

B.ED. SPL. EDUCATION

# CROSS DISABILITY & INCLUSION



SECD-01



MADHYA PRADESH BHOJ (OPEN) UNIVERSITY



**MADHYA PRADESH BHOJ (OPEN) UNIVERSITY**  
**RAJA BHOJ MARG (KOLAR ROAD), BHOPAL- 462016**

# **Cross Disability & Inclusion**

**B.Ed. Spl. Ed**

**(SECD 01)**

**MADHYA PRADESH BHOJ (OPEN) UNIVERSITY,  
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# Bachelor of Special Education

B.Ed. Spl. Ed.

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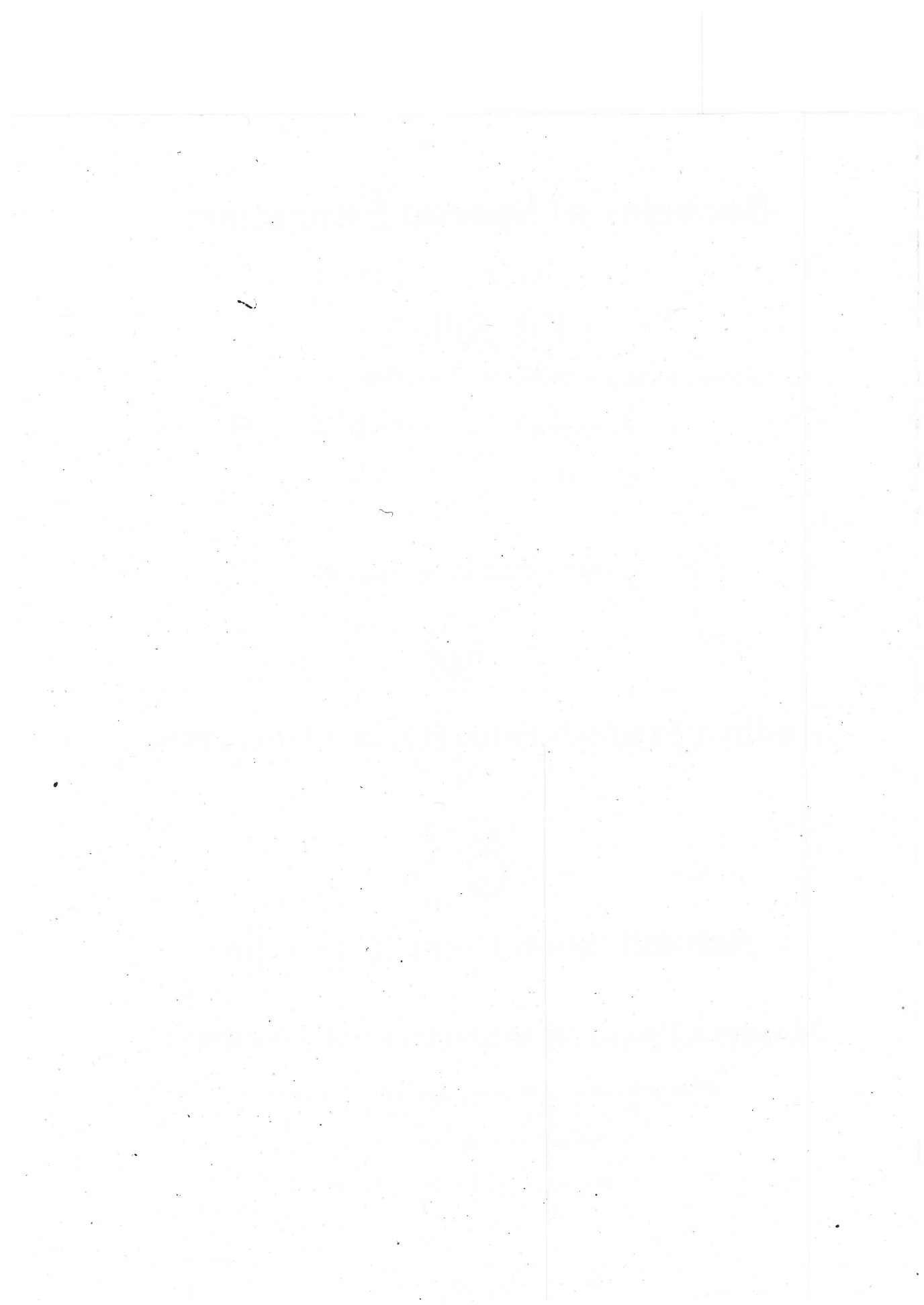
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**INCLUSIVE EDUCATION (SECD 01)**

**Block 1: Introduction to Inclusive Education**

**Block 2: Policies & Frameworks Facilitating Inclusive Education**

**Block 3: Adaptations Accommodations and Modifications**

**Block 4: Inclusive Academic Instructions**

**Block 5: Supports and Collaborations for Inclusive Education**

**Block 1: Introduction to Inclusive Education**

- Unit 1: Marginalisation vs. Inclusion: Meaning & Definitions
- Unit 2: Changing Practices in Education of Children with Disabilities: Segregation, Integration & Inclusion
- Unit 3: Diversity in Classrooms: Learning Styles, Linguistic & Socio-Cultural Multiplicity
- Unit 4: Principles of Inclusive Education: Access, Equity, Relevance, Participation & Empowerment
- Unit 5: Barriers to Inclusive Education: Attitudinal, Physical & Instructional



## UNIT 1

### Marginalisation vs. Inclusion: Meaning & Definitions

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### **1.1 Introduction**

Inclusion as we know it today has its origins in Special Education. The development of the field of special education has involved a series of stages during which education systems have explored different ways of responding to children with disabilities, and to students who experience difficulties in learning. In some cases, Special education has been provided as a supplement to general education provision; in other cases it has been entirely separate. In recent years, the appropriateness of separate systems of education has been challenged, both from a human rights perspective and from the point of view of effectiveness. Special education practices were moved into the mainstream through an approach known as “integration”. The main challenge with integration is that “mainstreaming” had not been accompanied by changes in the organization of the ordinary school, its curriculum and teaching and learning strategies. This lack of organizational change has proved to be one of the major barriers to the implementation of inclusive education policies. Revised thinking has thus led to a re-conceptualization of “special needs”. This view implies that progress is more likely if we recognize that difficulties experienced by pupils result from the ways in which schools are currently organized and from rigid teaching methods. It has been argued that schools need to be reformed and pedagogy needs to be improved in ways that will lead them to respond positively to pupil diversity – seeing individual differences not as problems to be fixed, but as opportunities for enriching learning.

### **1.2 How Inclusion relates to Education for All?**

The issue of inclusion has to be framed within the context of the wider international discussions Around the United Nations organizations’ agenda of “Education for All” (EFA), Stimulated by the 1990 Jomtien Declaration. “The Salamanca Statement on Principles, Policy and Practice in Special Needs

Education” (UNESCO 1994) provides a framework for thinking about how to move policy and practice forward. Indeed, this Statement, and the accompanying Framework for Action, is arguably the most significant international document that has ever appeared in special education. It argues that regular schools with an inclusive orientation are:

“...the most effective means of combating discriminatory attitudes, building an inclusive society and achieving education for all.”

In the early documentation on EFA, there was a rather token mention of “special needs” This has been gradually replaced by recognition that the inclusion agenda should be seen as an essential element of the whole EFA movement. In taking an inclusive approach we must not lose sight of its origins in special needs discourse as well as the fact that children with disabilities remain the largest group of children out of school.

Education for All means ensuring that all children have access to basic education of good quality. This implies creating an environment in schools and in basic education programmes in which children are both able and enabled to learn. Such an environment must be inclusive of children, effective with children, friendly and welcoming to children, healthy and protective for children and gender sensitive. The development of such child friendly learning environments is an essential part of the overall efforts by countries around the world to increase access to, and improve the quality of, their schools.

### **1.3 Marginalization: Multiple Diagnoses, Multiple Prescriptions**

To describe marginalization is not to explain it. Noting that poverty exists does not lead directly to a strategy for eliminating it. Nor does refining the definition and measures of marginalization lead to a reliable prescription for overcoming it. The multi-dimensionality of marginalization – that is, its complexity – plagues policy-makers. There is little agreement in the academic literature or in policy networks about how to understand the “real problem.” A number of competing diagnoses are available to account for unequal, and even polarized, distributions of income, capacity and power, all of which prevent real inclusion. Take, for example, homelessness. Homelessness and inadequate housing have emerged as

central social issues. Lack of access to affordable, adequate housing and safe neighbourhoods means that a range of people – from single men to families with children – are living on the margins of society and calling the streets of our cities home. Many are also on the margins of the labour force, working but not earning enough to support themselves and their families. There is a risk of reproducing marginality from one generation to the next, as schooling is mortgaged due to the inability to attend, to concentrate, or to thrive because of inadequate housing, food or income in general. Governments and the voluntary sector struggle to address the crisis, developing initiatives to deal with homelessness, to provide school lunches and breakfasts, and to enlarge food banks, as well as to redistribute income to seniors and families with young children and to promote training. Nonetheless, the underlying problems remain.

In large part, the difficulty of solving these problems, and the tenacity of the conditions that are indicators of marginalization, can be attributed to rapid changes associated with large trends such as globalization, new information technologies, restructured labour markets, and new ideologies. To say that they are “attributable” to such social, technological, economic and political changes, however, is not *to account for them* sufficiently to develop a coherent policy analysis. More is needed.

Seeking an identification of more proximate causes of marginalization forces us to recognize that a variety of sometimes competing theoretical explanations is available. Rather than skirting the issue of varying interpretations, this *Backgrounder* will embrace this diversity and work with three different diagnoses of marginalization, assessing the ways they construct the problem and the solutions proffered. Table 2 presents a preliminary classification of the three diagnoses.

Such variety in analysis is not necessarily a problem, in and of itself. However, in this case, it does contribute to confusion because the different diagnoses actually lead to different policy prescriptions. Each diagnosis identifies the problem differently and puts the accent on different interventions. As a result, the implications for policy action are not the same.

Therefore, the goal of this *backgrounder* is to begin the sorting process, seeking to identify any convergence in policy prescriptions and directions. To do so, it surveys the literature from different diagnostic angles for analyzing marginalization that are shown in Table 2, and asks:

What is marginalization? What forms does it take?

Who is being marginalized?

Why is marginalization occurring?

These questions will be asked of the three main diagnoses. In identifying the answer to the questions, we quickly find an additional complicating element. Each diagnosis has spawned several theoretical versions or analytical packages. Therefore, each diagnosis and these packages must be “unpacked.” Only by doing so will it be possible in the last section to begin to point to potential convergence and agreements about policy direction. The reader must note, of course, that in identifying these three diagnoses and their different versions, we are working with *ideal types*. They are analytical creations presented for purposes of discussion. Few individual authors or studies are likely to represent “pure examples” of the class to which they are assigned.

#### **1.4 Why Inclusion? – Rationale & Rights**

Exclusion from meaningful participation in the economic, social, political and cultural life of communities is one of the greatest problems facing individuals in our society today. Such societies are neither efficient nor desirable.

Despite encouraging developments, there are still an estimated 115-130 million children not attending school. Ninety percent of them live in low and lower middle income countries, and over 80 million of these children live in Africa. As alarming are the countless others within the school system being excluded from quality education. Among those who do enrol in primary school, large numbers drop out before completing their primary education. Current strategies and programmes have not been sufficient to meet the needs of children and youth who are vulnerable to marginalization or exclusion. In the past, efforts have consisted of specialized programmes, institutions and specialist educators. The unfortunate

consequence of such differentiation, although well intended, has often been further exclusion. Achieving the EFA and Millennium Development Goals by their assigned time lines will require unprecedented intersect oral and interagency collaboration among partners. Education must be viewed as a facilitator in everyone's human development and functionality, regardless of barriers of any kind, physical or otherwise. Therefore, disability of any kind (physical, social and/or emotional) cannot be a disqualifier. Inclusion, thus, involves adopting a broad vision of Education for All by addressing the spectrum of needs of all learners, including those who are vulnerable to marginalization and exclusion. Some examples of Marginalized/Excluded/Vulnerable Groups are:

### **1.5 Inclusion in Education– a human right**

UNESCO views inclusion as “a dynamic approach of responding positively to pupil diversity and of seeing individual differences not as problems, but as opportunities for enriching learning.”

Therefore, the move towards inclusion is not simply a technical or organizational change but also a movement with a clear philosophy. In order for inclusion to be implemented effectively, countries need to define a set of inclusive principles together with practical ideas to guide the transition towards policies addressing inclusion in education. The principles of inclusion that are set out in various international declarations can be used as a foundation. These then can be interpreted and adapted to the context of individual countries.

At the core of inclusive education is the human right to education, pronounced in the Universal Declaration of Human Rights in 1948 which states, “Everyone has the right to education... Education shall be free, at least in the elementary and fundamental stages. Elementary education shall be compulsory. Education shall be directed to the full development of human personality and to the strengthening of respect for human rights and fundamental freedoms. It shall promote understanding, tolerance and friendship among all nations, racial or religious groups, and shall further the activities of the United Nations for the maintenance of peace.” (art.26 - Universal Declaration of Human Rights)

Equally important are the provisions of the Convention on the Rights of the Child (UN, 1989), such as the right of children not to be discriminated against, stated in Article 2 and Article 23. Article 23 stipulates that children with disabilities should have: “effective access to and receive education, training, health care services, rehabilitation services, preparation for employment and recreation opportunities in a manner conducive to the child’s achieving the fullest possible social integration and individual development, including his or her cultural and spiritual development.” (Article 23)

Article 29 on the “Aims of education,” expresses that the educational development of the individual is the central aims and that education should allow children to reach their fullest potential in terms of cognitive, emotional and creative capacities. In addition, the UNESCO Convention against Discrimination in Education (1960) and the Convention on the Elimination of All Forms of Discrimination against Women (1979) are other key international human rights treaties that not only emphasize the prohibition but also the active elimination of discrimination. A logical consequence of these rights is that all children have the right to receive the kind of education that does not discriminate on any grounds such as caste, ethnicity, religion, economic status, refugee status, language, gender, disability etc. and that specific measures be taken by the State to implement these rights in all learning environments. A rights-based approach to education is founded upon three principles:

- Access to free and compulsory education
- Equality, inclusion and non-discrimination
- The right to quality education, content and processes

The move towards inclusion has involved a series of changes at the societal and classroom level that have been accompanied by the elaboration of numerous legal instruments at the international level. Inclusion has been implicitly advocated since the Universal Declaration in 1948 and it has been mentioned at all stages in a number of key UN Declarations and Conventions. (As seen in the following Figure 1.1: The Rights Framework for Inclusion)

While there are also very important human, economic, social and political reasons for pursuing a policy and approach of inclusive education, it is also a means of

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bringing about personal development and building relationships among individuals, groups and nations. The Salamanca Statement and Framework for Action (1994) asserts that: "Regular schools with inclusive orientation are the most effective means of combating discrimination, creating welcoming communities, building an inclusive society and achieving education for all." (Salamanca Statement, Art. 2)

The Jomtien World Conference on Education for All (1990) set the goal of Education for All (EFA). UNESCO, along with other UN agencies, international development agencies and a number of international and national non-governmental organizations, has been working towards achieving this goal - adding to the efforts made at the country level.

"All children and young people of the world, with their individual strengths and weaknesses, with their hopes and expectations, have the right to education. It is not our education systems that have a right to certain types of children. Therefore, it is the school system of a country that must be adjusted to meet the needs of all children." (B. Lindqvist, UN-Rapporteur, 1994)

It is thus imperative that schools and local authorities take the responsibility to ensure that this right is implemented. Concretely this involves:

- Initiating debates around how the community understands human rights;
- Generating collective thinking and identifying practical solutions such as how human rights can be made part of the local school curriculum;
- Linking the Human Rights movement with educational access;
- Fostering grassroots action and strengthening its ties to the policy level in order to promote protection;
- Encouraging the creation of community and children's councils where issues of access can be discussed; and
- Developing community-school mechanism to identify children not in school as well as develop activities to ensure that children enroll in school and learn.

Furthermore, adequate resources must be matched with political will, and constituent pressure maintained on governments to live up to their obligations.



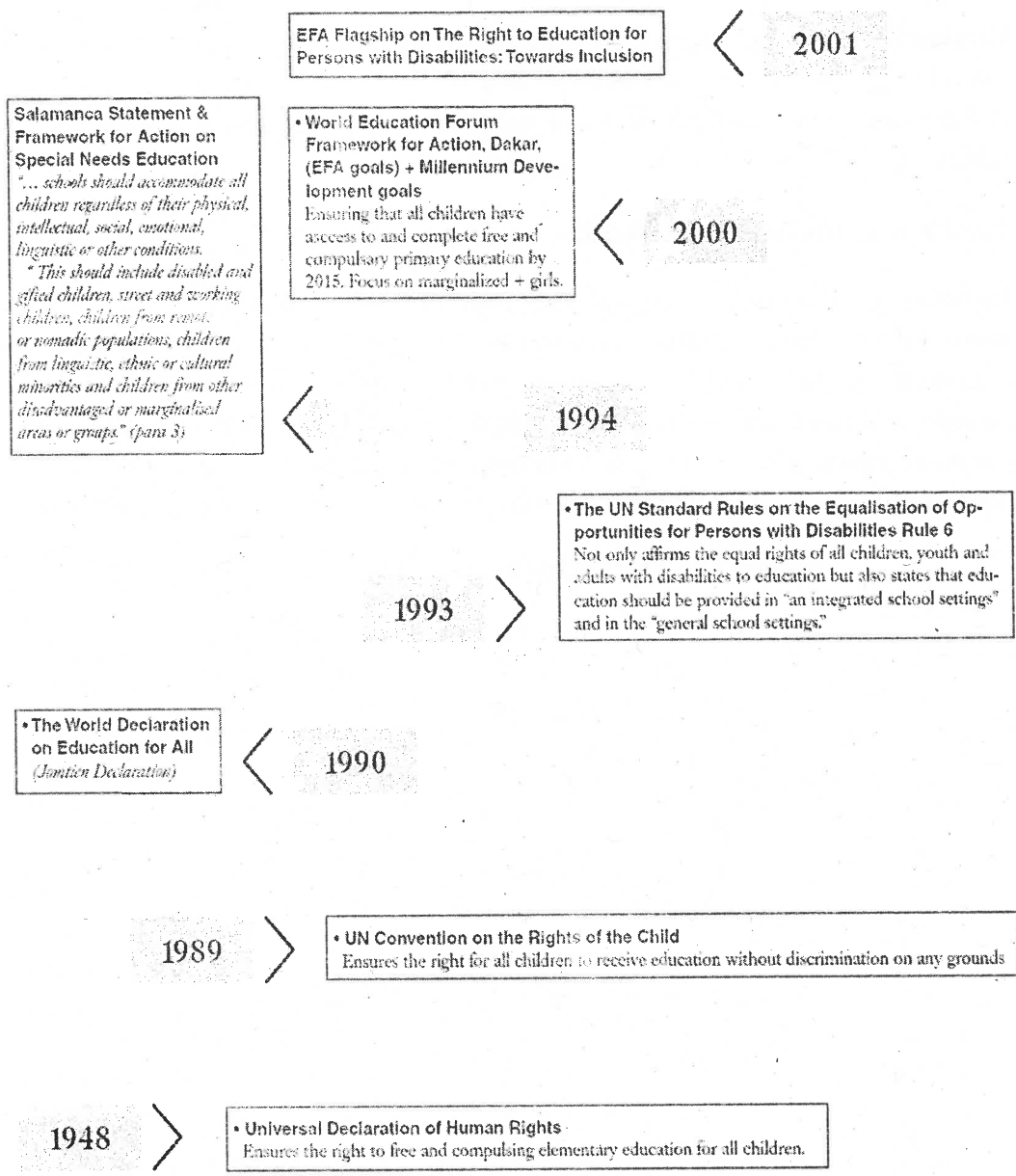
Ultimately, however, success will be judged by the quality of basic education provided to all learners. In the following sections we discuss how inclusion is defined and what practical steps are required to make inclusion in education a reality.

### **1.6 How is inclusion defined?**

Inclusion is seen as a process of addressing and responding to the diversity of needs of all learners through increasing participation in learning, cultures and communities, and reducing exclusion within and from education. It involves changes and modifications in content, approaches, structures and strategies, with a common vision which covers all children of the appropriate age range and a conviction that it is the responsibility of the regular system to educate all children.

**Figure 1.1: The Rights Framework for Inclusion**

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Inclusion is concerned with providing appropriate responses to the broad spectrum of learning needs in formal and non-formal educational settings. Rather than being a marginal issue on how some learners can be integrated in mainstream education, inclusive education is an approach that looks into how to transform education systems and other learning environments in order to respond to the diversity of

learners. It aims towards enabling teachers and learners both to feel comfortable with diversity and to see it as a challenge and enrichment of the learning environment, rather than a problem. Inclusion emphasizes providing opportunities for equal participation of persons with disabilities (physical, social and/or emotional) whenever possible into general education, but leaves open the possibility of personal choice and options for special assistance and facilities for those who need it. In defining inclusion, it is important to highlight the following elements:

Inclusion IS about:	Inclusion is NOT about:
welcoming diversity	reforms of special education alone, but reform of both the formal and non-formal education system
benefiting all learners, not only targeting the excluded	responding only to diversity, but also improving the quality of education for all learners
children in school who may feel excluded	special schools but perhaps additional support to students within the regular school system
providing equal access to education or making certain provisions for certain categories of children without excluding them	meeting the needs of children with disabilities only
	meeting one child's needs at the expense of another child

In particular, four key elements have tended to feature strongly in the conceptualization of inclusion. The four elements are as follows:

- **Inclusion is a process.** That is to say, inclusion has to be seen as a never-ending search to find better ways of responding to diversity. It is about learning how to live with difference and learning how to learn from

difference. In this way differences come to be seen more positively as a stimulus for fostering learning, amongst children and adults.

- **Inclusion is concerned with the identification and removal of barriers.** Consequently, it involves collecting, collating and evaluating information from a wide variety of sources in order to plan for improvements in policy and practice. It is about using evidence of various kinds to stimulate creativity and problem-solving.
- **Inclusion is about the presence, participation and achievement of all students.**

Here “presence” is concerned with where children are educated, and how reliably and punctually they attend; “participation” relates to the quality of their experiences whilst they are there and, therefore, must incorporate the views of the learners themselves; and “achievement” is about the outcomes of learning across the curriculum, not merely test or examination results.

Inclusion involves a particular emphasis on those groups of learners who may be at risk of marginalization, exclusion or underachievement.

This indicates the moral responsibility to ensure that those groups that are statistically most “at risk” are carefully monitored, and that, where necessary, steps are taken to ensure their presence, participation and achievement in the education system.

It is important to highlight that a holistic view of the education system, encompassing both the private and public system, must be taken when considering adopting an inclusive approach. Increasingly the world over, privatisation of education is on the rise. It is becoming evident that the private system of education in many countries is “competing” with the Government system. In some cases, government schools are closing because children are increasingly attending private schools. This trend could inadvertently lead to planners only planning for schools catering to poorer communities; this would inevitably be counterproductive to promoting principles of inclusion. Furthermore, in many countries the public system is generally considered lower in terms of quality of education being provided as compared to private schools. Thus, poorer children tend to be limited to the public system. It is imperative, therefore, that education

planners consider both the public and the private system in planning in order to effectively address the needs of *all* learners and combat exclusion. The move towards inclusion is a gradual one that should be based on clearly articulated principles, which address system-wide development. If barriers are to be reduced, as we will discuss later in this paper, policy-makers, educational personnel and other stakeholders need to take certain steps which must involve all members of the local community, including political and religious leaders, local education offices and the media. Some of these actions include:

- Mobilizing opinion
- Building consensus
- carrying out local situation analyses
- Reforming legislation
- Supporting local projects

In short, promoting inclusion is about improving educational and social frameworks to cope with new trends in educational structures and governance. It involves improving inputs, processes and environments to foster learning both at the level of the learner in his/ her learning environment as well as at the level of the system which supports the learning experience. In the following section we will look at how inclusion and quality are related.

### **1.7 Inclusion – how does it relate to quality?**

According to the 2005 Global Monitoring Report, “Education should allow children to reach their fullest potential in terms of cognitive, emotional and creative capacities.” An inclusive approach to education is one that strives to promote quality in the classroom. In order to move towards quality in education, changes are required at several levels. Human variations and differences are a naturally occurring and valuable part of society and should be reflected in schools. Schools should be able to offer opportunities for a range of working methods and individualized learning in order that no pupil is obliged to stand outside the fellowship of and participation in the school.

An inclusive school for all must put flexibility and variation at the centre, structurally as well as in terms of content, with the goal of offering every

individual a relevant education and optimal opportunities for development. Characteristics of “a school for all” include exercising flexibility with regard to the individual pupil’s capabilities and placing his/her needs and interests at the core. The school for all is therefore a coherent, but differentiated learning environment. All knowledge and experience about the development of children says that this can best take place in an environment where self-esteem and positive conception of oneself are strong, i.e. an environment where real participation and fellowship are experienced and actively promoted.

Placing the pupil at the centre does not imply that students need to be taught and will learn subject matter and content separately. Within the framework of the classroom, individual adaptations can be made. Furthermore, it involves pupils supporting one another according to their abilities and strengths. It is about seeing differences as opportunities for learning.

Nonetheless, quality in education is often perceived and measured as the academic results attained by the pupils through the successful completion of final exams and other quantitative measures. In some cases, privatized systems of education focus on provisions of good infrastructure, technology and facilities aiming at assuring “comfort” to students. These therefore become parameters of quality rather than “content and value” of education. Quality, however, is more than this and entails a school system where all children are welcome and where diversity and flexibility are seen as important ingredients for the development and personal growth of all learners. Educational planners must bear these issues in mind when generating discussions among receivers and providers in order to remove disparities in “quality” of education in the public and private systems. An inclusive perspective on quality education is concerned with the need to ensure that learning opportunities contribute to effective inclusion of individual and groups into the wider fabric of society. Quality education is therefore education that is inclusive as it aims at the full participation of all learners. We have learned from constructive and transactional theories that the quality of learning can be enhanced by the diversity of student involvement. Teacher attitudes and tolerance are the vehicles for the construction of an inclusive and participatory society. Focusing on quality education for enhanced inclusion implies identifying strategies for overcoming or eliminating the barriers to full participation for

individuals and groups which experience discrimination, marginalization and exclusion or which are particularly vulnerable.

### **1.8 Inclusion and cost effectiveness**

According to a recent World Bank study and a growing body of global research, Inclusive Education is not only cost-efficient but also cost-effective and “equity is way to excellence” This research likewise points to increased achievement and performance for all learners. Furthermore, within education, “countries are increasingly realizing the inefficiency of multiple systems of administration, organizational structures and services and the financially unrealistic option of special schools.”

One area where efficiency can be improved to yield results is in the realm of school health. UNESCO along with its partners, WHO, UNICEF and the World Bank joined forces in the development of the FRESH initiative aimed at raising the education sector’s awareness of the value of implementing an effective school health, hygiene and nutrition programmes as one of its major strategies to achieve Education for All. According to recent findings cited by the FRESH initiative, as a result of universal basic education strategies, some of the most disadvantaged children - girls, the rural poor, children with disabilities - are for the first time having access to school. However, their ability to attend school and to learn while there is compromised by poor health. These are the children who will benefit most from health interventions, since they are likely to show the greatest improvements in attendance and learning achievement. School health programmes can thus help modify the effects of socio-economic and gender- related inequities.” They also help create learning-friendly environments which ensure greater equity and better educational outcomes. Furthermore, school health programmes help link resources of the health, education, nutrition and sanitation centers in an infrastructure - the school – that is already in place, is persuasive and sustained. The effectiveness of this is measurable not only in terms of educational outcomes, reduced wastage less repetition but generally enhanced returns on educational investment. Inclusive education is about improving learning environments but also about providing opportunities for all learners to become successful in their learning experiences. A range of resources (e.g. teaching materials, special equipment, additional personnel, new teaching approaches or other learners) can provide support in the

task of learning. "Support" refers to all of these resources and, in particular, those resources beyond what the teacher can provide.

The cost of education is a critical issue to all school systems, especially when creating education facilities for all learners. Often questions are raised about the costs of education for traditionally excluded groups. It is falsely perceived as being costly when it is often only about making minor adjustments to accommodate all learners. Furthermore, there is a risk that with privatization, education is becoming more of a "commercial" venture. This may in turn lead to "cost-cutting" in areas that are essential for educational access for all.

If we adopt a holistic perspective of society, it is more relevant to ask about the costs to society when it does *not* provide education for all children. In such a context, it is clear that the most cost effective solution is to offer education to all children. Education is the fundamental basis upon which the survival of the human race and development of a nation depend; it is an important investment where no compromises should be made. Therefore, systems need to consider minimizing wastage of resources and using resources optimally in making education cost effective, rather than focusing on cost cutting measures.

One example that illustrates this is that schools with high repetition rates often fail to work in preventive ways, which in the long term is both inefficient and costly. The expenditure incurred by schools that have high rates of repetition in many cases would be better used to provide additional support to learners who encounter difficulties in education. Such preventive activities could minimize repetition and be less costly than the expenditure incurred by learners, for instance, who require seven or eight years to complete a four or five-year cycle of education.

A recent study entitled, "Investing in the Future: Financing the Expansion of Educational Opportunity in Latin America and the Caribbean", looked at the role that repetition plays in the number and share of expected primary and secondary school years. It shows that repetition accounts for more than one-quarter of the total number of school years in Brazil. Other countries where repetition accounts for a large share of the total volume of school years are Uruguay (10.5%), Costa Rica (8.7%) and Peru (6.8%). Such unnecessary repetition is detrimental to those



students themselves, as they often fall behind, drop-out of school and require additional support when they resume their studies. Repetition impacts negatively on students who could benefit from additional support in the classroom rather than having such resources utilized in the same way, without success, ostensibly for their benefit.

Several cost-effective measures to promote Inclusive Education have been developed in countries with scarce resources. These include: (a) trainer-of-trainer models for professional development; (b) linking university students in pre-service training institutions with schools for their clinical experiences; (c) converting special needs education schools into resource centers to provide expertise and support to clusters of general education schools; building capacity of parents and linking with community resources; utilizing children themselves in peer programs.

In short, providing education for all learners in schools and offering extra support to those encountering difficulties should reduce the need of costly repetition in schools and considerably reduce societal costs of supporting these individuals later on in life.

### **1.9 Key elements in the shift towards inclusion – Resource & Recourse**

Incorporating inclusion as a guiding principle typically requires change in education systems, and this change process is frequently faced with several challenges. It involves important shifts and changes at the systems as well as the societal level.

To understand change at all levels, it is important to know what change looks like from different points of view. How the teacher, student, local and national government see change is vital to understand how individuals and groups act and, indeed, react to each other. Reforming school systems to become inclusive is not only about putting in place recently-developed inclusive policies that meet the needs of all learners, but also about changing the culture of classrooms, schools, districts and universities etc. It is important to note that these change processes

towards inclusion often begin on a small scale and involve overcoming some obstacles such as:

- Existing attitudes and values
- Lack of understanding
- Lack of necessary skills
- Limited resources
- Inappropriate organization

Accepting change is really about learning. It means that schools should foster environments where teachers learn from experience in the same way that they expect their pupils should learn from the tasks and activities in which they are engaged. Teachers who regard themselves as learners in the classroom are more likely to successfully facilitate the learning of their pupils. The sensitivity they acquire as a result of reflecting on their own attempts to learn new ideas or new ways of working is influential in terms of the way children are dealt with in their classes.

There are several important conceptual elements that contribute to successful change. These include:

- Clarity of purpose
- Realistic goals
- Motivation
- Support
- Resources
- Evaluation

There are several levels and dimensions to the educational change process, some of which are intangible. "Good change processes develop trust, relevance and the desire to get better results. Accountability and improvement can be effectively interwoven, but it requires great sophistication." However, it is important to recognize that some dimensions of change can effectively be measured. Such measurements include:

- Direct benefits to children

- Wider impact on policies, practices, ideas and beliefs
- Enhanced children's participation
- Reduced discrimination (e.g. gender, disability, caste, minority status, etc)
- Strengthened partnerships and improved collaboration between ministries, at the national and local level of government and at the community level
- Development and strengthening of the education system, technology and pedagogy to include all learners

The following sections will explore some of these additional barriers and supports to change. The theoretical ideas and examples below are useful when trying to understand the barriers to change when implementing inclusive policies and practices.

### **1.10 Key players in support of inclusion – who are they?**

Teachers, parents, communities, school authorities, curriculum planners, training institutes and entrepreneurs in the business of education are among the actors that can serve as valuable resources in support of inclusion. Some (teachers, parents and communities) are more than just a valuable resource; they are the key to supporting all aspects of the inclusion process. This involves a willingness to accept and promote diversity and to take an active role in the lives of students, both in and out of school. The optimal learning environment for inclusion depends largely upon the relationship among teachers, parents, other students and society. Ideally, effective inclusion involves implementation both in school and in society at large.

However, it is only rarely that such a symbiosis exists between the school and society. Thus, it is the regular teacher who has the utmost responsibility for the pupils and their day-to-day learning. Nevertheless, it is the responsibility of the Ministry of Education to ensure that school-accessible and child-centered programmes are elaborated, implemented and evaluated. The outcome of such programmes and the results of their evaluation will facilitate new incentives and ideas for teaching.

The discussion of a pupil's progress and difficulties should involve the pupil and the pupil's parents. No matter how successfully a child is taught at school,

participation of the family, and in some cases the community, is deemed indispensable if one aims at ensuring that the child's school learning is applied at home and in other real-life daily settings. Family members and communities can be important resources - when informed, stimulated, entrusted and prepared in effective ways. Efforts should not be spared when guiding and directing families in work that is supportive to their child. It is often a great challenge to get the families of the most marginalized learners involved.

At a primary school in Durban, South Africa, teachers use grandmothers as a resource to develop the reading abilities of the children. Grandmothers have been trained to listen to children read and to encourage them to interact with texts. Twice a week, grandmothers come to the school and work with groups of children in the playground or under a tree. This also frees up the teachers to work with children who may be experiencing difficulties in learning and who may need individual attention from the teacher.

### **1.11 Attitudes and values – how can they affect inclusion?**

It has been shown that teachers' positive attitudes towards inclusion depend strongly on their experience with learners who are perceived as "challenging". Teacher education, the availability of support within the classroom, class size and overall workload are all factors which influence teachers' attitudes. Several studies have revealed that negative attitudes of teachers and adults (parents and other family members) are the major barrier to inclusion; children do not have prejudices unless adults show them. Thus, introducing inclusion as a guiding principle in these different areas will have implications for teachers' attitudes. Shared values make cooperation possible, just as lack of them makes it difficult for people to work together. However, when common values are lacking, common interests, which are precursors to values, may substitute for them and in daily life are often a significant driving force. Changes in attitudes involve significant changes in conceptions and role behaviour. Among other factors, this is why change is so difficult to achieve. One successful example of a first experience with inclusive schooling was in Burkina Faso through the "Inclusive schools and community support programmes" project which, according to those involved, "contributed to tackling the problem of education of children with special educational needs, marginalized for too long, as well as to changing attitudes

regarding these children.” A genuine new awareness on the part of parents and students was created. The pupils themselves observed such changes. One of them indicated that, “He was afraid to approach his comrades with intellectual disabilities, because it was said that they were inhabited by spirits and could contaminate you.” Now, he concluded, “I know that is not true. Now, we work and play together and I’ve learned to understand them, to like them and to help them when necessary.” *Source: Inclusive Schools and Community Support Programmes, UNESCO.* Negative attitudes towards differences and resulting discrimination and prejudice in society manifests itself as a serious barrier to learning. However, it is a barrier that can be overcome through the practice of inclusion and is not a necessary pre-cursor to the process. There are many misconceptions surrounding inclusion that often serve as obstacles to adopting an inclusive approach at the policy level which will be discussed in greater detail in the last section. Among them are:

- ❁ Inclusion is costly
- ❁ implementing inclusion needs societal change in attitudes first
- ❁ Inclusion is a positive theoretical concept, but is not practical
- ❁ Inclusion requires special skills and capacities that are difficult to develop
- ❁ Inclusion is the responsibility of the Social Ministry and not of the Ministry of Education
- ❁ Inclusion is a disability-specific issue

Overcoming these misconceptions about inclusion is one of the challenges to change. Furthermore, in the process of changes required for incorporating inclusion as a guiding principle, conflict and disagreement can occur. This is both inevitable and is fundamental to successful change. Individuals involved in a change process may require some pressure to change, but change will only be effective when they are able and allowed to react to form their own positions on the change process. In many cases, policymakers, parents, teachers and other stakeholders in the school need to realise that inclusion is a process which requires changes at both the level of the education system as well as the school level. This

can be challenging to accept as it may involve readjusting conceptual understandings and may have multiple practical consequences. "Some deep changes are at stake when we realize that people's basic conceptions of the school system are involved, i.e. their occupational identity and sense of competence."<sup>10</sup> The diagram on the following page traces the stages of understanding in the move towards inclusion. It demonstrates that the attitudes in society direct the actions, level of commitment and services provided to traditionally excluded groups. However, this schema is merely an example of a general process, which may differ from country to country. (See Figure 2.2: Understanding the process of Inclusion) An example of this in China, is the Golden Key Project, which promotes education for the visually impaired in poor rural areas. For each county, a professional guidance network has been set up including an itinerant supervisor, an administrative official and a social worker who are responsible for creating the link between the school and the community and have been able to successfully mobilize community forces to support inclusion. Initially resistance was encountered among members of the community and teachers who argued that they were not specially trained or equipped to handle these students. Others claimed that these pupils would slow their classes down and that the parents of the other children would not be pleased to know that their children were in classes with these children who are "different". However, once this transition to change was overcome, teachers came to recognize the contribution to the learning environment as well as the implications for the community. Eventually, even the most sceptical villagers were convinced of the importance of sending blind children to school and banded together to help support these children by volunteering to repair the path they used to go to school and provide them with other support services. The implementation of more inclusive systems of education is possible if schools themselves are committed to becoming more inclusive. The development of enabling mechanisms such as national policies on inclusion, local support systems and appropriate forms of curriculum and assessment are important in creating the right context for the development of inclusion. Inclusion has important benefits for all children as it produces schools with more enriching learning environments that view diversity as a positive force which must be acknowledged and celebrated. Inclusion produces schools that move away from rote learning and place greater emphasis on hands-on, experienced based, active and co-operative learning.

## **1.12 Accessible and flexible curricula – how can they serve as keys for schools for all?**

UNESCO's work on quality and relevance of education is based on the premise that educational quality and access are intricately linked. The concept "Education for All" thus questions a large part of the current school's way of organizing teaching. Teachers often retain the perspectives gained from their own school experiences.

According to the 2005 EFA Report, "One way to move towards a relevant, balanced set of aims is to analyze the curriculum in terms of inclusion. An inclusive approach to curriculum policy recognizes that while every learner has multiple needs – even more so in situations of vulnerability and disadvantage – everyone should benefit from a commonly accepted basic level of quality education. In the United Kingdom, a government supported "Index for Inclusion" identifies three dimensions of inclusion: creating inclusive cultures, producing inclusive policies and evolving inclusive practices.<sup>12</sup>

Schools often have general, common goals regarding what is desirable in terms of pupil achievement. An inclusive approach seeks to discourage teaching which is based on a criterion of averages, meaning that some pupils will not be able to keep up, while others will find it "too easy" and consider the teaching boring. Instead, Education for All places the pupil at the centre of teaching and learning based on an appreciation of his or her differences in understanding, feelings, social and perceptual skills, etc. This results in all pupils having optimal opportunities for becoming motivated and activated. Accessible and flexible curricula can serve as the "key" to creating "schools for all".

It is important that the curriculum be flexible enough to provide possibilities for adjustment to individual needs and to stimulate teachers to seek solutions that can be matched with the needs and abilities of each and every pupil.

Many curricula expect all pupils to learn the same things, at the same time and by the same means and methods. But pupils are different and have different abilities and needs. Therefore, the curriculum must take into consideration the various needs of pupils to ensure "access for all". Some of these strategies are:

- providing a flexible time-frame for pupils studying particular subjects
- giving greater freedom to teachers in choosing their working methods
- Allowing teachers the opportunity of giving special support in practical subjects (e.g. orientation, mobility) over and above the periods allotted for more traditional school subjects.
- allotting time for additional assistance for classroom-based work
- Emphasizing aspects of pre-vocational training Furthermore, some practical steps can be taken towards making curricula more inclusive. Some of the questions to consider are:
- What human values promoting inclusion are being fostered through the curriculum?
- Are human rights and children's rights part of the curriculum? Do they address the coexistence of rights with responsibilities, and how are they taught?
- Is the content of the curriculum relevant to children's real lives and future?
- Does the curriculum take gender, cultural identity and language background into consideration?
- Does the curriculum include environmental education?
- Are teaching methods child-centered and interactive?
- How is feedback gathered/integrated for curriculum revision?
- How the curriculum is related to national assessment systems?
- To what extent are the education authorities responsible for monitoring the school in tune with the curriculum revisions and transactions?

Together with flexible curricula, flexible teaching-learning methodology should be introduced. Making this a reality involves other changes in policy including shifting away from long, theoretical, pre-service-based teacher training to greater, continuous, in-service capacity building. Schools often need to be assisted in modifying subject matters and working methods, and this should be linked to appropriate skills training.

Looking at education through an inclusive lens implies a shift from seeing the child as a problem to seeing the education system as a problem. Initial views, which emphasized that the source of difficulties in learning came from within the learner, ignored the environmental influences on learning. It is now being strongly



argued that reorganizing ordinary schools within the community, through school improvement and a focus on quality, ensures that all children can learn effectively, including those categorized as having special needs.

### **1.13 Education systems as a problem Child as a problem**

#### **Inclusion – empowering for all?**

According to a recent report for the World Bank Disability Group, “Education is widely seen as a means to develop human capital, to improve economic performance and to enhance individual capabilities and choices in order to enjoy freedoms of citizenship.”<sup>13</sup> Within this context, therefore, empowerment refers to “acquiring the awareness and skills necessary to take charge of one’s own life chances. It is about facilitating the ability of individuals (and groups) to make their own decisions and, to a greater extent than hitherto, to shape their own destinies.” Some educational theorists tie the concept to Freire’s notion of “the collective struggle for a life without oppression and exploitation” and the expression of students’ and teachers’ “voices” which can be emancipator in different degrees.<sup>14</sup> This is the understanding of empowerment embedded in these guidelines. Social transformation requires self-formation. Curriculum can play an instrumental role in fostering tolerance and promoting human rights. It is the means by which respect for the dignity of persons and awareness of responsibilities as national and global citizens are instilled in children. Such knowledge can be a powerful tool for transcending cultural, religious and other diversities and empowering teachers, students and all members of society. Furthermore, education is an important vehicle through which economically and socially marginalized adults and children can be empowered to change their life chances, and obtain the means to participate more fully in their communities. The advantage of inclusion versus special education has been demonstrated on several levels. Studies in both OECD and non-OECD countries indicate that students with disabilities achieve better school results in inclusive settings. Inclusive education also provides opportunities to build “social networks, norms of reciprocity, mutual assistance and trustworthiness”. Special schools tend to perpetuate the segregation of disabled people, yet, for students with some types of disabilities, provision of high quality education in special schools may be more appropriate than “inclusion” in a regular school that does not provide meaningful interaction with

classmates and professionals. Another option is to reconcile the inclusive and specialized approaches in a “twin track” approach in which parents and learners decide whether to opt for an inclusive regular school or a special school initially, with inclusive education remaining the ultimate goal.<sup>15</sup> When communities can hold teachers, administrators, and government officials accountable for the inclusion of all children through formal institutional mechanisms, community members become more interested in school improvement and more willing to commit their own resources to the task. This commitment may include forming partnerships with outside contributors. According to the World Bank, “programs that expand the access of excluded groups to education have led to important shifts in mind-set among community members and government leaders regarding the contributions that those groups can make to society”<sup>16</sup>. This is where change processes and empowerment go hand in hand to move towards inclusion for all learners.

### **1.14 Inclusive Educations and Education for All**

The Dakar Framework for Action acknowledges the major education conferences throughout the 1990s, such as the Salamanca World Conference on Special Needs Education (1994 Salamanca, Spain), and urges the international community to continue working on achieving the goals set (Dakar Framework for Action, Para 4.). The “Expanded Commentary on the Dakar Framework for Action’ describes the broad vision of Education for All. This vision needs to be adopted in order to achieve the Dakar Framework for Action goals. It places a special emphasis on those learners who are the most vulnerable to marginalization and exclusion and identifies Inclusive Education as one of the key strategies to address issues. The Dakar Framework for Action thus clearly sets inclusive education as one of the main strategies to address the question of marginalization and exclusion. “The fundamental principle of EFA is that all children should have the opportunity to learn. The fundamental principle of Inclusive Education is that all children should have the opportunity to learn together.”

It is important to highlight that Education for All does not automatically imply inclusion. Inclusion properly understood is precisely about reforming schools and ensuring that every child receives quality and appropriate education within these schools. To this extent, inclusion is critical to the EFA movement since without it,

a group or groups of children are excluded from education. Thus, EFA by definition cannot be achieved if these children are excluded. Both EFA and inclusion are both about access to education, however, inclusion is about access to education in a manner that there is no discrimination or exclusion for any individual or group within or outside the school system.

Toward this end, inclusion needs to be the fundamental philosophy throughout programmes so that the goal of "Education for All" can be achieved. Inclusion, therefore, should be the guiding principle for UNESCO and other agencies' interface with Governments and other providers on Education for All.

In his speech to the 160th Executive Board, the Director General of UNESCO highlighted the need to make the special and urgent needs of marginalized and excluded groups an integral part of all UNESCO's programmes so as to enable the Organization to make a more effective contribution.

UNESCO's actions in promoting inclusive approaches in education will aim at:

- forging a holistic approach to education which ensures that the concerns of marginalized and excluded groups are incorporated in all education activities, and cooperating to reduce wasteful repetition and fragmentation;
- developing capacities for policymaking and system management in support of diverse strategies towards inclusive education; and
- Bringing forward the concerns of groups who are currently marginalized and excluded.

### **1.15 Tool for Educational Planners and Policymakers – Reflection & Reform**

In conclusion, we have looked at how inclusion is defined, some reasons and justifications for its implementation as well as some key elements in the shift towards inclusion. We now ask that you consider the following questions at the level of policy and legislation in greater detail before engaging in an in-depth analysis of the educational plans:

- What policies promote inclusion and which ones go against it?

- What are the existing barriers at the policy level that can act as a deterrent to the practice of inclusion and how can this issue be addressed?
- How can suitable guidelines to address and facilitate inclusion be prepared and followed?
- How can debate and discussion be generated among relevant stakeholders to promote inclusion?
- How can monitoring mechanisms be formulated and incorporated into plans and realistic goals set for achieving intended targets?

There are some indicators to determine whether your school system is on track to moving towards inclusion. The Centre for Studies on Inclusive Education (CSIE) piloted and refined an Index for Inclusive Schooling. The Index takes the social model of disability as its starting point, builds on good practice, and then organizes the Index work around a cycle of activities which guide schools through stages of preparation, investigation, development and review.<sup>18</sup>

### **Index for Inclusive Schooling**

- 1.1 Pupils are entitled to take part in all subjects and activities
- 1.2 Teaching and learning are planned with all pupils in mind
- 1.3 The curriculum develops understanding and respect for differences
- 1.4 During lessons all pupils participate
- 1.5 A variety of teaching styles and strategies is used
- 1.6 Pupils experience success in their learning
- 1.7 The curriculum seeks to develop understanding of the different cultures in society
- 1.8 Pupils take part in the assessment and accreditation systems
- 1.9 Difficulties in learning are seen as opportunities for the development of practice The checklist and matrices that follow are intended to help facilitate the

process of identifying gaps and corresponding strategies to address these gaps and move towards inclusion.

### **1.16 Steps towards inclusion Checklist**

The questions below can be used as a checklist to promote the incorporation of inclusive approaches in National Education Plans. The answers will serve as a background when analyzing the present status of the National Plan and the level of its inclusiveness. Findings can be used in discussions with responsible education authorities. Furthermore, they should be used as guidelines in advising on possible improvements in the National Education Plans. The findings should serve as a source for the identification of the needs for capacity building for Inclusive Education.

The questions have been “grouped” under two headings to facilitate a structure for the analysis of the National Education Plans / EFA plans. If the plan is still in draft form, then responding to the checklist below can provide some insight into areas that need to be elaborated in order to make the plans more inclusive. If the plan has already been completed, then the responses to these questions can serve as a guide to amending the plan based on addressing the issues that may have been overlooked during the initial planning process.

### **1.17 Strategic Planning for Inclusion – Inclusion Matrix Worksheet**

The worksheet which follows the Checklist Questions, is intended as a tool to help identify and analyze your current situation including your strengths (e.g., available resources that currently support inclusion; statement(s) on inclusion in your National /EFA Plan) and needs (e.g., resources that are needed to support inclusion, challenges that need to be overcome; gaps in your Plan or your system related to moving toward inclusion).

#### **Checklist Questions**

##### **A. Situation analysis**

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1. Have studies, needs-based analyses, etc. been undertaken to identify and address the needs and challenges of the children missing out on education or at risk of dropping out? If so, what are the findings?
2. Are any measures being taken with regard to data collection, indicators and statistics to ascertain the magnitude of marginalized and excluded children in the country?
3. What accommodations in teaching are made to ensure access for children with disabilities, ethnic and language minorities?
4. What capacity exists to build and strengthen community level involvement (eg. CBR, C-EMIS, ECCD initiatives)?

### **B. Policy, goals, objectives**

1. Which are the main action programmes in regard to marginalized/excluded/vulnerable groups? Is there specific mention made of particular groups? Are children with disabilities and other groups specifically planned for?
2. Are there specific policies/programmes/strategies in place to identify out-of-school children, provide speed-up and/or second chance educational opportunities? Are there specific family-based strategies to support them on a financial and/or emotional basis?
3. What are the linkages between formal and non-formal education in the plans/programmes for more inclusive education?
4. Do current educational policies favor particular groups at the expense of marginalized ones? If so, in which ways? Does this create obstacles to inclusion?
5. Is there any policy statement with regard to excluded groups? Are any particular groups specified?
6. is there a policy statement regarding language of instruction?
7. Is there language with negative connotations referring to excluded/marginalized groups? If so, how can this be changed?

8. What kind of priorities are reflected in the country's objectives of education? Do these priorities stimulate or discourage inclusion?
  9. Does the plan include provisions or measures regarding access to the curriculum for all learners?
  10. Does the plan include provisions or measures regarding physical access to school for all learners?
  11. Is reference made to UN declarations, the Salamanca Statement, the Dakar Framework of Action? The Convention on the Rights of the Child?
  12. Are references made to quality of/in education?
  13. Does the plan address required competence and quality of teachers in relation to inclusion?
  14. What are the main objectives and targets for the education described in the plan?
- Does the plan make reference to the EFA and/or Millennium Development Goals?

### **1.18 EFA Goals**

#### **Education for All Goals**

1. Expanding and improving comprehensive early childhood care and education, especially for the most vulnerable and disadvantaged children;
2. Ensuring that by 2015 all children, particularly girls, children in difficult circumstances and those belonging to ethnic minorities, have access to a complete free and compulsory primary education of good quality;
3. Ensuring that the learning needs of all young people and adults are met through equitable access to appropriate learning and life skills programmes;
4. Achieving a 50 per cent improvement in levels of adult literacy by 2015, especially for women, and equitable access to basic and continuing education for all adults;

5. Eliminating gender disparities in primary and secondary education by 2005, and achieving gender equality in education by 2015, with a focus on ensuring girls' full and equal access to and achievement in basic education of good quality;

6. Improving all aspects of the quality of education, and ensuring excellence of all so that recognized and measurable learning outcomes are achieved by all, especially in literacy, numeracy, and essential life skills.

### **1.19 Millennium Development Goals**

Goal 1: Eradicate extreme poverty and hunger – halve the number of people living on one dollar a day and who suffer from hunger.

Goal 2: Achieve universal primary education

Goal 3: Promote gender equality and empower women – equal access to primary and post-primary education for girls.

Goal 4: Reduce child mortality

Goal 5: Improve maternal health.

Goal 6: Combat HIV/AIDS, malaria and other diseases

Goal 7: Ensure environmental sustainability – reduce by half those without access to safe water.

Goal 8: Develop a global partnership for development – more aid, more debt relief, access to essential drugs and good governance.

### **1.20 References**

Ainscow, M. (1999) Understanding the development of inclusive schools. London: Falmer.

Bernard, A. (2000) Education for All and Children who are Excluded. Education for All 2000 Assessment. Thematic Studies.

On the Internet: [http://www2.unesco.org/wef/en-leadup/findings\\_excluded%20summary.shtm](http://www2.unesco.org/wef/en-leadup/findings_excluded%20summary.shtm)



Booth, T. (1996)

Chambers, R. 1997: Who's reality counts? Putting the first last. London, Intermediate Technology Publications. Booth, T. and Ainscow, M. (eds) (1998) From Them To Us: An international study of inclusion in education, Routledge Tackles questions such as "Can there be a global view of inclusive education?" through a series of case studies set in eight different countries. ISBN numbers are as follows:

Booth, T and Ainscow, M (revised 2002) Index for Inclusion: Developing Learning and Participation in Schools, CSIE

This practical guide is now being used in different parts of the world. It encourages a process of inclusive school development.

Dakar Framework for Action – Education for All, meeting our collective commitment. On Internet: <http://www2.unesco.org/wef/enconf/dakframeng.shtm>

Darnell, F. and Hoëm, A. 1996: Taken to Extremes. Education in the Far North. Oslo, Scandinavian University Press.

EFA Global Monitoring Report, The Quality Imperative, 2005.

Engebrigtsen, A. 1974: Frigjørende dialog – om frigjøringspedagogikk, Paulo Freire og utviklingsarbeid. Oslo, Norsk Fredskorpssambands Studiehefte.

Fine, M. (2000) Creating Inclusive Communities. An Inquiry into organizational approaches for Pursuing Diversity. Academy for Education Development and The National Youth Leadership Council, Service-Learning Diversity project. On the Internet: [http://www.aed.org/publications/pubs\\_inclusion.pdf](http://www.aed.org/publications/pubs_inclusion.pdf)

Freire, P. 1970: Pedagogy of the Oppressed. London, Penguin Education.

Fullan, M. 1999: The New Meaning of Educational Change. London, Cassell Educational Limited. Giroux, H. (1997) Pedagogy and the politics of hope Boulder, CO: Westview Press

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Human Sciences Research Council (HSCR) (2000) With Africa for Africa. Towards Quality Education for all. 1999 MLA Project.

UNESCO. UNICEF. HSCR. International Consultative Forum on Education for All (2000) Statistical Document. Education for All Year 2000 Assessment. Paris: UNESCO Publishing.

International Consultative Forum on Education for All (2000). Global Synthesis. Education for All Year 2000 Assessment. Paris: UNESCO Publishing.

McGregor, G. & Timm Vogelsberg, R. (1998) Inclusive Schooling Practices: Pedagogical and Research Foundations. A Synthesis of the

Literature that Informs Best Practice about Inclusive Schooling. Consortium on Inclusive Schooling Practices. The University of Montana. Rural Institute on Disabilities.

Meijer, C. (1999) Financing of Special Needs Education. A Seventeen Country Study of the Relation between Financing of Special Needs Education and Integration. European Agency for Development in Special Needs Education. Middelfart: Denmark.

Meisfjord, R. Mathisen, 2001, "Womens's Views A qualitative case study of the impact of adult training on Women in South Africa", Oslo University College, Oslo, Norway.

National Commission on Special Needs in Education and Training (NCSNET) and National Committee on Education Support Services (NCESS) (1997) Quality Education for All. Overcoming barriers to learning and development. Department of Education: Pretoria.

National Department of Education (1997) Curriculum 2005. Lifelong learning for the 21st century. South Africa: CTB Books.

OECD – CERI (1999) Inclusive Education at Work. Students with Disabilities in Mainstream Schools. Paris: OECD.

Susan J. Peters (2003) Inclusive Education: Achieving Education for All by Including those with Disabilities and Special Needs; Prepared for the World Bank Disability Group  
Supovitz, J. and Brennan R. (1997) Mirror, Mirror on the Wall, Which Is the Fairest Test of All? An Examination of the Equitability of Portfolio Assessment Relative to Standardized Tests. Harvard Educational Review. Vol. 67 No.3 Fall.  
Theis, Joachim (2003) Rights-based Approach to Education, Save the Children, Sweden.  
Tomasevski, Katarina (2003) Education Denied. Costs and Remedies. Zed Books London and New York, University Press, Dhaka, White Lotus Bangkok, David Philip Cape Town.

UNESCO (1985) Helping Handicapped Pupils in Ordinary Schools: Strategies for Teacher Training.

UNESCO (1990) World Declaration on Education for All and Framework for Action to Meet Basic Learning Needs. International

Consultative Forum on Education for All. Paris: UNESCO.

UNESCO (1994) The Salamanca World Conference on Special Needs Education: Access and Quality. UNESCO and the Ministry of

Education, Spain. Paris: UNESCO.

UNESCO (1996) Learning: the Treasure Within. Report to UNESCO of the International Commission on Education for the Twenty-first

Century. Paris: UNESCO.

UNESCO (1998) Wasted Opportunities: When Schools Fail. Education for All. Status and Trends. Paris: UNESCO.

UNESCO (1999a) From Special Needs Education to Education for All. A Discussion Document. Tenth Steering Committee Meeting

UNESCO Paris 30 September - 1 October 1998. Unpublished manuscript.

UNESCO (1999b) Welcoming Schools. Students with Disabilities in Regular Schools. Paris: UNESCO

## M.P BHOJ (OPEN )UNIVERSITY

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UNESCO (2001a) Including the Excluded: Meeting diversity in education. Example from Romania. Paris: UNESCO.

UNESCO (2001b) Including the Excluded: Meeting diversity in education. Example from Uganda. Paris: UNESCO.

UNESCO (2001c) Open File on Inclusive Education. Paris: UNESCO.

UNESCO (2003) Overcoming Exclusion through Inclusive Approaches in Education. A challenge and a vision. Conceptual paper. Paris: UNESCO

## UNIT 2

### **Changing Practices in Education of Children with Disabilities: Segregation, Integration & Inclusion**

#### Content

- 2.1 Introduction
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- 2.3 Emerging recognition of the need for change
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## 2.1 Introduction

The democratic and human-rights based intent of Inclusive Education is defined in the Salamanca Statement, and represented in the “recognition of the need to work towards ‘schools for all’ – institutions which include everybody, celebrate differences, support learning, and respond to individual needs. A commitment to this approach is central to UNICEF’s work in the Central Eastern Europe and Commonwealth of Independent States Region, which seeks to build Inclusive Education systems that promote schools based upon

‘a child-centered pedagogy capable of successfully educating all children, including those who have serious disadvantages and disabilities. The merit of such schools is not only that they are capable of providing quality education to all children; their establishment is a crucial step in helping to change discriminatory attitudes, in creating welcoming communities and in developing an inclusive society. A change in social perspective is imperative.

However, pursuit of this goal, given, the realities of the CEECIS Region, requires very specific approaches, positions, and solutions. Countries in this region place great value on education and have a long history of universal access and high attendance rates. However, the Region is also steeped in long-standing traditions based on a philosophy of defectology and leading to the placement of children with disabilities, and often, also, Roma children, in residential institutions where they remain indefinitely, marginalized, and isolated from society.

Across the CEECIS Region, the total number of children who are now officially recognized as disabled, tripled from about 500,000 in 1990, to 1.5 million in 2002. However, when compared to international benchmarks, that place the global percentage of children with disabilities at 2.5 per cent, this figure suggests that

over a million children with disabilities are not included in the data, and are rendered invisible. In the CEECIS Region, the number of children in institutional care is the highest in the world.

UNICEF estimates that across CEECIS, a child with a disability is almost 17 times as likely to be institutionalized as one who is not disabled. More than 626,000 children are institutionalized, and the rate of children in institutional care increased between 2000 and 2007, with approximately 60% of all institutionalized children being registered as children with disabilities. It can further be estimated that approximately 1,1 million children with disabilities in the CEECIS Region remain unaccounted for, and likely out-of-school.

Given these challenges, a broad range of strategies at all levels are needed to realise the right of children with disabilities to inclusive education: Government-wide measures to establish the necessary infrastructure, and specific targeted measures to promote the right to access and full participation in quality education, and the respect for rights within learning environments.

This background note provides a framework for addressing the very specific issues that affect the inclusion of children with disabilities in the CEECIS region. Children with disabilities form a significant proportion of the out-of-school population. They are presented here as a priority target group, one that is subject to severe discrimination, segregation, and exclusion from all social aspects of life. The purpose of this paper is to provide clear strategy options for programming in the area of inclusive education, while keeping in mind the need for system-wide approaches designed to address the needs of ALL children.

## **2.2 Inclusive education: the way forward**

Education for All (EFA), which represents an international commitment to ensure that every child and adult receives basic education of good quality, is based both on a human rights perspective, and on the generally held belief that education is central to individual well-being and national development. However, EFA has not, to date, given sufficient attention to some marginalized groups of children, in particular those seen as having 'special educational needs' or disabilities. Children with disabilities have remained relatively invisible in the efforts to achieve

universal access to primary education. It has become clear that, without targeted measures to help them overcome the barriers, the goals of EFA will not be achieved for children with disabilities.

### 2.3 Emerging recognition of the need for change

In response to the perceived failures to date of EFA, a growing focus has been placed on inclusion as the key strategy for promoting the right to education, including for children with disabilities. While EFA offers the goal of universal entitlement, inclusion can be understood, not merely as a vehicle for ending segregation, but rather as a commitment to creating schools which respect and value diversity, and aim to promote democratic principles and a set of values and beliefs relating to equality and social justice so that all children can participate in teaching and learning. In so doing, it brings the education agenda much closer to the broader understanding of the right to education embodied in the key human rights instruments.

UNESCO defines inclusive education as 'a process of addressing and responding to the diversity of needs of all learners through increasing participation in learning, cultures and communities, and reducing exclusion within and from education. It involves changes and modifications in content, approaches, structures and strategies, with a common vision which covers all children of the appropriate age range and a conviction that it is the responsibility of the state to educate all children'. Inclusive education is not a marginal issue, but is central to the achievement of high-quality education for all learners and the development of more inclusive societies.

However, while the inclusive education debate has undoubtedly played a significant role in raising concerns about disabled children in international forums, it is important to understand it not as a philosophy or educational approach exclusively for children with disabilities, but as an approach that is fundamental to achieving the right to education for children from all marginalized groups – for example, girls, Roma children, or working 5 children. In 2008, UNESCO argued that a broad concept of inclusive education 'can be viewed as a general guiding principle to strengthen education for sustainable development, lifelong learning for **all** and equal access of all levels of society to learning opportunities so as to



implement the principles of inclusive education'. Furthermore, children with disabilities are not a homogeneous group. They may identify more strongly with other aspects of their overall identity, such as their gender, economic status, or ethnicity, or a combination. Belonging to one or more of these groupings significantly increases their vulnerability, and investment in addressing the right to education needs to take account of such multi-vulnerabilities. It is helpful to acknowledge disability as one of many issues of difference and discrimination, rather than an isolated form of exclusion, and inclusion as a strategy for addressing all forms of exclusion and discrimination.

Disability, of course, can be understood very differently across different communities and cultures. In order to pursue a coherent approach to addressing inclusive education for children with disabilities, a definition of disability is required. Article 1 of the CRPD describes persons with disabilities as 'those who have long-term physical, mental, intellectual, or sensory impairments which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others'. This approach is consistent with the WHO's International Classification of Functioning, Disability and Health, known more commonly as ICF, which conceptualizes a person's level of functioning as a dynamic interaction between her or his health conditions, environmental factors, and personal factors. It defines functioning and disability as multidimensional concepts relating to:

- The body functions and structures of people
- The activities people do and the life areas in which they participate; and
- The factors in their environment that affect these experiences.

Both approaches allow for a broad approach to disability which acknowledges the importance of the context and environment in enabling or disabling individuals from participating effectively within society.

## **2.4 Understanding inclusion**

There have, traditionally, been three broad approaches to the education of children with disabilities: segregation in which children are classified according to their impairment and allocated a school designed to respond to that particular

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impairment; integration, where children with disabilities are placed in the mainstream system, often in special classes, as long as they can accommodate its demands and fit in with its environment; and inclusion where there is recognition of a need to transform the cultures, policies and practices in school to accommodate the differing needs of individual students, and an obligation to remove the barriers that impede that possibility.

It has been argued that inclusive education is not only about addressing issues of input, such as access, and those related to processes such as teacher training, but that it involves a shift in underlying values and beliefs held across the system. It requires that all children, including children with disabilities, not only have access to schooling within their own community, but that they are provided with appropriate learning opportunities to achieve their full potential. Its approach is underpinned by an understanding that all children should have equivalent and systematic learning opportunities in a wide range of school and additional educational settings, despite the differences that might exist.

Inclusive education provides a fundamentally different pedagogical approach to one rooted in deviance or difference. In other words, it stresses:

- a. the open learning potential of each student rather than a hierarchy of cognitive skills;
- b. reform of the curriculum and a cross cutting pedagogy rather than a need to focus on student deficiencies;
- c. active participation of students in the learning process rather than an emphasis on specialized discipline knowledge as key to teachers expertise;
- d. a common curriculum for all, based upon differentiated and/or individualized instruction, rather than an alternative curriculum being developed for low achievers;
- e. teachers who include rather than exclude.

Radical changes are required in education systems, and in the values and principles of the people involved in delivering education, if the world's most

vulnerable and disadvantaged children are to realize their right to gain access to their local school. Central to an inclusive approach are a commitment to:

- Putting inclusive values into action
- valuing every life equally
- helping everyone feel a sense of belonging
- Promoting children's participation in learning and teaching
- Reducing exclusion, discrimination and barriers to learning and participation
- Developing cultures, policies and practices to promote diversity and respect for everyone equally
- Learning from inclusive practice to share the lessons widely
- Viewing differences between children and between adults as a resource for learning
- acknowledging the right of children to locally based high quality education
- Improving schools for staff and parents as well as children
- emphasizing the value of building positive school communities as well achievements
- fostering positive relationships between schools and their values and surrounding communities
- recognizing the inclusion in education is one aspect of inclusion in society

## **2.5 The case for inclusion**

Clearly there is a human rights and principled case for inclusion, but there are also strong social and educational benefits:

- it can produce positive changes in attitudes within schools towards diversity by educating all children together and leading to greater social cohesion.

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- Children with disabilities are less stigmatized, and more socially included
- Children without disabilities learn tolerance, acceptance of difference and respect for diversity
- Children with disabilities have access to a wider curriculum than that which is available in special schools.
- it leads to higher achievement for children than in segregated settings. Indeed, there are educational benefits for all children inherent in providing inclusive education, through major changes in the way schooling is planned, implemented and evaluated.
- Education is a means to ensure that people can enjoy and defend their rights in society and contribute to the process of democratization and personalization both in society and in education.

Furthermore, there are powerful economic arguments in its favour, particularly with regards to poverty reduction and reducing the costs of education. One of the messages emerging from the General Discussion Day on the rights of children with disabilities, held by the Committee on the Rights of the Child in October 1997, was the importance of recognizing children with disabilities as contributors to society, not burdens. The World Bank has estimated that people with disabilities may account for as many as one in five of the world's poorest people (1999), while a 2005 World Bank study also suggested that "disability is associated with long-term poverty in the sense that children with disabilities are less likely to acquire the human capital that will allow them to earn higher incomes". Educating children with disabilities is a good investment. A World Bank paper notes that it reduces welfare costs and current and future dependence. It also frees other household members from caring responsibilities, allowing them to increase employment or other productive activities. It is in the economic interests of governments to invest in the education of children with disabilities in order that they can become effective members of the labor force as they grow up.

## **Overview of inclusive education for children with disabilities in the CEECIS region**

The challenges facing the region, in creating environments in which the education rights of children with disabilities are respected, are considerable. Despite significant efforts to address their exclusion from mainstream schooling, and many examples of positive practice, many countries are still struggling to address the issue of equitable and inclusive access for children with disabilities. Recent reviews of the education of children with disabilities by both OECD and UNICEF have found a wide gap between official recognition of inclusive education in the form of international treaties and legislative frameworks, and the actual situation on the ground.

The causes are multiple: lack of co-ordination and collaboration between ministries providing services to children with disabilities, the prevailing influence of the concept of defectology on the design of education provision for children with disabilities; limited availability of social service providers, lack of reliable and detailed data and indicators, inadequate financial and human resources, and hostile public attitudes. It is apparent that legal reforms, which, in theory, create the opportunity and means to claim rights will not, on their own, be capable of challenging the deep-seated discriminatory practices which currently impede change. Measures are needed to build the capacity of the system as a whole in order to challenge inequity, and meet the obligations to promote and protect the rights of children with disabilities undertaken by all countries in the region.

### **2.6 The historical context**

Throughout the CEECIS region, during the Soviet era, children with disabilities were treated through the lens of 'defectology', based on the philosophy that disabilities are faults that can be corrected if appropriate services are provided. Defectology is a discipline rooted in a medicalised approach in which children with disabilities are considered 'defective' from the norm.

The consequence of this approach has been the systematic placement of children, according to type of disability, in residential institutions, so that they can grow and develop with support, and protected from general society. Children who are

classified as 'handicapped' are those with mental or physical defects that are thought to hinder their optimal development within the conventional educational system. The policy led to very significant numbers of children with medium and severe disabilities being placed in residential schools, transferring as they got older to adult institutions where they would spend the rest of their lives. Invariably these facilities each catered for large numbers of children, segregated from their communities and cut off from families. A variety of types of institutions existed, including infant homes, hospitals, special institutions or *internets* (boarding schools) run by the education ministry, boarding homes for the severely disabled operated by social services, and children's homes administered by the health department.

Children with milder learning disabilities were typically disregarded altogether or sent to special schools with a remedial curriculum, where they were unlikely to receive appropriate support for their needs. Those who were deemed 'uneducable' were sent to institutions or confined to the home. Children who did stay in their families had little chance of a normal life, given that streets and buildings were not accessible, community-based services, education and recreation were largely unavailable, and children with disabilities and their families were often shunned in public spaces or so shamed that they avoided venturing out in public. This, then, was the context, which informed social and educational policy for children with disabilities, at the fall of the Communist regimes 20 years ago, the consequence of which was that children with disabilities were highly marginalized and largely invisible. Regrettably, it remains very much the picture today in many parts of the region.

## **2.7 Prevalence of disability**

The total number of children in the 27 countries across the region who are now officially recognized as disabled, tripled from about 500,000 at the onset of transition (between 1990 and 2001), to 1.5 million. This surge is largely due to greater recognition of disability rather than to actual increases in impairments. The total child population is estimated at just over 100 million. Given that the international benchmark for the prevalence of disability among children is assumed to be a rate of 2.5%, this figure of 1.5 million suggests that over a million children with disabilities are not included in the data. UNESCO estimates

that 1.8 million of all children of primary-school age are missing from school in the whole of the South Eastern Europe (SEE), Central Europe (CE), and Commonwealth of Independent States (CIS) region.

The information that does exist, both in relation to prevalence and access to education, derives largely from the following sources:

- Hospital registries of children that are identified at birth as having a disability;
- Data on the number of children living in institutions or attending special schools or classes;
- Lists of children registered by parents or doctors as having disabilities, which leaves out all children whose parents do not or are ashamed to register them.

However, the data provided by these sources is seriously flawed:

- Significant numbers of children in institutions are often not counted in disability registers or education data as they are considered uneducable.
- The data does not generally include those children with disabilities that develop after birth.
- Shame and stigma leads to many parents failing to register their children as having disabilities.
- Responsibility for children with disabilities is commonly split between government ministries (education, social, health, labour) leading to a lack of co-ordination in data collection.
- Many children with disabilities, even when living at home, do not attend school and are therefore not visible in the system.
- While data does exist for children in special schools, and to some extent for children in special classes in regular schools, the number of children with disabilities with milder disabilities in regular classes is often not collected.

The problems are compounded as a result of different definitions of disability and different terminology to describe impairments. These conflicting definitions arise not only regionally, but also within countries between different ministries and organizations. Official definitions of disability across the region generally remain medically-based and anchored in functional limitations; that is, that an individual is incapable in some basic way. The perpetuation of an approach which persists in understanding disability as a medical condition, inherent to the child, that can be repaired, renders it almost impossible for governments to envision what children with disability can accomplish in mainstream school settings.

There is a pressing need for more data on the education of children with disabilities in the region. Overall, the available data across the region on the learning achievement or school success of children with disabilities either in inclusive classrooms or in special schools is extremely limited, with very few systems set up for collection. Where it does exist, it indicates that children with disabilities generally receive a very restricted education. In many countries, national level education data fails to include information on numbers and placements of children with disabilities. Overall, the problem of acquiring accurate information on educational outcomes for children with disabilities is compounded by the fact that children from many socially vulnerable families, including Roma children, are placed in special schools. 10

## **2.7 Policies towards disability since transition**

In the last 20 years, culminating in the adoption of the CRPD in 2006, there has been an accelerating shift internationally towards the recognition of people with disabilities as holders of rights rather than problems to be solved. Alongside this development, the disability community has promoted adoption of a 'social model' of disability. This approach challenges the medical model where the focus is on changing the individual with a disability. Instead, it emphasizes the extent to which the physical, cultural, communication, attitudinal, transportation barriers in the environment serve to disable people, and therefore need to change.

However, CEECIS countries, overall, still conceptualize disability as primarily a chronic medical condition of the individual, for which the solutions are health care, rehabilitation, institutionalization, or social supports such as special



education and pensions. Little differentiation is made between impairment, illness and disability. And despite universal ratification of the Convention on the Rights of the Child (CRC) across the region, strong encouragement to promote inclusion and programmes of de-institutionalization in accession countries, the overwhelming majority of countries having signed and ratified the Convention on the Rights of Persons with Disabilities (CRPD), and many countries having introduced progressive legislation to strengthen the rights of children with disabilities, progress remains patchy.

## 2.8 De-institutionalization

Institutionalization remains the overwhelming policy approach across the region, with defectology continuing as the academic discipline governing the care and treatment of children with disabilities. Consistent with this context, the number of children in institutional care in the region is the highest in the world. UNICEF estimates that across CEECIS, a child with a disability is almost 17 times as likely to be institutionalized as one who is not disabled. More than 626,000 children reside in these institutions. The rate of children in institutional care in CEECIS has on average been almost stagnant since 2000. But in 12 countries, the rate *increased* between 2000 and 2007<sup>xxviii</sup>. This means that despite ongoing reforms, institutional care is becoming more frequent in more than half the countries.

Following the collapse of Communism and greater exposure to, and support from the West, conditions in institutions for children in the region did begin to improve. However, some countries, faced with severe economic difficulties, have experienced challenges in finding the necessary resources to maintain improved standards in institutions, with children often suffering from poor diet, lack of heat, insanitary conditions and inadequate staffing levels. The UN Study on Violence against Children highlighted profound concerns about conditions in institutions including violence, neglect, dangerous environments, including children being left for hours on urine soaked mattresses, or physically or medically restrained, understaffing and lack of monitoring or independent scrutiny.

Research undertaken in 2001 found that the death rate among institutionalized disabled children in several countries in Eastern Europe was almost twice that for children in the general population and for disabled children who are kept at home.

Despite this evidence, the high levels of poverty in many of the countries leads to some parents arguing that institutions meet their child's needs better than they can – providing rehabilitative services as well as diet. And, there are positive examples of some institutions building opportunities for children to connect more closely with their local communities.

De-institutionalization depends on the development of effective alternative community-based services. Such services have improved since the early 1990s, but still have a long way to go. A survey by UNICEF published in 2005 found that there were substantial differences both among and within countries, with a significant divide between CEECIS sub-regions, north and south, richer and poorer countries, urban and rural populations.

## **2.9 Early assessment, identification and care**

The emphasis in assessment, throughout CEECIS, remains strongly medically focused. The CEECIS still largely retains its legacy of rigid Soviet style screening commissions, and in most countries, children receive only a medical diagnosis at birth and a medical screening around age 6. Routine assessments tend to overlook the developmental and behavioral dimensions of health, and few countries provide comprehensive assessments with a coordinated multidisciplinary team. The problem is particularly acute in peripheral and especially rural areas. There is only limited training for health and other social service professionals about disabilities.

Efforts have been made to reform the commissions, to include social, emotional, and educational, as well as medical factors, when determining an appropriate educational plan for children. Nevertheless, a recent UNICEF survey revealed that in many countries throughout the region, they continue to rely on the defect logy model to determine disability classifications and educational capabilities for the child, and are rarely followed by a more comprehensive assessment or a re-examination of the original diagnosis. Furthermore, in many parts of the region, screenings are not compulsory and parents have to pay for them, resulting in the most at-risk children not receiving supportive services and being placed in inappropriate educational settings.

Even where early assessments are provided, they can prove detrimental. When any kind of development difference is noticed at birth, there is still a widespread practice of immediate separation of the child from the mother, depriving the child of essential breastfeeding support, bonding and contact. Once a diagnosis of disability is made, it is very hard to change it. This is especially true for children deemed 'uneducable' and placed in institutions. The commissions can pass down disability labels that are virtually impossible to appeal.

## 2.10 Education

The pattern of early years' education varies considerably across the region. While Early Childhood Education for children under 2 was not universally available in the region prior to transition, it has now fallen to levels of between 10-15%. However; there is no accurate information on the extent to which children with disabilities have access to such services.

There does, however, appear to be a growing understanding throughout the countries of the region that all children have a right to education under international and national law; that all children are capable of being educated; and that it is a government's responsibility to provide educational settings that respect these rights and capabilities. The national education laws in the majority of countries in the region do now state that all children have the right to receive an education in mainstream schools along with individualized instruction appropriate to their abilities. Most of the countries also have laws or regulations specifically designed to ensure equal opportunity for children with disabilities to receive full benefits of education at all levels.

There is also a trend toward inclusive education policy in the region. A number of countries include a component on 'inclusive education' in their national education strategic plans and national education reports. However, budgetary support, action frameworks, indicators, and implementation commitments are not included, inclusive education is generally not harmonized with general education planning, and policies towards and understanding of inclusion vary considerably. The concepts of integration and inclusion are not always clearly distinguished from each other and are often used interchangeably. Furthermore, there is a gulf between policy and practice on the ground.

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Current provision ranges from special schools, institutions, and 'correctional education centers' to special classrooms, supported home schooling, day care centers, inclusive classrooms, and individualized curricula in special classes in general education schools. Some inclusive classrooms do exist in all countries, either by government policy or as a consequence of NGOs or donor organizations piloting inclusive education programmes, although the total numbers of students involved is very difficult to ascertain. In general, it is children with mild or moderate degrees of disability who are deemed to be candidates for inclusive classrooms. And, although there have been some moves towards inclusion in mainstream schools, the reality is that there has been a bigger demand for and creation of special schools for children with disabilities in many countries and in practice, segregation of children with disabilities in special schools is still the predominant practice, with the majority of children with disabilities systematically excluded from mainstream education.

Institutes of Defectology continue to administer the majority of training for teachers who will teach children with disabilities. Some efforts have been made towards renaming these institutes. However, these shifts are not generally accompanied by appropriate paradigmatic changes towards an inclusive philosophy. Overall, the traditional Soviet approach to education that valued the use of uniform methods and standardized curricula is still very much in evidence. Pre-service teacher training in the region is a long way from succeeding in teaching inclusive pedagogy. Countries report an acute shortage of high quality in-service training programs. Nine countries of 22 in the region report having teachers trained to teach inclusively<sup>xxxix</sup>. And only four countries have pre-service teacher training programmes that incorporate inclusive education as a specific skill component. Often sponsored by NGOs, these programmes are rarely widespread and organizations rarely have the resources to scale them up.

The quality of training is further hampered by the inadequacy of practical experience during pre-service training across the region. In some countries, teachers have as little as one day to practice teaching before they are hired as teachers, with very few ever having the chance to observe an inclusive classroom in action. 13

## **2.11 Stigmatization and prejudice**

Discrimination and negative attitudes toward disability continue to permeate the region, which, in part, can be traced to the Communist past, when individuals were valued according to their productivity and contributions to the advancement of the state. These attitudes impede progress towards inclusion. The language widely used to describe disability serves to perpetuate negative stereotypes and prevent full inclusion. Professionals, as well as the wider society, commonly use derogatory terms such as 'defective', and 'imbecile' when referring to disability, while the belief that these 'defects' must be corrected prevails in the region.

Implementation of inclusive education is hampered by persisting negativity towards disability among the professionals in the education system. Government commitment to inclusion initiatives and the philosophies supporting them are very new, and counter many deeply held beliefs about education. The majority of teachers continue to have the same discriminatory attitudes towards disability as those evidenced in the majority population.

However, some countries in the CEECIS region have made significant efforts to raise awareness about children with disabilities, create tolerance and emphasize the value of inclusion. Fourteen of the 22 countries in the region have used targeted campaigns that debunk myths about disability and present disability in a positive light to change attitudes and raise general awareness about the importance of inclusive education. Successful disability campaigns in the region contain clear, contextualized messages that quickly and effectively relay information using innovative techniques with an overall aim to ensure that children with disabilities are more present and accepted in societies.

### **A human rights-based approach to inclusive education for children with disabilities**

## **2.12 The relevant human rights standards**

All governments in the region have ratified the Convention on the Rights of the Child (CRC), a holistic human rights treaty addressing the social, economic, cultural, civil, political and protection rights of children. It emphasizes both the

right to education on the basis of equality of opportunity, and the broad aims of education in terms of promoting the fullest possible development of the child.

Article 2 of the CRC introduces, for the first time in an international human rights treaty, an explicit obligation on governments to assure the realization of all rights to every child without discrimination, including on grounds of disability. In addition, Article 23 of the CRC specifically addresses the right of children with disabilities to assistance to ensure that they are able to access education in a manner that promotes their social inclusion. The Committee on the Rights of the Child, in a General Comment on children with disabilities, has further stressed that inclusive education must be the goal of educating children with disabilities.

Fulfillment of the obligation to ensure the equal right of all children with disabilities to education necessitates an approach based on a holistic understanding of the CRC. The Committee on the Rights of the Child has identified four rights which must also be understood as general principles to be applied in the realization of all other rights – non-discrimination, the best interests of the child, the optimum development of the child and the right of the child to be heard and taken seriously in accordance with age and maturity. These principles need to underpin all actions to promote the right of children with disabilities to education. In addition, it is necessary to take account of all other relevant rights. For example, many children with disabilities will continue to experience barriers in realizing their right to education, unless measures are taken to provide early assessment and access to early years provision, to tackle prejudice and discrimination, to provide protection from bullying and violence, and to develop appropriate support and services for families.

Despite these commitments, the rights of children with disabilities continue to be widely neglected and violated. The UN Convention on the Rights of Persons with Disabilities (CRPD) was drafted, not to introduce new rights – the rights of persons with disabilities are exactly the same as those of every other person – but to re-affirm those rights and introduce additional obligations on governments to ensure their realization. The CRPD includes detailed provisions on the right to education, stressing more explicitly than in the CRC, the obligation of governments to ensure ‘an inclusive system of education at all levels’. It also introduces a range of obligations to remove the barriers that serve to impede the

realization of rights for people, including children, with disabilities, and to ensure more effective protection and a stronger voice for children with disabilities to claim their rights.

### **Principles underpinning a rights-based approach to education**

A rights-based approach to education is informed by seven basic principles of human rights. These principles need to be applied in the development of legislation, policy and practice relating to the right to inclusive education:

- **Universality and inalienability:** Human rights are universal and inalienable, the entitlement of all people everywhere in the world. An individual cannot voluntarily give them up. Nor can others take them away.
- **Indivisibility:** Human rights are indivisible. Whether civil, cultural, economic, political or social, they are all inherent to the dignity of every person
- **Interdependence and interrelatedness:** The realization of one right often depends, wholly or in part, on the realization of others.
- **Equality and non-discrimination:** All individuals are equal as human beings, and by virtue of the inherent dignity of each person, are entitled to their rights without discrimination of any kind.
- **Participation and inclusion:** Every person and all people are entitled to active, free and meaningful participation in, contribution to and enjoyment of civil, economic, social, cultural and political development.
- **Empowerment:** Empowerment is the process by which people's capabilities to demand and use their human rights grow. The goal is to give people the power and capabilities to claim their rights, in order to change their own lives and improve their communities.
- **Accountability and respect for the rule of law:** A rights-based approach seeks to raise levels of accountability in the development process by identifying 'rights holders' and corresponding 'duty bearers' and to enhance the capacities of those duty bearers to meet their obligations.

### **2.13 Obligations to ensure the right to education for children with disabilities**

When governments across the region ratified the CRC and signed or ratified the CRPD, they undertook to take all necessary measures to ensure that the rights they contain are realized. This involves action:

- **To fulfill the right to education** - for example, by ensuring that quality education is available for all children, promoting inclusive education, and introducing positive measures to enable children to benefit from it, for example, making physical adaptations to buildings, providing accessible transport, adapting the curricula to the needs of all children, and providing necessary equipment and resources.
- **To respect the right to education** – for example, by avoiding any action that would serve to prevent children accessing education, for example, legislation that categorizes certain groups of children with disabilities as uneducable, school entry testing systems that serve to categorize children with disabilities as not ready for school.
- **To protect the right to education** - for example, by taking the necessary measures to remove the barriers to education posed by individuals or communities, for example, resistance by teachers to accepting children with disabilities, or violence, abuse or bullying in the school environment.

However, in order to achieve inclusive education, action is needed, beyond national governments, to involve stakeholders at every level.

- **for local authorities** - the development of local policies for implementation of inclusion; appropriate support for individual schools; provision of funding; securing the necessary building adaptations and the provision of resource centers.
- **for individual schools** - the introduction of an inclusive educational environment which addresses the culture, policies and practices of the school to ensure that the basic conditions exist in which all children can participate and learn.



- **for parents** – sending all their children to school, and supporting them both in their education, and in helping ensure that schools comply with the principles of an inclusive approach.
- **for children** – to take advantage of opportunities to participate and learn, support their peers and co-operate with the values of inclusive schooling.
- **for civil society**- supporting the development of community-based inclusive education and contributing to an environment of respect and acceptance.

### **A conceptual framework for promoting the right to inclusive education**

These basic principles and overarching government obligations can be applied to develop a clear conceptual framework to pursue the EFA goals within an inclusive approach, and ensure that children with disabilities are able to realise their right to education. A rights based approach to education requires more than '*business as usual*', and a commitment to inclusive education would embrace a three-dimensional approach. It requires an understanding of inclusion as an approach to education for all children that includes: (1) Education policies and strategies to promote the right to access education; (2) the right to quality education; and (3) respect for rights within the learning environment. In addition, this approach needs to be underpinned by a broad strategic commitment across government to create the necessary environment for ensuring the rights of children with disabilities.

### **Approaches to realizing the right of children with disabilities to inclusive education**

The implementation of these commitments would necessitate the following actions on the part of governments.

#### **2.14 Government-wide measures**

##### **2.14.1 Political will and good governance**

- Measures to promote accountability, transparency, access to justice and the rule of law

Recognition of and commitment to comprehensive and sustained measures to tackle the social exclusion of and discrimination against children with disabilities in the education system

Scaling up of programmes, policies and strategies that have been successful – evidence based advocacy should be used to increase the scale of impact

#### **2.14.2 Government structures**

Responsibility for education of children with disabilities to rest within education ministries to bring an end to the segregation of provision

Co-ordination across and between ministries to ensure a coherent and comprehensive approach to fulfilling the right to inclusive education for children with disabilities - for example, ministries of finance, health, social work, social protection, employment and vocational training, transport as well as education

Devolved government structures – devolving responsibilities to the local level to strengthen local accountability, but to be accompanied by capacity building, guidance, dedicated budgets and transparent reporting

#### **2.14.3 Ending institutionalization**

Commitment to ending the placement of children in long term residential institutions through planned process of transition to community based care

Introduction of the necessary legislative and policy framework to achieve the transition to community based alternatives to institutional care

strengthening cross-sectoral community-based services based on a commitment to case management as the key intervention to co-ordinate services from birth

Strengthening support for families to build their capacities to care for children with disabilities at home

#### **2.14.4 Financing**

- Commitment to initial investment of expenditure to achieve system reform, while recognising that in the long term, inclusive education is a cost effective approach to achieving education for all
- Provision of an adequate flexible funding and fair allocation formula to promote incentives for inclusive education
- Removal of requirements that children are labelled and categorised in order to receive appropriate services - rather they should be geared towards providing flexible, effective and efficient responses to learners' needs
- Introduction of effective tracking of expenditure to strengthen accountability, transparency and ensure more effective use of funds

#### **2.14.5 Guarantee the right to non-discrimination**

- Ratification of the CRPD and Optional Protocol
- Introduction of legislation prohibiting discrimination on grounds of disability
- Introduction of accessible and affordable mechanisms for challenging discrimination
- Provision of information to children with disabilities and their families on their right to non-discrimination, its implication and how to challenge violations

#### **2.14.6 Strengthening information systems**

- Introduction of a common definition of disability based on the ICF and rooted in the social model of disability
- Development of comprehensive education information management systems leading to improved collection of data on prevalence, developments in progressing inclusive education, as well as disaggregated data on educational access and outcomes
- Investment in capacity building in data collection

#### **2.14.7 Learning from what works**

- Systematic monitoring and evaluation of innovative programmes to promote inclusive education
- Analysis and dissemination of the lessons learned
- Government investment in mainstreaming the emerging lessons into models of inclusive education across the sector
- Further investment in the NGO sector to explore new approaches to achieving improved educational outcomes for children with disabilities

#### **2.14.8 Partnerships and participation**

- Commitment to investment in partnerships with families, children, NGOs and DPOs and all other all key stakeholders in all stages of the development of inclusive education
- Investment in removing the barriers that impede parental involvement in the education of children with disabilities including lack of awareness of educational alternatives, fear of hostility within communities, poverty and lack of information on their children's rights
- Respect for the contribution families are able to make as active partners throughout the life cycle of their children's education

#### **2.14.9 Capacity building and awareness-raising**

- Investment in capacity building at all levels to promote awareness of the rights of children with disabilities to inclusive education and to the development of the necessary systems and practices for its attainment– including national and local government officials, professionals working with children with disabilities within education, social work, and health.

## **2.15 Education policies and strategies to promote the right to access education**

Every child has the right to education on the basis of equality of opportunity. Children with disabilities are particularly at risk of being marginalised or discriminated against in the realization of this right. Governments need not only to establish the entitlement of every child to education, but must also take action to identify and remove the barriers and bottlenecks that impede access. A broad range of both universal and targeted measures are required to ensure that children with disabilities are equally able to realise the right to education alongside other children. This will include working to support parents in order that they can support their children's access to education, early identification and assessment, early years education, ensuring access to and availability of inclusive education for all children, with all necessary supports and adaptations, and creating inclusive learning environments in which children learn together.

### **2.15.1 Removing the barriers to inclusive education**

- removing the physical, communication, mobility and sensory barriers to education including investment in development of public spaces that are both safe and inclusive, providing that all education environments have physically accessible features and all the necessary conditions for learning, and introducing accessible transport
- Addressing attitudinal barriers by public awareness campaigns, use of appropriate language to challenge negative stereotypes of disability and encouraging the media play a positive role in challenging the barriers to inclusion
- addressing socio-economic barriers through provision of appropriate, accessible and non-stigmatizing social protection measures

### **2.15.2 Working with and supporting parents**

- Provision of parental education programmes to help parents support their child's learning, for example through parent-to-parent counseling, mother-child clubs, or civil society outreach through house to house visits

- Building partnerships between them and local schools, encouraging them to join school boards and developing programmes which explicitly address their concerns.

### **2.15.3 Early childhood education and care services**

- Investment in early assessment and intervention to both prevent institutionalisation and promote the possibility for effective and appropriate support
- Provision of comprehensive ECCE providing care, stimulation, parental support and access to relevant services
- Developing universal access to inclusive pre-school provision

### **2.15.4 Ensuring access to and availability of inclusive education**

- Introduction of legislation and policies establishing the right to inclusive education which includes a clear definition of inclusion and the specific objectives it is seeking to achieve, as well as guaranteeing children with and without disabilities the same right to access mainstream learning opportunities, with the necessary support services
- Provision of a consistent framework for the identification, assessment, and support required to enable children with disabilities to flourish in mainstream learning environments
- Introduction of an obligation on local authorities to plan and provide for all learners with disabilities within mainstream settings and classes, including in the most appropriate languages and modes and means of communication.

### **2.15.5 Creating inclusive learning environments**

- Building inclusive cultures within schools through:
  - Translation of national policies of inclusion into school based policies setting out both the commitment to non-discrimination and inclusion, including for example, the development of a child friendly school framework, school self-assessments as well as school development plans.

- Engagement of teacher associations, school boards, parent-teacher associations, and other functioning school support groups with programmes to increased their understanding and knowledge of disability
- Ensuring that such policies are reflected in all aspects of the life of the school: classroom teaching and relationships, school and board meetings, teacher supervision, school trips, playground behavior, budgetary allocations, and any interface with the local community or wider public.
- ending segregation within schools by:
  - ensuring a commitment to inclusive classroom teaching.
  - Developing municipal policies for inclusive classroom environments, involving schools, teachers, municipal officials, school administrators, parents and children, as well as other stakeholders
  - Provision of support within mainstream classes to children with disabilities.
  - monitoring schools on a regular basis to ensure that segregation is not taking place either formally or informally. Monitoring should involve parents of children with disabilities in order that systems are transparent and accountable to them and their children.

## **2.16 The right to quality education**

Education has to be of the highest possible quality to help every child reach her or his potential, and that quality should be consistent across regions, different populations, and urban and rural settings. Quality in education can only be achieved through the development of child-friendly inclusive learning environments, dedicated to a holistic approach to children's development. All learning environments and educational content, teaching and learning processes should reflect human rights principles. This means addressing children's multiple rights, using strategies that build links between the school and the family and community. Although there is no single definition of 'quality education', it is broadly understood to incorporate the opportunity for both effective cognitive learning, together with opportunities for creative and emotional development. In order to achieve these goals, education for children with disabilities must

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encompass positive learning opportunities providing appropriate support for all children, investment in and support for teachers to enable them to teach within inclusive environments, rights based learning and assessment, and child friendly, safe and healthy environments.

- **Securing the appropriate individualized support for children with disabilities**

- Introduction of IEPs as a key strategy for supporting children with disabilities in inclusive settings

- Involving students, parents and all relevant staff in the design and setting of targets

- Provision, where needed, of holistic packages of care involving support, not only in children's education, but also in the provision of health or social care services, technical assistance, and psychological support

- Establishing partnerships between service providers, NGOs, research and teaching institutes to support regular providers of education, health care and social care to provide the best possible all round care to enable children to benefit to the fullest possible extent from their education.

- **Developing inclusive curricula, teaching and learning methods**

- Promotion of active, participatory and child centered learning and teaching methods to allow children to work at an appropriate pace, in groups or individually, and partnering children with and without disabilities as peer educators to enable mutual learning

- Adopting a curriculum to enable all children to acquire the core academic curriculum and basic cognitive skills, together with essential life skills, including respect for human rights.

- Creative use of assistive technology to make it easier for students with disabilities to learn, including physical resources, computers and use of ICTs

- **Introduction of rights based and inclusive student assessment**



- Adoption of a holistic view of student assessment that considers academic, behavioral, social and emotional aspects of learning
- ensuring that children with disabilities are able to fulfill their educational potential through a system of individualized supports, which emphasize treatment according to need, and aim toward equitable success that is measured broadly.
- Measuring student progress in the general education curriculum, with clear standards and benchmarks and use multiple forms of student assessments to inform and facilitate teaching and learning
- Introduction of school self-assessment systems that measure whether commitments to inclusive education are being fulfilled and to help identify changes and improvements necessary for moving forward

- **Investment in teacher training**

- Reviewing the content of teacher training curricula to ensure that it embodies child centered methodology, teaching in inclusive and multi-cultural environments, using individual educational plans to adapt and support children with specific educational needs, human rights, and in particular, recognition of non-discrimination as a human right and positive strategies for promoting tolerance and tackling discriminatory behavior
- Providing increased levels of opportunity for practical work experience as part of teacher training
- On-going, high quality professional development opportunities for teachers that address inclusive methodologies

- **Support within schools for teachers**

- Ensuring adequate staffing levels to provide teachers with the time and resources needed to achieve effective inclusive education
- Provision of strong support from school leadership, with ownership by the governing body, and all school policies consistent with the goal of inclusive education

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Involvement of family and community as resources in classrooms to support individual learning programmes and increased individual attention that children with disabilities often need.

- **Establishing resources to provide specialist support**

Building multi-disciplinary support through a range of different specialist services, organizations and resource centers, and professionals working collaboratively to provide a comprehensive and seamless service to support inclusive education.

Development of collaborative practice and provision through networks of learning communities

Utilizing parental expertise as a significant source of support both to other families and to schools.

Improving teachers' conditions of service to ensure that they are adequately supported, paid and respected.

- **A child centered, safe and healthy environment**

Establishing close links between health and education services to provide a connection between school, community and the family, revolving around the child's well-being.

Promoting effective community partnerships to ensure positive interaction between the school and the community

Developing health and safety standards for the building of schools to reflect the needs of children in inclusive settings

providing safe and stimulating opportunities for play and recreation for all children

Ensuring that, in the case of natural and man-made disasters, all children are easily able to evacuate any buildings and routines are in place on how to respond in such situations.

## **2.17 Respect for rights within the learning environment**

Human rights are “inalienable”. In other words, they are inherent to each human being, and must be respected within learning environments, as in all other contexts. Education needs to be delivered in an environment which is respectful of the cultural, protection and participation rights of children. This will necessitate a commitment to respect for identity by recognizing, for example, the right of deaf and blind children to respect for their culture and language through provision of learning in sign language, respect for the right to be listened to and taken seriously in all aspects of education, and to the right, both within school and when travelling to/from school, to be protected from all forms of violence, bullying or harassment, school discipline which is respectful of their dignity.

- **Right to respect for identity, culture and language**

- Recognition of the right of children under international law to recognition of their cultural and linguistic identity
- Recognition of sign language as a language which must be recognised within the meaning of the right to language and culture
- Recognition of children’s right to respect for their language and culture within their education and schooling

- **Respect for children’s participation rights**

- Introduction of legislation guaranteeing school children the right to establish democratic bodies such as school councils, and requiring that such bodies comply with principles of non-discrimination and promote inclusion of children with disabilities, as well as both girls and boys.
- Development of guidance for local municipalities and schools on developing opportunities for children to be heard, which emphasises the necessity for inclusive and non-discriminatory approaches.
- Introduction of mechanisms for ensuring that children are able to express a view on school placements, and have their views taken seriously in accordance with their age and maturity.

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- Development of school policies in partnership with children on rights, inclusion, respect for diversity and non-discrimination
- Introduction of safe, accessible and confidential complaints mechanisms through which children with disabilities can raise concerns
  - **Right to respect for personal and physical integrity**
- Explicit prohibition of corporal and other humiliating punishments by law, and reinforced by other necessary measures, reinforced by clear enforcement mechanisms, and strong messages that all forms of violence against children is unacceptable
- Establishment of clear codes of conduct reflecting child rights principles for all staff, students and their families and communities, which include accessible complaints or reporting mechanisms which can be used safely and confidentially
- Training and support for all school staff in the use of effective non-violent and respectful classroom management strategies, as well as specific skills to prevent patterns of bullying and other gender-based violence and to respond to it effectively.
- Emphasis on tolerance, respect, equity, non-discrimination, and non-violent conflict resolution within the curriculum, textbooks and teaching methods
- Involvement of children themselves, including children with disabilities, as active agents in building safe environments, challenging bullying, prejudice and discrimination and providing peer-to-peer support.

### 2.18 Summary

Children with disabilities remain marginalized across the region, with their right to education far from being fully realized. Although significant efforts have been made to overcome the historic discrimination and exclusion they experience, too often such measures are fragmented and un-coordinated both across and within ministries. Furthermore, they fail to address the necessity for tackling the institutionalized barriers impeding change: the continued reliance on the narrow pedagogy of defectology, rooted in a medicalised understanding of disability; the

continued focus on segregation and institutional care, with insufficient investment in community-based services and supports; the deep-seated prejudices among those professionals charged with the responsibility for promoting inclusive education; and the lack of sufficient engagement with and respect for the expertise and potential contribution of families of children with disabilities, as well as the children themselves.

Lack of resources is often cited as a barrier to change. Of course, there will always be limits to the resources available, but the emerging evidence indicates that the provision of inclusive education is cost-effective. Not only is it no more expensive to provide than a segregated system, but the educational and social outcomes for children both with and without disabilities have been found to be positive. And, in the long term, providing quality inclusive education for children with disabilities reduces dependency on the state and promotes their potential economic capacity.

Most important is the political will to invest in measures at all levels to create the necessary environment to support and facilitate inclusive education. Piecemeal initiatives, however well-intentioned, are not enough. Governments need to commit to the introduction of legislation, policies, financing, data collection, capacity building, and partnerships as the vital building blocks in the creation of the infrastructure needed to support inclusive education. They will provide the basis for establishing the specific education measures required to achieve the right to access quality education on the basis of equality of opportunity for every child, which is also respectful of the human rights of those children. This goal is attainable. And it is not only the right way to go, and an obligation on the part of all governments, but it will bring long term benefits for all children and the wider society. 24

## **2.19 References**

Salamanca Statement and Framework for Action, 1994, pg. 6 UNICEF, 2007, Innocent Digest no.13, Promoting the Rights of Children with Disabilities WHO and World Bank, 2011, World report on Disability UNICEF, 2009, *Progress for Children: A Report Card on Child Protection*

M.P BHOJ (OPEN )UNIVERSITY

---

Miles S and Singal N, The Education for All and inclusive education debate: conflict, contradiction or opportunity? Miles S and Singal N, The Education for All and inclusive education debate: conflict, contradiction or opportunity? International Journal of Inclusive Education, 1464-5173, Volume 14, Issue 1, First published 2010, Pages 1 – 15

Miles, Susie and Singal, Nidhi(2010) 'The Education for All and inclusive education debate: conflict, contradiction or opportunity?', International Journal of Inclusive Education, 14: 1, 1 — 15, First published on: 01 October 20 Ainscow, M., T. Booth, and A. Dyson. 2006. Improving schools, developing inclusion. Abingdon: Routledge.09

UNESCO, Inclusive Education: the Way of the Future, International Conference on Education, 48th session, *Geneva, Switzerland, 25-28 November 2008*

Adapted from Skidmore D (2004) Inclusion: the dynamic of school development, Open University Press, London, pp112-127

Miles S and Singal N (2009) The Education for All and inclusive education debate: conflict, contradiction or opportunity? International Journal of Inclusive Education

UNESCO 2009- Policy Guidelines for Inclusion; Jonsson and Wiman 2001 Education, Poverty and Disability in Developing Countries; Social Analysis and Disability: A Guidance Note Incorporating Disability-Inclusive Development into Bank-Supported Projects 2007, Inclusive Education: Where there are few resources (2008)

Filmer D (2005) Disability, Poverty and Schooling in Developing Countries: Results from 11 Household Surveys, Social Protection Discussion Paper Series, World Bank

OECD Education Policies for Inclusion in South Eastern Europe: Challenges and Opportunities, Issues paper for an international conference in Vienna (22 – 23 May 2007), and Children and Disability in Transition in CEE/CIS and Baltic States, UNICEF, Geneva, 2005

V.I. Lubovsky (undated *Defectology: The Science of Handicapped Children*. Translated by A. Schultz). UNESCO, 2011, Global Monitoring Report

UNICEF, 2005, Children and Disability in Transition in CEECIS and Baltic States, UNICEF Innocenti Research Centre, Florence, <http://www.unicef.org/ceecis/Disability-eng.pdf> .Organization of Economic Cooperation and Development (2007) Education Policies for Inclusion in South Eastern Europe: Challenges and Opportunities. Presented in Vienna, Austria. <http://www.oecd.org/dataoecd/16/59/38613154.pdf> <http://www.oecd.org/dataoecd/16/59/38613154.pdf> <http://www.oecd.org/dataoecd/16/59/38613154.pdf>, And Organization of Economic Cooperation and Development (2007) Education Policies for Students at Risk and Those with Disabilities in South Eastern Europe: Follow-up Report. Paris.

End placing children under three years in institutions, UNICEF, Geneva Office, 2011 UNICEF, 2009, Progress for Children: A Report Card on Child Protection *ibid* Groce N (2005) Summary Report , Violence against Children with Disabilities, UN Secretary General's Study on Violence against Children Thematic Group on Violence against Children with Disabilities, UNICEF, New York

A brief overview: Inclusive Education for Children with Disabilities in the CEECIS Region, UNICEF, Geneva, 2010

Children and Disability in transition In CEECIS and Baltic States, UNICEF, Geneva, 2005

Organization of Economic Cooperation and Development (2007) Education Policies for Inclusion in South Eastern Europe: Challenges and Opportunities. Presented in Vienna, Austria. <http://www.oecd.org/dataoecd/16/59/38613154.pdf>

UNICEF (2007) Education for Some More than Others? A Regional Study on Education in Central and Eastern Europe and the Commonwealth of Independent States (*CISCISCEEICIS*). Geneva: UNICEF Regional Office for Central and Eastern Europe and the Commonwealth of Independent States. Becirevic, M. Tsokova, 2009.

M.P BHOJ (OPEN )UNIVERSITY

---

A brief overview: Inclusive Education for Children with Disabilities in the CEECIS Region, UNICEF, Geneva, 2010

Santo Pais, M (1997) The Convention on the Rights of the Child, in The Manual of Human Rights Reporting, OHCHR, Geneva



### UNIT 3

## **Diversity in Classrooms: Learning Styles, Linguistic & Socio-Cultural Multiplicity**

### 3.1 INTRODUCTION

3.2 Teaching and learning styles: the academic culture Learning styles

3.3 Diversity: In Higher Education and at USC

3.4 Learning Styles in a Diverse Classroom

3.5 Students' Special Needs

3.6 Tips on Teaching in a Diverse Classroom

3.7 Teaching techniques to address all learning styles

3.8 The academic culture and teaching styles

3.9 Course content and material

3.10 Class discussion

3.11 Assignments and examinations

3.12 The academic culture and re-acculturation

3.13 Collaborative learning as a tool for re-acculturation

3.14 Tactics for overcoming stereotypes and biases

3.15 Summary

3.16 REFERENCES

### 3.1 INTRODUCTION

Visions of educations for a multicultural society, strive for equity for opportunity to learn, largely through the conveyance of three policies: heterogeneous grouping, highly interactive instruction that appeals to a wide variety of learning styles, and inclusive curricula. This call for total reform strongly suggests that existing conceptions of education are inadequate for promoting multicultural equity. Unfortunately, these same conceptions have shaped the schooling of prospective teachers. Their education likely has been characterized by tracking (the process of assigning students to different groups, classes or programmes based on measure of intelligence, achievement or aptitude) traditional instruction that aspects to a narrow range of learning styles and curricula that exclude the contributions of woman and people of diverse cultures. Competition drives this model of schooling, in which students tend to be viewed as products coming off an assembly line. Universities continue to attract a rich mix of racial and culturally diverse students. These groups have traditionally been underrepresented in higher education, and every effort should be made to help them complete univ\*Corresponding author. E-mail: pierredp@uj.ac.za ortomb@uj.ac.za.ersity programmes. Many educators believe that such students are much more likely to succeed when allowed to learn math, science, or technology in small working groups. Especially at the start of a course, these students might learn more if they are allowed to choose their own working groups. Multicultural education is as essential to teaching as nurturing is to human development. To be effective teachers, education students must understand and appreciate human diversity when preparing teachers for multicultural classrooms, emphasis should be placed on a broad education in the liberal arts an initial course in multicultural education, infusion of multiculturalism throughout the education curriculum, field experiences in a multicultural setting and assessment of the cultural competency of each student. The classroom in many societies is a representation of people with different social class, gender, age, ability, ableness, sexuality, religious, racial, and/ or ethnic backgrounds as well as different personalities. Many of these differences are reflected in the multiplicity of learning styles of students. The irony is that most classrooms tend to cater mainly to the learning style needs of a particular group. According to Ginsburg (2001a), "Most diversity instruction is geared for abstract sequential learning. We emphasize the development of

analytical skills and focus most classes on theoretical and conceptual issues; we 246 Educ. Res. Rev. eagerly give “corrective feedback” and often inadvertently, encourage perfectionism; we rely more on lectures than group discussions and in our small groups we feature the cut and thrust of debate over the exchange of feelings and spiritual insights”. The above observation of Jerry Ginsburg’s seems very true even in most pre-university classrooms in many societies. So far, because of lack of recognition and facilitation of differences in learning styles, diversity in the classroom frustrates many students and teachers. The result is that development of fruitful learning and teaching is stunted. If the classroom is to motivate students to learn effectively, efficiently, and with joy rather than pain, the differences in their learning styles should be taken into account in the design and delivery of courses. To succeed in facilitating productive diversification in the classroom, the main principles of productive diversity – full inclusion and accommodation – must be diligently applied to course content, materials, assessment criteria, and delivery. Since the practice of these diversity principles is tedious, teachers must be convinced of diversity benefits first. When people find commonalities of honour diversity, it allows them to function together with another in different situations including classroom settings (McArthur-Blair, 1995), creating one of the foundations of inclusion. Thus, it is important to promote diversity in teaching and learning to create an inclusive community of critical independent learners. Addressing diversity can also help alleviate anxiety in courses with complex subject matter such as introductory statistics courses.

**Perceived diversity** When we speak of diversity in the classroom, we usually focus on the diversity of the students in the room. We often forget that the teacher also brings a range of diversity issues to the classroom. Every teacher brings his or her physical appearance and culture into the room at the same time as the students do. How teachers look, how they speak, how they act upon the opinions of the role of academics (and particularly of the class teachers teach), and the extent to which these differ from the physical, cultural and intellectual background of teachers; a teacher’s student will have a profound effect on the interactions in the classroom. Thus, teachers need to be aware of possible reactions among the students to teacher’s race, gender, age, ethnicity, physical attributes and abilities. Preparing for such reactions will involve not only knowing as much as you can about students, but also turning the mirror to yourself, and finding out more about your own diversity issues. Teachers should be aware of the comfort level they have in

discussion these topics before they enter the classroom. It is crucial to understand how teachers feel about these issues and what they say in a room where some might not understand their particular position. If diversity becomes a topic of discussion in the class, students will expect the teacher to be able to explain his or her own perspective. Try to have thought of a formulation that clarifies the teacher's perspective, while leaving enough room for student's perspectives in the discussion. Students who perceive the teacher as belonging to a particular racial or ethnic group and who then draw initial conclusions from that classification can affect the class atmosphere either negatively or positively from the first day. The best way to minimise the likelihood that a teacher's own perceived diversity will affect students behavior is to establish a "safe" environment in which the class can discuss both the teacher's and the student's diversity. Such a safe atmosphere establishes the difference between a highly successful class, and one where both teacher and students fear one another, experiencing discomfort when it comes to discussing the "real" issues. This fear can be the fear of being labelled as an outsider, or the fear of offending someone and making him or her feel unwanted in the groups. Either way, fear is not a good basison which to start any discussion. Invisible diversity In addition to such visible differences as race, gender, and physical attributes, any teacher also brings invisible diversity to the classroom. Invisible diversity such as political opinion, sexual orientation, ethnicity when it is separate from distinct racial characteristics, teaching and learning styles, regionalism, class, family, history, and religion have more to do with an individual's own self-perceptions and definitions than with others' immediate perceptions. These internal perspectives influence how a person sees the world, and are a source of personal identity. All people are shaped by a complex mix of experiences, backgrounds, as their visible identity. Everyone in the classroom is struggling with the tension between group identity and the feeling of individual worth that transcends the group. The assumption that diversity has only to do with the students in the classroom can make it hard for a teacher to recognise personal hidden assumptions. This may in turn hinder proper learning in class, as a teacher may unwittingly slant the choice of reading materials or the direction or form of class discussions. Of course, any choice of class materials presupposes an exclusion of other materials; any organisation of those materials into a coherent syllabus involves decisions about which elements to emphasise. These devices are necessary for structuring any class and most often benefit from

the teacher's perspective. As long as teachers are aware of their own presuppositions, however, they can avoid the kinds of slant in their class that can be harmful to student, or unnecessarily strain a teacher's relationship with them. The diversity in classrooms can serve as a catalyst for intellectual or emotional growth, both for teachers and for students. Seen as an opportunity rather than as a handicap, the diversity of class can facilitate the kinds of change that a university education is designed to promote. A motivated teacher can challenge hidden assumptions in the classroom, and provide equal and fair access from students of all walks of life to his or her chosen field. As students graduate and begin work in their professions they may carry the enthusiasm and openness they have experienced in academia out into society. Diversity issues and assumptions

Instructors commonly assume that students share the same perspectives and full life experiences and will therefore learn about diversity on their own. However, students can easily misinterpret that honouring diversity is not essential for them to succeed either in the education or future career. Thus, to help individual students to succeed, instructors need to balance between holding high expectations for all the students regardless of who they are as well as use different techniques to teach each individual effectively (Bucher, 2000). Main issues on diversity in the classroom are culture, age and gender. Another type of diversity is the difference in learning styles. **Cultural differences** One student interviewee said, "My classmate who did not like me to compare between the Canadian society and my country, gave me mean comments when I did so. Most of my instructors neither acknowledge my cultural experiences and ideas nor allowed me to share my ideas freely." Instructors need to recognise that acknowledging the differences between cultures and letting students articulate their different experiences is important in making students feel part of the learning community. Quoting the student, "it will enable me to blend into their circle so we can learn from each other's cultures." "Difficult to find a job with only homemaker skills", while the others wanted to "upgrade my qualifications so that I can work as a resident care assistant in hospitals." They are both mature students, there is an obvious age gap between them and fresh high school graduates. The two interviewees gave similar responses in their expectations of their instructors and fellow students. Instructors need not give me special treatment, but consider me at the same time as the rest of the class and don't put me down. I would also prefer classmates to better understand and respect my

reasons for returning to school.” **Gender differences** Various literatures assert the differences in learning context between males and females (especially mathematics Du Plessis and Bisschoff 247 and science). Although rapid technological advancement might affect men to some extent, it is a hurdle for somewoman. “I feel totally uncomfortable with high technology equipment like computers; I get nervous whenever I have to sit in front of the computer to type my essays,” said a female student returning to school after 19 years as a homemaker. Instructors need to be aware of the gender context of previous learning that might become an obstacle in the current learning (Hartman, 2000). **Learning styles** Both Kolb (1976) and Tobias (1990) have detailed discussions on different learning styles. However, many instructors do not take it into consideration the diversity of learning styles and their implications to the success of learning. I have previously discussed how instructor can get students to focus on the material by accommodating different learning styles, thereby helping students who are learning complex subjects such as statistics to feel less anxious (Chan, 2002). Formation of discussions groups and open-ended questions can be one of the ways to create a comfortable atmosphere where students can ask questions and think critically (Chan, 2002).

Knowing who your students are, as a group and as individuals, is an important part of good teaching. In recent years, higher education in general, and USC in particular, have become increasingly diverse. The variety of students is far greater, and their needs are very different, than in the past. This module will consider how to teach effectively in an environment of diverse learners. If you wish to facilitate the learning process of students with a variety of backgrounds and needs, the following points are important:

- Treat all students as individuals with unique strengths, weaknesses, and needs rather than as generalized representatives of particular racial, ethnic or cultural groups.

- Employ a variety of teaching styles to respond to the needs of diverse learners.
- Create an open classroom that values the experiences and perspectives of all students.

### 3.2 Teaching and learning styles: the academic culture learning styles

In recent decades, studies have shown that students have varying learning styles, and that no single teaching style fulfils all students' needs. Learning styles have very little to do with the students' motivation or attitude toward the class or the material. Often, professors complain that some students do not apply themselves to their studies, and therefore do not learn well. However, it may be that the teacher has simply not yet addressed these students' particular needs in class, and that new approaches will reach the students more effectively. A student's learning style has to do with the way he or she processes the information in order to learn it and then apply it. Professor Richard Felder of North Carolina State University (Felder and Porter, 1994) has described some of these varied learning preferences. Some students may be visual learners, and prefer to study graphs, look at models and pictures, and take notes to review later. Such students react well to extensive blackboards use, (especially drawings, models etc.)and handouts with appropriate illustrations. Others are aural learners – they listen closely in class, often read out loud when studying or sub-vocalize during lectures in class, and find it helpful to confer with their peers in class to confirm information. These students work well in study groups where discussions of the material reinforce class discussions and lectures. They might also react well to tapes and films in class. 248 Educ. Res. Rev. Verbal learners are likely to absorb reading materials and lectures more easily than other students. They seem to learn best from written materials, rather than from visual materials such as graphs and illustrations. Most university teachers are verbal learners, and thus find it easiest to relate to and teach such students. Still others may be sensing learners. Such students may be tactile learners who favour subjects that allow them to work with their hands. These students learn best by handling the textures and shapes of objects as they apply their knowledge: they enjoy looking at and handling objects of interest to the topic, such as original documents, photos, magazines, natural objects etc. Or sensing learners may be kinaesthetic learners who learn and remember by moving around physically. Moving them into small groups or pairs for discussion, having them participate effectively in an experiment, or getting them to “act out” a debate by placing them on opposite sides of the room will help this type of student to remember the content of the discussion. Both tactile and kinaesthetic learners

prefer “real-life” connections to the topic, rather than theoretical approaches. They are “active learners” who learn best by physically doing things, rather than reflecting about them by themselves, and thus they react well to group work. Inductive learners prefer to begin with experience or hard data, and infer the principles behind them. Deductive learners prefer to start with abstractions or principles, and enjoy deducing the consequences. Most classes are taught in a deductive manner. Not only because it is easier and less time-consuming to teach a class this way, but also because most often the teachers themselves are deductive learners. Deductive learners may often be reflective learners who prefer to think about the topic by themselves, or at most in pairs, and to work out the solutions. They do not react as well as other to group work. These different learning styles explain why in most classes, the student evaluation show that some students see group work as the most important part of heir learning experience, while other from the same class complain that they dislike group work and find it unhelpful. Providing a variety of approaches to the material can keep most of the students engaged in the class throughout the semester. Global learners seem more likely to see a project as a whole and have trouble breaking it down into its component parts. Teachers who expect them to start analysis from abstract concepts in order to reach a conclusion my find themselves as frustrated with the result of the students. Abstractions may be difficult for this type of learner, because they grasp information in large chunks and have a hard time analysing a topic from incomplete information. This type of students is excellent at synthesis, and by the end of a class may even outpace his or her peers in coming to appropriate conclusions quickly, but he or she often has trouble understanding material when first faced with a variety of pieces of information that make an incomplete picture. Sequential learners, on the other hand, are good at analysis of concepts because they learn linearly. When doing a project, they can take partial information and organize it into a logical order, and they can see what must be done first, next and last. They are patient with the fact that a typical class gives them information in a certain order, and that they must wait until the end of the semester to get the full picture the teacher is trying to present. Since most classes are organised sequentially, this type of learner excels in the typical college class. No teachers can make all students happy all the time, partly because of the diversity of learning styles in any class, and partly because each person uses a particular mix of these learning styles discussed above. No student is 100% a



global learner or 100% a tactile learner. Preference for one style or another may be strong, moderate, or balance. However, it is important to recognise that learning styles differ, and that your students may not learn well if you use only your style. In order to teach everyone most effectively, a teacher cannot consistently ignore a whole sector of the class simply because their learning styles do not correspond to the teacher's preferred teaching habits. To reach as many students as possible, the teacher must incorporate varying teaching techniques and strategies into the classroom. Lectures may be appropriate for verbal and aural learners, group work may be appropriate for kinesthetic learners, but any teaching style to the exclusion of the others will also exclude those students who do not learn best by that style. The existence of diversity in learning styles has serious pedagogical implications. However, many classrooms ignore the implications of diversity of learning styles. The result is the prevalence of parochial approach to learning in the education system (Rogers, 2001) that homogenizes the learning process of a diversity of students. This serves the interest of the status quo but kills initiative, innovation and creativity that are needed to produce productive workers and citizens. Students and society benefit from productive diversity in the classroom, and adapting pedagogy to different learning styles promotes productive diversity. Although students have different learning styles, the conventional approach to learning presented to them in the school system makes them think that other pedagogies are either not right or are only useful outside the classroom. "Indeed, traditional schooling might have taught them [students] that...teachers are endowed with the information and their role is to listen, take notes and be ready to reproduce the notes in the examination" (James, 2001). Because of this privileging of the conventional learning/ teaching style, students are likely to initially resist the introduction of other pedagogies. For example, in a class where I use a delivery system that involves small-group discussions on the selected topic to identify problems with the text before I do a presentation on the topic, students initially complain that they expect to be lectured before group exercises. Many of the students come to like the approach later when they realise that it makes lecture presentations more meaning full. Introducing pedagogy that validates or legitimises the neglected learning styles in the classroom will initially be resisted but will eventually flourish when the benefits of such diversity become evident. The bigger challenge, however, is how to successfully design and deliver curricula relevant to the multiplicity of learning styles represented in the

classroom. From the literature (Anderson, 2001; Clarke, 2001; Ginsburg, 2001), it is clear that the main areas that require diversification are course content, material, assessment criteria, delivery, and accessibility.

### **3.3 Diversity: In Higher Education and at USC**

Colleges and universities have become, in recent years, increasingly diverse institutions. Van Note Chrisom (1999) identifies the following trends to illustrate this point:

- Older students (those outside of the traditional 17- to 22-year-old age range) now make up more than half of student population in higher education.
- Nationally, women account for 54 percent of bachelor's degree students.
- The presence of minority students is growing, led by Asian Americans and Hispanic Americans.
- Gay, lesbian and bisexual students are becoming more vocal about their presence and their needs.
- Students with learning or physical disabilities are being identified more frequently.

These national trends are reflected in the diversity of USC as well. Consider the following statistics on the 2007-2008 undergraduate population:

- 48 percent male, 52 percent female;
- >60 percent receive some form of financial aid;
- European Americans compose only 48 percent of the population; Hispanics/Latinos compose 13 percent, African Americans 5 percent, Asian and Asian American 24 percent, and American Indians/Alaskan Natives 2 percent;
- 7 percent of the undergraduate degree students are international students.

What these facts and figures show is that learners come to us with many different experiences, many different ways of seeing the world, and many different learning needs. Teaching in such an environment can be challenging. But if you understand yourself and your students, it also can be very rewarding.

### **3.4 Learning Styles in a Diverse Classroom**

Eddy (1999) describes a learning style as the way in which we prefer to organize, classify and assimilate information about the environment. That is, how do we like to learn? There is a great deal written on learning styles – and probably as many theories as there are writers on the subject. However, in their most basic form, there are three main learning styles (Eddy):

- Auditory learners prefer to receive ideas and information by hearing them. These students may struggle with reading and writing, but excel at memorizing spoken words such as song lyrics.

They often benefit from discussion-based classes and the opportunity to give oral presentations. • Visual learners prefer to receive information by seeing it. Typically these students pay much attention to detail. They are less likely to speak in class than their auditory peers, and generally use few words when they do. Outlines, graphs, maps and pictures are useful in helping these students learn. • Kinesthetic-Tactile learners tend to learn best via movement and touch. These students are often labeled “hyperactive” because they tend to move around a great deal. Because they like movement, they may take many notes and learn best when allowed to explore and experience their environment. It is important to note that the various styles are those preferred by learners. If we looked at complete descriptions of each style, we would probably see some of ourselves in each. But we could also probably identify our dominant style. The fact that we learn in many ways is further justification for utilizing variety of teaching approaches is so important. Understanding learning styles can help you create more inclusive classrooms where everyone has a chance to succeed. For instance, a student from a culture that teaches children to listen quietly in a classroom (or a visual learner who is uncomfortable with speaking) can be at a disadvantage when a portion of the grade is based on participation in class. Sensitive teachers can allow for group work during class to create smaller, safer environments for these students to speak and for their classroom performance to be evaluated. Understanding Diverse Students from different cultures, backgrounds and educational environments learn in distinctly different ways. Be aware that the way you learned best might not be the way that other students will learn -- or that all students learn in the manner(s) you did. For more information on specific differences in student learning and development, a number of fine summaries of different ways students learn and develop during their collegiate experiences are available, including Evans, Forney, and Guido-DiBrito, 1998; Moore, 1990; Pascarella and Terenzini, 1991.

### **3.5 Students' Special Needs**

Some students will have unique challenges that make learning in a traditional classroom difficult. Examples include visual or hearing impairments, Attention Deficit Disorder, mobility challenges, chronic illness (such as that brought about by chemotherapy), and learning disabilities. There are many possible accommodations that help to create a productive learning environment for these

students. It may be necessary for a student with a hearing impairment to have an interpreter present, for instance. A student with a chronic illness may need you to be flexible about the due dates for assignments. Below are suggestions to consider when you work with students with special needs:

- Even though two students may have the same disability, their needs for accommodation may be quite different. Treat each student as an individual.
- Keep in mind that disabilities are not always visible to us. You are not required to assess a student's health; you should accept authorized documentation concerning an individual student's needs.
- Using many modes (written, verbal, video/slide, etc.) to present information is one way to help some learners with special needs learn more effectively. It is important to remember that you are not responsible for identifying the disability or deciding on the accommodations. The Office of Disability Services and Programs (DSP) at USC provides students with a letter authenticating their needs, and the students should be able to present this letter to you upon request. DSP will help you identify and make the necessary accommodations. If the student is not able to provide you with this documentation, you should politely explain that, before you can make the accommodations, the student needs to have registered with DSP. You will then work with DSP to determine the accommodations.

### **3.6 Tips on Teaching in a Diverse Classroom**

Our students are diverse in their cultures and ethnicity, their experiences, their learning styles, and many other dimensions. And all of these dimensions shape who they are and how they learn. Effective teachers understand this and use a variety of teaching methods to promote student learning. Below are some basic tips on how to teach effectively in a diverse learning environment:

- Having a "color-blind" classroom is probably neither possible nor a good idea. Trying to do so inevitably privileges a particular perspective (usually that of the teacher) and fails to recognize the experiences and needs of the learners. It is preferable to use strategies that recognize and capitalize on this diversity.
- Appreciating the individuality of each student is important. While generalizations sensitize us to important differences between groups, each individual student has unique values, perspectives, experiences and needs.
- Articulate early in the course that you are committed to meeting the needs of all students and that you are open to conversations about how to help them learn.
- As teachers, it is important that we

recognize our own learning styles and cultural assumptions, because these styles and assumptions influence how we teach and what we expect from our students. Being aware of them allows us to develop a more inclusive teaching style. • As you plan your course, and each class, prepare multiple examples to illustrate your points. Try to have these examples reflect different cultures, experiences, sexual orientations, genders, etc., to include all students in learning. • Help students move between abstract, theoretical knowledge and concrete, specific experiences, to expand everyone's learning. • Use different teaching methods (lectures, small groups, discussions, collaborative learning) to meet the variety of learning needs.

### **3.7 Teaching techniques to address all learning styles**

Motivate learning as much as possible, relate the material being presented to what has come before and what is still to come in the same course; relate it to material in other courses, and particularly to the student's personal experience. Provide a balance of concrete information (facts, data, real or hypothetical experiments and their results (sensing) and abstract concepts (principles, theories, models). Balance materials that emphasize practical problem- solving methods (sensing/ active) with material that emphasizes fundamental understanding (intuitive/ reflective). Provide explicit illustrations of intuitive patterns (logical inference, pattern recognition, and generalization) and sensing patterns (observation of surroundings, empirical experimentation, attention to detail). Encourage students to exercise both patterns. Do not expect either group to be able to exercise the other group's immediately. Follow the scientific method in presenting theoretical material: provide concrete examples of the phenomena the theory describes or predicts (sensing/ inductive); then develop the theory or formulate the model (intuitive/ inductive/ sequential); show how the theory or the model can be validated and deduce its consequences (deductive/ sequential); and present applications (sensing/ deductive/ sequential). Use pictures, schematics, graphs and simple sketches liberally before, during and after the presentation of verbal material (sensing/ visual). Show films (sensing/ visual); provide demonstrations (sensing/ visual), hands-on if possible (active) (Felder, 1993). Use computer-assisted instruction when possible sensors respond very well to it (sensing/ active). Do not use every minute of class time lecturing and writing on the board. Provide intervals, however brief, for students to think about what they have been told

(reflective). Provide opportunities for students to do something active besides transcribing notes. Small group brainstorming activities that take not more than 5 min are extremely effective for this purpose (active). Assigning some drill exercises to provide practice in the Du Plessis and Bisschoff 249 basic methods being taught (sensing/ active/ sequential), but do not overdo them. Also provide some open-ended problems and exercises that call for analysis and synthesis (intuitive/ reflective/ global). Give students the option of cooperating on homework and class assignments to the greatest possible extent (active). Active learners generally learn best when they interact with others; if they are denied the opportunity to do so they are being deprived of their most effective learning tool. Applaud creative solutions, even incorrect ones (intuitive/ global). Talk to students about learning styles, both in advising and in classes. Students are reassured to find their academic difficulties may not all be due to personal inadequacies. Explaining to struggling sensors or active or global learners how they learn most effectively may be an important step in helping them reshape their learning experiences so that they can be successful (all types).

### **3.8 The academic culture and teaching styles**

As you saw in the previous section, students' learning styles vary, and a teacher might have a complex mixture in a single class. However, the average college teacher is much more likely to be sequential, verbal, deductive, and reflective than his or her students. Traditionally, teachers prefer to organise their class in a "logical" order during the semester, starting with simple premises and working up to a more complex view of the field in question. They use lectures and discussions as the primary means of transmitting information to the students, and classes are usually conducted in a deductive manner, with principles clearly laid out and the expectation that the students can draw consequences and come up with applications. Students are encouraged to work individually, and achievement is measured by their ability to produce "original" materials or answers. Instructors generally emphasise individual accomplishment, verbal assertiveness in class discussion and competition for grades among students instead of collaboration. As a matter of fact, the academic community often discourages or even punishes collaboration, because it fears a heightened potential for plagiarism and collaborative effort. Such a teaching method encourages learners who already

share the teacher's learning style, but it slows down learners who must adapt to conditions of learning that do not come naturally to them. Thus a dominant "academic culture" exists in college classrooms, which encourages sequential, verbal, deductive and reflective learners to progress quickly to advance positions in a field. This leaves behind equally intelligent and resourceful students who must wonder if there is a place for them to excel in the academic world. Therefore teachers must look at course content and material as well.

### **3.9 Course content and material**

Whenever possible, select text and reading whose language is gender-neutral and free of stereotypes. If the re250 Educ. Res. Rev. adding teaches assign use only masculine pronouns or incorporate stereotypes, cite the date the material was written, point out these shortcomings in class, and give students an opportunity to discuss them. Aim for an inclusive curriculum. Ideally, a curriculum should reflect the perspective and experiences of a pluralistic society. At a minimum, creating an inclusive curriculum involves using text and readings that reflect new scholarship and research about previously underrepresented groups, discussing the contributions made to your field by women or by various ethnic groups, examining the obstacles these pioneering contributors had to overcome, and describing how recent scholarship about gender, race, and class is modifying your field of study. This minimum, however, tends to place women, people of colour, and non-European or non-American cultures as "asides" or special topics. Instead, try to recast your course content, if possible, so that one group's experience is not held up as the norm or the standard against which everyone else is defined. (Coleman et al., 1983) So not assume that all students will recognize cultural literary or historical references familiar to you. As the diversity of the student and faculty population's increase, you may find that you and your students have fewer shared cultural experiences, literary allusions, historical references, and metaphors and analogies. If a certain type of cultural literacy is prerequisite to completing your course successfully, consider administering a diagnostic pretest on the first day of class to determine what students know. Consider students' needs when assigning evening or weekend work. Be prepared to make accommodation for students who feel uncomfortable working in labs or at computer stations during the evening because of safety concerns. Students who are parents, particularly

those who are single parents, may also appreciate alternatives to evening lab work or weekend field trips, as will students who work part-time. Bring in guest lecturers. As appropriate, teachers should broaden and enrich the course by asking faculty or off-campus professionals of different ethnic groups to make presentations to classes. Class discussions prepare students to take part in the class with confidence and that they feel comfortable to discuss diversity matters in class.

### **3.10 Class discussion**

Emphasise the importance of considering the approaches and viewpoints. One of the primary goals of education is to show students different points of view and encourage them to evaluate their own beliefs. Help students begin to appreciate the number of situations that can be understood only by comparing several interpretations, and help them appreciate how one's premises, observations, and interpretations are influenced by social identity and background. For example, research conducted by the Institute for the Study of Social Change (1991) shows that while students and African-American students tend to view the term racism differently. Many white students, for example, believe that being friendly is evidence of goodwill and lack of racism. Many African-American students, however, distinguish between prejudice (personal attitudes) and racism (organisational or institutional bias); for them, friendliness evidences a lack of prejudice but not necessarily a wholehearted opposition to racism. Make it clear that you value all comments. Students need to feel free to voice an opinion and empowered to defend it. Try not to allow that own difference of opinion prevent communication and debate. Step in if some students seem to be ignoring the viewpoints of others. For example, if male students tend to ignore comments made by female students, reintroduce the overlooked comments into the discussion (Hall and Sandier, 1982). Encourage all students to participate in class discussion. During the first weeks of the term, you can prevent any one group of the students from monopolizing the discussion by your active solicitation of alternate viewpoints. Encourage students to listen to and value comments made from perspectives other than their own. Teachers may want to have students work in small groups early in the term so that all students can participate in nonthreatening circumstances. This may make it easier for students to speak up in



a larger setting. Large classes also make it difficult to come to a consensus where ground rules are concerned; students may lose patience with the teachers who try to include everyone's opinion. Despite difficulties, it is important for teachers to try to deliver their lessons in a way that accounts for the class diversity and various learning styles. Monitor own behaviour in responding to students. Research studies show that teachers tend to interact differently with men and women students (Hall and Sandier, 1982; Sadker and Sadker, 1990) and with students who are or whom the instructor perceives to be – high or low achievers (Green, 1989). More often than not, these patterns of behaviour are unconscious, but they can and do demoralise students, making them feel intellectually inadequate or alienated or unwelcome in the institution. As a teacher teaches, then, try to be even-handed in the following matter: 1. Recognising students who raise their hands or volunteer to participate in class (avoid calling on or hearing from only males or only members of one ethnic group). 2. Listening attentively or responding directly to students' comments and questions. 3. Addressing students by name (and with the correct pronunciation). 4. Prompting students to provide a fuller answer or an explanation. 5. Giving students time to answer a question before moving on. 5. Interrupting students or allowing them to be interrupted by their peers. 6. Crediting students' comments during your summary. 7. Giving feedback and balancing criticism and praise. 7. Making eye contact. Also, refrain from making seemingly helpful offers that are based on stereotypes and are therefore patronising. An example to avoid: an economics faculty member announced, "I know that women have trouble with numbers, so I'll be glad to give you extra help, Jane." Teachers might want to observe their teaching on videotape to see whether they are unintentionally sending different messages to different groups. Sadker and Sadker (1992) list questions to ask about your teaching to explore gender and ethnic differences in treatment of students (Hall and Sandier, 1982; Sadker and Sadker, 1990; Sadker and Sadker, 1992) In order to promote a positive classroom atmosphere that allow students to feel comfortable to take risks and make mistakes and respect the different dimensions of diversity, it is necessary to have consensus on the classroom's ground rules (Andrzejewski, 1995). Re-evaluating your pedagogical methods for teaching in a diverse setting. Observers note that in discussion class's professors tend to evaluate positively students who question assumptions, challenge points of view, speak out, and participate actively (Collett, 1990; Institute for the Study of Social Change, 1991).

Recognise, however, that some of the students were brought up to believe that challenging people who are in positions of authority is disrespectful or rude. Some students may be reluctant to ask questions or participate out of reinforcing stereotypes about their ignorance. The challenge for teaching a diverse student body is to be able to engage both verbally assertive students and those with other styles and expressions of learning. By setting ground rules, allowing discussion of different opinions, and empowering prior experiences, different type of learners can be accommodated. In addition, the amount of anxiety that students experience either in learning complex subjects or upon returning to school after many years can be reduced significantly. Speak up promptly if a student makes a distasteful remark even jokingly. Don't let disparaging comments pass unnoticed. Explain why a comment is offensive or insensitive. Let your students know that racist, sexist, and other types of discriminatory remark are unacceptable in class. For example: "What you said made me feel uncomfortable. Although you didn't mean it, it could be interpreted as saying..." Avoid singling out students as spokespersons. It is unfair to ask X student to speak for his or her entire race, culture, or nationality. To do so not only ignores the wide differences in viewpoints among members of any group but also reinforces the mistaken notion that every member of a minority group is an ad hoc authority on his or her group (Pemberton, 1988). An example to avoid: after lecturing on population genetics and theories of racial intelligence, a faculty member singled out an African-American student in the class to ask his reactions to the theories. Relatedly, do not assume that all students are familiar with their ancestors' language, traditions, culture, or history. Teachers should also be sensitive to students when it Du Plessis and Bisschoff 251 comes to assignments and examinations, especially to those whose first language is not English.

### **3.11 Assignments and examinations**

Be sensitive to students whose first language is not English. Most colleges require students who are non-native speakers of English to achieve oral and written competency by taking ESL courses. Ask ESL specialists on your campus for advice on how to grade papers and for information about typical patterns of errors related to your students' native language. For example, some languages do not have two-word verbs, and speakers of those languages may need extra help – and

patience – as they try to master English idioms: Such students should not be penalised for misusing, say, take after, take in, take off, take on, take out, and take over. Suggest that students form study teams that meet outside class. By arranging for times and rooms where groups can meet, teachers can encourage students to study together. Peer support is an important factor in student persistence in school (Pascarella, 1986), but students of colour are sometimes left out of informal networks and study groups that help other students succeed (Simpson, 1987). By studying together, students can both improve their academic performance and overcome some of the out-of-class segregation common on many campuses. Assigning group and collaborative activities. Students report having had their best encounters and achieved their greatest understandings of diversity as “side effects” of naturally occurring meaningful educational or community service experience (Institute for the Study of Social Change, 1991). Consider increasing students’ opportunities for group projects in which three to five students complete a specific task, for small group work during class, or for collaborative research efforts among two or three students to develop instructional materials or carry out a piece of a research style. Collaborative learning can be as simple as randomly grouping (by counting off) two or three students in a class to solve a particular problem or to answer a specific question. Give assignments and exams that recognize students’ diverse backgrounds and special interests. As appropriate to your field, teachers can develop paper topics or term projects that encourage students to explore the roles, status, contribution, and experiences of groups traditionally underrepresented in scholarly research studies or in academia (Jenkins et al., 1983). For example, a faculty member teaching a course on medical and health training offered students a variety of topics for their term papers, including one on alternative healing belief system. A faculty member in the social sciences gave the students an assignment asking them to compare female only, male-only, and male-female work groups.

### **3.12 The academic culture and re-acculturation**

The terms academic culture and academic community are used to describe what students encounter when they come into the university. These terms are chosen because they are particularly apt for what happens in university classrooms. Students arriving on campus must, in a sense, learn a new language and new rules

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of conduct to fit in with the expectations of university professors and other students who have already had university experiences.(Buffed, 1993) The university classroom has norms and values which may be foreign to first generation university goers, or to students from a culturally minority. University classroom culture values verbal assertiveness in discussions, active participation on an individual level in class, and competition among students for marks of excellence. Teachers prefer a certain form of self expression or style of speech: it should be rational, logical, and derive consequences from general principles. Styles of speech and emphasizing personal experience or emotion or using vernacular dialects are not encouraged, and may even count against students when it comes times to grade them. Certain classroom decorum is expected: students are expected to come to class dressed in what is conceived of as “an appropriate style” (such styles usually include ethnic or religious costumes). Students are to follow rules of conduct in discussion which underline the teacher’s power to direct and control the class and they must make and maintain eye contact with the teacher as they contribute to the discussion. A mix of lecturing and the Socratic method of questioning students in class dominate teaching styles. Verbal learning is assumed and deductive logic remains the dominant format. The fact that students must master the complex “grammar” of the university classroom to make passing marks means that all students coming to the university must be re-aculturated. Re-acculturation is thus not only an issue for “minorities” but is also important for any student who is the first family member to arrive at the university. First generation university students are disadvantaged because the academic culture is not a tradition in their family history, nor have they encountered it among their friends. Other “minority” cultures simply underline the problem most clearly because they often do not have the academic culture in their backgrounds. In addition, many minority cultures may even value things that are antithetical to the academic culture. The university classroom experience may be doubly difficult for cultures that do not value individual success over group results, or that value modesty over individual assertiveness. In all three cases, direct eye contact, maintained for even a minimum of time, may be considered highly impolite, especially toward such figures of respect as teachers. Asserting oneself in discussion may seem to them dangerously close to challenging the teacher and may imply that the teacher does not have the authority or the knowledge to conduct the class adequately. These groups often view standing out

among one's fellows in a competitive manner as damaging to the peer group. These students may view the Anglo emphasis on "leadership qualities" as destructive and self-serving, while their teachers may admire such qualities in such students. The predominant academic teaching style at universities is thus really an unexamined culture stance that involves complicated rules of conduct and its own language. The cultural norm is often foisted onto students under the guise of academic standards. Of course, academic standards are important, and should be to any teacher. The point here is that any single teaching style to the exclusion of other does not necessarily ensure any standards. It simply means that teachers may be leaving behind certain students who could be learning "up to standard" expected. Students need collaborative learning as a tool for re-acculturation.

### **3.13 Collaborative learning as a tool for re-acculturation**

A culture is based on a social and linguistic community. Re-acculturation in the first years of a university education teaches students the kind of language and behaviours necessary to be successful in the university world and in many professional situations beyond. Students coming to the university for the first time, or even starting a new class each semester, must find their place in a new group in which they must become members. Learning the "language" of their new group and understanding its rules will enable them to perform adequately and provide them with a passport to other groups. Kenneth A. Bruffe in *Collaborative Learning: Higher Education, Interdependence and the Authority of Knowledge* (1993) suggest that this re-acculturation happens most quickly and successfully for students when they work together with the other members of the class, rather than concentrating on solitary work. People in all fields make advances through collaborative learning, learning which happens through interdependent work with others. Literary critics, chemists, lawyers, historians or journalists, the knowledge these people have of their chosen field is socially constructed, and has been arrived at through conversations among peers. Advances in the science community, among historians, and among literary critics are announced through published papers which are then discussed publicly in journals and at conferences. Writing, another form of discussion or conversation, airs a certain theory which the community either accepts or rejects. Knowledge is constructed interpedently by people who talk together and reach a consensus. Since such a "conversation

among peers” is necessary for establishing criteria and learning new facts in every arena of human learning, Bruffe (1993) suggests that the most effective way to learn-and thus to teach-is to incorporate collaborative strategies into the university classroom. In addition to the traditional lecture, structured small group discussions can be very useful to expose students from all learning styles and backgrounds to a new discipline. The teacher can divide classes into smaller groups who must each work toward a consensus on a specific problem. Then the teacher can conduct a whole class discussion of the groups’ results, with an eye toward create class consensus, but also taking into account those places where groups could not reach a consensus. The classroom strategy teaches the kinds of activities and skills that students will later need to use in their chosen fields. Creating a classroom where students participate actively in such questions not only trains students for their future careers, but also make them learn the current material more solidly because it engages them more completely and it teaches them about negotiating within a diverse community. When the teacher attaches the actual class topic and material to the success of the class as a community, he or she puts each student in the position of establishing an important role for him or himself in that community and it gives each student responsibility for the success of the class. Small group activities release the students from the fear of speaking out in front of an entire class, or of being directly judged by the teacher all the time, while putting them in the limelight in a smaller setting, where participation counts even more because there are fewer people involved. Engaging students actively makes it possible for them to learn the rules (and thereby join a new community of knowledge) because they have to use those rules to solve the problems given in the class. Such exercises encourage students to think independently at the same time as they work interdependently in an academic field. In a small group, students must find a way to balance their earlier knowledge of the world with the new rules they are learning. They must also deal with their peers’ preconceptions and prejudice that stem from their own particular experience and background. In group discussion, those peers become real to them in ways they cannot during a lecture where the teacher is the focus of attention. Active participation in a group work forces face-to-face encounters that do not allow for abstract preconceptions about other class members

### 3.14 Tactics for overcoming stereotypes and biases

Become more informed about the history and culture of groups other than your own. Avoid offending out of ignorance. Strive for some measure of “cultural competence” (Institute for the Study of Social Change, 1991): know what is appropriate and inappropriate behaviour and speech in cultures different from your own. Broder and Chism (1992) provide a reading list, organised by ethnic groups, on multicultural teaching in colleges and universities. Beyond professional books and articles, read fiction or non-fiction works by authors from different ethnic groups. Attend lectures, take courses, or team teaches with Du Plessis and Bisschoff 253 specialists in Ethnic Studies or Women’s Studies. Sponsor mono-or multicultural student organisations. Attend campus wide activities celebrating diversity or events important to various ethnic and cultural groups. If you are unfamiliar with your own culture, you may want to learn more about its history as well. Convey the same level of respect and confidence in the abilities of all your students. Research studies show that many instructors unconsciously base their expectation of student performance on such factors as gender, language proficiency, socioeconomic status, race, ethnicity, prior achievement, and appearance (Green, 1989). Research has also shown that an instructor’s expectations can become self-fulfilling prophecies: students who sense that more is expected of them tend to outperform students who believe that less is expected of them regardless of the students’ actual abilities (Green, 1989; Pemberton, 1988). Tell all students that it is expected to work hard in class and that high standards for their academic achievement are hold. And then practice what you have said: expect your students to work hard, be challenged, and achieve high standards (Green, 1989; Pemberton, 1988). Don’t try to “protect” any group of students. Don’t refrain from criticizing the performance of individual students in class on account of their ethnicity or gender. If teachers attempt to favor or protect given group of students by demanding less of them, they are likely to produce the opposite effect: such treatment undermines students’ self-esteem and their view of their abilities and competence (Hall and Sandier, 1982). For example, one faculty member mistakenly believed she was being considerate to the students of colour in her class by giving them extra time to complete assignments. She failed to realize that this action would cause hurt feelings on all sides: the students she was hoping to help felt patronized and the rest of the class

resented the preferential treatment. Be even-handed in how you acknowledge students' good work. Let students know that their work is meritorious and praise their accomplishments. Be sure to recognize the achievements of all students.

### 3.15 Summary

Various diversity issues come to mind as soon as you enter a classroom: the visible ones of gender, race, age, ethnicity, and physical abilities will, of course, receive the most immediate attention. Unseen diversity issues also have a great impact on classroom atmosphere, however these include: political orientation, sexual orientation, ethnicity if not related to distinct racial characteristics or dress style, teaching and learning styles, regionalism, class, family history, and religion. From the above discussions on attempts to create and implement diversity pedagogy to reflect the variety of learning styles of students, it is clear that the process is 254 Educ. Res. Rev. complex and tedious. However, it is worthwhile pursuing it because it enhances student success by providing students from various backgrounds with voices in the classroom, encouraging student-teacher and student-dialogue, and helping all students to identify with the learning process in the classroom. Not surprisingly, hardly do students fail or perform poorly in my courses in which diversity is conscientiously practiced. An important thing that I have learned from the classroom diversity efforts is that to be successful, one has to possess both diversity

Competency (Cox and Beale, 1997) and human factor competency (Adu-Febiri, 2001), apart from motivation. Diversity competency is the ability to use awareness of differences, knowledge and understanding of differences, and facilitation skills to leverage differences to benefit people and organizations. Teachers need this competency in addition to the human factor competencies of commitment, dedication, loving-kindness, acceptance, persistence, responsibility and accountability to affectively facilitate productive diversity in the classroom. The school system should provide teachers with the adequate incentives and support to acquire and apply the necessary competence to make classroom diversity work. Diversity in learning styles exist in the classroom, and if not well facilitated frustrates both learners and teachers. Despite most situations most classrooms continue to experience monolithic approaches to learning. It takes a lot of work to facilitate productive diversity in the classroom, but it is doable and is worth the



effort. Diversity works in the classroom, and it works well when teachers value full inclusion, are motivated, supported, and provided with the necessary competence. The growing diversity in the classroom represents learning style differences, and provides opportunity for the teacher to substantially continue to developing productive labor force and citizens.

### 3.16 REFERENCES

Adu-Febiri (2001). 'Human Factor Competency and the Performance Effectiveness of Hospitality Industry Professions'. In Senyo Adjibolosoo (ED.). Portraits of Human Behaviour and Performance.

Anderson R (2001). 'Empowering Students Through Feminist Pedagogy'. In Newton et al. (Eds). Voices from the Classroom: Reflections on Teaching and Learning in Higher Education. Aurora, Ontario: Garamond Press.

Andrzejewski (1995). 'Teaching Controversial Issues in Higher Education: Pedagogical Techniques and Analytical Framework'. In Martin Renee J. (Ed.), Practicing What We Teach: Confronting Diversity in Teacher Education, New York: State University of New York Press. Action. Lanham: University Press America. Broder LLB, Chism NVN (1992). "The Future is Now: A Call for Action and List of Resources. "In L.L.B. Broder and N.V.N Chism (Eds.), Teaching for Diversity. New Directions for Teaching and Learning, no. 49. San Francisco: Jossey-Bass,.

Clarke S (2001). 'Disability in the Classroom: The Forgotten Dimension of Diversity?' In Janice Newton et al. (Eds). Voices from the Classroom: Reflections on Teaching and Learning in Higher Education. Aurora, Ontario: Garamond Press. Coleman L (1983).

The Influence of Attitudes, Feeling and Behavior Toward Diversity on Teaching and Learning. Boulder: University of Colorado, Faculty Teaching Excellence Programme, n.d. Collett J (1990).

"Reaching African-American Students in the Classroom." In L. Hilson (Ed.), To Improve the Academy. Stillwater, Okla.: New Forums Press Vol. 9.,. Cox Jr., Beale TRL (1997).

Developing Competency to Manage Diversity. San Francisco: Beret-Koehler.  
Gibbs G (1992). Improving the Quality of Student Learning. Bristol: Technical and Education Service. Ginsburg J (2001a). 'The Dialectic of Course Development: I Theorise, They React...Then?'. In Janice Newton et al. (Eds). Voices from the Classroom: Reflections on Teaching and Learning in Higher Education. Aurora, Ontario: Garamond Press. Ginsburg J (2001b). 'The Gregor Model of Learning Styles'. In Janice Newton et al. (Eds). Voices from the Classroom: Reflections on Teaching and Learning in Higher Education. Aurora, Ontario: Garamond Press. Green MF (1989). Minorities on Campus: A Handbook for Enriching Diversity. Washington, D.C.: American Council on Education. Gregory A (1985). An Adult's Guide to Style. Maynard, M.E: n.p. Hall RM, Sandler BR (1991). The Classroom Climate: A Chilly One For Women? Washington, D.C.: Association of American Colleges, 1982. Institute for the Study of Social Change. The Diversity Project: Final Report. Berkeley: University of California. James CE (2001). 'Diversity in the Classroom: Engagement and Resistance'. In Janice Newton et al. (Eds). Voices from the Classroom: Reflections on Teaching and Learning in Higher Education. Aurora, Ontario: Garamond Press. Jenkins ML, Gappa JM, Pearce J. (1983).

Removing Bias: Guidelines for Student-Faculty Communication. Annandale, Virgo.: Speech Communication Association. Kolb DA (1976). Learning Style Inventory: Technical Manual. Boston: McBer. Pascrell ET (1986).

"A Program for Research and Policy Development on Student Persistence at the Institutional Level. J. Coll. Stud. Pers. pp. 100-107. Pemberton G (1988).

On Teaching Minority Students: Problems and Strategies. Brunswick, Maine: Bowdoin. College. Rogers P (2001). 'Student Development: From Problem Solving to Problem Finding'. In Janice Newton et al. (Eds). Voices from the Classroom: Reflections on Teaching and Learning in Higher Education. Aurora, Ontario: Garamond Press. Sadker M, Sadker D (1990).

"Confronting Sexism in the College Classroom." In S.L. Gabriel and I. Smithson (Eds.), Gender in the Classroom: Power and Pedagogy. Urbana: University of Illinois Press. Sadker M, Sadker, D (1992).

"Ensuring Equitable Participation in College Classes". In L.L.B. Border and N.V.N. Chasm (Eds.), *Teaching for Diversity. New Directions for Teaching and Learning*, no. 49. San Francisco: Jossey-Bass.

Sources Eddy, Janet. (1999). "Learning Styles." *Teaching Nuggets*. Center for Excellence in Teaching. Los Angeles: University of Southern California. 46-48.

Evans, N., Forney, D. S., & Guido-DiBrito, F. (1998). *Student Development in College: Theory, Research, and Practice*. San Francisco: Jossey-Bass. *Facilitator's Guide for Race in the Classroom: The Multiplicity of Experience*. Derek Bok Center for Teaching and Learning and the Office of Race Relations and Minority Affairs at Harvard University: Boston, 1992. Moore, L. V. (Ed.) (1990).

*Evolving Theoretical Perspectives on Students*. (New Directions in Student Services, Vol. 51). San Francisco: Jossey-Bass. Pascarella, E. T., & Terenzini, P. T. (1991). *How College Affects Students: Findings and Insights from Twenty Years of Research*. San Francisco: Jossey-Bass. UCLA Office of Instructional Development. (1997).

*The TA Handbook 1997-98*. Los Angeles: University of California. Van Note Chism, Nancy. (1999). "Taking Student Social Diversity into Account." *Teaching Tips: Strategies, Research and Theory for College and University Teachers* (10th ed.) J. Wilbert McKeachie (Ed.). Boston: Houghton Mifflin Company. 183-200.

## UNIT 4

### **Principles of Inclusive Education: Access, Equity, Relevance, Participation & Empowerment**

#### **Content**

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#### 4.1. INTRODUCTION

The Agency Key Principles reports published in 2003 and 2009 have highlighted recommendations regarding aspects of educational policy that seem to be effective in supporting the inclusion of learners with different types of special educational needs (SEN) and that also underpin the principle of quality education for all. This current document draws on evidence from Agency work since 2003, and summarizes the key principles for practice that appear to be crucial in providing quality support to learners with different needs in mainstream settings.

Some key European and international guiding principles for inclusive education are outlined at: <http://www.european-agency.org/agencyprojects/key-principles/a-european-and-international-approach-to-inclusive-education>. A number of more recent publications also highlight the need for schools to become better at educating all learners in their communities and provide the context for the current work. Building on the UNESCO Policy Guidelines on Inclusion in Education (2009), it is increasingly recognized that inclusion and quality are reciprocal – that an inclusive ethos can make a significant contribution to the quality of education for all learners. The role of inclusive education in the development of a more just, equal and democratic society where diversity is celebrated is also considered to be of increasing importance. Such development involves principles such as equal opportunities, non-discrimination and universal access and needs to take account, in particular, of the individual needs of learners who are at risk of social exclusion and marginalization.

The Council of the European Union (2009) stresses that: 'Education should promote intercultural competences, democratic values and respect for fundamental rights and the environment, as well as combat all forms of discrimination, equipping all young people to interact positively with their peers from diverse backgrounds' (p. 3). This is also reinforced by the Conclusions of the Council of Ministers on the social dimension of education and training (2010) which note that education systems across Europe need to ensure both equity and excellence and recognize that improving educational attainment and key competences for all are crucial not only to economic growth and competitiveness but also to reducing poverty and fostering social inclusion.

Defining equity, the Commission of the European Communities (2006) states that it is: ‘... viewed as the extent to which individuals can take advantage of education and training, in terms of opportunities, access, treatment and outcomes’ (p. 2). The OECD (2007) links equity to fairness and states that personal and social circumstances should not be an obstacle to achieving educational potential.

The United Nations Convention on the Rights of Persons with Disabilities (2006) (UNCRPD) and in particular Article 24 on Education also advocates inclusive education and together with the optional protocol has been ratified by a growing number of Agency member countries and the European Union (see: <http://www.un.org/disabilities/latest.asp?id=169>). The EU Disability Strategy 2010–2020 aims to align EU policies with the UNCRPD. The World Report on Disability (2011) emphasizes the importance of appropriate training for mainstream teachers if they are to be confident and competent in teaching children with diverse educational needs. The report notes that teacher education programmes should be about attitudes and values, not just knowledge and skills.

Inclusion is a widely debated issue across Agency member countries and although there is variation in the approaches taken to providing for the diverse needs of learners, in particular those needing additional support due to special educational needs and disability, there are also a number of common elements focusing on raising the achievement of all learners. The following section outlines the basis for the evidence-based practice principles emerging from Agency work presented in Section 3.

One of the greatest problems faced by the world today is the growing number of individuals who are excluded from meaningful participation in the economic, social, political and cultural life of the society.

The EFA Global Monitoring Report (2008, 2009) sends a warning to governments that goals of EFA can’t be met by 2015 if the problem of inequality in education is not dealt properly, as education leads to an empowered and fulfilled life.

Keating (1996) successful change or transformation in the next century depends on the creation of a “learning society”. The first step to achieve this goal is to provide learning opportunities that will foster the full development of learning potential in all learners. This has an implication for providing personally

challenging, individually appropriate educational programme to all students, even those with exceptional learning needs. This is possible only in a flexible education system that assimilates the needs of a diverse range of learners and adapts itself to meet these needs.

According to the 2005 Global Monitoring Report, "Education should allow children to reach their fullest potential in terms of cognitive, emotional and creative capacities". Education for All means ensuring that all children have access to basic education of good quality by creating an environment in where learners both able and enabled to learn can learn. Such an environment must be inclusive, effective, friendly and welcoming to all learners.

#### **4.2 Disability a Developmental issue**

The World Health Organisation (WHO) estimates that 10% of any population is disabled (Thomas, 2005a). Also, DFID (2000) highlighted the relationship between disability and poverty. It was pointed out that disability could be the reason for poverty because it can lead to isolation and economic strain for the whole family, also the denial of education because of disability can lead to a lack of employment opportunities. Similarly, poverty can lead to malnutrition, dangerous working and living conditions (including road accidents) bad health and maternity care, poor sanitation, and vulnerability to natural disasters – all of which can result in disability. It is clear that if this group is ignored then it is very difficult to achieve the complete developmental goal.

According to an estimate only 2.5-6% of the population may have a disability, with approximately 98% of children with disabilities not attending any type of educational institution, the current provision (specialist or mainstream, government or NGO) is clearly not enough to attain EFA. At the core of inclusive education is the human right to education, pronounced in the Universal Declaration of Human Rights in 1949 but disability is clearly a development issue that we ignore at a price, including that of human rights. Alur (2002) stated that if

a person with a disability is dehumanised by cultural belief or stigma, as they are in India, then they can be „invisibilised□ and not considered worthy of rights. While there are also very important human, economic, social and political reasons

for pursuing a policy and approach of inclusive education, it is also a means of bringing about personal development and building relationships among individuals, groups and nations.

The Salamanca Statement and Framework for Action (1994) asserts that:” Regular schools with inclusive orientation are the most effective means of combating discrimination, creating welcoming communities, building an inclusive society and achieving education for all”

### **4.3 Meaning of Inclusive Education**

The discussion on inclusive education started with proposal of the social model of disability, which proposes systemic barriers, negative attitudes and exclusion by society (purposely or inadvertently) as the ultimate factors defining disability. This shift in the idea came when it was realized that children in special schools were seen as geographically and socially segregated from their peers and failure of meaningfully integrating students in mainstream schools (integration). Inclusive education is not only limited to mainstreaming the learners with special needs but also concerned with identifying and overcoming all barriers to effective, continuous and quality participation in education.

Booth (1996) has seen inclusion as a process of addressing and responding to the diversity of needs of all learners through increasing participation in learning, cultures and communities, and reducing exclusion within and from education. It involves changes and modifications in content, approaches, structures and strategies, with a common vision which covers all children of the appropriate age range and a conviction that it is the responsibility of the regular system to educate all children (UNESCO, 1994).

The Universal Declaration of Human Rights (1949), the United Nations General Assembly Charter (1959) and the United Nations Convention on the Rights of the Child(1989) all acknowledged education as a human right. The Salamanca Statement and Framework for Action on Special Needs Education (1994) suggested “inclusion” in mainstream education to be the norm so that all children have the opportunity to learn.



The Millennium Development Goals endorsed at the UN Millennium Development Summit (September 2000) targeted the eradication of extreme poverty and hunger and the achievement of universal primary education as its first two goals. Inclusive Education (IE) offers a strategy for reaching disabled children and adults and other marginalized or at risk groups, who normally constitute the poorest of the poor in developing country. Hence, Inclusive Education has been seen both as getting learners into and through learning institution by developing schools that are responsive to the actual, diverse needs of learning communities. Hence, it can be seen as a device for both access and quality which are also fundamental aspirations of EFA and MDG action frame works. In the broadest sense it is an approach which enables both teachers and learners to feel comfortable with diversity and to see it as a challenge and enrichment in the learning environment, rather than a problem. It also relieves individuals from the clutches of marginalization and exclusion.

One of the important parameter for quality education is to welcome the diversity and to provide flexibility in learning. Also, we have learnt that the quality of learning can be enhanced by the diversity of student involvement. An inclusive approach to education also strives to promote quality in the classroom by putting flexibility in terms of offering every individual a relevant education through a range of methods and individualized learning and variation in optimal opportunities for development personal growth of all learners. Researchers have also shown that Inclusive education results in improved social development and academic outcomes for all learners as it provides opportunity to get exposed to the real world which leads to the development of social skills and better social interactions. It also provides platform to the non-disabled peers adopt positive attitudes, tolerance and actions towards learners with disabilities. Thus, inclusive education lays the foundation to an inclusive society and participatory society by accepting, respecting and celebrating diversity.

#### **4.4 Barriers and Suggestions for Implementing Inclusive Education**

While we cannot neglect the importance of inclusive education it remains unanswered why the practice of inclusive education is presenting problems. It appears that it is both at the level of government policy but rather at the level of

implementation. While the policy states that all children should go to school – and governments are enforcing this rule – in many cases quality learning is not taking place, which is contradictory to the ethos of inclusive education. The reasons for the non implementation of the inclusive education in India, is because of various barriers which according to Johan (2002) are both external and as well as internal. The external barriers are confronted before coming to and getting enrolled in schools, which includes physical location of schools, non-availability of school, social stigmatization or economic conditions of the learners.

The internal barriers are mostly psychological barriers like self concept, confidence etc which are sometimes imposed by the external factors and first step to remove the internal barriers is to remove the external barriers. The following are some of the external barriers.

**1) Attitudinal Barriers:** It has been noted that disabled students suffer from physical bullying, or emotional bullying. These negative attitudes results in social discrimination and thus leads to isolation, which produces barriers to inclusion. Regarding disabled children some regions still maintain established beliefs that educating the disabled is pointless. It is sad to note here that these barriers are caused by society, which is more serious to any particular medical impairment. The isolation which results from exclusion closes the doors of real learning. The negative attitudes often develop due to lack of knowledge. Along with information about disability or condition, their requirements must be provided to peers, school staff and teachers as well. Increasing interactions between learners with special needs and community through organization of fairs, meetings etc. It is also very important to counsel the parents of these learners, especially in rural areas about the importance of providing education for developing self-reliant individuals. There is also a need to shift in perspectives and values so that diversity is appreciated and teachers are given skills to provide all children, including those with different learning needs, quality education. Also, at the policy level, it should be mandatory for all to educate about disability, so that a responsive individuals who respects disability could be developed.

**2) Physical barriers**

Along with the attitudinal barriers which are faced by the learners on the daily basis, another important barrier is the physical barriers, which includes school buildings, playgrounds, washrooms, library etc. Apart from this, the majority of schools are physically inaccessible to many learners because of poor buildings, particularly rural areas. Since most schools are not equipped to respond to special needs, poses blockage for learners in physically getting into school. For example, many of the students require a personal assistant for such basic activities as taking lunch in recess, personal care, remedial education efforts.

Most school buildings don't respond to the requirement of these learners properly. For example, if there is a ramp, sometimes it is too steep, often the doors were too heavy for the student to open unaided which impedes the access.

Hence, it is important for implementing the inclusive education in schools, it is important to overcome such physical barriers. Along with basic changes in the architectural designs such as widening doorways, removing unnecessary doors, installing proper ramps, technology could be used in the form of motion sensors to open doors, flush toilets and automatic door buttons for easier access through doors. Voice recognition technology can also used for activating many of the above-mentioned barriers. Since, there is an inadequacy of resources available to meet the basic needs in education, it is estimated that for achieving the inclusive education goal will require additional financial support from the government.

#### **4.5 Inappropriate Curriculum as a barrier**

In any education system, the curriculum is one of the major obstacles or tools to facilitate the development of more inclusive system. Curriculum includes the broad aims of education and has its implications on transactional and evaluation strategies. In our country of diversity, curriculum is designed centrally, hence which leaves little flexibility for local adaptations or for teachers to experiment and try out new approaches. This results in making the content inaccessible and demotivating. Therefore, the design and development of specific learning and teaching materials and teaching arrangements should take cognizance the needs, interest, aspirations and uniqueness of the learners. Elliot (2002) reports on changes being attempted in American schools where students „learn social skills and group work in environment that celebrates diversity. □

As a result of the knowledge based curriculum, the examinations are also too much content oriented rather than success oriented which is the demand of flexible inclusive curriculum. Supovitz & Brennan (1997) as cited by UNESCO, 2003 argued that , “while knowledge-based examinations are recognized to have their limitations in terms of both validity and reliability, formal standardized tests may also have adverse effects, such de contextualized facts and skills; ranking and sorting schools and children; narrowing the curriculum as teachers concentrate their teaching on the information, forms and formats required in the tests; and reinforcing bias in terms of gender, race/ethnicity and social class.”

In the inclusive settings, assessment of learners must be against the broad aims of curriculum and education and also must be evaluated against their own achievements rather to be compared by others, which will be truly individualized.

Also, it is suggested that the assessment has to be continuous, based on the feedback of both learners and the teachers. This will surely help learners also teacher□s in selecting appropriate teaching methods and styles.

As a consequence, all learners can be evaluated against their own achievements as opposed to being compared to other learners. Portfolio assessment can also be used. This would include learners□ own products such as final „best□ work, various works in progress, samples of tests completed, certificates earned, goals met, daily work samples, self-evaluation of the progress of learning and teachers□ observations (UNESCO, 2003).

#### **4.6 Untrained Teachers as Barrier**

For implementing the inclusive education successfully, it is important that teachers must have positive attitudes towards learners with special needs. But, because of lack of knowledge, education, understanding, or effort the teachers give inappropriate substitute work to the learners, which eventually leads to learners dissatisfaction and poor quality of learning.

Another important feature of the schools is high teacher–student ratios (average 1:45) and where it is expected that learners of diverse abilities have to be taught together. At the first place, there is a scarcity of trained teachers to deal with the

diversity and secondly, it is very wrong to assume to deal with 45 learners with diversity.

Hence, it is important to reduce the teacher- learner's ratio in the classroom, which is only possible if we have more schools with trained teachers to deal with the diversity of learners.

At present, training to teachers is fragmented, uncoordinated and inadequate taking place in a segregated manner i.e. one for special children and another for students with general capabilities; both of them are preparing teachers for the segregated schools. However, there is an effort by SCERT, DIETs in providing ongoing training programme, which are not adequate because of various reasons. Therefore, it is important that an inclusive teacher education programme must be designed which can foster proper skills among teachers.

#### **4.7 Organization of the Education System**

In our country, there are different types of schools such as private, government; public schools are developing inequality by offering differential levels of facilities and support. Those having an access to private schools have higher possibility of success as compared to those who go to government schools. Therefore, it is important like many developed countries, the common school system policy must be place properly. There is also a lack of information within many systems and often there is not an accurate picture of the number of learners excluded from the school system. Very often this leads to a situation where these learners do not have equal opportunities for further education or employment.

#### **4.8 WIDENING PARTICIPATION FOR ALL LEARNERS**

In the publication Key Principles for Promoting Quality in Inclusive Education (2009), widening participation to increase educational opportunity for all learners was identified as an over-arching principle. The following interconnected themes stemming from this were highlighted:

- Education and training in inclusive education for all teachers;

• Organizational culture and ethos that promotes inclusion; support structures organized so as to support inclusion; flexible resource systems that promote inclusion; policies that promote inclusion; legislation that promotes inclusion. These themes provide the basis for the practice principles identified from Agency thematic projects and presented in this document. They are therefore discussed in more detail here. As stated in the introduction, inclusion is now understood as a human rights issue that concerns a wider range of learners than those with special educational needs. As the Agency 2011 report

### **Participation in Inclusive Education – A Framework for Developing Indicators**

States, many learners, although present in school, are not engaged in their learning and leave school with few positive outcomes. Active participation in all aspects of school life is essential if learners are to continue in education and make the most of their learning for life, work and global citizenship. With reference to early school leaving, the Council of the European Union (2011) states that: 'Policy measures which can make a difference may include better early childhood education, updated curricula, improved teacher education, innovative teaching methods, individualized support – particularly for disadvantaged groups, including migrants and Roma – and stronger cooperation with families and the local community' (p. 2). Through building effective partnerships, schools are increasingly able to exert a positive influence on conditions beyond the school, improving support to learners and their families.

The recent Agency publications *Implementing Inclusive Assessment* (2009) and *Teacher Education for Inclusion across Europe*(2011)note that teachers need time for professional reflection and state that both teachers and learners must develop a positive mind-set, seeing challenges and errors as further learning opportunities. In all settings, diversity must be celebrated and valued and difference considered as a resource for learning. Clearly, initial and continuing teacher education has a vital role to play in the development of positive teacher attitudes as well as knowledge and skills.

The publication *Assessment in Inclusive Settings* (2007) emphasizes the crucial role of school leaders in the move towards inclusive education. While teachers are

leaders in their classrooms able to influence teaching and learning, they cannot guarantee the development of inclusive practice if the school leadership team does not support their work and continuing professional development. School leaders must create the conditions for inclusive development through strong relationships and a commitment to collaboration, teamwork, inquiry and innovation.

Within a positive school ethos, learners are listened to and actively involved in their assessment and learning as noted in the publication *Young Voices: Meeting Diversity in Education* (2008). The *World Report on Disability* (2011) also stresses that the voices of learners with disabilities must be heard. In order for this to happen, learner must be given a range of opportunities to access information (e.g. through appropriate methods of communication) and then be helped to process information, organize ideas and respond in meaningful ways.

The Agency report *Assessment in Inclusive Settings* (2007) suggests that teachers increasingly act as guides and facilitators of learning. Assessment becomes an integral part of the learning process with learners highlighting their own preferences, interests and barriers to learning. The Agency publications *Special Education across Europe* (2003) and *Multicultural Diversity and Special Needs Education* (2009) further stress the importance of such individualized approaches and the report *ICTs in Education for People with Disabilities* (2011) (a joint publication with UNESCO IITE) stresses how information and communication technology can be a powerful tool in supporting individualized learning approaches.

A key partner in the development of inclusive practice may include special settings. As they develop their role as resources, such settings can facilitate the exchange of professional expertise, through networking and dialogue and increase the capacity of all schools to respond to diverse needs. The publication *Special Needs Education in Europe – Thematic Publication* (2003) suggests that this practice would improve the support provided to all learners.

Learners and families who need additional support should be able to access coherent plans to secure appropriate, affordable and consistent services to meet their needs and achieve positive long-term outcomes. As stated in the document *Early Childhood Intervention – Progress and Developments 2005–2010* (2010),

schools and support services from all disciplines should work in close co-operation to meet the needs of learners and their families in every local community. Investment in early years provision and in early support for all learners should be seen as long-term, reducing the services needed by vulnerable learners in later life. The ICTs in Education for People with Disabilities (2011) report stresses the importance of involving families in developing tools and approaches for learners that can be used in the learning and home situations as a continuous and co-ordinate approach.

The paper Implementing Inclusive Assessment (2009) describes the move from multi-disciplinary to interdisciplinary working, which integrates the knowledge and perspectives of different areas of professional expertise in order to consider issues holistically and provide more flexible support options. This co-operative approach requires collaboration across policy sectors (e.g. health and social services) at all levels.

While acknowledging the critical role of the teacher and of school leaders discussed above, the key principles presented in this document start from the learner's perspective, putting children and young people at the heart of planning for their presence (access and attendance), participation (in quality learning experiences) and achievement (of outcomes through engagement in the learning process). This model, outlined in the UNESCO Guidelines for Inclusion (2005) draws together elements of Agency work and stresses that presence – in any educational setting – is not enough in itself. As young delegates at the European Parliament hearing in Brussels in November 2011 stressed, learners need to be actively involved in their own assessment and learning and in all decisions about their future.

#### **4.9 KEY PRINCIPLES FOR PROMOTING INCLUSIVE PRACTICE**

While the focus of most Agency work is on the compulsory education sector, these principles will apply to all sectors and phases of lifelong learning and to formal and non-formal education. The learner-focused principles will apply equally to learners with and without disabilities, as inclusion is concerned with the quality of education of all learners.



**4.9.1 Responding to learners' voices** Learners' voices and those of family and advocates should be listened to, particularly when decisions are made that affect their lives. Learners must be provided with relevant information in appropriate formats to enable them to take a full part in all discussions and decisions regarding their education and plans for the future. Learners should have a voice in decisions that affect them: in assessment – choosing different ways of showing what they know, understand and can do, being involved in discussions about assessment information and how it can support future learning; in the learning process – having different ways of accessing information, making it meaningful and expressing themselves; in planning their learning, taking personal factors into account; in the provision of support to overcome barriers to learning that does not stigmatize them or separate them from their peers; in curriculum – having a say in relevant, meaningful, personalized outcomes; and in evaluating the learning outcomes to ensure educational achievement and well being.

#### **4.9.2 Active participation of learners**

All learners are entitled to be active participants in the life of the school and community. All learners should feel part of their class/school, being valued for the individual contribution that they make to the life of the community.

Learners should be consulted about any additional support needed to help them participate in the full range of activities and experiences offered. Learners should: have a sense of belonging and feel secure in the school environment; have opportunities for collaboration and co-operative learning, with flexible peer groups to develop social and communication skills; have their achievements recognized and celebrated; take a full part in extracurricular and out-of-school activities; take responsibility for their own learning and an active role in the learning process, maintaining high expectations and increasing independence in learning; and recognize their responsibilities to others in the school and community.

#### **4.9.3 Positive teacher attitudes**

All teachers should have positive attitudes towards all learners and the will to work collaboratively with colleagues. All teachers should see diversity as a

strength and a stimulus for their own further learning. In their initial and continuing education, teachers need experiences that will develop positive attitudes and values and encourage them to research, reflect and find innovative solutions to new challenges presented by learner difference. In particular, teachers should welcome support from colleagues with different areas of expertise and work co-operatively moving from an individual to a collective approach to their work. Teachers should: take responsibility for all learners and show understanding of the fundamental needs that they all have in common e.g. to feel safe, to belong, to enjoy their time in school and achieve meaningful outcomes; value and show commitment to meeting a broad range of outcomes (including emotional health and well-being, social skills) and maintain high expectations for all learners;

- recognize when learners need support and arrange this sensitively together with the learner, without using potentially limiting labels;
- have knowledge of a range of resources (including ICT) and the skills to enable them to be used effectively in the classroom;
- have a positive attitude to innovation and be prepared to continue their own personal and professional development;
- collaborate with and support colleagues to reflect on practice and build 'team' knowledge and skills in order to help learners (for example in the development of individual support, classroom strategies or transition plans); and communicate effectively with learners, parents and colleagues from all agencies and support collaborative practice to benefit learners.

#### **4.9.4 Effective teacher skills**

All teachers should develop the skills to meet the diverse needs of all learners. In their initial and continuing education, teachers should be equipped with the skills, knowledge and understanding that will give them the confidence to deal effectively with a range of learner needs. Teachers should develop a range of approaches to assessment and pedagogy to enable them to use these in flexible ways to reduce barriers to learning and enable participation and achievement. They should develop a clear rationale for the approaches used, recognizing and reflecting on factors that can impact on learning and the barriers that can occur. Teachers should: assess learners using a range of approaches which allow them

to show what they know, understand and are able to do in a variety of ways; use feedback to identify and overcome barriers to learning (physical, attitudinal, organizational) and plan with learners to ensure that future learning is accessible, coherent and connected to their lives; provide a range of learning opportunities with choice for all learners, in line with a view of intelligence as multi-dimensional; use a range of approaches to teaching, using flexible groups and taking account of learners' preferences; plan a relevant curriculum that provides coherent opportunities for the development of core, cross curricular competences and meaningful engagement for all learners; and work with colleagues to develop individual plans to ensure the consistent deployment of any necessary support, aids and adaptations to meet learners' needs.

#### **4.9.5 Visionary school leadership**

School leaders should value diversity among staff as well as learners, encourage collegiality and support innovation. Effective inclusive practice requires visionary leadership at all levels that demonstrates inclusive values and develops the positive ethos and environment for learning that form the basis of quality education. Throughout the whole school, inclusive values should be evident in all policies and development plans and demonstrated through the mutually supportive working relationships and practice of all school leaders, staff and learners. School leaders should: establish a positive ethos and a learning culture by making their vision and inclusive values and beliefs explicit in all aspects of school life;

- ensure that inclusion and learner well-being are central to all policies and evident in all practice

- organize school in ways that avoid labeling or categorizing learners, e.g. flexible, mixed groupings for different activities; actively work to promote responses to difference that include learners by extending what is available in their usual learning environment;

encourage and empower staff to develop their capacity and competence to meet a diversity of needs through different approaches and contribute their expertise to the whole school learning community; support staff to reflect on their practice and become autonomous life-long learners; manage resources effectively and ensure that they reflect and respect the diversity of learners within the school; use sources

of funding creatively to ensure physical access to buildings and appropriate support (including aids/ICT) for all learners; develop effective monitoring, self-review and learner-centered evaluation that takes account of the achievement of all learners and of wider, as well as academic outcomes;

use the outcomes of monitoring and evaluation to inform planning and strategic improvement to develop the school's capacity to support the best possible progress for all learners; provide effective pastoral support for all staff and work to mediate external pressures by developing a clear rationale for approaches taken by the school; manage specialist staff and internal and external networks to take joint responsibility and to work in partnership to facilitate access to the curriculum and extracurricular activities for all learners; and communicate effectively with the local community, interdisciplinary support services and specialist settings to ensure a holistic and co-ordinate approach to learners and their families that recognizes the importance of meeting broader needs to enhance learning.

#### **4.9.6 Coherent interdisciplinary services**

Every school should have access to the support of interdisciplinary community services. Children and young people will not be successful in their learning if their basic health, social and emotional needs are not met. This may require support for families and communities and will need services such as health and social services to collaborate and ensure a holistic approach.

Interdisciplinary services should: demonstrate good working relationships and effective communication across and between different sectors/services and schools in the community. They should enable information to be shared and appropriate and timely support provided to address additional needs (such as therapies for medical needs, mental health support etc.); work closely with parents and learners to strengthen links between the family, school and the interdisciplinary team; and work with schools to involve all stakeholders, including local special schools/settings in their support networks and seek innovative ways to share expertise.

#### 4.10 Summary

Building on the work of the Agency and in particular the key principles outlined in the 2009 recommendations, this document sets out some major considerations for promoting inclusive practice.

Acknowledging the importance of the role of the teacher, the Commission of the European Communities (2006) states: 'The most important factors for efficiency and equity are the quality, experience and motivation of teachers and the types of pedagogy they use. Working in collaboration with parents and pupil welfare services, teachers can play a key role in securing participation of the most disadvantaged'.

As the Agency Director Cor Meijer, speaking at the launch of the World Report on Disability (June 2011) said: 'We can discuss inclusion on many levels, conceptual level, policy level, normative or research level, but in the end it is the teacher in the classroom who has to cope with a variety of students in the classroom. It is the teacher who implements the principles of inclusive education.' The key principles outlined here, if underpinned by those aimed at policy makers in 2009 could support teachers and other practitioners to develop more inclusive practice and effectively meet more diverse needs in mainstream classrooms.

Disability is seen as a developmental issue in any economy, as the disabled group is often being marginalized due exclusion from the society and thus leading to poverty. Inclusive Education approach doesn't only provide the basic human right to education but also dignity which is often being linked with the socio economic status. It is seen as a device for both access and quality education which are also fundamental aspirations of EFA and MDG action frameworks. Through, inclusive education the learners gets a chance for not only getting into the system but also a support to complete it successfully.

Inclusive education results in improved social development and academic outcomes for all learners as it provides opportunity to get exposed to the real world which leads to the development of social skills and better social interactions. It also provides platform to the non-disabled peers adopt positive attitudes, tolerance. An important prerequisite for inclusive education is have

respect for differences, respect for different learning styles, variations in methods, open and flexible curricula and welcoming each and every learner. A success of any learner is dependent on both school and community, but, both of them poses barriers in the implementation of the inclusive education policy. These barriers are both external and internal in nature and in order to facilitate inclusive education there has to have a modification in the environmental conditions, which includes the physical changes in the school buildings and increased number of schools. Apart from that, very importantly there is a need to change the negative attitudes and more responsibility towards learners with special needs, which can be brought about by policy changes. There is a need to provide proper training to the teachers dealing with the diverse needs of the learners, applying appropriate individualized pedagogy and assessment system. Also, this training must be continuous.

#### 4.11 References

Ainscow, M. 1999. *Understanding the Development of Inclusive Schools*. Oxford, Routledge.

Alur, M. (2002) Introduction, in Hegarty, S & Alur M (eds) (2002) *Education and Children with Special Needs: from Segregation to Inclusion*, New Delhi: Sage Publications  
Booth, T., (1996). *A Perspective on Inclusion from England*. Cambridge Journal of Education. 26, 1, 87-99  
Deno E. (1970) *Special education as developmental capital*, *Exceptional Children*. No.54 (2), Pg.229-237.  
DFID (2000a). *White Paper on International Development. Eliminating World poverty: Making Globalisation Work for the Poor*, London.  
DFID (2000). *Disability, Poverty and Development*, Department for International Development , London.

Keating, D.P. (1996). *The transformation of schooling: Dealing with developmental diversity*. In J. Lupart, A. McKeough, & C. Yewchuk (Eds.), *Schools in transition: Rethinking regular and special education*. (pp. 119-141). Toronto, ON: Nelson Canada.

Mittler, P. (2000). *Working towards inclusive education: Social context*. London: Fulton.

OECD (1999). *Inclusive Education at Work. Students with Disabilities in Mainstream Schools*. France: OECD.

Pivik J., Mccomas J., Laflamme M., (2002), *Barriers and Facilitators to Inclusive Education*, Council for Exceptional Children. Vol. 69, No. 1, pp. 97-107.

UNESCO. (1994) *The Salamanca Statement and Framework for Action on Special Needs Education*. Paris, UNESCO/Ministry of Education, Spain. (ED-34/WS/18.)

Smith, W.J. (1992). *The funding of inclusive education: A case study of critical policy issues*, Exceptionality Education Canada, 1&2, 49-75.

Thomas, P. (2005a) Disability, Poverty and the Millennium Development Goals: Relevance, Challenges and Opportunities for DFID, London: Disability Knowledge and Research, accessed at: [http://disabilitykar.net/research/pol\\_final.ht](http://disabilitykar.net/research/pol_final.ht)

UNESCO (2003) *Overcoming Exclusion through Inclusive Approaches in Education A Challenge :A Vision Conceptual Paper*, Paris, UNESCO

UNESCO (2004b). *EFA Global Monitoring Report 2005 Education for All: The Quality Imperative*. Paris, UNESCO.

UNESCO (2005) *Guidelines for Inclusion: Ensuring Access to Education for All*, France, UNICEF

UNICEF (2009) *Policy Guidelines on Inclusion in Education*, France, UNICEF

Wolfberg P., Lepage P., Cook E., (2009), *Innovations In Inclusive Education: Two Teacher Preparation Programs At The San Francisco State University*, International Journal of Whole Schooling Vol. 5 No. 2, Pg16-27

## UNIT 5

### **Barriers to Inclusive Education: Attitudinal, Physical & Instructional**

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## **5.1 Introduction**

In the times of education for all, we need to consider those who are somehow missing out. Among these, children with special needs occupy an important category. These children with disabilities are often left out of schools due to negative attitudes and non-inclusive set-ups. Providing an opportunity to children with special needs is thus essential for every society country in order to provide opportunities to each and everyone for developing and growing to full potential and realizing the objectives of education for all. UNICEF's Report on the Status of Disability in India 2000 states that there are around 30 million children in India suffering from some form of disability. The Sixth All-India Educational Survey (NCERT, 1998) reports that out of India's 200 million school-aged children (6–14 years), 20 million require special needs education. While the national average for gross enrolment in school is over 90 per cent, less than five per cent of children with disabilities are in schools. According to the EFA Global Monitoring Report 2010: reaching the marginalized, children with disabilities remain one of the main groups being widely excluded from quality education. Disability is recognized as one of the least visible yet most potent factors in educational marginalization. The United Nation's Convention on the Rights of Persons with Disabilities (UNCRPD), which was entered into force in 2008, was ratified by India in October, 2008.

It can be safely assumed that achieving the Education for All (EFA) targets and Millennium Development Goals will be impossible without improving access to and quality of education for children with disabilities. It is a binding on Indian government as well, being a signatory to UNCRPD. Inclusive Education for Disabled at Secondary Stage (IEDSS) was approved in India in September, 2008 to replace IEDC Scheme from 2009-10. The Scheme is 100% centrally funded. According to Barton (1997), "Inclusive education is not merely about providing access into mainstream school for pupils who have previously been excluded. It is not about closing down an unacceptable system of segregated provision and dumping those pupils in an unchanged mainstream system. Existing school systems in terms of physical factors, curriculum aspects, teaching expectations and styles, leadership roles will have to change. This is because inclusive education is about the participation of ALL children and young people and the removal of all forms of exclusionary practice". Achieving this goal in India requires serious planning and efforts.

## **5.2 Meaning of Inclusive Education**

Inclusive education is based on the principle that schools should provide for all children regardless of any perceived difference, disability or other social, cultural and linguistic difference. The diverse needs of these learners and the quest to make schools more learning friendly requires regular and special education teachers to consult and collaborate with one another as well as with family and community in order to develop effective strategies, teaching and learning (Jelas, 2010) within inclusive setups. With the right training, strategies and support nearly all children with SEN and disabilities can be included successfully in mainstream education. The 'Index for Inclusion' (Booth and Ainscow, 2011, 3rd edition) summarizes some of the ideas which make up the view of inclusion within the Index as follows (CSIE, 2014): Inclusion in education involves:

- Putting inclusive values into action.
- Viewing every life and every death as of equal worth.
- Supporting everyone to feel that they belong.
- Increasing participation for children and adults in learning and teaching activities, relationships and communities of local schools.
- Reducing exclusion, discrimination, barriers to learning and participation.

- Restructuring cultures, policies and practices to respond to diversity in ways that value everyone equally.
- Linking education to local and global realities.
- Learning from the reduction of barriers for some children to benefit children more widely.
- Viewing differences between children and between adults as resources for learning. Acknowledging the right of children to an education of high quality in their locality. Improving schools for staff and parents/carers as well as children.
- Emphasizing the development of school communities and values, as well as achievements.
- Fostering mutually sustaining relationships between schools and surrounding communities.
- Recognizing that inclusion in education is one aspect of inclusion in society.

Segregating children into 'special needs' and 'mainstream' schools prevent equal access to social and curricular opportunities and labels children (United Nations Convention on the Rights of the Child, 2008; UNESCO, 1994). Parents of children with disabilities are usually more in favour of inclusive education and have a deeper understanding and wider knowledge of terminology and specific legislation. However, many of the parents of children without disabilities are often reluctant to have children with disabilities in the same class as their own child. At the Jometin World Conference (1990) in Thailand, the goals for 'Education for All' were set and it was proclaimed that every person - child, youth and adult shall be able to benefit from educational opportunities which would meet their basic learning needs. Ever since that conference, UNESCO, along with other UN agencies, a number of international and national non-governmental organizations have been working towards these goals. The inclusion of pupils with barriers to learning and development in ordinary schools and classrooms is part of a global human rights movement. In 1994, at the UNESCO World Conference on Special Needs Education held in Salamanca, Spain, the idea of inclusive education was given further impetus. The conference considered the future international direction of Special Needs to ensure the rights of children to receive a basic education. The marginalization and exclusion of learners from an educational

system was addressed at the Dakar World Education Forum in April 2000 and it was so aptly captured in the statement: "The key challenge is to ensure that a broad vision of Education for All as an inclusive concept is reflected in national government and funding agency policies. Education for All... must take account of the need of the poor and the most disadvantaged...young people and adults affected by conflict, HIV/AIDS, hunger and poor health, and those with special learning needs..." The United Nations Convention on the Rights of People with Disabilities (UNCRPD, 2008) is a new international agreement about protecting and promoting the human rights of disabled people throughout the world. The Convention on the Rights of Persons with Disabilities is an international human rights treaty of the United Nations intended to protect the rights and dignity of persons with disabilities. Parties to the Convention are required to promote, protect, and ensure the full enjoyment of human rights by persons with disabilities and ensure that they enjoy full equality under the law. The Convention aims to serve as the major catalyst in the global movement from viewing persons with disabilities as objects of charity, medical treatment and social protection towards viewing them as full and equal members of society, with human rights. UNCRPD makes it a binding that countries ratifying it will ensure an inclusive education system at all levels and lifelong learning.

### **5.3 Inclusive Education in India**

In India, National Council of Educational Research and Training (NCERT) joined hands with UNICEF and launched Project Integrated Education for Disabled Children (PIED) in the year 1987, to strengthen the integration of learners with disabilities into regular schools. In 1997, IEDC was amalgamated with other major basic education projects like the DPEP (Chadha, 2002) and the Sarva Shiksha Abhiyan (SSA) (Department of Elementary Education, 2000). The Persons with Disability Act, 1995 has a provision of providing education to children with special needs in the most appropriate environment. The SSA launched by the Govt. of India, in 2001, underlines the prerogative of a child with disability to be included in the mainstream of education. MHRD (2006) in its Sarva Shiksha Abhiyan(SSA) framework clearly states that "SSA will ensure that every child with special needs, irrespective of the kind, category and degree of disability, is provided education in an appropriate environment. SSA will adopt *zero rejection policy* so that no child is left out of the education system. It will

also support a wide range of approaches, options and strategies for education of children with special needs” The Rehabilitation Council of India (RCI) is mainly responsible for education and rehabilitation of CWSN. The Rehabilitation Council of India (RCI) was set up as a registered society in 1986. On September, 1992 the RCI Act was enacted by Parliament and it became a Statutory Body on 22 June 1993. The Act was amended by Parliament in 2000 to make it more broad based. The mandate given to RCI is to regulate and monitor services given to persons with disability, to standardize syllabi and to maintain a Central Rehabilitation Register of all qualified professionals and personnel working in the field of Rehabilitation and Special Education. The Act also prescribes punitive action against unqualified persons delivering services to persons with disability. Article 24 of the Convention (UNCRPD, 2008) on education states that: 1. States Parties recognize the right of persons with disabilities to education. With a view to realizing this right without discrimination and on the basis of equal opportunity, States Parties shall ensure an inclusive education system at all levels and lifelong learning directed to: a) The full development of human potential and sense of dignity and self-worth, and the strengthening of respect for human rights, fundamental freedoms and human diversity; b) The development by persons with disabilities of their personality, talents and creativity, as well as their mental and physical abilities, to their fullest potential; c) Enabling persons with disabilities to participate effectively in a free society. 2. In realizing this right, States Parties shall ensure that: a) Persons with disabilities are not excluded from the general education system on the basis of disability, and that children with disabilities are not excluded from free and compulsory primary education, or from secondary education, on the basis of disability; b) Persons with disabilities can access an inclusive, quality and free primary education and secondary education on an equal basis with others in the communities in which they live; c) Reasonable accommodation of the individual’s requirements is provided; d) Persons with disabilities receive the support required, within the general education system, to facilitate their effective education; e) Effective individualized support measures are provided in environments that maximize academic and social development, consistent with the goal of full inclusion. 3. States Parties shall enable persons with disabilities to learn life and social development skills to facilitate their full and equal participation in education and as members of the community. To this end, States Parties shall take appropriate measures, including: a) Facilitating the

learning of Braille, alternative script, augmentative and alternative modes, means and formats of communication and orientation and mobility skills, and facilitating peer support and mentoring; b) Facilitating the learning of sign language and the promotion of the linguistic identity of the deaf community; c) Ensuring that the education of persons, and in particular children, who are blind, deaf or deaf-blind, is delivered in the most appropriate languages and modes and means of communication for the individual, and in environments which maximize academic and social development. 4. In order to help ensure the realization of this right, States Parties shall take appropriate measures to employ teachers, including teachers with disabilities, who are qualified in sign language and/or Braille, and to train professionals and staff who work at all levels of education. Such training shall incorporate disability awareness and the use of appropriate augmentative and alternative modes, means and formats of communication, educational techniques and materials to support persons with disabilities. 5. States Parties shall ensure that persons with disabilities are able to access general tertiary education, vocational training, adult education and lifelong learning without discrimination and on an equal basis with others. To this end, States Parties shall ensure that reasonable accommodation is provided to persons with disabilities. These provisions, being mandatory and a binding are a real challenge for the Government of India which has signed and ratified UNCRPD as early as in 2008. As far as clause 1a, b, and c are concerned, we know that many children with special needs are yet to be accommodated to our system of education. Most of such children are out of schools. Clause 2 desires full inclusion in Indian education which is not going to be easy considering the challenges to be faced. The Article not only desires full inclusion at the primary level but it desires accommodations at secondary and tertiary levels as well. The reality warns us to make immediate efforts in these areas.

#### **5.4 Barriers to Inclusive Education**

Inclusive education is a binding and priority for government of India. However, a wide gap in policy and practice exists in the country with respect to inclusive education. There are a number of barriers that hinder proper practice of inclusive education in our country. Based on the literature and personal experiences, the authors believe these barriers to include the following: 1. The inefficiency of teachers to develop and use instructional materials for inclusion students (Coskun,

Tosun, & Macaroglu, 2009) 2. Attitudes towards inclusion and disability among teachers, administrators and policy Planners 3. Attitudes of parents of children without disabilities 4. Lack of awareness about children with disabilities among general teachers (Unianu, 2012) 5. Improper curriculum adaptation 6. School environment 7. School management 8. Support services 9. Family collaboration 10. Insufficient and improper pre-service teacher education 11. Negative self-perceptions of children with disabilities 12. Negative attitudes of normal peers 13. ICT availability and related competencies 14. Improper policy planning and lack-luster implementation 15. Difficulties in physical access 16. Expenses involved

The barriers mentioned here do not form an exhaustive list but authors believe that not much are left out. In addition to above, skills of teachers which are responsible for implementing inclusive education are also not up to as desired and necessary for inclusion. Das, Kuyini and Desai (2013) examined the current skill levels of regular primary and secondary school teachers in Delhi, India in order to teach students with disabilities in inclusive education settings. They reported that nearly 70% of the regular school teachers had neither received training in special education nor had any experience teaching students with disabilities. Further, 87% of the teachers did not have access to support services in their classrooms. Finally, although both primary and secondary school teachers rated themselves as having limited or low competence for working with students with disabilities, there was no statistically significant difference between their perceived skill levels.

### **5.5 Attitudinal Barriers to Inclusive Education**

In addition to many other requirements, implementation of inclusive education immensely requires positive attitudes towards inclusion and disability among teachers, parents, peers, administrators and policy planners. However, negative attitudes are still persisting among these in many cases. This is adversely affecting inclusive education scenario in India. Mainstream teacher attitudes may be a contributory barrier to successful inclusive practices (Avramadis, Bayliss, & Burden, 2000; Bender, Vail, & Scott, 1995; De Boer, Pijl, & Minnaert, 2010). Teachers tend to be broadly positive about the principle of inclusion while at the same time viewing its practical implementation as problematic (e.g., Avramidis & Norwich, 2002; Scruggs & Mastropieri, 1996). However it has been argued that neutral, even negative, attitudes toward inclusion may better characterize teacher viewpoints (De Boer et al., 2010; Soodak, Podell & Lehman, 1998). Indeed

teachers in mainstream schools were less positive about the potential of children with learning disabilities than special school teachers. The inclusion of children with social, emotional and behavioural difficulties has consistently been reported as a particularly problematic for teachers, and is accompanied by negative teaching attitudes (Cook, 2001; Cook, Cameron & Tankersley, 2007; Hastings & Oakford, 2003; Shapiro, Miller, Sawka, Gardill, & Händler, 1999). These are children whose learning in the classroom is compromised by complex and long-term difficulties in managing their behavior, emotions and relationships (Simpson, Bloom, Cohen, Blumberg, & Bourdon, 2005). Unlike other groups of students with special needs, they are still as likely to be placed in specialist provision now as 30 years ago (Cooper, 2004). This group is mainly male, with a majority from low socio-economic status backgrounds, and with lower educational attainment than their peers (Farrell & Tsakalidou, 1999; Simpson *et al.*, 2005). Teachers with negative attitudes believe that inclusion is a burden on teachers and they should receive special service delivery in special education settings to avoid the negative impact on their typically developing peers in the regular classroom (Zambelli & Bonni 2004). A number of studies found that general education teachers are not supportive of inclusion. Hammond and Ingalls (2003), for example, concluded that most of the teachers did not support inclusion, albeit their schools had inclusive programs. Burke and Sutherland (2004) found similar results where in-service teachers' attitudes toward inclusion were negative. Other studies found that general education teachers are less supportive of inclusion (Armstrong, Armstrong, Lynch, & Severin, 2005; De Boer, Pijl, & Minnaert, 2010; De Boer, Pijl, & Minnaert, 2011). Rakap and Kaczmarek (2010) investigated Turkish general education teachers working in public elementary schools regarding the inclusion of students with disabilities in their classrooms and their readiness to include students with severe learning disabilities. The results indicated that the teachers had negative attitudes towards the inclusion of students with disabilities into regular education classrooms. School principals too have a central role in promoting an inclusive ethos within their schools. This implied that school principals have a crucial role within their school to communicate their expectations regarding inclusive practices clearly to their teaching staff (MacFarlane & Woolfson, 2013). Although no research could be located in Indian settings by the authors, but they believe that negative attitudes are quite prevalent



among teachers, parents, peers, administrators and policy planners towards disability as well as inclusive education.

## **5.6 What is accessibility?**

Accessibility is a general term used to describe the degree to which a product, device, service, or environment is available to be used by all intended audiences. According to the Government of Ontario, there are five identified barriers to accessibility for persons with disabilities. These barriers are attitudinal, organizational or systemic, architectural or physical, information or communications, and technology. As an educator, you have a responsibility to accommodate students with disabilities under the Ontario Human Rights Code. Requests for accommodation are made on an individual basis by students through the Office for Students with Disabilities and require medical and/or formal documentation.

Under the Accessibility for Ontarians with Disabilities Act, you also have a responsibility to learn about accessibility for persons with disabilities and how it relates to the development and delivery of accessible programs and courses. To create an accessible learning environment, educators must be aware of the barriers that affect student learning and educational opportunities, and they must proactively remove the barriers that are within their control.

## **5.7 What are the five barriers to accessibility?**

### **5.7.1. Attitudinal**

Attitudinal barriers are behaviors, perceptions, and assumptions that discriminate against persons with disabilities. These barriers often emerge from a lack of understanding, which can lead people to ignore, to judge, or have misconceptions about a person with a disability. Examples of attitudinal barriers include:

- Assuming a person with a disability is inferior.
- Assuming that someone with speech impairment cannot understand you.
- Forming ideas about a person because of stereotypes or a lack of knowledge.

- Making a person feel as though you are doing them a “special favour” by providing their accommodations. As an educator, there are a number of ways you can help remove attitudinal barriers. You could:
- Avoid making assumptions about a student’s disability or capabilities; many persons with disabilities talk about being frustrated with people assuming what they can or cannot do.
- Encourage students with disabilities to come forward and speak to you about the way they learn and what may be “disabling” in your course, classroom, or teaching. Remember that students with disabilities do not have to disclose their disability to their professors or to anyone else in the academic environment in order to receive accommodations.
- Respect the privacy of students with disabilities.
- Insist on professional, civil conduct between and among students to respect people’s differences and create an inclusive environment.
- Engage in the accommodation process at your university in good faith and implement appropriate accommodations.

### **5.7.2. Organizational or systemic**

Organizational or systemic barriers are policies, procedures, or practices that unfairly discriminate and can prevent individuals from participating fully in a situation. Organizational or systemic barriers are often put into place unintentionally. Examples of organizational or systemic barriers include:

- A program that requires students to take a full course load.
- Office hours conducted in person only, or not allowing students to access their professors or administrators by phone, e-mail, or other means of communication.
- Having poorly defined or unclear learning objectives for a course.
- Requiring students to express their understanding of course content in only one way. As an educator, there are a number of ways you can help remove organizational or systemic barriers:

- Identify and clearly express essential course content and provide flexibility so that students can express their understanding of essential course content in multiple ways.
- Encourage students to speak to you about accessibility issues in the classroom or about your course.
- If you are involved in designing or developing new or revised facilities, services, policies, processes, courses, or curricula, ensure that these are designed inclusively, with the needs of persons with disabilities in mind.

### **5.7.3. Architectural or physical**

Architectural or physical barriers are elements of buildings or outdoor spaces that create barriers to persons with disabilities. These barriers relate to elements such as the design of a building's stairs or doorways, the layout of rooms, or the width of halls and sidewalks. Examples of architectural or physical barriers include:

- Sidewalks and doorways that is too narrow for a wheelchair, scooter, or walker.
- Desks that is too high for a person who is using a wheelchair, or other mobility device.
- Poor lighting that makes it difficult to see for a person with low vision or a person who lip-reads.
- Doorknobs that is difficult to grasp for a person with arthritis. As an educator, you may not have the ability to make adjustments to the physical environment of your classroom. The best solutions may be outside your scope of responsibility – they may have significant costs to the institution and may need to be phased in over time through building renovations or the purchase of new furniture or equipment. Despite these challenges, you may be able to participate in intermediary solutions that can help overcome physical barriers. Some examples could include:
- Reserving seating for students with disabilities in a classroom that may not be fully accessible.

- Making lighting adjustments in the classroom, such as eliminating glare by closing blinds or drapes.
- Turning off any noisy machinery, such as projectors, while they are not in use.
- Using a microphone in a large classroom.
- Arranging to meet a student in an alternate location if your office is not accessible.
- Requesting a classroom change if you cannot meet the learning needs of your students.

#### **5.7.4. Information or communications**

Information or communications barriers occur when sensory disabilities, such as hearing, seeing, or learning disabilities, have not been considered. These barriers relate to both the sending and receiving of information. Examples of information or communications barriers include:

- Electronic documents that are not properly formatted and cannot be read by a screen reader.
- Lectures that are confusing and poorly organized.
- Language that is not clear.
- Print that is too small or in a font that is difficult to read.
- Videos that are not captioned and don't have transcriptions. As an educator, you have a significant amount of autonomy in selecting, creating, and distributing your course materials. When possible, make your course materials available in multiple formats, and make each format accessible to the greatest number of students. Some examples could include:
  - Make your lectures notes, slides, and other handouts accessible and electronically available to students.
  - Consider allowing students to audio-record lectures, or create your own audio podcasts of your lectures and make them available.
  - Provide all students with an organized, well-written, and complete syllabus.

- See the resources in the Educators' Accessibility Resource Kit on Creating Accessible Lectures, Using PowerPoint, and Using Word Documents and/or PDFs.

### **5.7.5. Technology**

Technology barriers occur when a device or technological platform is not accessible to its intended audience and cannot be used with an assistive device. Technology can enhance the user experience, but it can also create unintentional barriers for some users. Technology barriers are often related to information and communications barriers. Examples of technology barriers include:

- Electronic documents without accessibility features, such as alternative text (AltText), that screen readers read to describe an image. Handouts or course material that is available only in hard copies. Requiring students to use a website that does not meet accessibility standards. Learning Management Systems or course websites that cannot be accessed using screen-reading software. As an educator, you have a significant amount of autonomy in deciding if and how you use technology in your courses. There are a number of ways you can help remove technology barriers: Select digital textbooks where appropriate. Create digital course packs in easily convertible electronic formats. Use captioned videos or provide transcripts for video and audio files. See the resources in the Educators' Accessibility Resource Kit, such as Creating Accessible Lectures, Using PowerPoint, and Using Word Documents and/or PDFs, to learn how to create accessible lectures and accessible documents.

### **5.8 Getting started**

Consider working with a curriculum developer or education specialist at your university in the faculty development office or teaching and learning centre, or with staff in the Office for Students with Disabilities to learn how to make your courses more accessible. Learn from your peers and discuss what works well.

### 5.9 More resources on the barriers to accessibility:

Government of Ontario, Ministry of Economic Development, Trade and Employment, Understanding Barriers to Accessibility University of Toronto Scarborough, Access Ability, Teaching and Learning Services: Universal Instructional Design, Creating an Accessible Curriculum University of Ottawa, A Guide for Professors: Minimizing the Impact of Learning Obstacles to obtain this document in an alternative format, contact:

Ontario Human Rights Commission. The Opportunity to Succeed: Achieving Barrier-Free Education for Students with Disabilities. Consultation Report (October 2003), p.69. Cited in University of Toronto Scarborough, Universal Instructional Design, Creating an Accessible Curriculum, AccessAbility, Teaching and Learning Services. Progressive nations such as Canada and the United States have civil rights laws protecting their citizens embedded in their national policies. These rights extend to children and have been advocated by international organizations such as the United Nations (1989) and the World Health Organization (1980). Children with disabilities represent an especially vulnerable class of citizens, and special laws and policies have been in place for over 25 years promoting full participation and integration of these children into society—particularly that aspect of society in which they are so deeply immersed (i.e., educational settings). This investigation addresses issues relevant to the effective application of these policies for children with disabilities in school settings. In Canada it has been 30 years since the Commission on Emotional and Learning Disorders produced the CELDIC Report (1970), which endorsed the integration of students with “exceptionalities” into the general education system. Their report, entitled *One Million Children*, offered a new perspective on educational practices for children with disabilities and provided the first endorsement for mainstreaming or integration in Canada (Hammill, Bartel, & Bunch, 1984). This first step has led to the current laws of protection and equality detailed in the Canadian Charter of Rights and Freedoms. The United States has similar legislation (i.e., the Individuals with Disabilities Education Act; IDEA), a federally based civil rights law which states that children with disabilities are legally entitled to free appropriate public education (FAPE)

## 5.10 Barriers and Facilitators to Inclusive Education

MARC LAFLAMME University of Ottawa, Canada ABSTRACT: To examine how inclusive our schools are after 25 years of educational reform, students with disabilities and their parents were asked to identify current barriers and provide suggestions for removing those barriers. Based on a series of focus group meetings, 15 students with mobility limitations (9-15 years) and 12 parents identified four categories of barriers at their schools: (a) the physical environment (e.g., narrow doorways, ramps); (b) intentional attitudinal barriers (e.g., isolation, bullying); (c) unintentional attitudinal barriers (e.g., lack of knowledge, understanding, or awareness); and (d) physical limitations (e.g., difficulty with manual dexterity). Recommendations for promoting accessibility and full participation are provided and discussed in relation to inclusive education efforts. 98 Fall 2002 meets their education and related services needs in the least restrictive environment (LRE). However, unlike American national legislation which mandates that all children with disabilities be educated in the class and school building they would normally attend if not disabled, except where the child's needs dictate otherwise (U.S. Public Law 94-142), inclusive educational policies in Canada are provincially based and vary across the country in their scope and breadth (Valentine, 2001). In the province of Ontario, for example, the Education Act (Regulation 181/98) defines a student with exceptionalities as a pupil who's behavioral, communicational, intellectual, physical or multiple exceptionalities are such that he or she is considered to need placement in a special education program. This determination is based on defining the level of functioning and disability of students with exceptionalities in order to determine needed resources and services. The Education Act requires that school boards provide, or purchase from other boards, special educational programs and services for their students with exceptionalities. The special services include the facilities and resources necessary for developing and implementing a special education program (Ontario Ministry of Education, Ministry of Training, Colleges and Universities, 2000). This study addresses the question of whether these special education efforts meet the needs of children with disabilities and comply with our convictions of inclusion, full participation, and citizenship. Integration has been defined by educators as "an educational placement procedure for exceptional children, based on the conviction that each child should be educated in the least restrictive environment in which his or her related needs can be satisfactorily

addressed”(p. 2, Canadian Teachers’ Federation, 1981). More recently, inclusion has been advocated for children with disabilities (Bunch & Valeo, 1997; Helmstetter, Peck, & Giangreco, 1994; Hunt & Goetz, 1997) where students with disabilities learn alongside their age-appropriate peers in general education classrooms with appropriate aids and services (Gilhool, 1989). How are schools assessed and evaluated for inclusive environments and practices? A good first step is the assessment of structural environments, some of which have been conducted by governments, disability organizations, engineers, researchers, and health care professionals for a list of organizations examining architectural accessibility). Also important is the examination of school climates and cultures for promoting inclusive efforts within schools (e.g., National Institute for Urban School Improvement, 2000). Zoller, Ramanathan, and Yu (1999) explored the elements of climate and culture in a school considered a model for inclusive practices. Using qualitative methods these authors concluded that a successful inclusive school climate depended on the attitudes and actions of the principal, a supportive school community, and shared values and language. Inclusive efforts on the part of teachers and school staff regarding accommodation, instructional needs, and curriculum have also been examined (Destefano, Shriner, & Lloyd, 2001). These authors found that teacher training in these areas improved participation and accommodation efforts, as well as teacher confidence. Another valuable method for determining the quality of inclusion within schools is to ascertain the experiences of the parents of children with disabilities. In an exemplary study, Law (1993) used focus groups and interviews with the parents of 22 children with disabilities to explore cultural, economic, institutional, physical, and social environmental factors associated with home, neighborhood, school, and community environments. The physical barriers noted most often included steep ramps, uncut curbs, heavy doors, and one-inch thresholds. One facilitator (a solution which ameliorates barriers), according to these parents, would be the involvement of individuals with disabilities in the planning stages of public facility development. Structural or physical barriers within the child’s environment included a lack of knowledge, bureaucratic inflexibility, and beliefs toward resource availability. Although physical barriers were considered an impediment to full participation, the most frequently reported barriers to activity and participation limitations for children with disabilities were institutional and attitudinal. Institutional barriers referred to those reflecting the institutional



bureaucracy in schools and school boards, health care facilities, recreational programs, and charitable organizations. These parents felt frustration with regard to the lack of information and feeling of helplessness toward having their needs addressed. The facilitators for overcoming institutional barriers reported by the parents included better communication methods, the opportunity to educate service providers about their child's requirements, the opportunity to be consulted regarding improving disabling environments, and the provision of more coordinated and understandable information about programs and policies. These parents singled out attitudinal and social barriers as the biggest difficulty for their children, including inappropriate comments, lack of knowledge, or rude behavior by both adults and children. The main suggestion for improving this situation was the integration and inclusion of individuals with disabilities within all aspects of society. Specific to school environments, Hanson et al. (2001) interviewed parents to determine their perspective of their children's school experiences in order to identify those factors that influenced inclusive placement decisions. Although the majority of parents valued inclusive placement, concerns about class size, availability of therapeutic services, acceptance by other children, attitudes about the child's disability, as well as teachers' level of training and experience were expressed. Parental opinions (along with those of teachers and therapists) were also garnered to examine the environmental influences of children's social experiences in school (Baker & Donnelly, 2001). Even though only one of the four children with Fragile X syndrome attended a fully inclusive class, the authors stress the importance of the school environment for influencing the quality of social experiences, specifically, its physical environment, other children, executive staff, professionals, policy, and ethos. The concerns noted from these studies describe barriers to inclusive education and underscore the value of parental reports for assessing and evaluating inclusive school environments and practices. However, what is lacking in the literature are empirically based studies examining the barriers to inclusion and full participation in general school settings, identified by those most impacted— students with disabilities. It is our assertion that students are fully capable of identifying and expressing accessibility concerns and should be allowed and encouraged to participate in evaluating inclusive environments. This capability was observed by Ronen, Rosenbaum, Law, and Streiner (1999) when they asked youth with epilepsy to provide their perceptions of the disease in order to identify health-related quality of life factors.

Endorsement for acquiring the opinion of youths with disabilities was also given by Cook, Swain, and French (2001) after they explored the views of pupils with disabilities upon the closure of their segregated school. Likewise, Hemmingsson and Borell (2000) interviewed students with physical disabilities about their accommodation needs in relation to a specially adapted school for students with disabilities in Sweden. Even in a school designed to remove architectural barriers for students with severe physical disabilities, 83% of the students reported unmet accommodation needs, particularly in the areas of reading, remembering, and speaking. This study stresses the need to assess and address individual accommodation needs and supports the concept of student reporting. No studies were found where students with disabilities were asked about their opinions of accessibility and inclusion within an integrated school setting. Therefore, the present study examined barriers and facilitators to accessibility and inclusion within eight different school settings based on comments from students with physical disabilities and their parents. Focus groups were chosen as the methodological approach since they are considered very effective for eliciting perceptions, feelings, attitudes and ideas on a topic relevant to the group's experience (Vaughn, Shay, Schumm, & Sinagub, 1996). Implementation for focus groups generally involves having the moderator or leader define the purpose, outline the process, define guidelines of behavior, and then provide the guideline question or questions.

## 5.11 METHOD

### SUBJECTS

Purposive sampling was used, with the participants chosen based on three main factors: (a) having a mobility limitation, (b) being able to understand and participate in the focus groups, and, (c) regular attendance in an integrated school. Recruitment for the participants was effected through a local children's rehabilitation center, where letters describing the study and requests for participation were sent to the parents of youth who fit the inclusion criteria. Those indicating an interest in participating were contacted and organized into three different focus groups, based on level of education and gender. The first group ( $n = 5$ ) consisted of younger children (9-13 years old) who attended primary or middle school. The second group ( $n = 5$ ) consisted of males between the ages of

14 and 16 years who were attending or entering high school. The final focus group consisted of 4 females (9-15 years old) and one male (14 years old). The youth attended eight different schools in the Ottawa-Carleton area (Ontario, Canada). The students participating in the focus groups had either cerebral palsy ( $n = 10$ ) or spina bifida ( $n = 5$ ). The mobility level of the students, based on the *Gross Motor Function Classification System* scale (Palisano et al., 1997) included one student who used a power wheelchair, four students who used manual wheelchairs, four students who required assistive devices such as walkers, and four students who had gross motor difficulties but did not require assistive devices. Concurrent with, but separate from the student focus groups, 12 parents of the student participants also took part in focus groups based on the same purpose. The first parent focus group consisted of two mothers and two fathers. The second group consisted of three mothers, and the last group consisted of two fathers and three mothers.

### **5.12 PROCEDURE**

Each focus group session lasted 1.5 hours and consisted of one session per group. To ensure comfort level and familiarity, the session for the younger students was held at their rehabilitation center, where they had either attended preschool or had outpatient appointments. The two focus groups with the older students were held in a classroom at the University of Ottawa, in a building adjacent to the rehabilitation center. All parent focus group meetings were held in a room next door to the student focus group meetings. Prior to the meeting, information letters and consent forms were sent to all parents. The focus group process included thanking the participants for agreeing to be the expert consultants on the project, an introduction of the moderator and recorder, an explanation of the purpose of the focus group, a warm-up exercise, a brainstorming session, the prioritization of identified barriers and solutions, and wrap-up. The first author (female) served as moderator for the students' focus group sessions, the second author (female) moderated and recorded the parents' sessions, and the third author (male) recorded the students' focus group meetings. Along with the manually recorded notes, all sessions were audiotape. Following the introduction of the moderator and recorder, verbal consent for participation and for the use of the audiotape was requested. A warmup exercise was then carried out for the student focus groups. All participants were then told that the reason for holding the focus groups was to

determine the content of a virtual reality (VR) program aimed at teaching disability awareness (Pivik, Mc- Comas, Macfarlane, & Laflamme, 2002). Specifically, the participants were told, "Today, we hope that you will assist us in deciding what should go into the VR program; that is, can you describe the barriers or constraints you deal with at school?" The content question was left very broad and only supplemented with prompts when necessary (e.g., "any bad attitudes?"). Following the listing of barriers, the participants were asked to suggest possible solutions to overcome these barriers. A modified version of the nominal group technique was used to narrow down the list of barriers and facilitators. During the brainstorming session, each point was printed out on a flip chart that was visible to all participants. Following the session, each participant was given seven stickers and asked to place one or more of these stickers on the barriers he or she felt were important to include in the software. Thus, a child could place any number of 100 *Fall 2002* stickers (up to 7) on any number of barriers (up to 7), depending on their perceived relative importance. The same exercise was conducted for the facilitators' list. The list was then reformatted based on the number of stickers allotted each factor, from highest to lowest frequency.

### **5.13 Environmental barriers.**

The reported environmental barriers included the following categories: doors, passageways, elevators, washrooms, stairs and ramps, lockers, water fountains, and recreational areas. A major problem identified by many of the students was physically getting into school. Often the only door having an access ramp was located at the rear of the building, requiring the student to go around the building in order to enter. If the ramp was not too steep or did not have a ledge that created obstacles, then often the doors were too heavy for the student to open unaided. Most often, the doors did not have automatic door buttons for easy access. Fire doors were of particular concern, and many youth expressed fear about being trapped in the school in the event of a fire. Within the school, doorways were often not wide enough for wheelchair access or they had lips or ledges on the frame, impeding access. Passageways were another concern for the students. Reported barriers included too little space between desks within classrooms, narrow aisles within the library, and crowded hallways. Especially difficult were hallways filled with students during class changeover, requiring the students using

a wheelchair to leave class earlier than their peers to get to the next class or activity. As well, access within the halls was said to become more difficult during colder months when the hallways are filled with winter boots and clothing. Movement within the school can also be impeded if facilities in the school are located on different floors. If an elevator exists, it is often slow or requires a key to access. The students reported that often only one staff member had the elevator key, which required them to search for that teacher for access to the elevator. Another major barrier regarding the elevators was that they do not function during fires or fire drills. One student reported that all those who use wheelchairs were ordered to congregate in an upstairs classroom to await assistance: "If the fire alarm goes off, we are told to meet in a room upstairs and just wait. You can't do anything but just sit and wait and hope they remember about you." Although this seems a logical solution, most of the students reported this as being extremely frightening. Other reported environmental barriers included inaccessible washrooms, lockers with hooks placed too high or with combination locks, which were difficult for students with manual dexterity problems, water fountains which were too high for wheelchair access and inaccessible recreational facilities. For the youth in high school, the lack of accessibility for recreational activities was of paramount concern. One youth de- Exceptional Children 101 A major problem identified by many of the students was physically getting into school. Scribed his experiences during physical education as "helping to set up and keeping score." Typically, the play areas were not accessible and often the gyms were difficult or impossible to access when not directly attached to the school building. If the gyms were accessible, the equipment (e.g., basketball hoops) was not adaptable for those who use wheelchairs. This lack of accessibility not only isolated the students and prevented the opportunity for physical activity, but it also impacted on social activities such as school dances.

#### **5.14 Intentional attitudinal barriers.**

All of the students in the focus groups reported instances of isolation, physical bullying, or emotional bullying. Isolation took the form of either being ignored or having difficulty forging friendships. Physical bullying usually related to people pushing the student's wheelchair without permission, and in one instance, being purposely knocked out of the wheelchair. The most frequent attitudinal barrier

mentioned was that of emotional bullying. The students indicated that this was the most hurtful and included name calling, pointing, mouths dropping open, being ridiculed, being labeled as “stupid,” condescending attitudes by teaching staff, and generally being treated differently from other students. For example, one youth reported that her peers “just stare at you and point and then whisper to each other . . . all they have to do is ask me about my disability, but they don’t.”

### **5.15 Unintentional attitudinal barriers.**

Unintentional attitudinal barriers relate to a lack of knowledge, education, understanding, or effort on the part of the educational system or staff. From the entire sample, the most frequently reported barrier was a lack of understanding by teachers and support staff. This took the form of being given inappropriate substitute work when too busy to adapt the curriculum, always being assigned as a teacher’s helper in physical education classes instead of adapting or equalizing the playing field, excluding children with special needs from certain classes without reason, or not understanding their physical capabilities or limitations. As one youth reported, “I can deal with water fountains being too high, but when a teacher reprimands me for talking too loud because I am trying to tell someone behind me to stop pushing me in the wrong direction, that is not fair. They are behind me and can’t hear me unless I speak loudly.” Another unintentional attitudinal barrier reported was the failure to plan or get advice for wheelchair access when building or renovating a school.

### **5.16 Physical barriers.**

Along with the environmental and attitudinal barriers they had faced on a daily basis, these youth also bear the difficulties associated with their condition or disability. For example, many of the students require a personal assistant or teaching aide for such basic activities as getting dressed for recess, personal care, remedial education efforts, or maneuvering within the school. The other major barrier noted by the students was their need for extra time to get to class, eat lunch, or complete school work. Along with information about their disability or condition, these physical requirements were the type of information the students wanted school staff to understand.

### **Suggested facilitators.**

The students were also asked to suggest possible facilitators to the barriers identified, in order to improve accessibility and promote full participation. The facilitators focused on three areas: (a) environmental modifications, (b) social/policy changes, and (c) institutional resources. For the environmental barriers, suggestions included technological solutions, along with basic architectural changes to doors, elevators, washrooms, and ramps. Technological facilitators included motion sensors to open doors, flush toilets, and activate sinks; keypad entry or fingerprint ID for opening lockers and accessing elevators; and, finally, automatic door buttons for easier access through doors. Voice recognition technology was also suggested for activating many of the above-mentioned barriers. Basic architectural changes to school buildings would include lowering locker shelves and hooks, lowering water fountains, building wider corridors and classrooms, installing ramps near stairs, widening doorways and eliminating lips and ledges on doors, removing unnecessary doors and equipping remaining doors with access buttons, and, lastly, providing a more gradual incline on ramps. Architectural facilitators for washrooms would include lowering sinks, placing paper towels and soap within reach, enlarging washroom stalls, and installing grab bars and toilet paper dispensers closer to the toilets. The final category of environmental facilitators focused on elevators, where the youth suggested additional or larger elevators, lower elevator buttons, and easier access such as keyless entry. Social or policy facilitators reported included providing disability awareness education for both students and educational staff. Many of the youth stated that they would be willing to talk to their peers about their disability, "but no one had ever asked them to do anything like that." The general consensus was that it would be better to "get it out in the open than have people staring and giggling." Other social changes would include having special physical education classes for the students with disabilities and sometimes "equalizing the playing field by having everyone play wheelchair or chair basketball." Policy facilitators would include allowing extra time to get to classes, having a rule stating that consent must be obtained before pushing someone's wheelchair, providing suggestion boxes at schools, including individuals with disabilities in the planning of renovations or expansions, and finally, repairing elevators swiftly. The students also felt that added resources would be greatly beneficial. They recommended

more teachers' aides, access to laptop computers (since writing can be difficult for some), and working copies of books for home work to avoid having to carry all of their books to and from home and school.

### **5.17 PARENT DATA**

Twelve parents attended concurrent focus group meetings with the same purpose: to identify barriers and facilitators to accessible education and full participation based on their children's experiences. Interestingly, the parents reported many of the same barriers and facilitators identified by the youth. However, the parents of the elementary students and those attending high school voiced somewhat different concerns. The main concern for parents of the elementary school children related to social difficulties, isolation, and their child's self-esteem. The overriding barrier identified was unintentional attitudinal barriers on the part of the educators. These included teachers who had "no or outdated information about the disabilities, had condescending or negative attitudes, and did not have the information or interest in adapting the teaching environment to include my child." The parents of these elementary children overwhelmingly suggested that disability awareness training should be integrated into teacher training and professional development, and that school administrators should encourage positive attitudes toward inclusion, be aware of their staff's level of knowledge, and encourage the development of support groups within the school for other students or parents. The parents of the older youth also reported the need for increased education of teachers and students regarding disabilities, their impact, and methods of encouraging greater participation. Other suggestions for teachers included providing keyboard training, downloading timetables, notes, and assignments in advance to assist the student and involve the parent; allowing classes to be audiotaped; providing copies of overheads to the students who have difficulty taking notes; and including visual cues to help those students organize thoughts and remember sequences. Science laboratories and cafeterias were also reported as typically inaccessible for students who have mobility limitations in high school. The laboratories themselves usually have benches that are too high, materials that require the use of two hands, and microscopes placed too high. The cafeterias are often not adapted to the needs of students who use wheelchairs, with food aisles being too narrow, food placed too high to reach, and inaccessible seating



arrangements. According to the parents, these types of environmental barriers cause their children to be differentiated and isolated from their peers.

### **5.18 Barriers the Awareness Challenge**

That was developed from the results of this study (Pivik, et al., 2002; see <http://www.health.uottawa.ca/vrlab>). This computer program was designed and evaluated to teach children without disabilities about the accessibility and attitudinal barriers encountered by their peers with mobility impairments. Sitting in a virtual wheelchair, children wheel through a virtual school and experience obstacles such as stairs, narrow doors, and out-of-reach objects and attitudinal barriers such as inappropriate comments. For improving inclusive school climates, the National Institute for Urban School Improvement (2000) has developed a series of guides to help individuals examine whether a school is focusing on inclusive practices. For example, the guides suggest examining the school's mission 104 Fall 2002 The students in these eight schools were capable of identifying both barriers and facilitators to inclusive school environments. Facilitating inclusive school environments requires ensuring physical access, the opportunity for optimal learning and social experiences, and providing a nurturing climate. Statement, the school's structural layout, the curriculum, teaching practices, and the methods used to evaluate both students and teachers. As well, Center, Ward, and Ferguson (1991) identified appropriate resource support and structured teaching techniques as the two most important conditions for successful placement of students with disabilities in general education classes. Appropriate support includes: (a) support teachers who have special education training; (b) integration aides being provided with professional training; (c) team teaching used as a mode of operation, so that assistance is not focused solely on the target student; and (d) support (teacher/aide) that is appropriate to the child's needs. Related to educational support is the effect teaching staff can have on facilitating inclusive participation of children with disabilities. In this study, particular concern was expressed by both students and parents regarding the lack of understanding, knowledge, or effort by educational staff. Providing all teachers with disability awareness training and methods for making school subjects more inclusive (especially physical education) would greatly facilitate a more equitable learning environment. One method for acquiring specific disability awareness

information is through the use of parent panels (Duckworth & Kostell, 1999). The typical parent panel would consist of meetings between parents and educational staff, in order to share information about different disabilities and discuss associated issues and concerns. It is also important for the educators to spend time listening and talking to students with disabilities, as their viewpoint may differ from their parents. Finally, training of general education teachers to modify or implement teaching methods to be inclusive is needed, a finding also recommended by Hanson et al. (2001). Kauffman and Hallahan (1997) define the goal of special education as offering effective instruction in academic and social skills areas, as well as the opportunity to foster social networks that induce and sustain desirable social behavior and lead to satisfying relationships. We would add that a fully inclusive school milieu provides the opportunity for educators and school administrators to develop an environment that reflects societal ideals—equality without discrimination. According to the sample of students and parents involved in this investigation, their schools fall short of meeting this obligation, and there is no reason to believe that this situation is unique to these individuals or these schools, as evidenced by current policy scans conducted in Canada (Valentine, 2001) and the United States (National Council on Disability, 2000). These documents describe the current situation of inclusive education and both find the situation lacking in terms of resources, effort, and enforcement. This study provided a snapshot of the experiences of youth with physical disabilities in integrated school settings. Further research is needed to examine the experiences of children with other types of disabilities and learning styles. Based on this study, we recommend that governments continue in their efforts to enforce their civil rights laws and provide resources to meet them. Similarly, school boards need to develop inclusive policies and procedures and direct resources to that effort. Principals need to ensure that their schools are fully inclusive and take a lead role in modeling inclusive attitudes and behaviors. Teachers need to ensure that they have the knowledge and skills to adapt their teaching to include all children and the willingness to learn about the experiences of children with disabilities. Finally, we all need to stop and listen to students with disabilities to better understand their realities. With its structures, rules, and objectives, a school is like a microcosm of our world. We have the opportunity to provide schools that model the behavior and attitudes that we want our children to take with them into the real world. In order for our actions to reflect our words, we need to provide the necessary effort,

educational policies, and resources to ensure that our values and principles are met. Exceptional Children 105 Attitudinal barriers were identified by our students as the most deleterious of their school experiences.

### **5.19 Summary**

Facilitating inclusive school environments requires ensuring physical access, the opportunity for optimal learning and social experiences, and providing a nurturing climate. Without these elements in place, students with disabilities are denied full participation and an equitable educational experience. In this study, students with disabilities and their parents identified four areas that require improvement in schools. These include modifying physical structures to improve accessibility, addressing negative attitudes through increased disability awareness programs, dealing with the lack of knowledge or understanding through increased inclusive education of teachers and staff, and finally, developing more inclusive education policies. Although this study was specific to school environments, many of the concerns of this sample were consistent with previous research examining inclusivity. For example, Law (1993) and Hemmingsson and Borell (2000) also reported many of the same physical barriers such as steep ramps, heavy doors, and door thresholds. Further, institutional, attitudinal, and social barriers were found to be important factors as well. Our students and their parents expressed concern about their teachers' knowledge for adapting the curriculum to meet diverse learning styles, a finding also expressed by Hanson et al. (2001). The need for personnel to understand physical limitations and special needs was reported by our students as well as the students interviewed by Hemmingsson and Borell. Finally, the lack of inclusive policies and procedures reported by our students and their parents echoed Law and Baker and Donnelly (2001). The students in these eight schools were capable of identifying both barriers and facilitators to inclusive school environments. In fact, we asked them only about structural and attitudinal barriers, and they extended the task to include unintentional attitudinal barriers and ethos considerations, as well as policy and procedure issues. Although their parents reported many of the same issues, there were differences found between these two groups. This result stresses the need to include both students and their parents in the evaluation of inclusive school environments and in the planning of new facilities or renovations. Attitudinal barriers were identified by our students

as the most deleterious of their school experiences. All of the participants had experienced negative comments, teasing, staring, and isolation. To ameliorate negative attitudes, schools need to institute pro social programs that include sensitivity and disability awareness training. According to Rowley-Kelly (1993), this type of program may include: highlighting individual differences as well as commonalities, ensuring that students with disabilities understand that they have the right to be included, providing the opportunity for students with disabilities to take an active role in helping their peers achieve understanding and social acceptance, and facilitating acceptance of individuals with disabilities through age-appropriate disability awareness and sensitivity training exercises. For example, exercises appropriate for grades 3 and 4 may include: alike-and-different activities, information about disabilities, children designing a room that would be accessible, developing games that would include individuals with disabilities, discussions about name calling and teasing, and wheelchair simulation. Another useful tool may be the freely accessible desktop VR program,

Teachers' attitudes towards inclusive education could be formed and developed in the context of an educational system which can provide some specific conditions in order to have a good practice in this field. Those conditions refer to a restructure of the curricula, more help from support teachers, more time for preparing the educational activities, decreasing the number of students in one class, creating and developing opportunities for interactive partnerships between teachers, students, support teachers and parents and so on. The reform of the curriculum should be made in parallel with a proper training for teachers regarding their knowledge of inclusion and its principles. The difficulties are inherent to any change or reform, but it is necessary to develop an educational system which can properly respond to all the needs, characteristics and individual differences of all children in school (Unianu, 2012). The separate teacher education programs for regular and special education do not equip teachers with an integrated knowledge of the expected roles, functions and responsibilities to meet the diversity of learning needs in the classroom. A need is being felt for a new paradigm for the preparation of teachers. There exists the need for teacher educators of regular and special education at all levels of teacher education to develop a "whole faculty approach" in facilitating an inclusive pre-service teacher education curriculum embedded across all discipline areas (Jelas, 2010). Within a

tradition of a dual regular and special education system in India, the Government is promoting educational reforms that encourage an inclusive approach to education. A move towards an inclusive approach to education in India is being promoted through collaboration and support between teachers trained in regular and special education. Thus, different perceptions of pre-service teachers preparing to work either in elementary schools or in special schools are a particular concern for people devoted to inclusive education. A need is being felt for better teacher preparation due to the very low understandings of inclusive education and pre-service teachers' perceived lack of skills, knowledge, experience, and/or training for an inclusive approach. Investigating the determinants of teachers' attitudes and behaviour and their relative importance is crucial for improving teaching practices, initial teacher education and professional development opportunities for effective inclusion of children with special needs (MacFarlane & Woolfson, 2013). Summing up, authors feel and believe that many initiatives have been introduced at all levels to implement inclusive education in India but the road ahead is still quite long.

### 5.20 References

- Armstrong, A., Armstrong, D., Lynch, C. and Severin, S. (2005). Special and inclusive education in the Eastern Caribbean: policy, practice and provision. *International Journal of Inclusive Education*, 9(1), 71-87.
- Avramadis, E., Bayliss, P., & Burden, R. (2000). Student teachers' attitudes towards the inclusion of children with special educational needs in the ordinary school. *Teaching and Teacher Education*, 16(2), 277-293.
- Avramidis, E., & Norwich, B. (2002). Teachers' attitudes towards integration/inclusion: a review of the literature. *European Journal of Special Needs Education*, 17(2), 129- 147.
- Bender, W., Vail, C., & Scott, K. (1995). Teachers' attitudes towards increased mainstreaming: implementing effective instruction for students with learning disabilities. *Journal of Learning Disabilities*, 28(2), 87-94.
- Burke, K., & Sutherland, C. (2004). Attitudes toward inclusion: Knowledge vs. Experience. *Education*, 125(2), 163-172.

Chadha, A. (2002). "Inclusive Education in DPEP". *Journal of Indian Education*. Special issue on Education of Learners with Special Needs.

Cook, B. G. (2001). A comparison of teachers' attitudes toward their included students with mild and severe disabilities. *Journal of Special Education*, 34(4), 203-213.

Cook, B. G., Cameron, D. L., & Tankersley, M. (2007). Inclusive teachers' attitudinal ratings of their students with disabilities. *Journal of Special Education*, 40(4), 230-238.

Cooper, P. (2004). Is 'inclusion' just a buzz word? *Emotional and Behavioral Difficulties*, 9(4), 219-222.

Coskun, Y. D., Tosun, U. & Macaroglu, E. (2009). Classroom teachers styles of using and development materials of inclusive education. World Conference on Educational Sciences 2009. *Procedia Social and Behavioral Sciences*, 1, 2758-2762.

Available online at [www.sciencedirect.com](http://www.sciencedirect.com) CSIE (2014). Centre for Studies on Inclusive Education: supporting inclusion, challenging exclusion. <http://www.csie.org.uk/inclusion/what.shtml>. Retrieved on Nov. 19, 2014.

Das, A. K., Kuyini A. B., & Desai I. P. (2013). Inclusive education in india: are the teachers prepared? *International Journal of Special Education*, 28(1). <http://www.internationaljournalofspecialeducation.com/articles.cfm?v=2013&v=28&n=1>

De Boer, A., Pijl, S. J., & Minnaert, A. (2010). Regular primary schoolteachers' attitudes towards inclusive education: a review of the literature. *International Journal of Inclusive Education*, 1(1), 1-24.

De Boer, A.A., Pijl, S.J. & Minnaert, A.E. (2010). Attitudes of parents towards inclusive education: A review of the literature, *European Journal of Special Needs Education*, 25(2), 165-181.

De Boer, A.A., Pijl, S.J. & Minnaert, A.E.M.G. (2011). Regular primary school teachers' attitudes towards inclusive education: A review of the literature. *International Journal of Inclusive Education*, 15(3), 331-353.

Department of Education (2000). *Sarva Shiksha Abhiyan: A Programme for Universal Elementary Education*. New Delhi: MHRD, GOI

Farrell, P., & Tsakalidou, K. (1999). Recent trends in the re-integration of pupils with emotional and behavioral difficulties in the United Kingdom. *School Psychology International*, 20(4), 323-337.

Hammond, H., & Ingalls, L. (2003). Teachers Attitudes toward Inclusion : Survey Results from Elementary School Teachers in Three South-western Rural School Districts. *Rural Special Education Quarterly*, 22(2), 24-30.

Hastings, R. P., & Oakford, S. (2003). Student teachers' attitudes towards the inclusion of children with special needs. *Educational Psychology*, 23(1), 87-94.

Jelas, Z. M. (2010). *Learner Diversity and Inclusive Education: A New Paradigm for Teacher*

Education in Malaysia. International Conference on Learner Diversity 2010. *Procedia Social and Behavioral Sciences*, 7(C), 201–204. Available online at [www.sciencedirect.com](http://www.sciencedirect.com)

MacFarlane, K. & Woolfson, L. M. (2013). Teacher attitudes and behavior toward the inclusion of children with social, emotional and behavioral difficulties in mainstream schools: An application of the theory of planned behaviour. *Teaching and Teacher Education*, 29 (2013), 46 52.

MHRD (2006). *Sarva Shiksha Abhiyan: Discovering New Paths in Inclusion, A Documentation of Home-based Education Practices for CWSN in SSA. Elementary Education & Literacy Bureau- MHRD. New Delhi: Government of India.* NCERT (1998). *Sixth All-India Educational Survey. National Council of Educational Research and Training, New Delhi.*

NCERT (2000) *Assessment of Needs for Inclusive Education: Report of the First Regional Workshop for SAARC Countries, New Delhi, NCERT.*

- NCERT (2006). Position Paper: National Focus Group on Education of Children with Special Needs. New Delhi: National Council of Educational Research and Training
- Project Integrated Education for the Disabled (1993). New Delhi: NCERT.
- Rakap, S., & Kaczmarek, L. (2010). Teachers' attitudes towards inclusion in Turkey. *European Journal of Special Needs Education, 25*, 59-75.
- Scruggs, T. E., & Mastropieri, M. A. (1996). Teacher perceptions of mainstreaming/inclusion, 1985-1995: a research synthesis. *Exceptional Children, 63*(1), 59-74.
- Shapiro, E., Miller, D., Sawka, K., Gardill, C., & Handler, M. (1999). Facilitating the inclusion of children with EBD into general education classrooms. *Journal of Emotional and Behavioral Disorders, 7*, 83-127.
- Simpson, G., Bloom, B., Cohen, R., Blumberg, S., & Bourdon, K. (2005). US children with emotional and behavioural difficulties: data from the 2001, 2002, and 2003 National Health Interview Surveys. *Advance Data: From Vital and Health Statistics, 360*.
- Soodak, L., Podell, D., & Lehman, L. (1998). Teacher, school, and student attributes as predictors of teachers' responses to inclusion. *Journal of Special Education, 31*(4), 480-497.
- UNCRPD (2008). UN Convention on the Rights of Persons with Disabilities [www.un.org/disabilities/default.asp?id=259](http://www.un.org/disabilities/default.asp?id=259)
- United Nations Educational, Scientific and Cultural Organisation (UNESCO) (1994). The Salamanca statement and framework for action on special needs education. New York: UNESCO.
- UNESCO (2000). *Dakar Framework for Action*. [http://www.unesco.org/education/efa/ed\\_for\\_all/dakfram\\_eng.shtml](http://www.unesco.org/education/efa/ed_for_all/dakfram_eng.shtml)
- Unianu, E. M. (2012). Teachers' attitudes towards inclusive education. *PSIWORLD 2011. Procedia - Social and Behavioral Sciences, 33*, 900-904. Available online at [www.sciencedirect.com](http://www.sciencedirect.com)
- UNICEF ROSA (2003). EXAMPLES OF INCLUSIVE EDUCATION: INDIA. The United Nations Children's Fund (UNICEF), Regional Office for South Asia. Kathmandu, Nepal.



**Block 2:**

**Polices & Frameworks Facilitating Inclusive Education**

Unit 1: International Declarations: Universal Declaration of Human Rights (1948), World Declaration for Education for All (1990)

Unit 2: International Conventions: Convention against Discrimination (1960), Convention on Rights of a Child (1989), United Nations Convention of Rights of Persons with Disabilities (UNCRPD) (2006)

Unit 3: International Frameworks: Salamanca Framework (1994), Biwako Millennium Framework of Action (2002)

Unit 4: National Commissions & Policies: Kothari Commission (1964), National Education Policy (1968), National Policy on Education (1986), Revised National Policy of Education (1992), National Curricular Framework (2005), National Policy For Persons With Disabilities (2006) National Acts & Programs: IEDC (1974), RCI Act (1992), PWD Act (1995), National Trust Act (1999), SSA (2000), RTE (2006), RMSA (2009), IEDSS (2013)

## UNIT 1

### **International Declarations: Universal Declaration of Human Rights (1948), World Declaration for Education for All (1990)**

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## **1.1 Introduction**

Progress toward the goal of achieving Education For All has progressed steadily in most countries until the enrolment rate approaches 90-95 per cent of primary school children. At this point progress appears to stall. It seems that “more of the same” will not work and that a different and more concentrated approach is needed to find the children who have never been enrolled in the school system. It is necessary to find out who these children are and why they are not attending school. It is also necessary to make changes to the school system to ensure that they not only have access to, but are welcomed in schools where diversity is expected and valued, and their needs are met in appropriate, flexible teaching and learning environments. The UNESCO project which has resulted in these guidelines was a response to the concern for children who remain systematically excluded from school. Out-of-school children have suffered from a lack of differentiation and are frequently referred to collectively as “disadvantaged” or

“marginalized”. These terms mask their individuality, particular contexts, characteristics and needs. Inadequate information frustrates attempts to take steps to identify them and to design strategies to include them meaningfully in education policy and implementation. The result is that they remain excluded, illiterate, uneducated and above all, “invisible”. Global statistics on the number of out-of-school or excluded children vary with the source, but evidence would suggest that the number is increasing. In the 2004 UNICEF report on the State of the World’s Children, it was stated that there were 140 million children out of school, the majority being girls and children with disabilities. This exceeds an earlier World Bank estimate of 113 million, of whom 30-40 per cent were estimated to be children with disabilities. Tomasevski<sup>2</sup> has commented that although these figures are supposed to be galvanizing, their most likely effect is numbing and that what is needed is to create the kinds of information which will generate action.

### **1.2 National data limited**

Reports obtained from country assessments in the EFA monitoring process have confirmed that national data on out-of-school children are limited, especially for children with disabilities. The assessment process in the Asian and Pacific region was conducted by the Assessment, Information, Monitoring and Statistics Unit (AIMS) of the UNESCO Bangkok Asia and Pacific Regional Bureau for Education. The results prompted Mr. Ko-Chih Tung, head of the UIS-AIMS Unit, and Regional Adviser of the UNESCO Institute for Statistics (Asia Pacific), to say that what was needed was not more information about children who *are* in school, but more information about those who are *not*.

### **1.3 Inclusive education**

Although the concept of inclusive education has been promoted internationally for more than a decade, multiple barriers remain to the full participation of children with disabilities in education. Lack of information, combined with discriminatory attitudes towards persons with disabilities at all levels of society, contributes to the continued neglect of their right to education. This partly explains the minimal rate of progress that has been made towards the enrolment and participation in the education process of children with disabilities. The factors are complex and

extend beyond the boundaries of the school and classroom. It is conservatively estimated that less than 10 per cent of children with disabilities in developing countries in the Asia-Pacific region are in school.

#### **1.4 The UNESCO project**

In 2004, the UIS-AIMS Unit of UNESCO Bangkok developed a project to identify the necessary and effective steps for including children with disabilities in national EFA action plans and strategies and to develop guidelines for action for use in regional and national capacity building to promote the goal of full inclusion of children with disabilities in the EFA process, including the monitoring process. The goal of the UNESCO project was, firstly, to analyse the complex inter-play of factors which result in exclusion and, secondly, to obtain detailed information about education systems in selected countries where a specific commitment has been made to include children with disabilities in schools, in the national education process and in the monitoring process. Case studies were conducted in four countries to document and analyse the processes, problems, solutions and outcomes of effective education policies and practices. A review process was then undertaken, with more than 50 stakeholders participating in a writers review meeting, which enabled country level verification of the results. Stakeholders included representatives of parent organizations and organizations of persons with disabilities, teachers from regular and special schools and special education units, head teachers and principals, Ministry of Education officials and administrators, officials of educational statistics and monitoring sections, university lecturers engaged in teacher education, representatives of regional and local NGOs engaged in promoting and providing inclusive education, and community members. Discussion groups were held on a range of topics which had been the subject of investigation during the in-country process. These were held on the basis of country level, as well as professional and other primary affiliations. The outcome was a series of recommendations for actions considered necessary to improve the opportunity and quality of education for children with disabilities in the educational systems of the region. The recommendations addressed every level of the educational systems and highlighted the importance of collaboration and inter-dependence between school systems, parents, disability advocates and

communities. The four countries selected for study were Brunei, Samoa, Thailand and Viet Nam.

- **Manual on Guidelines for Action to Include Children with Disabilities in School Systems and the EFA Monitoring Process**

The lessons learned from the Case Studies and the recommendations from the Review Meeting of stakeholders have been transferred into this Manual on Guidelines for Action to Include Children with Disabilities in School Systems and in the EFA Monitoring Process. The Manual begins by identifying the problem and setting out the rationale for the focus on the education of children with disabilities. This is followed by a detailed analysis of eight aspects of the education system and the ways in which it must change to allow the full inclusion of children with disabilities. Each aspect has a critical role to play in transforming the education system.

The eight topics are:

- Creating change in national education systems – what are the catalysts?;
- Laying the foundations for including children with disabilities in national education systems: Policy, legislation and budgetary resources;
- Providing education, administering and implementing policy and collaborating with partners;
- Structuring and re-structuring the school system;
- Training teachers: pre-and in-service training and education for regular and specialist teachers;
- Designing data collection processes; monitoring and evaluating progress;
- Participating in the education process: The collaborative role of organizations of people with disabilities, families and community members;
- Listening to children. Each topic is discussed in terms of:
- The challenge to the national education system of providing education to children with disabilities;
- The barriers faced by children with disabilities;
- Experiences from case study countries;

- Recommendations for action at the level of government, school and community;
- Lessons learned, with examples of good practice and illustrations drawn both from countries in which case studies were conducted and from others in the region engaged in implementing inclusive education;
- Checklist of questions for use in assessing progress towards developing a school system which fully includes children with disabilities. The final section summarizes the way forward, with an emphasis on a rights-based approach to providing education of good quality for children with disabilities in the region.

### **1.5 Who will use the manual?**

The manual is intended as a resource for all those concerned with the issue of upholding the rights and improving the educational opportunities for children with disabilities. This can include those engaged in advocacy, as well as those engaged in teaching and other aspects of the education system. It will include policy makers and administrators, statisticians, teacher educators, parents, organizations of persons with disabilities and communities. The recommendations are not intended to be taken as a “recipe” for action, but rather to be considered for their relevance to each situation, in the context of the current stage of development in each school or school system. It is hoped that it will provide ideas for action from the lessons learned and shared by those who participated in the project process and that it will act as a catalyst for change where children with disabilities are still not fully included in schools and the national education system.

### **1.6 Rationale for the focus on childrenwith disabilities**

The issue of discrimination and exclusion from education is not exclusive to children with disabilities. In addition to children who never attend school, there are large numbers of children who drop out early and fail to complete basic primary education. A recent UNESCO publication lists the following groups of children at risk for exclusion and acknowledges that it may not be comprehensive: Children from ethnic minorities, language minorities, refugees or displaced children, child workers, domestic workers, children who have HIV/AIDS or are HIV/AIDS orphans, children who are abused, migrant children, children from

religious minorities, poverty-stricken children, street children, children in conflict zones and child soldiers, nomadic children and children with disabilities. The numbers of children with disabilities is grossly underestimated, particularly in developing countries. Children with severe and moderate disabilities may be acknowledged, but children with mild or hidden disabilities are ignored. So too is the large population of children with learning disabilities or difficulties. These children account for a large proportion of children who drop out and do not complete primary education. They have no obvious disability but may experience extreme difficulty with learning in one or more areas. Children with "hidden" disabilities may include those with intellectual disabilities and mental health problems, but may also include children with unidentified disabilities such as hearing loss. Children from many of the groups listed above may fall into any of these categories.

Most of the initial action and advocacy for the right to education of these groups of children has traditionally been taken by non-government agencies. This is again particularly true in developing countries. Experience from countries which participated in the UNESCO project suggest that until governments accept responsibility and mandate their education within the national education system, progress will be limited and on a very small scale.

### **1.7 Children with disabilities**

Children with disabilities arguably form the largest group of readily identifiable children who have been and continue to be persistently excluded from education. The World Bank estimates that of the 115 million children worldwide who are not in school, 30-40 per cent are children with disabilities. Evidence from 43 governments in the review of national progress in the implementation of the Agenda for Action for the Asian and Pacific Decade of Disabled Persons (1993-2002) indicated that less than 10 per cent of children and youth with disabilities had access to any form of education.<sup>6</sup> At the same time, data from the UNESCO Institute for Statistics indicated that for many countries in the region, including Cambodia, Samoa, Thailand and Viet Nam, net enrolment ratios for non-disabled children ranged from 85-95 per cent.<sup>7</sup> In a UNESCO status report to the United Nations Development Group on progress toward achieving the second Millennium Development Goal of Universal Primary Education for all boys and



girls by 2015, the Director General stated that 98 per cent of children with disabilities in developing countries do not attend school. Few countries collect comprehensive data on persons with disabilities or data on children with disabilities in school systems. The EFA Global Monitoring Report has no indicators on the participation of children with disabilities in education.

This discrimination in education needs to be understood within a broader context. Globally, children with disabilities are part of a population of 600 million people with disabilities. This is approximately 10 per cent of the World's population, two thirds of whom live in the Asia-Pacific region. Discrimination against people with disabilities has been long-term and widespread with a number of significant effects. Persons with disabilities have been prevented from accessing rights that are freely available to other members of society in such areas as health, education, employment, community participation and other basic social and political rights. They have also been denied access to the disability-specific services that they need in areas such as early intervention and rehabilitation. Failure to access these services, combined with prejudice and rejection, has resulted in economic and social exclusion for children and adults with disabilities and their families. This marginalization has meant that their needs have not been considered in the development of basic mainstream services such as education and health. Where services have been provided, it has usually been in the context of welfare or charity, often initiated by non-governmental organizations, with responsibility less likely to be taken by the government. Education has most commonly been provided in segregated special schools, to a minority of children in urban areas. This helps to explain the extremely low enrolment rates cited above. Pressure for change to these discriminatory attitudes and practices has been extremely slow but consistent. In 1981 the United Nations International Year of Disabled Persons (IYDP) focused global attention on disability issues for the first time. The World Programme of Action Concerning Disabled Persons (1983-1992), which followed IYDP began the process of transforming the disability issue from one of "social welfare" to that of integrating the issues of persons with disabilities into all aspects of the development process. Concern with the rights of persons with disabilities has increased throughout the intervening period and the blueprint for action for the second Asian and Pacific Decade of Disabled Persons (2003-2012) proclaims this goal in its title, "Biwako Millennium Framework for Action:

Towards an Inclusive, Barrier-free and Rights-based Society for Persons with Disabilities in Asia and the Pacific (BMF).”<sup>10</sup> The focus on rights has been accompanied by the growth of strong advocacy from persons with disabilities and the development of Self-Help Organizations (SHO) at the local, national and international level. Achievements in some areas of development for persons with disabilities have been significant but progress towards gaining equal access to quality education for children with disabilities has remained unacceptably slow. Some of the reasons for this include:

- Governments have been slow to change attitudes which have viewed disability as a welfare issue and have been reluctant to acknowledge the equal right to education of children with disabilities, preferring to continue their reliance on non-government organizations for responsibility in this area;
- Governments have failed to comply with international mandates to which they are signatories, in respect of the right to education of children with disabilities;
- Some international frameworks on education have failed to place any specific emphasis on the rights of children with disabilities to education, referring to them only indirectly within such terms as “disadvantaged”, “marginalized” or “children in difficult circumstances”. This begs the question of whether the disadvantage, marginalization or difficult circumstances may be the *result* of exclusion from education, rather than an inherent characteristic of their disability. The terminology has the effect of minimizing the attention of governments to this large and identifiable minority of children as a specific target for inclusion in educational policy and provision;
- Until recently education for children with disabilities has not been a high priority issue for advocacy to governments by organizations of persons with disabilities.

This is partly because there have been many critical issues competing for their attention. Members of these organizations may not have been disabled as children, and may not have experienced exclusion or disadvantage in their own education. In addition, parents’ groups have sometimes been denied a voice in these groups,

and seldom have the power to advocate directly to government on behalf of their children. Education is now becoming a critical issue in disability advocacy and is the third priority area in the Biwako Millennium Framework (BMF). Irrespective of the barriers faced, and the slow progress made in achieving access to education, it is important that it is increasingly clearly understood by governments, schools, and the wider community, that children with disabilities, together with all children, have a basic right to education. It is the responsibility of the government of the respective country to fulfil this right for all children, including children with disabilities.

### **1.8 The right to education – international mandates**

The first international mandate on the right to education for *all* children was pronounced 60 years ago. Since that time the right to education has been repeatedly endorsed and expanded by the international community. Response by national governments has varied, but overall has moved in a direction towards fulfilling this right for the majority of children, but not for “all”. Interpretation of the word *all* has reflected the values and attitudes of the times. Only relatively recently has there been the beginnings of a shift towards including the right to education of children with disabilities within the commonly accepted understanding of the right to “Education for All”.

### **1.9 UNESCO Constitution, 1945**

In 1945 UNESCO was founded with a constitution expressing a belief, “in full and equal opportunities for education for all”.<sup>12</sup> Since that time, UNESCO has been working to make these opportunities a reality, but the realization of “full and equal” opportunities is still proving elusive.

- **United Nations Universal Declaration of Human Rights**

In 1948 the Universal Declaration of Human Rights was adopted by the General Assembly of the United Nations. Article 26 proclaimed that *everyone* has the right to education, free and compulsory at the “elementary” stages, with technical and professional education made generally available and higher education equally accessible to all on the basis of merit. Article 2 affirmed that everyone is entitled

to all rights and freedoms set forth in the Declaration, “without distinction of any kind”.

### **1.10 The Convention on the Rights of the Child (1989) and a World Fit For Children (2002)**

The Convention on the Rights of the Child (CRC) (1989)<sup>14</sup> was the first treaty developed specifically to uphold the rights of children. Ratified by more states than any other convention, it was followed a little more than a decade later by the United Nations General Assembly’s Special Session on Children (2002).

“A World Fit for Children”, the outcome document, extended and expanded the rights covered in the Convention on the Rights of the Child, with increased concern for the specific rights of a wide range of minority groups, including children with disabilities.

Articles 1 and 2 of the Convention state that all rights apply “to every human being” under the age of 18 years, and prohibits discrimination on a number of grounds including that of disability. A World Fit For Children expands the proscription on discrimination, with a specific article on children with disabilities.

Article 3: “Leave no child behind”. Each girl and boy is born free and equal in dignity and rights; therefore all forms of discrimination affecting children must end.

Article 20: “Discrimination gives rise to a self-perpetuating cycle of social and economic exclusion and undermines children’s ability to develop to the fullest potential. We will make every effort to eliminate discrimination against children whether rooted in the child’s or his or her parent’s or legal guardian’s race, colour, sex, language, religion, political or other opinion, national, ethnic or social origin, property, disability, birth or other status.”

Article 21: “We will take all measures to ensure the full and equal enjoyment of all human rights and fundamental freedoms, including equal access to health, education, and recreational services, by children with disabilities and children with special needs; to ensure the recognition of their dignity; to promote their self-reliance; and to facilitate their active participation in the community.”

Under the section on General Protection, article 3 mandates the adoption of special measures to eliminate discrimination against children on a number of grounds which include disability, and also ensures their equal access to education, health and basic social services. Article 1 call for the registration of every child at birth or soon after. The right to education is further strengthened in “A World Fit for Children” and supports the goals and targets of the UNESCO Dakar

Framework for Action, (see below), but makes explicit reference to children with disabilities.

Article 5: “Educate every child.” All girls and boys must have access to and complete primary education that is free, compulsory and of good quality as a cornerstone of an inclusive basic education.” This incorporates the second Millennium Development Goal, one of a series of eight development goals adopted in 2000 by the world community to reduce poverty by half, by the year 2015. Strategies to achieve the goal and targets on education include:

Article 2: Promote innovative programmes that encourage schools and communities to search more actively for children who have dropped out of, or are excluded from school and from learning, especially girls and working children, children with special needs and *children with* disabilities, and help them enroll, attend, and successfully complete their education, involving governments as well as families, communities and non-governmental organizations as partners in the educational process.

Article 4: Ensure that all basic education programmes are accessible, inclusive, and responsive to children with special learning needs and for children with various forms of disabilities.

Article 6: Develop and implement special strategies for improving the quality of education and meeting the learning needs of all. To understand the critical importance of measures which support the families of children with disabilities and the development of the disabled child in the early years, the following strategies were adopted:

Article 10: Strengthen early childhood development by providing appropriate services and support to parents, including parents with disabilities, families, legal

guardians and caregivers, especially during pregnancy, birth, infancy and early childhood, so as to ensure children's physical, psychological, social, spiritual and cognitive development.

Article 17: Ensure effective access by children with disabilities and children with special needs to integrated services, including rehabilitation and health care, and promote family-based care and appropriate support systems for parents, families, legal guardians and caregivers of these children.

### **1.11 1990 World Conference on Education for All, Jomtien, Thailand**

In 1990, UNESCO hosted the first World Conference on Education for All, in Jomtien, Thailand. The World Declaration on Education For All and the Framework for Action to Meet Basic Learning Needs had as its goal universal primary education, but with a major focus on providing educational opportunities designed to meet basic learning needs in a more flexible manner, responding to the needs, culture and circumstances of learners. Article 3, Clause 5 contained the only reference to children with disabilities, and intense advocacy by three international disability organizations resulted in the text being changed from: "The learning needs of the disabled demand special attention" to: "Steps need to be taken to provide equal access to education for every category of disabled persons as an integral part of the education system".<sup>16</sup> A decision was made to review progress in 2000.

In the years following the Jomtien conference, two significant events for persons with disabilities took place. The first was an initiative of the United Nations, focused on providing a set of norms and standards to guide the action of governments and civil society to promote full participation and equal opportunities for persons with disabilities in all aspects of life. Although not mandatory, states would be monitored and guided on their progressive implementation of the standard rules. The second was a response by UNESCO to the call at Jomtien to provide equal access to children with disabilities within the mainstream education system. This resulted in the development of the far-reaching strategy of inclusive education.

### **1.12 1993 The standard rules on the equalization of opportunities for persons with disabilities**

Rule 6 on Education requires states to recognize the principle of equal primary, secondary and tertiary educational opportunities for children, youth and adults with disabilities. It should be provided in integrated settings and as an integral part of the national educational system, included in planning, curriculum and school organization. Where education is compulsory it should be provided to all children with all kinds of disabilities. Parent groups and organizations of persons with disabilities should be involved in the education process at all levels. Special attention should be given to very young children and pre-school children with disabilities, as well as adults and particularly women with disabilities.

To accommodate educational provisions for persons with disabilities in the national education system, states should have a clearly stated policy, understood and accepted at the school level and by the wider community; allow for curriculum flexibility, addition and adaptation; and provide for quality materials, on-going teacher training and support to teachers. Adequate, accessible and appropriate support services should be provided to meet the needs of persons with different disabilities in mainstream schools.

In situations where the general school system does not yet adequately meet the needs of all persons with disabilities, special education may be considered, but it should be aimed at preparing students for education in the general school system. States should aim for the gradual integration of special education services into mainstream education. Integrated education and community-based programmes should be seen as complementary approaches in providing cost-effective training for persons with disabilities.

### **1.13 1994 Salamanca Statement and Framework for Action on Special Needs Education**

The focus on educating all children in the mainstream education system received strong support at the UNESCO World Conference on Special Needs Education: Access and Quality, held in Spain in 1994. The conference adopted the Salamanca Statement on Principles, Policy and Practice in Special Needs Education and a

Framework for Action. The Salamanca Statement called for a policy shift which would require all schools in the regular school system to become inclusive schools and serve all children, "particularly those with special educational needs".<sup>17</sup> It stated that special needs education for children with disabilities and those with learning difficulties could not advance in isolation but must form part of an overall educational strategy which would call for major reform of the regular school. This approach was seen as necessary to advance the commitment to Education for All, by ensuring that it effectively means all children, regardless of their physical, intellectual, social, emotional, linguistic or other conditions.

Article 2 affirms the right to education of all children with their diverse characteristics and abilities and demands that education systems and programmes be designed to take into account this wide diversity. Regular schools must provide an appropriate child-centred teaching and learning environment that can accommodate these special educational needs. The article concludes with the statement that:

"Regular schools with this inclusive orientation are the most effective means of combating discriminatory attitudes, create welcoming communities, building an inclusive society and achieving education for all; moreover they provide an effective education to the majority of children and improve the efficiency and ultimately the cost-effectiveness of the entire education system."

The statement called on governments to take policy, legislative and implementation measures to transform national education and develop a system of inclusive schools. Clear guidelines are provided for action needed to ensure changes at the level of school management, appropriate training of personnel, curriculum flexibility, and the development of support services. In addition partnerships with parents and the role of the community are emphasized. The Salamanca Framework for Action received strong reinforcement from Bengt Lindquist, Special Rapporteur for the Standard Rules. He emphasized that it is *all* children, with their individual strengths and weaknesses, hopes and expectations, who have a right to education, not our education systems that have a right to certain types of children. It is school systems that must change to meet the needs of all children. The move towards inclusive education has been in the process of



development for the past decade. More rapid progress has been made in developed than developing countries.

### **1.14 World Education Forum and the Dakar Framework for Action (2000)**

The World Education Forum in Dakar provided the first opportunity to present the results of the global EFA 2000 Assessment involving more than 180 countries. After conducting the “biggest review on education in history” the results were mixed. Numbers of children in school rose with many countries reporting that they were approaching full primary school enrolment for the first time. At the same time the number of out-of-school children was cited as 113 million but given that data on many groups of excluded children, including children with disabilities, is not collected the numbers may well be higher. It was concluded that without accelerated progress towards Education for All, national and internationally agreed targets for poverty reduction will be missed, and inequalities within and between countries will widen. Six goals were set for the achievement of Education for All by 2015. (See Annex 1).

Under “Challenges and Opportunities” a call was made for inclusive approaches to ensure a broad vision for EFA, encompassing early childhood education, literacy and life-skills programmes as well as primary education. It must address the “needs of the poor and the most disadvantaged, including working children, remote rural dwellers and nomads, and ethnic and linguistic minorities, children, young people and adults affected by conflict, HIV/AIDS, hunger and poor health; and those with special learning needs.” Children with disabilities were not explicitly mentioned in the framework, although presumably implicitly included in references to most vulnerable and disadvantaged children, children in difficult circumstances, the poor and excluded, and children who are not enrolled. In terms of the need for high quality education starting from early childhood, the call for educational opportunities that are equitable, responsive to the needs of learners and that neither exclude nor discriminate has obvious, if not explicit, reference to children with disabilities.

Governments were required to develop or strengthen national EFA plans of action, reflecting a commitment to the achievement of the goals and targets of the

Framework for Action by 2015 at the latest. There was a requirement “to set out clear strategies to overcome the special problems facing those currently excluded from educational opportunities, with a clear commitment to girls” education and gender equity.

The Dakar Framework has re-stated a global commitment to the achievement of Education for All as a fundamental right for all children, but the lack of reference to particular minority groups by name, and the articulation of strategies most appropriate for their inclusion, may have led to a lesser response by governments than has been the case when addressing the needs of more clearly stated target groups, such as children from ethnic minorities and children with HIV/AIDS. Stimulating government action towards the achievement of the right to education for children with disabilities may require a combined approach, utilizing the strength of mandates such as the Dakar Framework for Action on Education for All and the Biwako Millennium Framework for Action, which has been adopted by governments of the region as a framework to guide action to achieve the specific rights of people with disabilities. These rights include the right to education.

### **1.15 Regional mandates Biwako Millennium Framework for Action: Towards an Inclusive, Barrier-free and Rights-Based Society for Persons with Disabilities in Asia and the Pacific (2003-2012)**

Mandates which focus exclusively on the rights of persons with disabilities are a response to a situation in which the rights of this group of people have been systematically ignored or denied by the societies in which they live. Global mandates which implicitly, but not explicitly, include their rights often do not achieve the same results for disabled people as they do for non-disabled people. Relentless and continuing advocacy at every level is necessary to reach a point where disability issues are included and addressed as a natural part of the mainstream national development agenda. Attitude change is a slow process and a culture of prejudice, discrimination and exclusion takes time to transform. The Biwako Millennium Framework was adopted at a UNESCAP high-level meeting, to conclude the Asian and Pacific Decade of Disabled Persons, 1993-2002, held in

Otsu, Japan, in 2002. It was developed in response to the evaluation of the achievements of governments in the region to the Agenda for Action of the first decade. With regard to achievements in the area of education it was noted that:

“With lack of access to education, equality is denied to children and youth with disabilities in the Asian and Pacific region. Excluded from education, they are excluded from opportunity and development, condemned to live in poverty, in what can become a self-perpetuating, inter-generational cycle.”

The Biwako Millennium Framework is a policy blueprint for action by governments to ensure the rights of persons with disabilities to live in inclusive and barrier-free societies. It establishes principles and policy directions necessary for the achievement of this goal and identifies seven priority areas for action.

Priority Area 3 is: “Early detection, early intervention and education”. Time-bound targets have been set, with a list of actions required to achieve the targets. (See Annex 2). The targets and policy directions for action have been incorporated into the relevant sections of this document. They provide a series of specific recommendations which will inform government policy, legislation, and implementation at all levels of the system, with particular reference to the importance of partnership with organizations of persons with disabilities, families and the community. They make explicit some of the steps it is necessary for governments to take as they address the issue of including children with disabilities in regular schools in the national education system. To this extent, the Biwako Millennium Framework complements the Dakar Framework for Action and re-focuses attention on some aspects of the Salamanca Statement.

The Asian and Pacific Decade of Disabled Persons has been a catalyst for similar initiatives in the African and Arab regions. At the global level, the United Nations has established an Ad Hoc Committee to draft a comprehensive and integral international convention to promote and protect the rights of persons with disabilities. Article 24 addresses the right to education. This draft Convention, when completed and ratified, will provide the strongest mandate for the rights of people with disabilities across all areas of development, including education.

Following the World Education Forum in Dakar in 2000, a Flagship programme was initiated. The Flagships provide focused attention on particular challenges

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concerned with specific aspects of the Education for All goals, and work towards the achievement of their goals by means of partnerships between United Nations organizations, multi and bilateral agencies, non-government organizations and civil society organizations such as universities. The last flagship to be formed was the Flagship on the Right to Education for Persons with Disabilities: Towards Inclusion. UNESCO is the lead agency, initially, in partnership with the University of Oslo. Other members include UNICEF, World Bank, OECD, international disability alliance organizations (IDA), non-governmental organizations, governments and donor countries, as well as the national UNESCO Commissions of the Nordic countries. The objective of the Flagship is to unite all partners in its efforts to provide access to education and to promote completion of quality education for all children and adults with disabilities. Strategies include:

- Encouraging policy-makers and managers to look at the barriers within the education system, how they arise and how they can be removed;
- Working to ensure that the right to education for all persons with disabilities is incorporated in National Education Plans;
- Stimulating and monitoring development in the field of awareness raising and advocacy for the right to education;
- Ensuring that EFA monitoring processes include data and documentation of resources allocated to persons with disabilities;
- Encouraging parental involvement in the classroom, teacher problem-solving and mutual support, and having non-disabled students work with their disabled peers to support them in their learning. Working groups have been established in two key areas. The first is data and statistics, critical for monitoring and evaluating progress on the inclusion of people with disabilities in the education system.

The second is professional development of teachers. The quality of education available to children with disabilities, and all children, is dependent on the knowledge, skills and active commitment of teachers in regular inclusive classrooms, working in supportive teaching and learning environments.

### **1.16 Inclusive education and children with disabilities**

The title of the flagship, the “Right to Education for Persons with Disabilities Towards Inclusion” reflects the current situation in which there is a movement towards inclusive education throughout the world.

All children have the right to education. The equal right for children with disabilities has been clearly mandated but the right is not being comprehensively upheld. The growing trend towards more flexible, relevant and responsive education has been promoted since the Jomtien conference in 1990. The Salamanca Statement provided a vision of an inclusive system of education which would play a role beyond the school and would contribute to the building of inclusive and non-discriminatory societies. Inclusive schools would benefit all children as they developed ways of teaching that respond to individual differences and diverse abilities. In addition, they would be cost-effective, removing the need for separate schools systems for children with disabilities. In spite of the clear advantages of inclusive education, the data on the number of children with disabilities not in school suggests that the process is unacceptably slow and many of the most significant barriers that remain are not able to be solved at the level of the individual teacher or the individual school.

There is evidence of a growth in the development of inclusive education practices at the local level in many countries. This has been strongly supported by UNESCO with the development of a series of technical materials and publications aimed at teachers, teacher trainers, educational administrators and managers. Many have been translated into a number of languages and widely disseminated at the local, national and regional levels. Strong promotion and support for inclusive education has come from other United Nations agencies and particularly from international non-governmental agencies such as Save the Children Alliance<sup>26</sup> and others working at regional and local levels, sometimes in partnership with governments, as in the case of Viet Nam.<sup>27</sup> Some of these initiatives explicitly address the needs of children with disabilities and others focus on a wider group of children at risk for exclusion. The role of donors and development agencies and institutions is of critical importance in this regard, working with governments on the inclusion of children with disabilities, and other excluded groups, in national education systems. Measurement indicators must be developed to reflect progress.

The barriers which keep children with disabilities out-of-school in such disproportionately large numbers is attributed to negative attitudes and systems, and societies that discriminate against them.

For real change to take place, governments need to take seriously their obligations under the many education and disability mandates which they have signed or adopted. National policies and practices in education need to be based on a commitment to these global human rights principles. The Manual on Rights-based Education<sup>28</sup> outlines the following rights, among many. Children with disabilities have the same right to education as all other children. They have the right to be educated in regular inclusive schools and not in separate segregated systems. Within regular inclusive schools, they have the right to an education that responds to the diversity of their abilities and is adapted to their particular needs, with support as it is needed.

It is only when a national commitment is made to include children with disabilities in the education system that any real progress is made towards achieving the goal of full enrolment for children with disabilities. The reforms that will need to take place in the education system will affect all areas, starting with policy, legislation and the commitment of budgetary and other resources. Administrative procedures need to be effective from central to local school levels. The focus in the early stages must be on building support and creating positive attitudes, and preparing the school for the necessary changes. Another focus must be on establishing methods of finding children who are out-of-school, and encouraging them to attend. One of the most important keys to success is the preparation of teachers so that they have the skills necessary to teach children with a wide range of abilities. A further critically important area is to establish effective systems for collecting data, so that the progress of children with disabilities can be monitored and evaluated, and included in the EFA process. The role of parents, organizations of persons with disabilities and the community must be considered and their expertise harnessed.

### **1.17 The challenge**

Discussion of the challenges faced by national governments in implementing rights-based education and recommendations for overcoming them are presented

in the chapters which follow. Examples are presented of strategies that have been used in the four countries where case studies were conducted.

One fact that becomes very clear is that even after a commitment has been made to fully include children with disabilities in the national education system, it takes time for the results to be seen. The pace of change will be determined by many factors, some of which include the population and size of the education system, the level of resources, the extent to which a system of separate schools for children with disabilities already exists, the level of partnership that exists with non-government organizations and the strength of advocacy and involvement in decision-making of organizations of persons with disabilities. Above all it depends on the commitment of governments. The case study countries provide examples of education systems at different stages of development, after a decision has been made to address the right to education of children with disabilities. Brunei has a net enrolment ratio of 98 per cent, with almost full inclusion of children with disabilities achieved over a ten year period. Only children with severe disabilities are not yet included in regular schools. Thailand has increased the number of children with disabilities enrolled in school over a five year period, from four per cent attending special segregated schools in 1999, to an estimated 23 per cent in integrated schools within the national education system in 2004, the majority of whom attend their local regular community school. In 1999 Thailand passed legislation which mandated the right to education of all children with disabilities, and the obligation of all schools to accept them. They also set in place a very detailed set of administrative and school support procedures to make sure the policy was implemented. It is hoped that the examples presented and the lessons learned from them will be helpful to guide other countries as they move towards more inclusive systems of education.

### **1.18 Creating Change in National Education Systems – What Are the Catalysts?**

Creating change in education systems is not an easy task. Traditionally education is a conservative institution designed to pass on cultural knowledge and values. Pressures for change are complex and can come from many sources. The movement towards including children with disabilities in national education

systems is gaining pace in many countries of the region, and indeed, worldwide. Some of the factors which have influenced these decisions include:

- Global initiatives and response by governments to the adoption of international and regional mandates;
  - Successful programmes initiated by international or national non-governmental organizations aimed at including children with disabilities in regular community schools;
  - Advocacy by disabled peoples' organizations, parents of disabled children and community groups.
- **Global initiatives**

The Dakar Framework for Action on Education For All, which is linked to the Millennium Development Goal of ensuring that all children have access to primary education by 2015, has required that governments look at the issue of children who are currently not in school. Although children with disabilities are not specifically named in the six Education For All goals, they are clearly part of the groups described as the "most vulnerable and disadvantaged" and "children in difficult circumstances" (EFA Goals 1 and 2).

It is often not until governments have achieved a primary school enrolment rate of 90-95 per cent that attention is focused on out-of-school children in general and children with disabilities in particular. Children with disabilities form the largest group of out-of-school children.

The first and second Asian and Pacific Decades of Disabled Persons, promoted by UNESCAP, and adopted by all governments in the Asian and Pacific region, have had a significant effect in raising awareness of the rights and needs of persons with disabilities. The right to education is the third priority area of the Biwako Millennium Framework for Action: Towards an Inclusive, Barrier-free and Rights-based Society for Persons with Disabilities in Asia and the Pacific (BMF).

In addition to these catalysts the international mandates outlined in an earlier section have all played a part in motivating governments to change their education policies to be more inclusive of children with disabilities. Foremost among these were the Convention on the Rights of the Child (1989), the United Nations



Standard Rules on the Equalization of Opportunities for Persons with Disabilities (1993) and the Salamanca Statement and Framework (1994).

○ **Non-Governmental Organization initiatives**

Initiatives for inclusive education and particularly the inclusion of children with disabilities have often started with concern from non-governmental organizations, resulting in action to include these children in local community schools. Save the Children (UK) and (Sweden), Plan International, Christian Blind Mission (CBM) and many other organizations have been particularly active in the region in the past decade. Small scale grass-roots projects and pilot projects have many benefits. They:

- Help to change attitudes and to create a more favorable environment for children with disabilities to be accepted in both schools and in the community;
- Support local communities and schools where children with disabilities are beginning to be included;
- Increase the level of expertise at the school level, by providing training on how to develop an inclusive school community, as well as training teachers in strategies which will help them teach children with a wide range of abilities in their classes;
- Teach teachers how to become “trainers” of other teachers, so that their expertise and experience can be transferred within their school and to neighboring schools;
- Develop and maintain good communication with ministry of education officials so that awareness is created within the ministry of examples of successful inclusion of children with disabilities in regular community schools;
- Can engage local, provincial and national education ministry officials in decision-making with a view to transferring “ownership” of the programme to the ministry in the long term, thus ensuring that it will be sustainable;
- Can work in partnership with ministry officials to expand the programme to other schools and provinces.

### **1.19 Advocacy**

Advocacy by organizations of parents of children with disabilities, and by organizations of people with disabilities is a very important mechanism for changing the education system to make it more willing and more capable of including children with disabilities in schools and making sure that the schools meet their educational needs. In many countries where special schools have been established, they were started by organizations of parents working in partnership with non-governmental organizations.

In other countries they have been instrumental in encouraging governments to include children with disabilities in regular pre-schools, primary schools, secondary schools and universities. The Biwako Millennium Framework has identified the strengthening of self-help organizations of persons with disabilities and related family and parent associations as the first priority for the second decade of disabled persons. It states that they are the “most qualified and best equipped to support, inform and advocate for themselves and other persons with disabilities.”<sup>31</sup>

This includes children with disabilities.

### **1.20 Barriers for children with disabilities**

- Governments often ratify international conventions and global initiatives but fail to conform to their goals and requirements. Many signatories of such treaties and agreements as the Convention on the Rights of the Child and the Dakar Framework for Action on Education for All have failed to modify their educational policies and practices in relation to the right to education of children with disabilities.
- Governments may not see it as their responsibility to provide education to children with disabilities, believing that people with disabilities are subjects for charity rather than services. They may see this as the domain of non-governmental organizations, which have in many countries been the first to try and provide some form of education or training to children with disabilities, often in small separate schools or centres.

- Governments may fail to take action to include children with disabilities in national education systems because they assume that extensive resources are needed to achieve this.
- Non-governmental organizations may work in isolation, with limited contact or communication with ministry of education officials, thus losing the opportunity to demonstrate the good practices they may have developed at the grass roots level for including children with disabilities in community schools.
- In many countries negative attitudes towards people with disabilities are widely held. These attitudes can include the belief that disability is visited on a family as a punishment for past misdeeds. This may result in the exclusion of the family and children from social services and community activities.
- Rejection of families of children with disabilities, and of the children themselves, by the community can result in low self-esteem and a sense of shame. Parents may be ignorant of the rights of their children to education and may accept the community view that these children cannot learn.
- Some countries do not have strong organizations of persons with disabilities, or any mechanism for their voices to be heard by government.
- Where organizations of persons with disabilities do exist, they may focus on issues of concern to adults with disabilities, such as physical access and access to jobs and employment. They may fail to realize that if they do not advocate for children with disabilities their voice will never be heard – and another generation of children with disabilities will grow up without access to education and opportunity.

### **1.21 Catalysts for change in case study countries**

#### **Brunei**

Ministry of Education officials from Brunei attended the Salamanca Conference (1994) and in 1995 started the formal process of including children with disabilities in the national education system. A Special Education Unit was established within the Ministry and the first Special Education conference was held in 1996. At this conference the Minister of Education stated: "We must look

at how the system can better serve all children, including children with special needs who require special education and related services if they are to realize their full potential.”

### **Samoa**

Change in Samoa has been a gradual process with non-governmental organization influence playing an important role. Two non-governmental organizations had been providing education to children with disabilities for more than 25 years. Compulsory education was made mandatory for all children aged five to 14 years in 1992, but in practice this did not include children with disabilities. It was the result of advocacy from the non-governmental organization service providers to government, urging them to take some responsibility for the education of children with disabilities that led to recognition of this as an issue in the 1995-2005 Policy and Strategy document. It was agreed that a strategy should be developed whereby government would take full responsibility “over time”. On-going advocacy from these non-government schools, parents groups, and a recently formed organization of persons with disabilities has led to their representation on the Special Needs Education Advisory Committee of the Ministry of Education.

### **Thailand**

The right to education for children with disabilities is enshrined in both the 1997 Constitution and in the 1999 National Education Act. The key catalysts for these achievements have been sustained advocacy by leaders of strong disability organizations, and their historical involvement in the establishment of nongovernmental organization educational programmes for children with disabilities, before government accepted responsibility for this task. The disability organizations have worked in partnership with parent organizations over a long period of time. Ministry of Education officials also cited the Agenda for Action for the Asian and Pacific Decade of Disabled Persons (1993-2002), the Biwako Millennium Framework for Action, policy guideline for the second Asian and Pacific Decade, 2003-2012, and UNESCO guidelines on inclusive education as significant influences on policy development and implementation.

### **Viet Nam**

For more than a decade a partnership between Save the Children (Sweden) and the National Institute of Educational Sciences (NIES), of the Ministry of Education and Training (MOET), Viet Nam, has resulted in “a workable strategy for inclusive education in Viet Nam”.<sup>34</sup> This long-term commitment by an international non-government organization, working in close cooperation with national Ministry of Education counterparts, has seen the development of inclusive education projects in more than six provinces. Strong emphasis was placed on training at all levels of the system and the community, and on ensuring local “ownership” and sustainability of the project. A second catalyst has been the engagement of the ministry in a World Bank project on Primary Education for Disadvantaged Children. Viet Nam has taken seriously its commitments under the Education for All programmes and has received World Bank Fast Track funding for its progress towards full enrolment of children in primary education. Realization that an enrolment of 100 per cent cannot be achieved without attention to children currently excluded from school has led to a focus on the inclusion of children with disabilities in current policy and action plans. Viet Nam has also been strongly influenced by its participation in the first and second Asian and Pacific Decades for Persons with Disabilities and has worked to meet the goals and targets of the Agenda for Action and the Biwako Millennium Framework.

### **1.21.1 Recommendations for action by stakeholders**

#### **Government**

Governments should take action to fulfill their obligations after they ratify and adopt international conventions and frameworks such as the Convention on the Rights of the Child and the Dakar Framework for Action and regional commitments such as the Biwako Millennium Framework. All of these initiatives mandate the education of children with disabilities.

Governments should work in close cooperation with non-governmental organizations which are providing education to children with disabilities and developing strategies to include them in regular community schools, with a view to learning from these processes and including them in the national education system. Governments should consult with organizations of persons with disabilities and parents of children with disabilities, in the development of policies

and changes to the school system, to ensure that these children are included in regular community schools and that their needs met.

### **1.21.2 Millennium Development Goal**

In this priority area the Millennium Development Goal is to ensure that by the year 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling and that girl and boys will have equal access to all levels of education.

#### **Targets**

Target 6.Children and youth with disabilities will be an integral part of the population targeted by the Millennium Development Goal of ensuring that by 2015 all boys and girls will complete a full course of primary schooling.

Target 7.At least 75 per cent of children and youth with disabilities will, by 2010, be able to complete a full course of primary schooling.

Target 8.By 2012, all infants and young children (birth to four years old) will have access to, and receive community-based early intervention services, with support and training for their families.

### **1.21.3 School and community**

Non-governmental organizations should engage with ministry of education officials to ensure that they are aware of, and participating in, the non-government projects on including children with disabilities in education. Disabled peoples' organizations should advocate to ministry of education officials to fulfill the right to the education of children with disabilities by including them in national education policies and schools. Parents should advocate for the inclusion of their children in local community schools within the national education system.

### **1.22 Summary**

International and regional mandates such as the Convention on the Rights of the Child, the Dakar Framework for Action on Education For All and the Biwako Millennium Framework are important catalysts for change. For their benefits to be

maximized they should be implemented and monitored at the regional level within a framework of capacity building and support to governments by the respective United Nations and other development agencies, such as UNESCO, UNICEF, UNESCAP and the World Bank. Good examples from the UNESCO Bangkok office have included awareness training for EFA coordinators and UNESCO country officers on the importance of including children with disabilities in Education For All and national education planning, monitoring and evaluation processes. In 2004 and 2005, EFA coordinators attended UNESCO Regional Workshops on Inclusive Education in Asia and the Pacific. Advocacy to government by organizations of persons with disabilities, and parent groups, has been effective in influencing policies on education to make them more inclusive. Non-governmental organizations working to include children with disabilities in community schools can also play an important role in advocating for change and demonstrating strategies that are effective.

The Cook Islands government ratified the Convention on the Rights of the Child in 1999 and as a direct result of signing this convention in 2000 appointed a Special Needs Education Adviser to develop a national policy and action plan for special needs education. The policy established closer links between the special classes and the regular schools to encourage the placement of children with disabilities in regular schools, with support to the classroom teachers provided by teachers with special training. A programme of in-service training was set up to prepare teachers in regular classes to teach children with different abilities. The pre-service teacher training curriculum for regular teachers was modified to include the teaching strategies needed for teaching children with a wider range of abilities.

### **1.23References**

i United Nations. 2015. Transforming our world: the 2030 Agenda for Sustainable Development.

<https://sustainabledevelopment.un.org/post2015/transformingourworld>.

ii UNESCO. 2014. 2014 GEM Final Statement: The Muscat Agreement.

<http://unesdoc.unesco.org/images/0022/002281/228122E.pdf>.

iii Adapted from: UNESCO. 2015. Rethinking Education: Towards a global common good?

<http://unesdoc.unesco.org/images/0023/002325/232555e.pdf>.

iv UNICEF. 2015. The Investment Case for Education and Equity. [www.unicef.org/publications/files/Investment\\_Case\\_for\\_Education\\_and\\_Equity\\_FINAL.pdf](http://www.unicef.org/publications/files/Investment_Case_for_Education_and_Equity_FINAL.pdf).

v UNESCO. 2015. Rethinking Education, op. cit., p.10.

vi UNESCO. 2014. EFA Global Monitoring Report 2013/4 – Teaching and Learning: Achieving Quality for All. <http://unesdoc.unesco.org/images/0022/002256/225660e.pdf>.

vii Banks, L.M. and Polack, S. The Economic Costs of Exclusion and Gains of Inclusion of People with Disabilities: Evidence from Low and Middle Income Countries. <http://disabilitycentre.lshtm.ac.uk/files/2014/07/Costs-of-Exclusion-and-Gains-of-Inclusion-Report.pdf>.

viii United Nations. 1948. Universal Declaration of Human Rights. [www.un.org/en/documents/udhr](http://www.un.org/en/documents/udhr).

ix UNESCO. 1960. Convention against Discrimination in Education. [www.unesco.org/education/pdf/DISCRI\\_E.PDF](http://www.unesco.org/education/pdf/DISCRI_E.PDF).

x United Nations. 1989. Convention on the Rights of the Child. [www.ohchr.org/en/professionalinterest/pages/crc.aspx](http://www.ohchr.org/en/professionalinterest/pages/crc.aspx).

xi United Nations. 1960. International Covenant on Economic, Social and Cultural Rights. [www.ohchr.org/EN/ProfessionalInterest/Pages/CESCR.aspx](http://www.ohchr.org/EN/ProfessionalInterest/Pages/CESCR.aspx). The covenant states (Art. 13.2) that '(a) Primary education shall be compulsory and available free to all; (b) Secondary education in its different forms, including technical and vocational secondary education, shall be made generally available and accessible to all by every appropriate means, and in particular by the progressive introduction of free education; (c) Higher education shall be made equally accessible to all, on the basis of capacity, by every appropriate means, and in particular by the progressive introduction of free education'.



xii United Nations. 2006. Convention on the Rights of Persons with Disabilities. [www.un.org/disabilities/convention/conventionfull.shtml](http://www.un.org/disabilities/convention/conventionfull.shtml).

xiii United Nations. 1979. Convention on the Elimination of All Forms of Discrimination against Women. [www.un.org/womenwatch/daw/cedaw/text/econvention.htm](http://www.un.org/womenwatch/daw/cedaw/text/econvention.htm).

xiv United Nations. 1951. Convention relating to the Status of Refugees. [www.unhcr.org/3b66c2aa10.html](http://www.unhcr.org/3b66c2aa10.html).

xv United Nations. 2010. Resolution on the Right to Education in Emergency Situations.

[www.ineesite.org/uploads/files/resources/UN\\_Resolution\\_Education\\_in\\_Emergencies.pdf](http://www.ineesite.org/uploads/files/resources/UN_Resolution_Education_in_Emergencies.pdf).

xvi Adapted from: UNESCO. 2015. Rethinking Education, op. cit.

xvii United Nations. n.d. Definition of key terms used in the UN Treaty Collection.

[http://treaties.un.org/Pages/Overview.aspx?path=overview/definition/page1\\_en.xml](http://treaties.un.org/Pages/Overview.aspx?path=overview/definition/page1_en.xml).

xviii UIS/EFA GMR. 2015. *A growing number of children and adolescents are out of school as aid fails to meet the mark*. Policy

paper 22/Fact sheet 31.  
<http://unesdoc.unesco.org/images/0023/002336/233610e.pdf>.

xix UNESCO. 2012. EFA Global Monitoring Report 2012 – Youth and Skills: Putting education to work. <http://unesdoc.unesco.org/images/0021/002180/218003e.pdf>.

xx See for example:

European Union. 2007. Key Competences for Lifelong Learning – European Reference Framework. [www.alfa-trall.eu/wp-content/uploads/2012/01/EU2007-keyCompetencesL3-brochure.pdf](http://www.alfa-trall.eu/wp-content/uploads/2012/01/EU2007-keyCompetencesL3-brochure.pdf).

World Bank. 2011. Learning for All: Investing in People's Knowledge and Skills to Promote Development.

[http://siteresources.worldbank.org/EDUCATION/Resources/ESSU/Education\\_Strategy\\_4\\_12\\_2011.pdf](http://siteresources.worldbank.org/EDUCATION/Resources/ESSU/Education_Strategy_4_12_2011.pdf). UNESCO. 2012. EFA Global Monitoring Report 2012, op. cit. UNESCO Bangkok. 2015. Transversal Competencies in Education Policy and Practice (Phase I). <http://unesdoc.unesco.org/images/0023/002319/231907E.pdf>.

xxi Consultative Group on Early Childhood Care and Development. n.d. Early Childhood Development on the Post-2015 Development Agenda. [www.ecdgroup.com/pdfs/Response-to-HLP-Report-2013\\_final.pdf](http://www.ecdgroup.com/pdfs/Response-to-HLP-Report-2013_final.pdf).

xxii UNESCO. 2015. EFA Global Monitoring Report 2015, op. cit.

xxiii UIS database for 2000 and 2013 data. <http://data.uis.unesco.org>.

xxiv UIS. 2012. International Standard Classification of Education: ISCED 2011. <http://www.uis.unesco.org/Education/Documents/isced-2011-en.pdf>.

xxv OECD. 2013. The skills needed for the 21st century. OECD Skills Outlook 2013: First Results from the Survey of Adult Skills, Chapter 1. [http://skills.oecd.org/documents/SkillsOutlook\\_2013\\_Chapter1.pdf](http://skills.oecd.org/documents/SkillsOutlook_2013_Chapter1.pdf).

xxvi UNESCO. 2015. EFA Global Monitoring Report 2015, op. cit.

xxvii Ibid.

xxviii Ibid.

xxix Plan International. 2012. The State of the World's Girls 2012: Learning for Life. <https://plan-international.org/state-worlds-girls-2012-learning-life>.

xxx UNESCO Institute for Lifelong Learning. 2010. CONFINTEA VI Sixth International Conference on Adult Education: Final report. <http://unesdoc.unesco.org/images/0018/001877/187790e.pdf>.

xxxi UNESCO. 2008. The Global Literacy Challenge: A profile of youth and adult literacy at the mid-point of the United Nations Literacy Decade 2003–2012. <http://unesdoc.unesco.org/images/0016/001631/163170e.pdf>.

- xxxii UIS. 2015. Adult and Youth Literacy: UIS Factsheet. [www.uis.unesco.org/literacy/Documents/fs32-2015-literacy.pdf](http://www.uis.unesco.org/literacy/Documents/fs32-2015-literacy.pdf).
- xxxiii OECD. 2010. PISA 2009 Results: What Students Know and Can Do – Student Performance in Reading, Math and Science. [www.oecd.org/pisa/pisaproducts/48852548.pdf](http://www.oecd.org/pisa/pisaproducts/48852548.pdf).
- xxxiv UNESCO. 2014. *Shaping the Future We Want: UN Decade of Education for Sustainable Development (2005-2014) – Final Report*. <http://unesdoc.unesco.org/images/0023/002303/230302e.pdf>.
- xxxv UNICEF. 2012. Water, Sanitation and Hygiene: 2012 Annual Report. [www.unicef.org/wash/files/2012\\_WASH\\_Annual\\_Report\\_14August2013\\_eversion\\_\(1\).pdf](http://www.unicef.org/wash/files/2012_WASH_Annual_Report_14August2013_eversion_(1).pdf).
- xxxvi Plan International. 2012. A Girl's Right to Learn Without Fear: Working to end gender-based violence at school. <https://plan-international.org/girls-right-learn-without-fear>.
- xxxvii United Nations Girls' Education Initiative. n.d. End School-Related Gender-Based Violence. Infographic. [www.ungei.org/news/files/ENGLISH\\_SRGBV\\_INFOGRAPHIC\\_NOV2014\\_FINAL.pdf](http://www.ungei.org/news/files/ENGLISH_SRGBV_INFOGRAPHIC_NOV2014_FINAL.pdf).
- xxxviii UNESCO. 2014. Education for All Global Monitoring Report 2013/14. Teaching and Learning: Achieving quality for all – Gender Summary. <http://unesdoc.unesco.org/images/0022/002266/226662E.pdf>.
- xxxix UNESCO. 2014. EFA Global Monitoring Report 2013/4, op. cit.
- xl UIS/EFA GMR. 2014. Wanted: Trained teachers to ensure every child's right to primary education. Policy paper 15/ Fact sheet 30. [www.uis.unesco.org/Education/Documents/fs30-teachers-en.pdf](http://www.uis.unesco.org/Education/Documents/fs30-teachers-en.pdf).
- xli UNESCO. 2014. EFA Global Monitoring Report 2013/4, op. cit.

xlii UIS/EFA GMR. 2014. Wanted: Trained teachers to ensure every child's right to primary education, op. cit., and UIS database for 2012 trained teacher numbers. <http://data.uis.unesco.org>.

xliii Norwegian Ministry of Foreign Affairs. 2015. Chair's Statement – The Oslo Declaration. [www.osloeducationsummit.no/pop.cfm?FuseAction=Doc&pAction=View&pDocumentId=63448](http://www.osloeducationsummit.no/pop.cfm?FuseAction=Doc&pAction=View&pDocumentId=63448).

xliv United Nations. 2015. The Addis Ababa Action Agenda of the Third International Conference on Financing for Development. <http://daccess-dds-ny.un.org/doc/UNDOC/GEN/N15/232/22/PDF/N1523222.pdf?OpenElement>.

xliv UNESCO. 2015. EFA Global Monitoring Report 2015, op. cit.

xlvi UNESCO. 2015. Pricing the right to education: The cost of reaching new targets by 2030. EFA GMR Policy Paper 18. <http://unesdoc.unesco.org/images/0023/002321/232197E.pdf>.

xlvi UNESCO. 2000. Dakar Framework for Action, p. 9. <http://unesdoc.unesco.org/images/0012/001211/121147e.pdf>.

lviii UNESCO. 2015. Pricing the right to education, op. cit.

lix UNESCO. 2015. Humanitarian Aid for Education: Why it Matters and Why More is Needed. EFA GMR Policy Paper 21. <http://unesdoc.unesco.org/images/0023/002335/233557E.pdf>.

l See UNESCO and UNICEF. 2013. Making Education a Priority in the Post-2015 Development Agenda: Report of the Global Thematic Consultation on Education in the Post-2015 Development Agenda. [www.unicef.org/education/files/Making\\_Education\\_a\\_Priority\\_in\\_the\\_Post-2015\\_Development\\_Agenda.pdf](http://www.unicef.org/education/files/Making_Education_a_Priority_in_the_Post-2015_Development_Agenda.pdf).

UNIT 2

**International Conventions: Convention against Discrimination (1960), Convention on Rights of a Child (1989), United Nations Convention of Rights of Persons with Disabilities (UNCRPD) (2006)**

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## 2.1 INTRODUCTION

The Convention on the Rights of the Child (CRC) recognizes the human rights of all children, including those with disabilities. The Convention contains a specific article recognizing and promoting the rights of children with disabilities. Along with the CRC, the Convention on the Rights of Persons with Disabilities (CRPD), adopted by the United Nations General Assembly in December 2006, provides a powerful new impetus to promote the human rights of all children with disabilities. In spite of the almost universal ratification of the Convention on the Rights of the Child, and the social and political mobilization that led to adoption of the Convention on the Rights of Persons with Disabilities, disabled children and their families continue to be confronted with daily challenges that compromise the enjoyment of their rights. Discrimination and exclusion related to disabilities occur in all countries, in all sectors of society and across all economic, political, religious and cultural settings.

- **Promoting inclusion**

Human rights have provided both the inspiration and the foundation for the movement towards inclusion for children with disabilities. Inclusion requires the recognition of all children as full members of society and the respect of all of their rights, regardless of age, gender, ethnicity, language, poverty or impairment. Inclusion involves the removal of barriers that might prevent the enjoyment of these rights, and requires the creation of appropriate supportive and protective environments. The UN Educational, Scientific and Cultural Organization

(UNESCO) states that the inclusion of children who would otherwise be perceived as 'different' means "changing the attitudes and practices of individuals, organizations and associations so that they can fully and equally participate in and contribute to the life of their community and culture. An inclusive society is one in which difference is respected and valued, and where discrimination and prejudice are actively combated in policies and practices." The World Conference on Special Needs Education, organized by UNESCO and held in Salamanca, Spain, in 1994, recommended that inclusive education should be the norm. This has now been reaffirmed in the new Convention on the Rights of Persons with Disabilities. In the context of education, inclusion means the creation of barrier-free and child-focused learning environments, including for the early years. It means providing appropriate supports to ensure that all children receive education in non-segregated local facilities and settings, whether formal or informal. It is framed by article 29 of the Convention on the Rights of the Child, which requires that the child's education be directed to the development of their personality, talents and mental and physical abilities to their fullest potential; to the preparation of the child for responsible life in a free society, in the spirit of understanding and tolerance. Inclusion is a process that involves all children, not just a number of 'special' children. It gives non-disabled children the experience of growing up in an environment where diversity is the norm rather than the exception. It is when the education system fails to provide for and accommodate this diversity that difficulties arise, leading to marginalization and exclusion. Inclusion is not the same as 'integration', which implies bringing children with disabilities into a 'normal' mainstream or helping them to adapt to 'normal' standards. For example, in the context of schooling, integration means the placement of children with disabilities in regular schools without necessarily making any adjustments to school organization or teaching methods. Inclusion, on the other hand, requires that schools adapt and provide the needed support to ensure that all children can work and learn together.

- **Scope of this Digest**

The enjoyment of human rights by children with disabilities can be fully realized only in an inclusive society, that is, a society in which there are no barriers to a child's full participation, and in which all children's abilities, skills and potential

are given full expression. The *Digest* reviews concrete initiatives and strategies for advancing the social inclusion of children with disabilities. These initiatives are by no means confined to income-rich countries. Indeed, some of the poorest countries in the world are now leading the way through a combination of political will, partnership with local communities and, above all, the involvement of children and adults with disabilities in decision-making processes. This *Digest* intended to help raise the profile of childhood disability and to give impetus to the challenge of ensuring that children with disabilities are fully included in efforts to promote the human rights of all children. It examines the situation of children with disabilities from a global perspective, considering countries and societies with widely differing levels of economic development and service provision, and a variety of socio cultural realities that influence attitudes towards persons with disabilities. It seeks to demonstrate that the inclusive policies and practices required to promote the enjoyment of the rights of these children are both feasible and practical.

## **2.2 HOW MANY CHILDREN WITH DISABILITIES?**

It is estimated that, overall, between 500 and 650 million people worldwide live with a significant impairment. According to the World Health Organization (WHO), around 10 per cent of the world's children and young people, some 200 million, have a sensory, intellectual or mental health impairment. Around 80 per cent of them live in developing countries. Statistics such as these demonstrate that to be born with or acquire an impairment is far from unusual or abnormal. The reported incidence and prevalence of impairment in the population vary significantly from one country to another. Specialists, however, agree on a working approximation giving a minimum benchmark of 2.5 per cent of children aged 0-14 with self-evident moderate to severe levels of sensory, physical and intellectual impairments. An additional 8 per cent can be expected to have learning or behavioural difficulties, or both. These estimates were found to be useful in the detailed analysis of statistics on incidence and prevalence of childhood disability in the UNICEF study on Children and Disability in Transition in CEE/CIS and Baltic States. They are based on research and data gathered over years in countries with the highest human development rankings. The minimum benchmark was found particularly helpful in comparing official country rates to



this standard since data, if available, are often not comparable between countries. Countries frequently use different classifications, definitions and thresholds between categories of 'disabled' and 'non-disabled', with the result that a child who is classified as, for example, having a mild impairment according to one system might be regarded as not being disabled at all under another.

### 2.3 DISABILITY AND INCLUSION

The history of disability is for the most part one of exclusion, discrimination and stigmatization. Often segregated from society, persons with disabilities – and in particular, children with disabilities – have been regarded as objects of charity and passive recipients of welfare. This charity-based legacy persists in many countries and affects the perception and treatment received by children with disabilities.

The 'social model' of disability The human rights approach to disability has led to a shift in focus from a child's limitations arising from impairments, to the barriers within society that prevent the child from having access to basic social services, developing to the fullest potential and from enjoying her or his rights. This is the essence of the social model of disability. The emphasis given to equality and non-discrimination in international human rights instruments is reflected in the social model of disability. This model rejects the long-established idea that obstacles to the participation of disabled people arise primarily from their impairment and focuses instead on environmental barriers. These include:

- prevailing attitudes and preconceptions, leading to underestimation;
- the policies, practices and procedures of local and national government;
- the structure of health, welfare and education systems;
- lack of access to buildings, transport and to the whole range of community resources available to the rest of the population;
- the impact of poverty and deprivation on the community as a whole and more specifically on persons with disabilities and their families.

A great deal can be done to remove or reduce the barriers faced by children and adults with disabilities. For persons with disabilities, this is both a liberating and

an empowering view, one that emphasizes the positive contribution that they themselves can make in removing the barriers to their participation. At the same time, the social model emphasizes the role of government and civil society in removing the obstacles faced by citizens with disabilities in becoming active participants in the various communities in which they live, learn and work. Emphasizing the social construction of disability in no way implies rejecting medical and professional services and supports. Nor does it mean denying the potential of intervention in reducing or alleviating impairment or in providing rehabilitation or training. Provision of technical aids, medical intervention and professional support are all important ways of promoting empowerment and independence and are an integral part of the social model. For example, a simple medical procedure may be all that is required to help a child with eye or ear infections to benefit from classroom learning. Nevertheless, the medical model (sometimes known as the 'defect model') still exerts a disproportionate influence at many levels. For example, teachers and parents sometimes ask questions such as "Can children with Down's Syndrome attend an ordinary school?" or "How do you teach children with muscular dystrophy?" The answer to the last question was given by a group of 48 children with muscular dystrophy from France: Care providers cannot understand that we are all different, even if we have the same condition, the same disability. What we want to say to all adults who take care of us is that we are 48 different personalities. There is no personality type known as muscular dystrophy. This quotation emphasizes that the rights, needs and voice of the individual child are fundamental. It is this principle that lies at the heart of the Convention on the Rights of the Child and is reflected as well in the Convention on the Rights of Persons with Disabilities.

## **2.4 Disability and poverty**

The World Bank has estimated that persons with disabilities account for up to one in five of the world's poorest people, that is, those who live on less than one dollar a day and who lack access to basic necessities such as food, clean water, clothing and shelter.<sup>s</sup> These figures have been brought to life in a recent report from Inclusion International which documents the poverty and exclusion experienced daily by people with intellectual disabilities and their families in all regions of the

world, but which also records many examples of how these obstacles are beginning to be overcome.

Poverty is both a cause and a consequence of disability. Correlates of poverty, such as inadequate medical care and unsafe environments, significantly contribute to the incidence and impact of disability, and complicate efforts for prevention and response. By the same measure, many of the factors contributing to high levels of impairment among children are potentially preventable, thus offering the opportunity to reduce the levels of disability as well as of poverty. Such factors include malnutrition and micronutrient deficiencies, preventable diseases such as measles, lack of sanitation and clean water, as well as violence, abuse and exploitation, including through labor. Lack of access to all levels of education and low levels of family support in any community are also closely linked to both poverty and disability. Significant progress is being made in eliminating major causes of impairment such as iodine deficiency and lack of access to safe water. On the other hand, the last decade has seen a persistence or rise in other factors that have contributed to the incidence of impairments, including HIV/AIDS, environmental pollution, accidents and drug abuse.<sup>10</sup> War and civil strife are also major causes of impairment among children, largely affecting countries in the developing world. UNICEF has estimated that between 1990 and 2001, 2 million children around the world were killed and as many as 6 million disabled by armed conflict.<sup>11</sup> The prevention of disability caused by landmines and unexploded ordnance needs to be given higher priority in the region's most affected. The additional burden placed on families with members, including children, with disabilities, deepens the impact of economic poverty and may further perpetuate discriminatory attitudes towards these groups. In the light of the inextricable link between poverty and disability, effective action to reduce poverty must address disability concerns in a systematic manner. This fundamental principle of inclusive planning was recognized by former President of the World Bank James Wolfensohn

## **2.5 Convention on the Rights of the Child**

The 1989 Convention on the Rights of the Child (CRC) is the first binding instrument in international law to deal comprehensively with the human rights of children, and is notable for the inclusion of an article specifically concerned with

the rights of children with disabilities. The implementation of the CRC is monitored and promoted at the international level by the Committee on the Rights of the Child. The CRC identifies four general principles that provide the foundation for the realization of all other rights:

non-discrimination;

the best interests of the child;

survival and development;

respect for the views of the child.

The principle of non-discrimination is reflected in article 2 of the CRC that expressly prohibits discrimination on the grounds of disability: States parties shall respect and ensure the rights set forth in the present Convention to each child...without discrimination of any kind, irrespective of the child's...disability...or other status. This principle is motivated by the recognition that segregated or separate facilities for education, health care, recreation and all other aspects of human life on the basis of disability can create and consolidate exclusion.

## **2.6 INTERNATIONAL STANDARDS AND MECHANISMS**

A 'problem' and, in doing so, maintain or reinforce mechanisms of discrimination. Certain children require additional or different forms of support in order to enjoy their rights. For instance, a child with a visual impairment has the same right to education as all children, but in order to enjoy this right and to ensure her or his participation, the child may require enlarged print, Braille books or other forms of assistance.

Article 23 of the CRC refers to the obligations of States parties and recognizes that a child with mental or physical disabilities is entitled to enjoy a full and decent life, in conditions that ensure dignity, promote self-reliance and facilitate the child's active participation in the community:

- i) States parties recognize that a mentally or physically disabled child should enjoy a full and decent life, in conditions which ensure dignity, promote self-reliance and facilitate the child's active participation in the community.
- ii) States parties recognize the right of the disabled children to special care and shall encourage and ensure the extension, subject to available resources, to the eligible child and those responsible for his or her care, of assistance...appropriate to the child's condition....
- iii) ...assistance extended...shall be provided free of charge, whenever possible... and shall be designed to ensure that the disabled child has effective access to and receives education, training, health care services, rehabilitation services, preparation for employment and recreation opportunities in a manner conducive to the child's achieving the fullest possible social integration and individual development, including his or her cultural and spiritual development.
- iv) States parties shall promote...the exchange of appropriate information in the field of preventive health care and of medical, psychological and functional treatment of disabled children.... In this regard, particular account shall be taken of the needs of developing countries. This special article on children with disabilities is included "without prejudice to" the general applicability of the principles and provisions of the CRC to the situation of children with disabilities. The article adds force to the other provisions of the CRC, including freedom from discrimination, respect for the dignity of the child and the cultivation of her or his potential to assume a responsible and independent life in society. They may be seen to be particularly relevant to the situation of children with disabilities in the following provisions:

The child's right not to be separated from his or her family (article 9).

Services and assistance to support parents in their child-rearing responsibilities (article 18).

Protection from injury, neglect and any form of violence (article 19).

Protection of children deprived of a family environment (article 20).

Refugee children (article 22).

Periodic review of treatment (article 25).

The child's right to free and compulsory primary education, to secondary and vocational education and the prevention of drop out (article 28).

Children belonging to minorities and indigenous people (article 30).

Protection from work that interferes with education (article 32).

Protection from abuse (article 33).

Protection from sexual exploitation (article 34).

Protection from torture or other cruel, inhuman or degrading treatment or punishment, and from deprivation of liberty (article 37).

Right to rehabilitative care for victims of neglect, exploitation, abuse or degrading treatment (article 39).

The implementation of the CRC is monitored at the international level by the Committee on the Rights of the Child, which oversees the progress made by States parties in promoting the realization of children's human rights. Reiterating its concern with the rights of children with disabilities, in 2006 the Committee issued a General Comment on this particular topic (see chapter 5 below for discussion of the Committee's comments and policy recommendations concerning children with disabilities).

- **Other international human rights instruments and decisions**

In addition to the CRC, a number of other important human rights instruments reinforce the rights of persons with disabilities (box 4.1). Of particular note is the renewed impetus for recognizing the principle of non-discrimination as a fundamental part of all international human rights instruments, thus guaranteeing their relevance to persons with disabilities.<sup>17</sup> Disability issues have also been addressed in the context of other human rights institutions of the United Nations,

for example, in 2006 in a report by the Special Reporter on the right to education, addressing steps to fulfill the right to inclusive education.<sup>18</sup>

## **2.7 UN Standard Rules on the Equalization of Opportunities for Persons with Disabilities**

The CRC provides a binding implementation framework with implications for law, policy and practice with respect to children with disabilities. The Standard Rules on the Equalization of Opportunities for Persons with Disabilities, adopted by the UN General Assembly in 1993, provides detailed guidance on what should be done and how to do it.<sup>19</sup> The Committee on the Rights of the Child recommended that the two documents be used as complementary tools in promoting the rights of children with disabilities.<sup>20</sup> Around the world, these Rules have had a major influence on the development of disability legislation, the level and provision of services for persons with disabilities and, above all, on attitudes towards disability issues. The simplicity of the Rules enables them to be used as a practical tool by those involved in developing disability legislation and policy.<sup>21</sup> Unlike the CRC, which is legally binding for all States that have ratified or acceded to it, the Standard Rules express a political commitment on the part of States to adapt society to individuals with functional impairments. The Rules address all aspects of the lives of persons with disabilities and indicate how governments can make social, political and legal changes to ensure that persons with disabilities are treated as full citizens of their country. The Rules cover four main areas: 1 Preconditions for equal participation (awareness raising, medical care, rehabilitation, support services and accessibility). 2 Target areas for equal participation (accessibility, education, employment, income maintenance and social security, family life and personal integrity, culture, recreation and sports, religion). 3 Implementation measures (information and research, policy-making and planning, legislation, economic policies, coordination of work, organizations of disabled persons, personnel training, national monitoring and evaluation of disability programmes in the implementation of the Rules, technical and economic cooperation and international cooperation).

## **2.8 Convention on the Rights of Persons with Disabilities**

When proposals for a new disability convention were first raised, it was suggested by some that there was no need for such a convention because the rights of persons with disabilities were automatically included in all other conventions, whether or not these included disability-specific references. At the same time, organizations of persons with disabilities pressed the case for a disability-specific convention, noting examples of their needs being overlooked in the implementation and monitoring of conventions and other international initiatives. In November 2001, the General Assembly of the United Nations adopted a resolution to establish an ad hoc committee to consider proposals for a Convention on the Rights of Persons with Disabilities. The proposed convention aimed to give status, authority and visibility to disability as a human rights issue in a way that would have been impossible to achieve by any other means.

At its concluding session in August 2006, the committee adopted the draft of the proposed convention, which was subsequently adopted by the UN General Assembly on 13 December 2006, and became open for signature by Member States from 30 March 2007. States, as well as regional integration organizations, become parties to the Convention and to its Optional Protocol either by signing and ratifying the instruments or by acceding to them. Signature conveys the intention to take steps towards ratification at the international level, in the prospect of compliance with the respective provisions. More than 80 Member States and many NGOs took part in the signing ceremony and the subsequent dialogue on implementation. As of 15 August 2007, 101 countries had signed the Convention, and 4 countries – Croatia, Hungary, Jamaica and Panama – had ratified it. For entry into force, it is necessary that the Convention receive 20 ratifications. Children themselves, with support of child advocates, played an important role in the drafting process as well as in other aspects of the development of the Convention.

The Convention is a human rights instrument with an explicit social development dimension. It adopts a broad categorization of persons with disabilities and reaffirms that all persons with all types of disabilities must enjoy all human rights and fundamental freedoms. It clarifies and describes how all categories of rights apply to persons with disabilities and identifies areas where adaptations have to be



made for persons with disabilities to effectively exercise their rights and areas where the protection of their rights must be reinforced.

The study concluded that although some progress had been made in recognizing the rights of persons with disabilities, “there are more good intentions world-wide that are not necessarily backed by strong political will” (p. 12). It was found, for example, that 30 countries have reported taking no measures to enable children with disabilities to receive education in integrated settings. In 37 countries education is not available to low income persons with disabilities or to women with disabilities. At the same time, 84 countries reported relevant changes to the training of teachers, and increasing numbers are adopting policies and passing legislation to promote the access of children with disabilities to education. The Convention reflects a ‘paradigm shift’ in attitudes and approaches to persons with disabilities; in the direction of the social model of disability described above. It represents the culmination of the process initiated over two decades ago by the United Nations of moving from the treatment of persons with disabilities as ‘objects’ of charity, medical treatment and social protection towards viewing persons with disabilities as ‘subjects’ with rights who are capable of claiming those rights and making decisions for their lives based on their free and informed consent, as well as being active members of society. The General Principles of the Convention (article 3) are fundamental to all articles of the Convention and to its implementation by member States. They are as follows: Respect for the inherent dignity,

- a) Individual autonomy including the freedom to make one’s own choices, and independence of persons.
- b) Non-discrimination.
- c) Full and effective participation and inclusion in society.
- d) Respect for difference of persons with disabilities as part of human diversity and humanity.
- e) Equality of opportunity.
- f) Accessibility.

g) Equality between men and women.

h) Respect for the evolving capacities of children with disabilities and respect for the right of children with disabilities to preserve their identities. All of the provisions in the Convention apply to children with disabilities as well as to adults. In recognition of children's specific situation, however, several articles make explicit reference to their rights. The preamble recognizes that children with disabilities have full enjoyment of all human rights on an equal basis with others. The general principles include respect for the evolving capacities of the child and children's right to preserve their identity. The general obligation requires that children with disabilities must be consulted when States parties are developing and implementing legislation and policies. Several other articles specifically address the rights of children with disabilities, including their right to participation, information, education, family life and freedom from violence. Three articles in particular – articles 7, 24 and 32 – merit examination in greater detail.

#### **Article 7: Children with disabilities**

Building upon the CRC, the principles summarized in article 7 of the Convention affirm the fundamental rights of all children with disabilities to the entire range of human rights inherent to all children. Requirements for the best interests of the child and for the participation of the children themselves in decision-making are particularly important for children with disabilities, whose interests and voices are all too frequently overlooked and undervalued. Their right to appropriate support in making their voices heard is emphasized in both article 7 and article 24.

#### **Article 24: Education**

A second article of the Convention with particular implications for children is article 24 on education. Article 24 reflects a clear commitment to the principle of inclusive education as a goal. In this respect, it advances further the direction established in earlier documents such as the CRC, the Salamanca Statement and Framework and the Standard Rules. Article 24 also addresses the specific needs of children with severe and complex sensory impairments for access to specific supports to learning such as sign language, Braille and low vision aids. Other children with disabilities may also need modifications to the curriculum, to styles

of teaching and to the organization of the classroom. Support to all children with disabilities has to be individually tailored and resourced both in terms of time and staffing. Clearly, parents and the children themselves have to be partners in deciding the nature and intensity of such support and ways in which it can be reduced as both child and teacher become more confident and competent (see chapter 6 below for further discussion of education).

### **Article 32: International cooperation**

The Convention has important implications for the role of international actors, and of the UN system in particular. In article 32, the Convention recognizes the importance of international cooperation in support of national efforts for the realization of its purpose and objectives, and stresses that cooperation should aim at ensuring that development programmes are inclusive of, and accessible to persons with disabilities. The Convention is also open for accession to regional integration organizations. In addressing the need for all development programmes to be inclusive and accessible to persons with disabilities, article 32 identifies a range of areas in which international partners are expected to play a facilitating and supportive role. With the establishment of the Convention, disability will take on a more prominent role in the development process. In these actions disability must be increasingly addressed within all programmes, not only as a separate item.

Once a country ratifies the Convention, its provisions, and compliance with them, should be reflected in elements of its national development agenda, including its poverty reduction strategy and UN Development Assistance Framework. The UN and other international actors will in turn be called upon by governments and civil society to provide guidance and assistance in the implementation process.

## **2.9 Monitoring implementation of the Convention**

In order for the Convention to have a positive impact on the quality of life of persons with disabilities and on society as a whole, effective procedures are required for its implementation at the national level. The roles and responsibilities of stakeholders – including member States, persons with disabilities and their organizations, UN system entities, development partners, and regional entities – in

the implementation and monitoring of the Convention need to be clearly established and defined. The Convention sets out reporting obligations at both the national and international levels. Particular priority must be given to the actions needed at the national level. As outlined in article 33 of the Convention, States parties are required to designate focal point(s) within government, and consider the establishment of a coordination mechanism within government to facilitate relevant actions. The article also highlights the importance of an independent mechanism for monitoring at the national level, and the engagement of civil society, especially the involvement and participation of persons with disabilities and their organizations in the process.

At the international level, the Convention establishes a treaty monitoring body, the Committee on the Rights of Persons with Disabilities (in Geneva), as well as a Conference of States parties (in New York). As is the case for other human rights treaty bodies, the Committee will be made up of independent experts, receiving secretariat support from the Office of the High Commissioner for Human Rights. The Committee will consist initially of 12 members elected by secret ballot from a list submitted by States parties. Each ratifying country is expected to provide an initial comprehensive report to this Committee on progress over a two-year period to implement the Convention, and to report subsequently every four years. The Committee will also take into account the representations of NGOs and members of civil society. The reports of the UN Committee will be in the public domain and available on the internet. The Optional Protocol to the CRPD introduces additional procedures to strengthen the implementation of the Convention and the monitoring role of the Committee.

Within the UN system, each agency involved in the disability field will play a distinctive role. In respect of children and women, UNICEF is particularly well placed to provide support to government and civil society partners, especially organizations of persons with disabilities, in the promotion of the implementation and monitoring of the Convention. The UN Division of Economic and Social Affairs (UN-DESA) has been called upon to lead the establishment of an inter-agency group that will support the development of a UN system-wide strategy to advance the implementation of the Convention. The CRPD process has represented an unprecedented opportunity for civil society and the

nongovernmental sector. For the first time in history, the United Nations General Assembly attributed a leading role to non-governmental organizations in the elaboration of an international convention by specifically involving them in its working structures. This partnership between organizations of persons with disabilities and development and human rights actors will be maintained throughout the implementation and monitoring process.

- **Global review of the rights of children with disabilities by the UN Committee on the Rights of the Child**

The most wide-ranging and authoritative evidence of worldwide discrimination comes from a recent global overview of the situation of children with disabilities conducted by the UN Committee on the Rights of the Child, in its General Comment 9 based on analysis of the reports submitted over a long period by many States parties.<sup>32</sup> In this General Comment the Committee reported that some recommendations had to be made specifically concerning children with disabilities for the “overwhelming majority” of countries reviewed. The Committee emphasized that obstacles stemmed not from the disability itself but from “a combination of social, cultural, attitudinal and physical barriers that children with disabilities encounter in their daily lives.” These barriers are reflected in many reports from countries in all regions of the world and are by no means confined to the poorest countries.

- **Confronting discrimination**

Discrimination can manifest itself in various ways: through cultural prejudices, socio-economic, legislative or administrative measures, as well as environments that are inaccessible to persons with disabilities. Cultural prejudices often reflect guilt, shame or even fear associated with the birth of a child with a disability. It is reported by Save the Children that where there is a cultural reverence for bloodlines, babies born with physical or intellectual impairments are often hidden away or abandoned because they are considered to be a sign of impurity.<sup>33</sup> Cultural attitudes are also influenced by negative or stereotyped depictions of persons with disabilities in folklore, books, films or television programmes. However, the experience of many countries has demonstrated that the existence of deep-seated negative attitudes should not be regarded as an insuperable obstacle to progress.

Preconceptions or lack of open discussion about disability sometimes results in children with disabilities being overlooked in the planning and provision of services. In other cases, the services put in place are inappropriate, poorly conceived or ill-funded. Even in situations where such barriers can be overcome, this means little if children with disabilities are unable to gain physical access to schools, hospitals, public buildings or recreational areas, or to use public transportation to do so. Furthermore, the marginalization experienced by children with disabilities is all too often compound and cumulative. Children may be discriminated against or suffer social exclusion not only because they have an impairment, but also because of their gender, or because they belong to other groups that experience discrimination (see box 5.1) such as children living in poverty, children who have lost their parents, children living on the street, or children belonging to religious, ethnic or national minorities. In this latter regard, the situation of Roma children in Central and Eastern Europe and the Commonwealth of Independent States (the CEE/CIS region) represents a particularly damaging cycle of disability, discrimination and disadvantage. Available evidence suggests very high rates of classified disability among the Roma minority. Such a diagnosis may in part represent higher rates of impairment as an outcome of entrenched disadvantage, unmet needs and lack of information. However, it is likely also to be based in stigma and bias, reflecting the way that aptitudes are measured according to dominant cultural standards. The perpetuation of disadvantage is further seen in the observed practice of placing Roma children in institutions or in special, segregated schools, regardless of their impairment status.

## **2.10 HUMAN RIGHTS OF CHILDREN WITH DISABILITIES TODAY**

The effect of multiple discriminations is typically more than merely additive. For example, a family belonging to a minority group that experiences discrimination is more likely to live in poverty and consequently have limited access to proper medical care. The combination of these factors increases the likelihood that a child will both be born with some form of impairment and have lower priority in access to already limited support and services. The consequences of disability can be particularly serious for women and girls because they risk being discriminated

against on grounds of their gender as well as of their particular impairment. As a result they may have even more limited access to essential services, including health care, education and vocational rehabilitation.

### **2.10.1 Access to health, rehabilitation and welfare services**

Of the 200 million children reported living with disabilities, few of those living in developing countries have effective access to health and rehabilitation or support services. For example, they may miss out on vaccinations, or treatment for simple fever or diarrhoea, easily curable illnesses Mortality for children with disabilities under five can be as high as 80 per cent in some income poor countries.<sup>35</sup> Children with severe disabilities may not survive childhood because of a lack of basic primary health care facilities. In addition, rehabilitation services are often concentrated in urban areas and can be very expensive.<sup>36</sup> Even the simplest aids and appliances to reduce the impact of a child's impairment may not be available. Even where services are largely urban based, children with disability will often have to be left by their parents for weeks or months while they receive care – with profound psychological consequences.

Under article 24 of the CRC, every child has the right to enjoy the highest attainable standard of health and to have access to facilities for rehabilitation and the treatment of illness. Once a child is identified as having an impairment, however, other normative conditions may be overlooked, including basic health care. In countries where access to basic medical services is generally difficult, it is likely to be significantly more difficult for children and adults with disabilities to obtain proper medical treatment. Many medical decisions made around the globe have come to convey that the life of a child with a disability is considered to be worth less than that of a child who has no disability. There are documented cases of physicians in both income-rich and income poor countries who have chosen to deny children with disabilities access to essential operations. In extreme cases, doctors, sometimes backed by the courts, have refused to intervene to save the life of a child with a disability, even when the child's parents have sought such intervention.<sup>38</sup> Studies have also suggested that physicians may withhold medical and rehabilitative services from people with severe impairments because of assumptions that they are too severely disabled to benefit. In other respects, health care providers may lack awareness of underlying causes that have a persistent

influence on the health and well-being of persons with disabilities. Yet in other instances, children with disabilities have been subjected to clinical and pharmacological interventions that would be considered unacceptable if carried out on children without disabilities in the same community, with examples including electroshock therapy, excessive medication and routine hysterectomies.<sup>39</sup> The result in all such instances is that children with disabilities are deprived of individualized or appropriate care.

### **2.10.2 Institutionalization and lack of appropriate care**

Four decades of work to improve the living conditions of children with disabilities in institutions have taught us one major lesson: there is no such thing as a good institution.

Placement of children in institutional care remains a common response to disability in some parts of the world. The ability of parents or caregivers to cope with a child with a disability may be compromised for different reasons. They may, for example, find themselves isolated in a community that does not understand their child's impairment; and they may lack the needed economic and social support, or the required information, to be able to provide the needed care and assistance for their children.

However, it has become widely accepted that institutional care for children whose needs cannot be met within their own family is highly detrimental to their well-being and development. Institutionalization often means that children are cut off from their families and the life in their communities. Research has demonstrated that children experience developmental delays and potentially irreversible psychological damage by growing up in such environments. Even in a well-staffed institution, a child rarely gets the amount of attention he or she would receive from their own parents and families, or from substitute caregiver families in the community. In addition, children in these settings are denied the important benefit of modeling by other children, which is critical for learning.

Under the CRC, children, including children with disabilities, have the right to be cared for by their parents (article 7) and not be separated from their parents unless a competent authority determines this to be in the child's best interests (article 9).



In this regard, there is little evidence to suggest that the best interests of a child with a disability are promoted through segregated structures or facilities rather than in an inclusive society in which all children are able to experience and benefit from diversity. This is reinforced by the CRPD (article 23), which requires: "States parties shall undertake that where the immediate family is unable to care for a child with disabilities, to take every effort to provide alternative care within the wider family, and, failing that, within the community in a family setting." Furthermore, article 25 of the CRC states: "when a child has been placed for the purposes of care or treatment, she/he has a right to a periodic review of treatment provided and all other circumstances relevant to the child's placement." The available evidence suggests, however, that such reviews rarely take place.

Once institutionalized, adolescents and young persons with disabilities are also at increased risk of neglect, social isolation and abuse. The World Report on Violence against Children, for example, presents evidence on the incidence of violence in relation to the provision of care, including by institutional staff; violence represented by a lack of care; and bullying and physical violence by other children.<sup>51</sup> In almost all countries in Central and Eastern Europe and the Baltic States, the number of children in public care increased after transition. The number of children with disabilities living in institutions rose rapidly during the early transition years, doubling and trebling their numbers over a short period. At the end of the 1990s, close to 1 million children (about 1 per cent of all children) were reported to be living in institutions in the 27 countries of the CEE/CIS and Baltic States, including 317,000 children with disabilities.<sup>52</sup> Medical conditions such as epilepsy, cleft palate and scoliosis are sometimes considered sufficient reason for the unnecessary placement of children in a long-term residential facility.<sup>53</sup> A variety of reasons are given to justify such institutionalization: professionals may insist that institutions will provide the most effective care; there is a lack of support for families to allow them to care for these children at home; few services and supports exist in the community to help parents address the needs of these children. Combined, these factors often result in parents having little option but to assign their children to residential care. Trends like these were seen in the Russian Federation, where economic hardship following the transition contributed greatly to problems faced by children with disabilities and their families. With fewer resources available to them in the community, more and

more parents were forced to place children in institutions; in turn, the budgets of the institutions, already stretched, were required to cover the costs of an increased number of children.<sup>54</sup> In 2002 more than 200,000 children were living in 1,439 boarding schools (internets), although only 11 per cent of them were orphans, and a further 30,000 children with severe physical and intellectual impairments, half of whom were orphans, were cared for outside the education system in 151 boarding homes run by social protection agencies. A further 20,000 young children, mostly abandoned, lived in 249 infant homes run by health authorities. The practice of institutionalization is by no means restricted to Central and Eastern Europe and the CIS. Recent reports examine conditions in institutions, for example in Latin American countries,<sup>56</sup> as well as in the Middle East and South-Eastern Europe. For countries with a strong tradition of institutional provision, a major priority must be to develop appropriate services and financial supports in the community, especially to prevent abandonment and neglect. Wherever possible, if children cannot live with their own families they should be in alternative family situations, that is, living in ordinary homes in the local community. These families should be supported by experienced professionals and should be financially rewarded for their work and care. The children should receive appropriate education tailored to their needs, preferably in a regular school with appropriate support or, failing that, in a special class or special school. Continuing contact with the natural family needs to be maintained, with a view to their resuming care for the child at some point in the future, this time with additional support from professionals in the community. In the meantime professionals like these should be recruited and trained. In many cases there is scope to increase the capacity and involvement of other existing social networks, including faith-based groups and trade unions, in support of such initiatives. Many countries in Central and Eastern Europe and the Baltic States have begun to address these problems and to develop alternatives to institutional care, such as adoption, fostering and guardianship.

## **2.11 FOUNDATIONS FOR INCLUSION**

Interact with their peers and to participate in society, the greater the benefit is likely to be for all children. Early identification and assessment, combined with appropriate interventions, mean that potential difficulties can be identified in time

to limit the consequences of an impairment on a child's life and development and to maximize participation in all the activities usual for the child's age group. Primary health care workers, along with other community workers, have a key role to play in identifying infants and young children with developmental delays and impairments, and in supporting families to help their child to learn and develop. Early identification can also be promoted through the preparation of all family members, especially parents, to monitor their child's developmental progress through the use of simple instruments, strengthened with a basic understanding of children's capacities at different stages. The participation of the wider family, especially grandparents, is of great importance in ensuring parents feel supported and valued in this process. Health and community workers need to encourage the involvement of the extended family wherever possible.

### **2.11.1 Community-based rehabilitation**

A specific form of local support is community-based rehabilitation (CBR) programmes that are designed and run by local communities. CBR, which was first developed in the late 1970s and early 1980s by the World Health Organization (WHO), is a "strategy which, within general community development, promotes rehabilitation, equalization of opportunities, poverty reduction and social inclusion for all children and adults with disabilities at a local level." The major objective of CBR is to ensure that persons with disabilities and their families enjoy access to regular services and opportunities. In this way, they become active members of their communities and, equally, communities feel a sense of ownership with regard to these projects.<sup>90</sup> Community-based rehabilitation is implemented through the combined efforts of persons with disabilities themselves and their families in the neighborhood, along with the appropriate health, education, vocational and social services. The potential of CBR is fully realized when there is a strong culture of sharing information about good practice, and in providing evidence about coverage, quality of service, sustainability, comparability and cost effectiveness – a key characteristic of CBR projects when they are well managed.<sup>91</sup> Community-based rehabilitation can benefit everyone in the community. For example, when the community makes changes to facilitate access for persons with disabilities, it makes life easier for others who were not

recognized as having disabilities. If the community clears walkways and makes them smooth for wheelchairs to move easily, or for people with visual impairments to walk, then these walkways are also made easier for older persons or those pushing carriages or carts. Additionally, CBR can serve as a stimulus for community leaders and social groups to work together.

### **2.11.2 Involving children with disabilities**

As discussed previously, there are numerous reasons why children's participation should be encouraged, in daily life as well as in policy development. These arguments are particularly strong in the case of children with disabilities:

In advancing inclusion and overcoming obstacles, persons with disabilities themselves are the experts – nobody understands the impact of exclusion better than those who experience it.

A key element of citizenship is the right to express one's views and to influence decision making processes. Denying children with disabilities the right to be heard effectively means denying them full citizenship.

Decisions made about or on behalf of a child are better informed and more likely to produce positive outcomes if she or he is involved in the process.

The process of participation is a central part of learning to take responsibility, to make decisions and to develop self-esteem and confidence.

Children with no voice are vulnerable to abuse, violence and exploitation, since they have no means of challenging this oppression. Putting such initiatives into place is not a highly specialized operation requiring significant additional resources. In practice, the inclusion of children with disabilities can be significantly advanced by simply consulting with these children and their families when setting up projects or structures intended for a general population, or by maintaining an awareness of potential barriers to inclusion in any new initiatives. <sup>108</sup> Underestimation of the potential of children with severe or complex impairments is perhaps the greatest obstacle: experience has shown that all children can be helped to find the means to express meaningful choices and preferences.

## 2.12 ENSURING ASU PPORTIVEENVIRONMENT

Such as government ministries, local authorities, development agencies and children with disabilities and their families. The rights of children with disabilities are often most effectively promoted when 'disability issues' do not come under the responsibility of a single ministry. The mainstreaming of disability issues into existing programmes and throughout established sectors, such as health, education and social welfare ministries, might still involve establishing a focal point for disability to ensure that children with disabilities are included in all programmes. Without this, disability issues are in danger of being submerged and overlooked. One effective initiative has been to establish a national coordination committee that oversees disability issues in all ministries and at different administrative levels to ensure intersects oral coordination. Organizations of disabled persons should always be fully represented on an equal basis. In Turkey, for example, intersect oral coordination has been promoted through the establishment of a coordinating agency, the Administration of Disabled Persons.<sup>118</sup> An alternative is represented by South Africa, where both the Office on the Rights of the Child, and the Office on the Status of Disabled Persons, which are responsible for the Integrated National Disability Strategy, are based in the President's Office.

The development of national legislation and policy to address disability issues is an opportunity to ensure that public spaces, buildings, recreation areas and transport systems are conceived or modified in such a way that they can be used by all citizens and that government departments themselves take a lead in the employment of persons with disabilities. In this regard, a number of countries have made notable progress in modifying access to streets, buses, trains and some buildings for persons with disabilities. Access is not only a matter concerning the physical environment but involves enabling children with disabilities to overcome barriers to communication and day-to-day interaction with others. For example, sign language has been given the status of mother tongue under Finland's new school legislation.<sup>120</sup> In Central and Southern Africa, Braille materials and the provision of trained sign language interpreters are made available by many governments in the region. As regards entry into the workforce for young persons with disabilities who have reached the age of access to employment, governments in many European and Asian countries have introduced legislation and regulations

that require employers to reserve a certain quota of jobs for persons with disabilities. Other countries have introduced anti-discrimination laws that make it unlawful for employers to discriminate on in general. Similarly, explicit priority is given to children with disabilities as an integral element of Uganda's commitment to provide free primary education to four children in every family (see box 6.7 above). In Brazil, inclusion is part of wider efforts to address problems of poverty, marginalization and illiteracy. Some 5 million children have benefited from Bolsa Familia, a nationwide programme providing grants to the poorest families to send their children to school.<sup>115</sup> this programme is being implemented along with a national initiative on inclusive education and is further strengthened by municipal level capacity-building efforts.

### **2.12.1 International and regional partnerships**

If countries and agencies are to achieve the goals set out in international commitments, including Education for All, the Millennium Development Goals and 'A World Fit for Children', children with disabilities must be fully and visibly included in their policies and programmes. Children's rights can be promoted through the regular reports of the UN system and other organizations, including on progress towards the Millennium Goals. The Convention on the Rights of Persons with Disabilities will provide important mechanisms to monitor progress towards the attainment of their rights.<sup>128</sup> Identifying common goals creates synergies that make international efforts more effective. The 1981 International Year of the Disabled represented a critical watershed moment in relation to children with disabilities, with interest being mobilized around disability issues in UNICEF and other international agencies, and international NGOs such as Rehabilitation International, stimulating a range of innovative efforts. Subsequently, following the end of the Decade of Disabled Persons (1983–1992), an inter-agency working group consisting of WHO, UNESCO, the International Labor Organization (ILO) and UNICEF was formed to consult on issues related to childhood disability. The working group came together to build joint technical capacity through the development of training materials, workshops, and guidelines with indicators for early detection, and by designing effective interventions, including promoting access to mainstream education and social services. The governments of the Asia and Pacific region, which has by far the largest number

of persons with disabilities in the world, joined forces with NGOs in declaring 1993–2002 and 2003–2012 as Asian and Pacific Decades of Disabled Persons, establishing mutual initiatives and targets, goals and timeframes.<sup>129</sup> These initiatives were developed within the work programme of the UN Economic and Social Commission for Asia and the Pacific (ESCAP), which provided leadership and coordination across the entire region.

## **2.13 Convention on the Rights of Personswith Disabilities and Optional Protocol tothe Convention on the Rights of Personswith Disabilities**

### **Article 1: Purpose**

The purpose of the present Convention is to promote, protect and ensure the full and equal enjoyment of all human rights and fundamental freedoms by all persons with disabilities, and to promote respect for their inherent dignity. Persons with disabilities include those who have long-term physical, mental, intellectual or sensory impairments which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others.

### **Article 2: Definitions**

For the purposes of the present Convention: “Communication” includes languages, display of text, Braille, tactile communication, large print, accessible multimedia as well as written, audio, plain-language, human-reader and augmentative and alternative modes, means and formats of communication, including accessible information and communication technology; “Language” includes spoken and signed languages and other forms of non spoken languages; “Discrimination on the basis of disability” means any distinction, exclusion or restriction on the basis of disability which has the purpose or effect of impairing or nullifying the recognition, enjoyment or exercise, on an equal basis with others, of all human rights and fundamental freedoms in the political, economic, social, cultural, civil or any other field. It includes all forms of discrimination, including denial of reasonable accommodation; “Reasonable accommodation” means necessary and appropriate modification and adjustments not imposing a disproportionate or undue burden, where needed in a particular case, to ensure to

persons with disabilities the enjoyment or exercise on an equal basis with others of all human rights and fundamental freedoms; “Universal design” means the design of products, environments, programmes and services to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design. “Universal design” shall not exclude assistive devices for particular groups of persons with disabilities where this is needed.

### **Article 3: General principles**

The principles of the present Convention shall be:

- (a) Respect for inherent dignity, individual autonomy including the freedom to make one’s own choices, and independence of persons;
- (b) Non-discrimination;
- (c) Full and effective participation and inclusion in society;
- (d) Respect for difference and acceptance of persons with disabilities as part of human diversity and humanity;
- (e) Equality of opportunity;
- (f) Accessibility;
- (g) Equality between men and women;
- (h) Respect for the evolving capacities of children with disabilities and respect for the right of children with disabilities to preserve their identities.

### **Article 4: General obligations**

1. States parties undertake to ensure and promote the full realization of all human rights and fundamental freedoms for all persons with disabilities without discrimination of any kind on the basis of disability.
2. With regard to economic, social and cultural rights, each State party undertakes to take measures to the maximum of its available resources and, where needed, within the framework of international cooperation, with a view to achieving progressively the full realization of these rights, without prejudice to those



obligations contained in the present Convention that are immediately applicable according to international law.

3. In the development and implementation of legislation and policies to implement the present Convention, and in other decision-making processes concerning issues relating to persons with disabilities, States parties shall closely consult with and actively involve persons with disabilities, including children with disabilities, through their representative organizations.

4. Nothing in the present Convention shall affect any provisions which are more conducive to the realization of the rights of persons with disabilities and which may be contained in the law of a State party or international law in force for that State. There shall be no restriction upon or derogation from any of the human rights and fundamental freedoms recognized or existing in any State party to the present Convention pursuant to law, conventions, regulation or custom on the pretext that the present Convention does not recognize such rights or freedoms or that it recognizes them to a lesser extent.

5. The provisions of the present Convention shall extend to all parts of federal states without any limitations or exceptions.

#### **Article 5: Equality and non-discrimination**

1. States parties recognize that all persons are equal before and under the law and are entitled without any discrimination to the equal protection and equal benefit of the law.

2. States parties shall prohibit all discrimination on the basis of disability and guarantee to persons with disabilities equal and effective legal protection against discrimination on all grounds.

3. In order to promote equality and eliminate discrimination, States parties shall take all appropriate steps to ensure that reasonable accommodation is provided.

4. Specific measures which are necessary to accelerate or achieve de facto equality of persons with disabilities shall not be considered discrimination under the terms of the present Convention.

**Article 6: Women with disabilities**

1. States parties recognize that women and girls with disabilities are subject to multiple discrimination, and in this regard shall take measures to ensure the full and equal enjoyment by them of all human rights and fundamental freedoms.
2. States parties shall take all appropriate measures to ensure the full development, advancement and empowerment of women, for the purpose of guaranteeing them the exercise and enjoyment of the human rights and fundamental freedoms set out in the present Convention.

**Article 7: Children with disabilities**

1. States parties shall take all necessary measures to ensure the full enjoyment by children with disabilities of all human rights and fundamental freedoms on an equal basis with other children.
2. In all actions concerning children with disabilities, the best interests of the child shall be a primary consideration.
3. States parties shall ensure that children with disabilities have the right to express their views freely on all matters affecting them, their views being given due weight in accordance with their age and maturity, on an equal basis with other children, and to be provided with disability and age-appropriate assistance to realize that right.

**2.14 Optional Protocol to the Convention on the Rights of Persons with Disabilities**

The States parties to the present Protocol have agreed as follows:

**Article 1**

1. A State party to the present Protocol ('State party') recognizes the competence of the Committee on the Rights of Persons with Disabilities ('the Committee') to receive and consider communications from or on behalf of individuals or groups of individuals subject to its jurisdiction who claim to be victims of a violation by that State party of the provisions of the Convention.

2. No communication shall be received by the Committee if it concerns a State party to the Convention that is not a party to the present Protocol.

### **Article 2**

The Committee shall consider a communication inadmissible when:

- (a) The communication is anonymous;
- (b) The communication constitutes an abuse of the right of submission of such communications or is incompatible with the provisions of the Convention;
- (c) The same matter has already been examined by the Committee or has been or is being examined under another procedure of international investigation or settlement;
- (d) All available domestic remedies have not been exhausted. This shall not be the rule where the application of the remedies is unreasonably prolonged or unlikely to bring effective relief;
- (e) It is manifestly ill-founded or not sufficiently substantiated; or when
- (f) The facts that are the subject of the communication occurred prior to the entry into force of the present Protocol for the State party concerned unless those facts continued after that date.

### **Article 3**

Subject to the provisions of article 2 of the present Protocol, the Committee shall bring any communications submitted to it confidentially to the attention of the State party. Within six months, the receiving State shall submit to the Committee written explanations or statements clarifying the matter and the remedy, if any, that may have been taken by that State.

### **Article 4**

1. At any time after the receipt of a communication and before a determination on the merits has been reached, the Committee may transmit to the State party concerned for its urgent consideration a request that the State party take such

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interim measures as may be necessary to avoid possible irreparable damage to the victim or victims of the alleged violation.

2. Where the Committee exercises its discretion under paragraph 1 of this article, this does not imply a determination on admissibility or on the merits of the communication.

### **Article 5**

The Committee shall hold closed meetings when examining communications under the present Protocol. After examining a communication, the Committee shall forward its suggestions and recommendations, if any, to the State party concerned and to the petitioner.

### **Article 6**

1. If the Committee receives reliable information indicating grave or systematic violations by a State party of rights set forth in the Convention, the Committee shall invite that State party to cooperate in the examination of the information and to this end submit observations with regard to the information concerned.

2. Taking into account any observations that may have been submitted by the State party concerned as well as any other reliable information available to it, the Committee may designate one or more of its members to conduct an inquiry and to report urgently to the Committee. Where warranted and with the consent of the State party, the inquiry may include a visit to its territory.

3. After examining the findings of such an inquiry, the Committee shall transmit these findings to the State party concerned together with any comments and recommendations.

4. The State party concerned shall, within six months of receiving the findings, comments and recommendations transmitted by the Committee, submit its observations to the Committee.

5. Such an inquiry shall be conducted confidentially and the cooperation of the State party shall be sought at all stages of the proceedings.

**Article 7**

1. The Committee may invite the State party concerned to include in its report under article 35 of the Convention details of any measures taken in response to an inquiry conducted under article 6 of the present Protocol.
2. The Committee may, if necessary, after the end of the period of six months referred to in article 6.4, invite the State party concerned to inform it of the measures taken in response to such an inquiry.

**Article 8**

Each State party may, at the time of signature or ratification of the present Protocol or accession thereto, declare that it does not recognize the competence of the Committee provided for in articles 6 and 7.

**Article 9**

The Secretary-General of the United Nations shall be the depositary of the present Protocol.

**Article 10**

The present Protocol shall be open for signature by signatory States and regional integration organizations of the Convention at United Nations Headquarters in New York as of 30 March 2007.

**Article 11**

The present Protocol shall be subject to ratification by signatory States of this Protocol which have ratified or acceded to the Convention. It shall be subject to formal confirmation by signatory regional integration organizations of this Protocol which have formally confirmed or acceded to the Convention. It shall be open for accession by any State or regional integration organization which has ratified, formally confirmed or acceded to the Convention and which has not signed the Protocol.

**Article 12**

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1. 'Regional integration organization' shall mean an organization constituted by sovereign States of a given region, to which its member States have transferred competence in respect of matters governed by the Convention and this Protocol. Such organizations shall declare, in their instruments of formal confirmation or accession, the extent of their competence with respect to matters governed by the Convention and this Protocol. Subsequently, they shall inform the depositary of any substantial modification in the extent of their competence.
2. References to 'States parties' in the present Protocol shall apply to such organizations within the limits of their competence.
3. For the purposes of article 13, paragraph 1, and article 15, paragraph 2, any instrument deposited by a regional integration organization shall not be counted.
4. Regional integration organizations, in matters within their competence, may exercise their right to vote in the meeting of States parties, with a number of votes equal to the number of their member States that are parties to this Protocol. Such an organization shall not exercise its right to vote if any of its member States exercises its right, and vice versa.

### **Article 13**

1. Subject to the entry into force of the Convention, the present Protocol shall enter into force on the thirtieth day after the deposit of the tenth instrument of ratification or accession.
2. For each State or regional integration organization ratifying, formally confirming or acceding to the Protocol after the deposit of the tenth such instrument, the Protocol shall enter into force on the thirtieth day after the deposit of its own such instrument.

### **Article 14**

1. Reservations incompatible with the object and purpose of the present Protocol shall not be permitted.
2. Reservations may be withdrawn at any time.

**Article 15**

1. Any State party may propose an amendment to the present Protocol and submit it to the Secretary- General of the United Nations. The Secretary-General shall communicate any proposed amendments to States parties, with a request to be notified whether they favour a meeting of States parties for the purpose of considering and deciding upon the proposals. In the event that, within four months from the date of such communication, at least one third of the States parties favor such a meeting, the Secretary-General shall convene the meeting under the auspices of the United Nations. Any amendment adopted by a majority of two thirds of the States parties present and voting shall be submitted by the Secretary-General to the General Assembly for approval and thereafter to all States parties for acceptance.

2. An amendment adopted and approved in accordance with paragraph 1 of this article shall enter into force on the thirtieth day after the number of instruments of acceptance deposited reaches two thirds of the number of States parties at the date of adoption of the amendment. Thereafter, the amendment shall enter into force for any State party on the thirtieth day following the deposit of its own instrument of acceptance. An amendment shall be binding only on those States parties which have accepted it.

**Article 16**

A State party may denounce the present Protocol by written notification to the Secretary-General of the United Nations. The denunciation shall become effective one year after the date of receipt of the notification by the Secretary-General.

**Article 17**

The text of the present Protocol shall be made available in accessible formats.

**Article 18**

The Arabic, Chinese, English, French, Russian and Spanish texts of the present Protocol shall be equally authentic. In witness thereof the undersigned plenipotentiaries, being duly authorized thereto by their respective Governments, have signed the present Protocol.

## 2.15 Summary

The inclusion of children with disabilities is not simply a charitable act. It is a process inspired by the promotion of human rights that benefits the entire population of a country and provides a clear statement of a government's commitment to *all* its citizens and to the principles of good governance. International human rights instruments, including the Convention on the Rights of the Child and the Convention on the Rights of Persons with Disabilities, provide critical policy imperatives, frameworks and guidance for the development of inclusive practices. Inclusion represents the recognition of fundamental rights and freedoms of a group of children who have been historically among the most marginalized. It allows them to realize their full potential and frees them from the discrimination and prejudice that have kept them hidden and on the margins of society. Promoting inclusion requires mobilizing and increasing the capacity of those key individuals most influential and supportive for this process – especially the extended family, teachers, community members, health staff and other carers. Reliable and objective statistics are important to assist planning and resource allocation and to place children with disabilities more clearly on the map. Although the statistical databases necessary for this purpose require time to develop, planning and programming must move forward. Denying or delaying services to children with disability on the grounds that more data are needed is not acceptable. Plans, policies and budgets should be designed to allow changes and modifications, as additional data are made available over time.

This Innocent Digesthas emphasized a number of principles for advancing inclusion: consulting and listening to children with disabilities and their families themselves; adopting a life-cycle and integrated approach that responds to the evolving capacities of the child, and working with parents, other family members, peers and communities – as well as with service providers, policy-makers and key leaders. Specific strategies based on these principles include the planned shift of children with disabilities from segregated, institutionalized care and enabling them to be included within their families, local schools and communities, with all the required support systems and services.

A strong message from the World Conference on Special Needs Education held in Salamanca in 1994 was that child-centered schools are a training ground for



societies that respect the differences and dignity of all human beings.<sup>137</sup> Developing educational systems and learning opportunities that are capable of responding to the needs of all children is not only a matter of justice; it is also an essential investment in the future of every society that is committed to becoming or remaining democratic and participatory.<sup>138</sup> The movement towards developing truly inclusive societies is already underway in many parts of the world. It is gaining strength from the Millennium Declaration and the Millennium Development Goals, from other international commitments such as Education for All and 'A World Fit for Children', and above all from the Convention on the Rights of the Child and the new Convention on the Rights of Persons with Disabilities. With the necessary national and international commitment to establishing more just and inclusive societies, this momentum will decisively grow. Day by day, diversity is coming to be understood as a resource and more children and adults with disabilities are being given the opportunity to contribute to the life of their family, community and country.

## 2.16 References

- 1 United Nations General Assembly, A World Fit for Children, A/RES/S-27/2 (paragraphs 7(3) and 21), United Nations, New York, 11 October 2002. <[www.unicef.org/specialsession/docs\\_new/documents/A-RES-S27-2E.pdf](http://www.unicef.org/specialsession/docs_new/documents/A-RES-S27-2E.pdf)>
- 2 United Nations Educational, Scientific and Cultural Organization, World Conference on Special Needs Education: Access and quality, Salamanca, Spain, UNESCO, Paris, 1994. See <[www.unesco.org/education](http://www.unesco.org/education)> for follow-up reports.
- 3 United Nations, Disability Fact Sheet, International Convention on the Rights of Persons with Disabilities, United Nations, New York, 2006.
- 4 UNICEF, Children and Disability in Transition in CEE/CIS and Baltic States, Innocent Insight, UNICEF Innocent Research Centre, Florence, 2005.
- 5 UNICEF, 'UNICEF Gambia 2000 Annual Report' (internal document), UNICEF, Banjul, 2000.

6 United Nations Statistics Division, <<http://unstats.un.org/unsd/demographic/sconcerns/disability/>>, accessed 3 March 2007; also <[www.un.org/esa/socdev/enable/](http://www.un.org/esa/socdev/enable/)>

7 Cited by Persson, Ulrika, 'Have Children with Disabilities an Obvious Place in Society?' at 'Myths and Facts concerning Children with Disabilities' conference, Malmö, 9-11 December 1999; proceedings published by Rädda Barnen, Stockholm, 2000.

8 Elwan, A., *Poverty and Disability: A survey of the literature*, Washington, DC: World Bank, 1999.

9 Inclusion International, *Hear Our Voices: A global report: People with an intellectual disability and their families speak out on poverty and exclusion*, Inclusion International, London, 2006, <[www.inclusion-international.org](http://www.inclusion-international.org)>

10 Groce, N., *HIV/AIDS and Disability: Capturing hidden voices*, World Bank and Yale University Press, New Haven, 2004.

11 'UNICEF Says Small Arms and Light Weapons Take Young Victims: Children', Press release, UNICEF, 2001.

12 European Disability Forum, *Development Cooperation and Disability*, EDF Policy Paper, 2002, Doc. EDF 02/16 EN, <[www.edf-feph.org/Papers/pospaper/03.02/EDF%2002-16-Development%20Cooperation.pdf](http://www.edf-feph.org/Papers/pospaper/03.02/EDF%2002-16-Development%20Cooperation.pdf)>.

13 Wolfensohn, J. D., 'Poor, Disabled and Shut Out', *Washington Post*, 3 December 2002, p. A25.

14 World Bank, *Social Analysis and Disability: A guidance note – incorporating disabilityinclusive development into bank-supported projects*, Social Analysis Sectoral Guidance Note Series, Social Development Department, World Bank, Washington, D.C., 2007. See also Guernsey, K., M. Nicoli, and A. Ninio, 'Making Inclusion Operational: Legal and institutional resources for World Bank staff on the inclusion of disability issues in investment projects', *Law and Development Working Paper Series No. 1*, October 2006.

15 Mainstreaming Disability in Development Cooperation, an IDDC project to break the cycle of poverty and disability in development cooperation, financed by the European Commission, <[www.make-developmentinclusive.org](http://www.make-developmentinclusive.org)>.

16 For a comprehensive account of human rights initiatives see Herr, S., L. Gostin, and H. Köh (eds), *The Human Rights of Persons with Intellectual Disabilities: Different but equal*, Oxford University Press, Oxford, 2003. Further background on disability and human rights is contained in, for example, Lansdown, G., *It Is Our World Too! Disability Awareness in Action*, London, 2001; Quinn, Gerard, et al., *Human Rights and Disability: The current use and future potential of United Nations human rights instruments in the context of disability*, United Nations, Geneva, 2002, esp. ch. 8: Kilkelly, Ursula, 'Disability and Children: The Convention on the Rights of the Child (CRC)'

17 Quinn, Gerard, et al., *Human Rights and Disability*, op. cit., p. 1.

18 UN Human Rights Council, Implementation of General Assembly Resolution 60/251 of 15 March 2006 Entitled "Human Rights Council", The Right to Education of Persons with Disabilities, Report of the Special Reporter on the right to education, Vernor Muñoz, Document SA/HRC/4/29, United Nations, New York, 19 February 2007, <[www.ohchr.org/english/bodies/hr\\_council/docs/4session/A.HRC.4.29.pdf](http://www.ohchr.org/english/bodies/hr_council/docs/4session/A.HRC.4.29.pdf)>.

19 Available from United Nations, Division for Social Policy and Development, <<http://www.un.org/esa/socdev/enable/dissre00.htm>>.

20 Committee on the Rights of the Child, Sessional/ Annual Report of Committee, Report on the 16th Session (Geneva, 22 September- 10 October 1997), CRC/C/69, para. 331.

21 Blomgren, Lars, 'UN Standard Rules for Persons with Disabilities: Visions and tools in our work for a society for all children', delivered at 'Myths and Facts concerning Children with Disabilities' conference, Malmö, 9-11 December 1999; proceedings published by Rädde Barnen, Stockholm, 2000.

22 See <[www.un.org/esa/socdev/enable/rapporteur.htm](http://www.un.org/esa/socdev/enable/rapporteur.htm)> to access the full report and for detailed information on implementation of Rule 6 on Education.

23 Statement by Bengt Lindqvist, former UN Special Rapporteur on Disability (1994–2001), Ad Hoc Committee to Consider Proposals for a Comprehensive and Integral Convention on the Rights of Persons with Disabilities, New York, 29 July–9 August 2002.

24 Optional Protocol to the Convention on the Rights of Persons with Disabilities, <[http://untreaty.un.org/English/notpubl/IV\\_15a\\_english.pdf](http://untreaty.un.org/English/notpubl/IV_15a_english.pdf)>.

25 Committee on the Rights of the Child, General Comment 9. Rights of Children with Disabilities. 43rd session, Geneva, 11-29 September 2006.

26 Quoted in [www.un.org/millenniumgoals/](http://www.un.org/millenniumgoals/) (no date given), accessed 1 June 2007.

27 UN Millennium Development Goals, <[www.un.org/millenniumgoals](http://www.un.org/millenniumgoals)>; <[www.disabilitykar.net/learningpublication/developmentgoals.html](http://www.disabilitykar.net/learningpublication/developmentgoals.html)>.

28 <[www.disabilitykar.net/learningpublication/developmentgoals.html](http://www.disabilitykar.net/learningpublication/developmentgoals.html)>.

29 Disability Knowledge and Research forum, quoted in <[www.disabilitykar.net/learningpublication/developmentgoals.html](http://www.disabilitykar.net/learningpublication/developmentgoals.html)>, accessed 8 December 2006.

30 Wiman, R. (ed.), Disability Dimension in Development Action: Manual on inclusive planning, National Research and Development Centre for Welfare and Health in Finland (STAKES) for United Nations, 1997 and 2000. Revised version available online 2003 at <[www.un.org/esa/socdev/enable/publications/FFDisabilityDim0103\\_b1.pdf](http://www.un.org/esa/socdev/enable/publications/FFDisabilityDim0103_b1.pdf)>.

31 This definition is based on that used by the Equality Authority, Ireland.

32 Committee on the Rights of the Child, General Comment 9, op. cit.

33 Jones, Hazel, *Disabled Children's Rights: A practical guide*, Save the Children, Stockholm, 2001.

34 See UNICEF, Children and Disability in Transition in CEE/CIS and Baltic States, op. cit., pp. 25–26; see also Sammon, Elayn, *Defying Prejudice, Advancing Equality 2: Children and disability in the context of family breakdown*

in Central and South Eastern Europe and the Former Soviet Union, EveryChild, London, 2001.

35 Committee on the Rights of the Child, Summary Record of the 418th Meeting, CRC/C/SR.418, 6 October 1997.

36 Groce, Nora Ellen, An Overview of Young People Living with Disabilities: Their needs and their rights, UNICEF Programme Division (Working Paper Series), New York, 1999.

37 See, for example, Save the Children Alliance, Disabled Children's Rights: A CD-Rom with examples of good practice and violations from around the world, available with Jones, Hazel, Disabled Children's Rights, op. cit.

38 Lansdown, G., *It Is Our World Too!* op. cit.

39 United Nations Secretary-General's Study on Violence against Children, Summary Report of the Thematic Meeting on Violence against Children with Disabilities, 28 July 2005, United Nations, New York, p. 18, <[www.violencestudy.org/r180](http://www.violencestudy.org/r180)>.

40 See, for example, World Health Organization, Disability Prevention and Rehabilitation: A guide for strengthening the basic nursing curriculum, Document WHO/RHB/96.1, Division of Health Promotion, Education and Communication, Geneva, 1996, <[http://whqlibdoc.who.int/hq/1996/WHO\\_RHB\\_96.1.pdf](http://whqlibdoc.who.int/hq/1996/WHO_RHB_96.1.pdf)>.

41 Mittler, H., Families Speak Out: International perspectives on families' experience of disability, Brookline Books, Boston, 1994.

42 Children's Law Centre, NGO Alternative Report on the Implementation of the Convention on the Rights of the Child in the UK, CRC 31st Session, 16 September-4 October 2002, <[www.crin.org/docs/resources/treaties/crc.31/UK\\_ngo\\_report.doc](http://www.crin.org/docs/resources/treaties/crc.31/UK_ngo_report.doc)>. See also examples from the CEE/CIS region in UNICEF, Children and Disability in Transition in CEE/CIS and Baltic States, op. cit.

43 United Nations Educational, Scientific and Cultural Organization, Open File on Inclusive Education: Support materials for managers and administrators, UNESCO, Paris, 2001.

44 Carr, J., *Down's Syndrome: Children growing up*, Cambridge University Press, Cambridge, 1995.

45 Statistic quoted in Children's Rights Alliance for England, Report to the Pre-Sessional Working Group of the Committee on the Rights of the Child, Preparing for Examination of the UK's Second Report under the CRC, 2002, <[www.crin.org/docs/resources/treaties/crc.31/CRC\\_England\\_2002.pdf](http://www.crin.org/docs/resources/treaties/crc.31/CRC_England_2002.pdf)>.

46 Saleh, Lena and Sai Väyrynen, 'Inclusive Education: Consensus, conflict and challenges', UNESCO, Paris, 1999.

47 Centre for Information and Statistics on Labour and Social Affairs, Vietnam Child Disability Survey 1998, Ministry of Labour, Invalids and Social Affairs (MOLISA), Vietnam and UNICEF, Hanoi, 2000.

48 Saleh, Lena, 'Rights of Children with Special Needs: From rights to obligations and responsibilities', paper presented at the International Conference on Children's Rights in Education, 27–30 April 1998, Copenhagen.

### UNIT 3

**International Frameworks: Salamanca Framework (1994),  
Biwako Millennium Framework of Action (2002)**

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### 3.11 SUMMARY

## 3.1 Introduction

We, the members and associate members of ESCAP represented at the High-level Intergovernmental Meeting to Conclude the Asian and Pacific Decade of Disabled Persons, Recognize that while an estimated 400 million persons with disabilities have the capacity to contribute to national development in the Asian and Pacific region and have increasingly become agents of change in their communities through their collective action, the majority of persons with disabilities are still excluded from education, employment and other economic and social opportunities and constitute some 20 per cent of the poorest people,

Recall that following the International Year of Disabled Persons in 1981, the United Nations General Assembly, in its resolution 37/52 of 3 December 1982, adopted the World Programme of Action concerning Disabled Persons, aimed at achieving full participation and equality and protection of rights of persons with disabilities, Also recall the continuing commitment of Governments in the Asian and Pacific region to the promotion of full participation and equality of persons with disabilities in the Asian and Pacific region and to the improvement of their lives through the proclamation of the Asian and Pacific Decade of Disabled Persons, 1993-2002, at the end of the United Nations Decade of Disabled Persons



(1983-1992) and through the adoption of the Proclamation on the Full Participation and Equality of People with Disabilities in the Asian and Pacific Region and the Agenda for Action for the Asian and Pacific Decade of Disabled Persons, 1993-2002, at the launch of the Decade at Beijing in 1992, Affirm the policy guidelines set out in the Agenda for Action for achieving the goals of the Asian and Pacific Decade of Disabled Persons within the 12 policy areas (national coordination, legislation, information, public awareness, accessibility and communication, education, training and employment, prevention of causes of disability, rehabilitation services, assistive devices, self-help organizations and regional cooperation) and the 107 specific targets adopted at a regional review meeting in 1995, further strengthened in 1999 and endorsed by the Commission at its fifty-sixth session in 2000,

Recognize that in the 1990s, United Nations initiatives concerning global policies and programmes in areas such as education, environment, human rights, population and development, social development, advancement of women, children, and shelter and habitat incorporated disability issues as substantive concerns in their declarations, frameworks and strategic action programmes. In particular, the World Summit for Social Development, held at Copenhagen in March 1995, in its Copenhagen Declaration on Social Development noted that people with disabilities, as one of the world's largest minorities, are often forced into poverty, unemployment and social isolation. It recommended the promotion of the Standard Rules on the Equalization of Opportunities for Persons with Disabilities and the development of strategies for implementation of the Rules, Note that the world community has expressed its commitment to economic and social development in the face of rapid globalization in adopting General Assembly resolution 55/2 of 8 September 2000 entitled United Nations Millennium Declaration, embodying a large number of specific commitments aimed at improving the lot of humanity in the twenty-first century, Appreciate that under such a favorable policy milieu at the global and regional levels, ESCAP members and associate members adopted resolution 58/4 of 22 May 2002 on promoting an inclusive, barrier-free and rights-based society for people with disabilities in the Asian and Pacific region in the twenty-first century, by which it proclaimed the extension of the Asian and Pacific Decade of Disabled Persons, 1993-2002, for another decade, 2003-2012. The resolution will give further

impetus to the implementation of the World Programme of Action concerning Disabled Persons and the Agenda for Action for the Asian and Pacific Decade of Disabled Persons in the region beyond 2002, Agree that overall improvement has been achieved in all 12 policy areas under the Agenda for Action, but that progress has been uneven, particularly in the continuing and alarmingly low rate of access to education for children and youth with disabilities, and has been marked by significant sub regional disparities, Encourage Governments to actively implement the paradigm shift from a charity-based approach to a rights-based approach to the development of persons with disabilities and to move towards the human rights perspective, especially the perspective of the right to development for persons with disabilities, bearing in mind General Assembly resolution 56/168 of 19 December 2001 on a comprehensive and integral international convention to promote and protect the rights and dignity of persons with disabilities, Urge Governments in the region which have not done so to join the signatories to the Proclamation on the Full Participation and Equality of People with Disabilities in the Asian and Pacific Region and to strive to achieve the 107 targets for the implementation of the Agenda for Action for the Asian and Pacific Decade of Disabled Persons, Adopt the Biwako Millennium Framework for Action to promote an inclusive, barrier-free and rights-based society for persons with disabilities in the region. An inclusive society means a society for all and a barrier-free society means a society free from physical and attitudinal barriers, as well as social, economic and cultural barriers. A rights-based society means a society based on the concept of human rights, including the right to development,

Confirm that the Biwako Millennium Framework for Action is set in the context of relevant disability-specific United Nations international instruments, mandates and recommendations, including General Assembly resolutions 2856 (XXVI) of 20 December 1971 on the Declaration on the Rights of Mentally Retarded Persons, 3447 (XXX) of 9 December 1975 on the Declaration on the Rights of Disabled Persons, 37/52 of 3 December 1982 on the World Programme of Action concerning Disabled Persons, the Rehabilitation and Employment (Disabled Persons) Convention (No. 159), 1983, adopted by the International Labour Organization on 20 June 1983, and its recommendation on that Convention, General Assembly resolution 48/96 of 20 December 1993 on Standard Rules on

the Equalization of Opportunities for Persons with Disabilities and the Salamanca Statement and Framework for Action on Special Needs Education, Anticipate that the Biwako Millennium Framework for Action will contribute to attaining the millennium development goals and targets as issues relating to persons with disabilities are vital concerns to be addressed in realizing the relevant millennium development goals and targets.

### **3.2 PRINCIPLES AND POLICY DIRECTIONS OF THE BIWAKO MILLENNIUM FRAMEWORK FOR ACTION**

To promote the goals of an inclusive, barrier-free and rights-based society for persons with disabilities in the Asian and Pacific region, the Biwako Millennium Framework for Action, is guided by the following principles and policy directions:

- (1) Enact and/or enforce legislation and policies related to equal opportunities and treatment of persons with disabilities and their rights to equity in education, health, information and communications, training and employment, social services and other areas. Such legislation and policies should include persons with all types of disabilities, women and men, and people in urban and remote and rural areas. They should be rights-based and promote inclusive and multisectoral approaches.
- (2) Include disability dimensions in all new and existing laws, policies plans, programmes and schemes.
- (3) Establish or strengthen national coordination committees on disability which will develop and coordinate the implementation and monitoring of the policies concerning disability, with effective participation from organizations of and for persons with disabilities.
- (4) Support the development of persons with disabilities and their organizations and include them in the national policy decision-making process on disability, with special focus on the development of women with disabilities and their participation in self-help organizations of persons with disabilities as well as in mainstream gender initiatives.

- (5) Ensure that disabled persons be an integral part of efforts to achieve the millennium development goals, particularly in the areas of poverty alleviation, primary education, gender and youth employment.
- (6) Strengthen national capacity in data collection and analysis concerning disability statistics to support policy formulation and programme implementation.
- (7) adopt a policy of early intervention in all multisectoral areas, including education, health and rehabilitation, and social services for children with disabilities from birth to four years.
- (8) Strengthen community-based approaches in the prevention of causes of disability, rehabilitation and equalization of opportunities for persons with disabilities.
- (9) Adopt the concept of universal and inclusive design for all citizens, which is cost-effective, in the development of infrastructure and services in the areas of, inter alia, rural and urban development, housing, transport and telecommunication.

### **3.3 PRIORITY AREAS FOR ACTION**

Further efforts need to focus on priority areas where progress was found inadequate and action was lagging during the implementation of the Asian and Pacific Decade of Disabled Persons, 1993-2002. By resolution 58/4, Governments in the region defined the priority policy areas as:

Self-help organizations of persons with disabilities and related family and parent associations;

Women with disabilities; Early detection, early intervention and education; Training and employment, including self-employment; Access to built environments and public transport; Access to information and communications, including information, communications and assistive technologies; Poverty alleviation through capacity-building, social security and sustainable livelihood programmes. For each priority area, the following have been identified: (a) critical issues, (b) millennium development goals, where applicable, (c) targets of the Biwako Framework and (d) action required achieving those targets.

### **3.4 THE SALAMANCA STATEMENT ON PRINCIPLES, POLICY AND PRACTICE IN SPECIAL NEEDS EDUCATION**

This Framework for Action on Special Needs Education was adopted by the World Conference on Special Needs Education organized by the Government of Spain in co-operation with UNESCO and held in Salamanca from 7 to 10 June 1994. Its purpose is to inform policy and guide action by governments, international organizations, national aid agencies, non-governmental organizations and other bodies in implementing the Salamanca Statement on Principles, Policy and Practice in Special Needs Education. The Framework draws extensively upon the national experience of the participating countries as well as upon resolutions, recommendations and publications of the United Nations system and other intergovernmental organizations, especially the Standard Rules on the Equalization of Opportunities for Persons with Disabilities. It also takes account of the proposals, guidelines and recommendations arising from the five regional seminars held to prepare the World Conference.

The guiding principle that informs this Framework is that schools should accommodate all children regardless of their physical, intellectual, social, emotional, linguistic or other conditions. This should include disabled and gifted children, street and working children, children from remote or nomadic populations, children from linguistic, ethnic or cultural minorities and children from other disadvantaged or marginalized areas or groups. These conditions create a range of different challenges to school systems. In the context of this Framework, the term 'special educational needs' refers to all those children and youth whose needs arise from disabilities or learning difficulties. Many children experience learning difficulties and thus have special educational needs at some time during their schooling. Schools have to find ways of successfully educating all children, including those who have serious disadvantages and disabilities. There is an emerging consensus that children and youth with special educational needs should be included in the educational arrangements made for the majority of children. This has led to the concept of the inclusive school. The challenge confronting the inclusive school is that of developing child centered pedagogy capable of successfully educating all children, including those who have serious disadvantages and disabilities. The merit of such schools is not only that they are

cap able of providing quality education to all children; their establishment is a crucial step in helping to change discriminatory attitudes, in creating welcoming communities and in developing an inclusive society.

A change in social perspective is imperative. For far too long, the problems of people with disabilities have been compounded by a disabling society that has focused upon their impairments rather than their potential.

### **3.5 I NEW THINKING IN SPECIAL NEEDS EDUCATION**

The trend in social policy during the past two decades has been to promote integration and participation and to combat exclusion. Inclusion and participation are essential to human dignity and to the enjoyment and exercise of human rights. Within the field of education, this is reflected in the development of strategies that seek to bring about a genuine equalization of opportunity. Experience in many countries demonstrates that the integration of children and youth with special educational needs is best achieved within inclusive schools that serve all children within a community. It is within this context that those with special educational needs can achieve the fullest educational progress and social integration. While inclusive schools provide a favourable setting for achieving equal opportunity and full participation, their success requires a concerted effort, not only by teachers and school staff, but also by peers, parents, families and volunteers. The reform of social institutions is not only a technical task; it depends, above all, upon the conviction, commitment and good will of the individuals who constitute society.

The fundamental principle of the inclusive school is that all children should learn together, wherever possible, regardless of any difficulties or differences they may have. Inclusive schools must recognize and respond to the diverse needs of their students, accommodating both different styles and rates of learning and ensuring quality education to all through appropriate curricula, organizational arrangements, teaching strategies, resource use and partnerships with their communities. There should be a continuum of support and services to match the continuum of special needs encountered in every school.

Within inclusive schools, children with special educational needs should receive whatever extra support they may require to ensure their effective education. Inclusive schooling is the most effective means for building solidarity between

children with special needs and their peers. Assignment of children to special schools – or special classes or sections within a school on a permanent basis – should be the exception, to be recommended only in those infrequent cases where it is clearly demonstrated that education in regular classrooms is incapable of meeting a child's educational or social needs or when it is required for the welfare of the child or that of other children.

The situation regarding special needs education varies enormously from one country to another. There are, for example, countries that have well established systems of special schools for those with specific impairments. Such special schools can represent a valuable resource for the development of inclusive schools. The staff of these special institutions possesses the expertise needed for early screening and identification of children with disabilities. Special schools can also serve as training and resource centres for staff in regular schools. Finally, special schools or units within inclusive schools – may continue to provide the most suitable education for the relatively small number of children with disabilities who cannot be adequately served in regular classrooms or schools. Investment in existing special schools should be geared to their new and expanded role of providing professional support to regular schools in meeting special educational needs. An important contribution to ordinary schools, which the staff of special schools can make, is to the matching of curricular content and method to the individual needs of pupils.

Countries that have few or no special schools would, in general, be well advised to concentrate their efforts on the development of inclusive schools and the specialized services needed to enable them to serve the vast majority of children and youth – especially provision of teacher training in special needs education and the establishment of suitably staffed and equipped resource centers to which schools could turn for support. Experience, especially in developing countries, indicates that the high cost of special schools means, in practice, that only a small minority of students, usually an urban élite, benefit from them. The vast majority of students with special needs, especially in rural areas, are as a consequence provided with no services whatsoever. Indeed, in many developing countries, it is estimated that fewer than 1 per cent of children with special educational needs are included in existing provision. Experience, moreover, suggests that inclusive

schools, serving all of the children in a community, are most successful in eliciting community support and in finding imaginative and innovative ways of using the limited resources that are available.

### **3.6 GUIDELINES FOR ACTION AT THE NATIONAL LEVEL**

Integrated education and community-based rehabilitation represent complementary and mutually supportive approaches to serving those with special needs. Both are based upon the principles of inclusion, integration and participation, and represent well-tested and cost-effective approaches to promoting equality of access for those with special educational needs as part of a nationwide strategy aimed at achieving education for all. Countries are invited to consider the following actions concerning the policy and organization of their education systems.

Legislation should recognize the principle of equality of opportunity for children, youth and adults with disabilities in primary, secondary and tertiary education carried out, in so far as possible, in integrated settings.

Parallel and complementary legislative measures should be adopted in the fields of health, social welfare, vocational training and employment in order to support and give full effect to educational legislation.

Educational policies at all levels, from the national to the local, should stipulate that a child with a disability should attend the neighborhood school that is, the school that would be attended if the child did not have a disability. Exceptions to this rule should be considered on a case-by-case basis where only education in a special school or establishment can be shown to meet the needs of the individual child.

The practice of 'mainstreaming' children with disabilities should be an integral part of national plans for achieving education for all. Even in those exceptional cases where children are placed in special schools, their education need not be entirely segregated. Part-time attendance at regular schools should be encouraged. Necessary provision should also be made for ensuring inclusion of youth and adults with special needs in secondary and higher education as well as in training



programmes. Special attention should be given to ensuring equality of access and opportunity for girls and women with disabilities.

Special attention should be paid to the needs of children and youth with severe or multiple disabilities. They have the same rights as others in the community to the achievement of maximum independence as adults and should be educated to the best of their potential towards that end. Educational policies should take full account of individual differences and situations. The importance of sign language as the medium of communication among the deaf, for example, should be recognized and provision made to ensure that all deaf persons have access to education in their national sign language. Owing to the particular communication needs of deaf and deaf/blind persons, their education may be more suitably provided in special schools or special classes and units in mainstream schools.

Community-based rehabilitation should be developed as part of a global strategy for supporting cost-effective education and training for people with special educational needs. Community-based rehabilitation should be seen as a specific approach within community development aimed at rehabilitation, equalization of opportunities and social integration of all people with disabilities; it should be implemented through the combined efforts of people with disabilities themselves, their families and communities, and the appropriate education, health, vocational and welfare services.

Both policies and financing arrangements should encourage and facilitate the development of inclusive schools. Barriers that impede movement from special to regular schools should be removed and a common administrative structure organized. Progress towards inclusion should be carefully monitored through the collection of statistics capable of revealing the number of students with disabilities who benefit from resources, expertise and equipment intended for special needs education as well as the number of students with special educational needs enrolled in regular schools.

### **3.7 TARGETS AND ACTION IN THE PRIORITY AREAS**

#### **3.7.1 Self-help organizations of persons with disabilities and related family and parent associations**

## 1. Critical issues

Persons with disabilities are the most qualified and best equipped to support, inform and advocate for themselves and other persons with disabilities. Evidence suggests that the quality of life of persons with disabilities, and of the broader community, improves when disabled persons themselves actively voice their concerns and participate in decision-making. Self-help organizations are the most qualified, best informed and most motivated to speak on their own behalf concerning the proper design and implementation of policy, legislation and strategies which will ensure their full participation in social, economic, cultural and political life and enable them to contribute to the development of their communities.

It is imperative to recognize the right of persons with disabilities to self-representation and to strengthen their capacity to participate in the decision-making process. Persons with disabilities must articulate their own issues and advocate for reforms that will bring about their development and independent living in their communities and society at large. However, when children and others are not able to represent themselves, their parents, family members and other supporters should be encouraged and enabled to help advocate their rights and needs until such support is no longer necessary.

## 2. Targets

Target 1. Governments, international funding agencies and non-governmental organizations (NGOs) should, by 2004, establish policies with the requisite resource allocations to support the development and formation of self-help organizations of persons with disabilities in all areas, and with a specific focus on slum and rural dwellers. Governments should take steps to ensure the formation of parents associations at local levels by the year 2005 and federate them at the national level by year 2010.

Target 2. Governments and civil society organizations should, by 2005, fully include organizations of persons with disabilities in their decision-making processes involving planning and programme implementation which directly and indirectly affects their lives.

### **3. Action required achieving targets**

Governments should implement measures under the direction of the national coordination committee on disability to increase the level of consultations between self-help organizations of persons with disabilities and diverse sectoral ministries, as well as with civil society and the private sector. These measures should include training of persons with disabilities, including women with disabilities, on how to participate effectively in the various decision-making processes. Governments should establish guidelines for the conduct of consultations and the process should be periodically reviewed and evaluated by representatives of self-help organizations of persons with diverse disabilities.

Governments should establish a policy review panel within the national coordination committee on disability consisting of representatives of persons with diverse disabilities. The panel should review all policies and their implementation which directly or indirectly affect persons with disabilities.

Governments should take action to increase the representation of persons with disabilities in all areas of public life, including government, at all levels from national to local, as well as the legislature and judicial bodies. This should be promoted by means of affirmative action and anti-discrimination legislation.

#### **3.7.2 Women with disabilities**

##### **1. Critical issues**

Women with disabilities are one of the most marginalized groups in society, as they are multiply disadvantaged through their status as women, as persons with disabilities, and are over-represented among persons living in poverty. Women and girls with disabilities, to a greater extent than boys and men with disabilities, face discrimination within the family, are denied access to health care, education, vocational training, employment and income generation opportunities, and are excluded from social and community activities.

Women and girls with disabilities encounter further discrimination as they are exposed to greater risk of physical and sexual abuse, denial of their reproductive rights, and reduced opportunity to enter marriage and family life. In rural areas

girls and women are more disadvantaged, with higher rates of illiteracy, and lack of access to information and services. Stigmatized and rejected from earliest childhood and denied opportunities for development, girls with disabilities grow up lacking a sense of self-worth and self-esteem and are denied access to the roles of women in their communities.

## **2. Targets**

Target 3. Governments should, by 2005, ensure anti-discrimination measures, where appropriate, which safeguard the rights of women with disabilities.

Target 4. National self-help organizations of persons with disabilities should, by 2005, adopt policies to promote the full participation and equal representation of women with disabilities in their activities, including in management, organizational training and advocacy programmes.

Target 5. Women with disabilities should, by 2005, be included in the membership of national mainstream women's associations.

## **3. Action required achieving targets**

Governments should implement measures to uphold the rights of women with disabilities and to protect them from discrimination. In particular, measures should be implemented to ensure equal access to health services, education, training and employment, and protection from sexual and other forms of abuse and violence.

Governments, NGOs and self-help organizations should implement programmes to raise the public's awareness of the situation of women with disabilities and to promote positive attitudes, role models and opportunities for their development.

Governments may facilitate the establishment of a mechanism at the regional, national and sub national levels to disseminate relevant gender-related information among women with disabilities. The information should include, but not be limited to, international documents and information on national legislation.

Self-help organizations of persons with disabilities should ensure that women with disabilities are represented at the local, national and regional levels of the organizations.

Self-help organizations should ensure that women with disabilities constitute at least half of their delegations at meetings, workshops and seminars.

Women with disabilities should be encouraged to take part in and be given priority in receiving training opportunities in managerial and general subjects provided by self-help organizations.

Governments, NGOs, self-help organizations and donors should provide leadership training for women with disabilities to raise their awareness of gender issues and to increase their capacity to participate in policy and decision-making processes at all levels of self-help organizations of persons with disabilities and in advocacy and consultative roles with Government and in civil society.

Women with disabilities should form self-help groups within self-help organizations and form national and regional networks as a means of support and of disseminating and sharing information.

### **3.7.3 Early detection, early intervention and education**

#### **1. Critical issues**

Available evidence suggests that less than 10 per cent of children and youth with disabilities have access to any form of education. This compares with an enrolment rate of over 70 per cent for non-disabled children and youth in primary education in the Asian and Pacific region. This situation exists despite international mandates declaring that education is a basic right for all children and calling for the inclusion of all children in primary education by 2015. Governments should ensure the provision of appropriate education which responds to the needs of children with all types of disabilities in the next decade. It is recognized that there is wide variation in the response which Governments in the Asian and Pacific region have made in providing education for children with disabilities, and that children are currently educated in a variety of formal and informal educational settings, and in separate and inclusive schools.

The exclusion of children and youth with disabilities from education results in their exclusion from opportunities for further development, particularly diminishing their access to vocational training, employment, income generation and business development. Failure to access education and training prevents the achievement of economic and social independence and increases vulnerability to poverty in what can become a self-perpetuating, inter-generational cycle.

## **2. Millennium development goal**

In this priority area the millennium development goal is to ensure that by the year 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling and that girl and boys will have equal access to all levels of education.

## **3. Targets**

Target 6. Children and youth with disabilities will be an integral part of the population targeted by the millennium development goal of ensuring that by 2015 all boys and girls will complete a full course of primary schooling.

Target 7. At least 75 per cent of children and youth with disabilities of school age will, by 2010, be able to complete a full course of primary schooling.

Target 8. By 2012, all infants and young children (birth to four years old) will have access to and receive community-based early intervention services, which ensure survival, with support and training for their families.

Target 9. Governments should ensure detection of disabilities at as early an age as possible.

## **4. Action required achieving targets**

Governments should enact legislation, with enforcement mechanisms, to mandate education for all children, including children with disabilities, to meet the goals of the Dakar Framework for Action and the millennium development goal of primary education for all children by 2015. Children with disabilities need to be explicitly included in all national plans for education, including national plans on education for all of the Dakar Framework for Action.

Ministries of Education should formulate educational policy and planning in consultation with families and organizations of persons with disabilities and develop programmes of education which enable children with disabilities to attend their local primary schools. Policy implementation needs to prepare the school system for inclusive education, where appropriate, with the clear understanding that all children have the right to attend school and that it is the responsibility of the school to accommodate differences in learners.

The following measures should be taken, where appropriate, by Governments in the region to improve the quality of education in all schools, for all children, including children with disabilities, in special and inclusive educational contexts: (a) conduct education and training for raising the awareness of public officials, including educational and school administrators and teachers, to promote positive attitudes to the education of children with disabilities, increase sensitivity to the rights of children with disabilities to be educated in local schools and on practical strategies for including children and youth with disabilities in regular schools; (b) provide comprehensive pre- and in-service teacher training for all teachers, with methodology and techniques for teaching children with diverse abilities, the development of flexible curriculum, teaching and assessment strategies; (c) encourage suitable candidates with disabilities to enter the teaching profession; (d) establish procedures for child screening, identification and placement, child-centred and individualized teaching strategies and full systems of learning and teaching support, including resource centres and specialist teachers, in rural and urban areas; (e) ensure the availability of appropriate and accessible teaching materials, equipment and devices, unencumbered by copyright restriction; (f) ensure flexible and adaptable curriculum, appropriate to the abilities of individual children and relevant in the local context; (g) ensure assessment and monitoring procedures are appropriate for the diverse needs of learners.

### **3.7.4 Training and employment, including self-employment**

#### **1. Critical issues**

The challenge of integrating and including persons with disabilities in the economic mainstream has not been met. Despite international standards and the implementation of exemplary training and employment legislation, policies and

practices in some countries, persons with disabilities, and especially women, youth and those in rural areas, remain disproportionately undereducated, untrained, unemployed, underemployed and poor.

Persons with disabilities have a right to decent work. Decent work is productive work in conditions of freedom, equity, security and human dignity. Persons with disabilities have unique differences and abilities and they should have the right to choose what they want to do based on their abilities, not on their disabilities. They require the same educational, vocational training, employment and business development opportunities available to all. Some may require specialized support services, assistive devices or job modifications, but these are small investments compared to lifetimes of productivity and contribution. Furthermore, a lifetime of exclusion often results in psychosocial barriers, which must be addressed if persons with disabilities are to succeed in training and employment situations.

Vocational training and employment issues must be considered within the context of the full participation of persons with disabilities in community life and within the macro context of changing demographics and workplaces. Responses to issues such as globalization, job security, poverty reduction and unemployment among youth and older workers must also consider how these issues and responses affect persons with disabilities.

## **2. Targets**

Target 10. At least 30 per cent of the signatories (member States) will ratify the International Labour Organization Vocational Rehabilitation and Employment (Disabled Persons) Convention (No. 159), 1983, by 2012.

Target 11. By 2012, at least 30 per cent of all vocational training programmes in signatory countries will be inclusive of persons with disabilities and provide appropriate support and job placement or business development services for them.

Target 12. By 2010, reliable data that measure the employment and self-employment rates of persons with disabilities will exist in all countries.

## **3. Action required achieving targets**



Governments should examine, ratify and implement the Vocational Rehabilitation and Employment (Disabled Persons) Convention (No. 159), 1983.

Governments should have policies, a written plan, a coordinating body and some mechanism to evaluate the success of including persons with disabilities in training, employment, self-employment and poverty alleviation programmes. These activities should include consultations with organizations of and for persons with disabilities as well as employers' and workers' organizations.

Governments should develop and implement employer incentives and strategies to move persons with disabilities into open employment and recognize that government, as a major employer in most countries, should be a model employer with regard to the hiring, retention and advancement of workers with disabilities.

Governments should examine and/or enact anti-discrimination legislation, where appropriate, that protects the rights of workers with disabilities to equal treatment and opportunity in the workplace and in the marketplace. Governments should encourage and promote employment of persons with disabilities in the private sector and should provide a mechanism for the protection of rights of those persons with disabilities affected by layoffs and downsizing exercises.

Governments, international organizations, NGOs, training institutions and other social partners should collaborate to increase the availability and upgrade the competencies of staff providing training, employment and vocational rehabilitation services to ensure that trained and competent staff is available. Persons with disabilities should be actively recruited and included in such training programmes and hired as staff.

Governments, with the assistance of NGOs, should ensure that persons with disabilities have the support services they require to participate in mainstream vocational training and employment, and allocate the additional funds required to remove barriers to inclusion, with the full recognition that the price tag related to exclusion is higher.

Governments, NGOs and disabled persons' organizations should collaborate more with employers, trade unions and other social partners to develop partnerships, policies, mutual understanding and more effective vocational training and

employment services that benefit persons with disabilities working in formal, informal or self-employment settings.

### **3.7.5 Access to built environments and public transport**

#### **1. Critical issues**

Inaccessibility to the built environment, including the public transport system, is still the major barrier which prevents persons with disabilities from actively participating in social and economic activities in the countries of the region. Some Governments recognize disabled persons basic right to equal access to built environments. Creating inaccessible built environments, streets and transport systems discriminates against persons with disabilities and other members of society. The concept of universal/inclusive design has emerged as a result of the struggle of persons with disabilities for accessible physical environments. Universal/inclusive design approaches have proven to benefit not only persons with disabilities but also many other sectors within the society, such as older persons, pregnant women and parents with young children.

Most of the world's population of older persons resides in the Asian and Pacific region. The numbers are expected to increase dramatically given current demographic trends. The proportion of older women is also steadily growing given that women outlive men in nearly all countries, both rich and poor. As more people – men and women – survive to older age, the numbers of older people with disabilities are rising. Additionally, the onset of physical disability in old age will only exacerbate the social stigma older persons face as they are often viewed as burdens and liabilities. All persons with disabilities, however, whether young or old, have issues in common which affect them equally. These include the barriers in our environment, such as the lack of access to built environments and public transport.

#### **2. Targets**

Target 13. Governments should adopt and enforce accessibility standards for planning of public facilities, infrastructure and transport, including those in rural/agricultural contexts.

Target 14. All new and renovated public transport systems, including road, water, light and heavy mass railway and air transport systems, should be made fully accessible by persons with disabilities and older persons; existing land, water and air public transport systems (vehicles, stops and terminals) should be made accessible and usable as soon as practicable.

Target 15. All international and regional funding agencies for infrastructure development should include universal and inclusive design concepts in their loan/grant award criteria.

### **3. Action required achieving targets**

Governments, in collaboration with disabled persons organizations, civil society groups such as professional architecture and engineering associations and others in the corporate sector, should support the establishment of national and/or regional mechanisms to exchange information on means to realize accessible environments, with display, library and research facilities, and information centers and should network with research and/or educational architectural and engineering establishments.

Ensure that professional education and academic courses in architecture, planning and landscape and building and engineering contain inclusive design principles; teaching the teachers courses in effective teaching of practical accessible design are established for all design schools in the region, including travelling workshops which involve the active participation of persons with disabilities; and support continuing education professional development courses on best practices in inclusive design techniques for experienced practitioners, including those professionals who work closely with the end-users, such as community-based rehabilitation personnel.

Encourage innovative techniques, such as through design competitions, architectural and other awards and various other forms of support, to identify particular applications that enhance accessibility and apply local knowledge and materials. Local materials to make built environments accessible, e.g., tactile blocks and non-slip floor tiles, should be developed and made available. Networks to disseminate innovative techniques should be developed.

Support the establishment of appraisal mechanisms on how codes and standards have been developed, applied and enforced and how they have increased accessibility in various countries. Feedback and case studies on areas (rather than on a single new or upgraded building) are important, with publicity and dissemination of the findings, and show how improvements could be made.

### **3.7.6 Access to information and communications, including information, communication and assistive technologies**

#### **1. Critical issues**

ICT has been the engine of economic growth and continues to spur the globalization process. However, the benefits of ICT development have spread unevenly between the haves and the have-nots and between developed and developing countries.

The effects of ICT upon persons with disabilities have been both positive and negative. Many disabled persons benefit from ICT development, as the technologies are opening up opportunities for employment at all skill levels and opportunities to live independently in the community. Deaf-blind persons, with proper training, are using a refreshable Braille screen reader and persons with severe cerebral palsy are taking part in information exchange through the Internet. However, benefits are still largely limited to persons with disabilities in more developed countries. The rapid development of ICT has given rise to unanticipated problems for persons with certain disabilities. For example, online processes for registration, banking or shopping transactions may not be accessible to persons with cognitive/intellectual, physical or visual and/or auditory disabilities.

The majority of disabled persons in the developing countries in the Asian and Pacific region are poor and have been excluded from ICT use, although there is a great potential benefit for the use of ICT in rural areas in developing countries.

The Tokyo Declaration on Asia-Pacific Renaissance through ICT in the Twenty-first Century, adopted by the Asia-Pacific Summit on the Information Society, organized by the Asia-Pacific Telecommunity and held at Tokyo in November 2000, declared that people in the Asian and Pacific region should have access to

the Internet by the year 2005 to the extent possible. It also recognized disability as one of the causes of the digital divide, along with income, age and gender. The World Summit on the Information Society will be held at Geneva in 2003 and at Tunis in 2005. At the Summit, issues concerning persons with disabilities and other disadvantaged groups should be considered.

In the information society, access to information and communications is a basic human right. Copyright owners should bear responsibility for ensuring that content is accessible to all, including persons with disabilities. Any anti-piracy or digital rights management technology should not prevent persons with disabilities from access to information and communications.[2] Information and communication technology should break down the barriers in telecommunication and broadcasting systems. Developing countries need greater support in the area of ICT.

## **2. Targets**

Target 16. By 2005, persons with disabilities should have at least the same rate of access to the Internet and related services as the rest of citizens in a country of the region.

Target 17. International organizations (e.g., International Telecommunication Union, International Organization for Standardization, World Trade Organization, World Wide Web Consortium, Motion Picture Engineering Group) responsible for international ICT standards should, by 2004, incorporate accessibility standards for persons with disabilities in their international ICT standards.

Target 18. Governments should adopt, by 2005, ICT accessibility guidelines for persons with disabilities in their national ICT policies and specifically include persons with disabilities as their target beneficiary group with appropriate measures.

Target 19. Governments should develop and coordinate a standardized sign language, finger Braille, tactile sign language, in each country and to disseminate and teach the results through all means, i.e. publications, CD-ROMs, etc.

Target 20. Governments should establish a system in each country to train and dispatch sign language interpreters, Braille transcribers, finger Braille interpreters, and human readers and to encourage their employment.

### **3. Action required achieving targets**

Governments should promulgate and enforce laws, policies and programmes to monitor and protect the right of persons with disabilities to information and communication; for instance, legislation providing copyright exemptions to organizations which make information content accessible to persons with disabilities, under certain conditions. Governments, in collaboration with other concerned agencies and civil society organizations, should:

Set up an ICT accessibility unit within the ICT ministry/regulatory agency, and encourage private companies to establish an equivalent unit to coordinate activities within and outside agencies/companies.

Conduct and encourage awareness-raising training for ICT policy makers, regulatory agencies, representatives as well as technical personnel of private ICT companies to raise understanding of disability issues, including disabled persons ICT accessibility needs, their capability and aspiration to be productive members of society.

Support computer literacy training and capacity-building for persons with disabilities, through training on how to communicate with software and hardware developers and standards organizations to address their needs.

Provide various forms of incentives, including exemption of duties for ICT devices used by persons with disabilities and subsidize the cost of assistive technology equipment to ensure that they are affordable for persons with disabilities in need.

Support the creation and strengthening of networks, including cooperatives, of consumers with disabilities at the national, regional and international levels in order to increase the bargaining and buying power for ICT products and services, which are generally expensive to buy individually.

Take all necessary steps to ensure, in the development of measures and standards relating to ICT accessibility, that organizations of persons with disabilities are involved in all stages of the process. Adopt and support ICT development based on international standards which are universal/open/non-proprietary to ensure the long-term commitment to ICT accessibility for persons with disabilities among all sectors, with special attention to standards that have accessibility components and features with a proven record of effectiveness. Examples of these are the Web Accessibility Initiative of the World Wide Web Consortium and the Digital Accessible Information System Consortium.

### **3.7.7 Poverty alleviation through capacity-building, social security and sustainable livelihood programmes**

#### **1. Critical issues**

In the Asian and Pacific region, it is estimated that of 400 million persons with disabilities, over 40 per cent are living in poverty. Those persons with disabilities have been prevented from accessing entitlements available to other members of society, including health, food, education, employment and other basic social services, and from participating in community decision-making processes.

Poverty is both a cause and consequence of disability. Poverty and disability reinforce one another, contributing to increased vulnerability and exclusion. Poor nutrition, dangerous working and living conditions, limited access to vaccination programmes and health and maternity care, poor hygiene, bad sanitation, inadequate information about the causes of impairments, war and conflict and natural disasters are factors responsible for disability. Many of these causes are preventable. Disability in turn exacerbates poverty, by diminishing access to means of livelihood, increasing isolation from the marketplace and economic strain. This affects not just the individual but often the entire family.

The increasing numbers and proportions of older people living to advanced old age has meant that the number of persons with disabilities will increase and this may be a contributing factor to human poverty. The issues of concern for older persons have to do with disabilities related to ageing and the provision of appropriate health care and social security. In ageing societies, especially, these

issues will have a profound impact on national health and long-term care systems and on whether social security schemes are sufficient as currently constituted.

The main factors that account for the low level of social services for poor persons with disabilities are household-based and community-based. However, there is little knowledge about the determining factors for the low welfare level of persons with disabilities in the developing countries of the region. Social and economic survey data at the household and community levels, which are necessary for an analysis of the factors, are lacking. It is important to examine to what extent the development of community-level infrastructure affects the provision of services for poor persons with disabilities.

An integrated approach is required, linking prevention and rehabilitation with empowerment strategies and changes in attitudes. The significance of disability should be assessed as a key development issue and its importance should be recognized in relation to poverty, human rights and the achievement of internationally agreed development targets. Eliminating world poverty is unlikely to be achieved unless the rights and needs of persons with disabilities are taken into account. One of the millennium development goals has a specific target of poverty eradication. This is a positive approach. However, there is a danger that this strategy may omit the important vulnerable group of persons with disabilities as efforts to achieve the targets could focus on those who can be brought out of poverty most easily and not those in extreme poverty, among whom persons with disabilities are disproportionately represented. The root causes of poverty of persons with disabilities are far more complicated and multifaceted. Hence, conscious efforts should be made to include persons with disabilities in the target groups given priority in the poverty reduction strategy to achieve the millennium development goals.

## **2. Millennium development goals**

50. The relevant millennium development goal in this priority area is to halve, by the year 2015, the proportion of the worlds people whose income is less than one dollar a day and the proportion of people who suffer from hunger, and by the same date, to halve the proportion of people who are unable to reach or to afford safe drinking water.



### 3. Targets

Target 21. Governments should halve, between 1990 and 2015, the proportion of persons with disabilities whose income/consumption is less than one dollar a day.

### 4. Action required achieving targets

Governments should immediately include, as a major target group, persons with disabilities in their national poverty alleviation programmes in order to achieve the millennium development goal target to eradicate extreme poverty and hunger.

Governments should allocate adequate rural development and poverty alleviation funds towards services for the benefit of persons with disabilities.

Government should include disability dimensions and poverty mapping and disability into the collection and analysis of millennium development goal baseline data on income poverty, education, health, etc., so as to ensure baseline data for poor persons with disabilities.

Government should mainstream disability issues into pro-poor development strategies through:

- (a) Increased resource allocation for poor persons with disabilities and the introduction of social budgeting for disability;
- (b) Participatory evaluation of existing social and economic policies through more effective methodologies, including the use of citizens report card method;
- (c) Establishment of appropriate social protection schemes, such as schooling subsidy and/or health insurance for poor families with disabled children and older persons with physical and mental disabilities;
- (d) Comprehensive development policies targeting persons with disabilities and families with disabled persons.

Governments should document and disseminate good field-based practices in poverty alleviation for persons with disabilities that can be used as models for capacity-building in government sectoral ministries, civil society organizations and the private sector.

Governments should encourage the building of strategic alliances among and advocating the importance of disability issues to policy makers. Organizations of persons with disabilities and community development organizations, with assistance from the United Nations system, with a view to incorporating disability issues into development policies.

### **3.8 STRATEGIES TO ACHIEVE THE TARGETS OF THE BIWAKO MILLENNIUM FRAMEWORK FOR ACTION**

The following strategies should support Governments, in collaboration with civil society organizations, in the achievement of targets cited in chapter IV.

#### **3.8.1 National plan of action (five years) on disability**

A national plan of action concerning disability is vital to implement the Biwako Millennium Framework for Action, 2003-2012, at the national and sub national levels.

Strategy 1. Governments should develop, in collaboration with organizations of persons with disabilities and other civil society organizations, and adopt by 2004, a five-year comprehensive national plan of action to implement the targets and strategies of the Biwako Millennium Framework for Action, 2003-2012. The national plan should have inclusive policies and programmes for integrating persons with disabilities into mainstream development plans and programmes.

#### **3.8.2 Promotion of a rights-based approach to disability issues**

A rights-based approach should be taken to advance disability issues. The civil, cultural, economic, political and social rights of persons with disabilities should be addressed and protected. Disability issues should be integrated into national plans relating to development and into a human rights agenda. Globally, more than 40 countries have adopted non-discrimination laws on disability, but only 9 countries in the Asian and Pacific region have done so.

Strategy 2. Governments should examine the adoption of laws and policies and review of existing laws to protect the rights of persons with disabilities, especially to ensure non-discrimination. They should include a clear and specific definition

of what constitutes discrimination against persons with disabilities. Such laws and policies should comply with United Nations standards on human rights and disabilities. Persons with disabilities should have equal access to effective remedies to enforce their rights under such laws.

Strategy 3. National human rights institutions should draw special attention to the rights of persons with disabilities and integrate them into the full range of their functions. Governments should consider, according to the concrete circumstances of their countries and areas, establishing an independent disability rights institution to protect the rights of persons with disabilities.

Strategy 4. Governments should ensure that persons with disabilities, including disability groups in civil society, fully participate from an early stage in helping to shape the laws and policies that will affect their lives and in monitoring and evaluating the implementation of these laws and policies and in recommending improvements.

Strategy 5. States should consider ratifying the core international human rights treaties.<sup>3</sup> After consultation with disability groups, Governments should include specific information about the rights of persons with disabilities in reports submitted to treaty monitoring bodies under the treaties they have ratified.

Strategy 6. Governments should consider support for and contribute to the work of the Ad Hoc Committee established by General Assembly resolution 56/168 of 19 December 2001 to consider proposals for a comprehensive and integral international convention to promote and protect the rights of persons with disabilities in the elaboration of the comprehensive and integral international convention to promote and protect the rights and dignity of persons with disabilities and should encourage and facilitate the full participation of a wide range of disability groups from all regions of the world in contributing to the Committee's work.

Strategy 7. Governments should include persons with disabilities and their organizations, in their procedures at the national, regional and international levels, concerning the drafting and adoption of the proposed human rights convention on disability, (as decided by General Assembly resolution 56/168 of 19 December

2001) which by passing, will ensure a strong consumer-influenced monitoring mechanism on the rights and responsibilities of persons with disabilities.

### **3.8.3 Disability statistics/common definition of disabilities for planning**

Lack of adequate data has been one of the most significant factors leading to the neglect of disability issues, including the development of policy and measures to monitor and evaluate its implementation, in the region. In many developing countries, the data collected do not reflect the full extent of disability prevalence. This limitation results in part from the conceptual framework adopted, the scope and coverage of the surveys undertaken, as well as the definitions, classifications and the methodology used for the collection of data on disability. It is also recognized that a common system of defining and classifying disability is not uniformly applied in the region. In this connection, a wider usage of the International Classification of Functioning, Disability and Health in countries of the region will be expected to provide a base for the development of such a common system of defining and classifying disability.

Strategy 8. Governments are encouraged to develop, by 2005, their system for disability-related data collection and analysis and to produce relevant statistics disaggregated by disability to support policy-making and programme planning.

Strategy 9. Governments are encouraged to adopt, by 2005, definitions on disability based on the Guidelines and Principles for the Development of Disability Statistics,<sup>4</sup> which will allow intercountry comparison in the region.

### **3.8.4 Strengthened community-based approaches to the prevention of causes of disability, rehabilitation and empowerment of persons with disabilities**

Many developing countries in the region are now beginning to augment and replace traditional institutional and centralized rehabilitation programmes and projects with approaches better suited to their social and economic environments of poverty, high unemployment and limited resources for social services. Community-based rehabilitation programmes form the hub of such strategies. The

community-based approach is particularly appropriate for the prevention of causes of disability, early identification and intervention of children with disabilities, reaching out to persons with disabilities in rural areas, raising awareness and advocacy for the inclusion of persons with disabilities in all activities in the community, including social, cultural and religious activities. Education, training and employment needs could also be met by this approach. It is essential that persons with disabilities exercise choice and control over initiatives for community-based rehabilitation.

Strategy 10. Governments, in collaboration with organizations of persons with disabilities and civil society organizations, should immediately develop national policies, if that has not yet been done, to promote community-based approaches for the prevention of causes of disability, for rehabilitation and for the empowerment of persons with disabilities. Community based rehabilitation (CBR) perspectives should reflect a human rights approach and be modeled on the independent living concept, which includes peer counseling.

### **3.9 COOPERATION AND SUPPORT IN PURSUANCE OF THE BIWAKO MILLENNIUM FRAMEWORK FOR ACTION**

#### **3.9.1 Sub regional cooperation and collaboration**

One of the important focuses of the new regional framework is to strengthen cooperation and collaboration among Governments at the sub regional level. Countries in the same sub region share common concerns, aspirations and constraints and are in the best position to provide mutual support and collaboration. In this regard, Governments in each sub region are requested to formulate their own sub regional priorities and a plan of action to seek mutual support in the implementation of the Biwako Millennium Framework for Action.

Strategy 11. Governments, in cooperation with relevant NGOs, such as the Asian and Pacific Disability Forum, and self-help organizations of persons with disabilities in each subregion of Asia and the Pacific, should establish, by 2004, sub regional mechanisms to support governments to achieve targets and strategies contained in the Biwako Millennium Framework for Action.

Strategy 12. Governments in each sub region should collaborate with relevant NGOs in establishing focal points within appropriate sub regional organizations with a view to coordinating sub regional activities on disability.

### **3.9.2 Regional collaboration**

#### **1. Collaboration with the Asian and Pacific Development Center on Disability**

The Asia-Pacific Development Center on Disability will be established towards 2004 at Bangkok, as a legacy of the Asian and Pacific Decade of Disabled Persons, to promote the empowerment of persons with disabilities and a barrier-free society in the Asian and Pacific region. The Center will serve persons with disabilities and persons working with them in training and information support in the Asian and Pacific region.

Strategy 13. Governments, the United Nations system, civil society organizations and the private sector should collaborate, support and take advantage of the training and communication capability of the Center in the field of disability in the region. Capacity-building of persons with disabilities in the Pacific should be also clearly addressed by the Center.

2. Networking among centers of excellence in focused areas There are government institutes and agencies, as well as civil society and private organizations involved in research and development, implementing new approaches in the field of disabilities in the Asian and Pacific region. It would be useful to identify those institutes/agencies/organizations as centres of excellence and to facilitate the exchange among them of information, experiences and personnel to promote networking, with a view to maximizing cooperation and collaboration. The Asia-Pacific Development Center on Disability could play a supporting role in establishing and maintaining such a network.

Strategy 14. Governments, civil society organizations and the private sector should establish a network of centers of excellence in focused areas to maximize cooperation and collaboration.

Strategy 15. ESCAP and other United Nations agencies should assist in the establishment of a network of centers of excellence in focused areas through the identification and promotion of such centers.

Strategy 16. Governments of the region should enter into a suitable agreement on trade, technology transfer and human resource development for fast and efficient sharing of resources. Governments should also promote regional cooperation, share information and document good practices on the achievements of the Biwako Millennium Framework targets.

### **3.10 MONITORING AND REVIEW**

#### **3.10.1 Organization of regional and sub regional meetings**

The Commission, by its resolution 58/4 of 22 May 2002 on promoting an inclusive, barrier-free and rights-based society for people with disabilities in the Asian and Pacific region in the twenty-first century, requested the Executive Secretary of ESCAP to report to the Commission biennially until the end of the Decade on the progress made in implementation of that resolution. ESCAP should convene biennial meetings to review achievements and to identify action that may be required to implement the Biwako Millennium Framework for Action. At those meetings, the representatives of national coordination committees on disability matters comprising government ministries/agencies, NGOs, self-help organizations and the media will be invited to present reports to review progress in the implementation of the Biwako Millennium Framework for Action at the national and subnational levels. Self-help organizations of persons with disabilities should be encouraged to participate actively in the review process. Regional meetings should focus one at a time on the targets adopted in the following thematic areas:

- (a) Self-help organizations of persons with disabilities, women with disabilities, education, training and employment;
- (b) Access to built environments and access to information and communications;
- (c) Poverty alleviation through social security and sustainable livelihoods.

Governments in each subregion should organize subregional meetings to review achievements and to identify action that may be required to implement the Biwako Millennium Framework for Action based on their sub regional priorities and action plan in a similar manner as at the regional level described in the above paragraph.

B. Regional working group to coordinate and monitor the Biwako Millennium Framework for Action A regional working group comprising the United Nations system, Governments and civil society organizations, including organizations of persons with disabilities in the region should meet regularly to coordinate and monitor implementation of the Biwako Millennium Framework for Action.

### **3.11 SUMMARY**

The Commission, at its fifty-eighth session, adopted resolution 58/4 of 22 May 2002 on promoting an inclusive, barrier-free and rights-based society for people with disabilities in the Asian and Pacific region in the twenty-first century, by which it proclaimed the extension of the Asian and Pacific Decade of Disabled Persons, 1993-2002, for another decade, 2003-2012.

The present document sets out a draft regional framework for action that provides regional policy recommendations for action by Governments in the region and concerned stakeholders to achieve an inclusive, barrier-free and rights-based society for persons with disabilities in the new decade, 2003-2012. The regional framework for action identifies seven areas for priority action in the new decade. Each priority area contains critical issues, targets and the action required.

The regional framework for action explicitly incorporates the millennium development goals and their relevant targets to ensure that concerns relating to persons with disabilities become an integral part of efforts to achieve the goals.

### **3.12 References**



[92723] WEM\_Fact\_Science\_Technology.jpg\_low. Allen, J. P. B. and H. G. Widdowson. 1974. *English in Physical Science*. Oxford University Press, London.

Aser. 2014. Annual Status of Education Report 2014. [manabadi.co.in/forteachers/aserreport-2014-annual-status-of...](http://manabadi.co.in/forteachers/aserreport-2014-annual-status-of...)

BSE Odisha. 2013. Bhoutik Bigyan (Physical Sciences) for Class IX. Board of Secondary Education Odisha, Cuttack.

Can, T. 2009. 'Learning and Teaching Language Online: A Constructivist Approach'. *Novitas-Royal*. 3(1). pp. 60-74.

Cooper, L. N. 1969. *An Introduction to the Meaning and Structure of Physics*. A Harper International Edition.

Country Trends. 2008. July 2008 (Internet). 'English as the International Language of Science'. Issue 6. Dykstra, D. J., C. P. Boyle, and I. A. Monarch. 1992. 'Studying Conceptual Change in Learning Physics'. *Science Education*. Vol. 76(6). pp. 615-652.

Grierson, B. 2015. 'The Power Agers'. *Reader's Digest*. Vol. 56, No. 3, March 2015. p. 81.

Harrison, D. 2015. 'Why We Can't Spell'. *Reader's Digest*. Vol. 56, No. 2, February 2015. p. 94.

Heisenberg, W. 2000. *Physics and Philosophy* (With introduction by Paul Davies). Penguin Books. <http://apa.org/education/k12/alternative-conceptions.aspx>. <http://woknowing.wordpress.com/.../social-negotiation-as-a-central-princ...>

[http://www2.phy.ilstu.edu/pte/publications/dealing\\_alt\\_con.pdf](http://www2.phy.ilstu.edu/pte/publications/dealing_alt_con.pdf).

Kaufman, D. 2004. 'Constructivist Issues in Language Learning and Teaching'. *Annual Review of Applied Linguistics*. 24. pp. 303-319.

Liu, C. H. and R. Matthews. 2005. Vygotsky's Philosophy: Constructivism and its Criticisms Examined. *International Education Journal*. 6(3). pp. 386-399.

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- Longman Group Ltd.1979. Longman Dictionary of Scientific Usage. Manivannan, G. 2006. Importance of the English Language. Summary: A Look at the Importance of English in India and the World. Internet.
- Mohapatra, J. K. and B. K. Parida. 1995. 'The Location of Alternative Conceptions by a Concept Tree Graph Technique'. International Journal of Science Education. Vol. 17(5). pp. 663-681.
- Nair, A. R . 2015. 'Yawning Skill Gap Cause for Concern'. Wednesday, January 21, 2015. p. 18. The Hindu, Bengaluru.
- NCERT. 2005. National Curriculum Framework 2005. National Council of Educational Research and Training, New Delhi.
- . 2006a. *Physics Part I* Textbook for Class XI. National Council of Educational Research and Training, New Delhi.
- . 2006b. Science Textbook for Class IX. National Council of Educational Research and Training, New Delhi. Newton, Isaac. 2010. The Principia. Snowball Publishing. Orwell, G. 1949 (reprinted 2010). 1984. Rupa Publications India Pvt. Ltd., New Delhi.
- Parida, B. K. (Ea.) 1998. A Source Book of Remedial Materials for Teaching Physics at Higher Secondary Level. Regional Institute of Education, Bhubaneswar.
- Preville, P. 2015. 'A New Way of Thinking'. *Reader's Digest*. Vol. 56, No. 1, January 2015. pp. 82-89.
- Raghava, G. P. S . 2012. 'What is the role of language in science?' *ResearchGate*. Oct 20, 2012. Internet.
- Ratcliffe, S. (Ea.) 2005. *Oxford Quotations and Proverbs*. Oxford University Press.
- Rayan, A. P. 2015. 'Five Easy Tips to Improve Your English Proficiency'. *The New Indian*

*Express (Edex)*. Vol. 5, No. 37, Monday January 5, 2015. p. 16.

*Sambad*. 2015a. Vol. XXXI, No. 88, Friday 2 January 2015. p. 17. Bhubaneswar.

. 2015b. Vol. XXXI, No. 179, Monday 6 April 2015. p. 6. Bhubaneswar.

Sansanwal, D. N . 2000. 'Jerk Technology'. *Journal of Indian Education*. XXVI (1). pp. 17- 22.

Singh, R. K. 2010. *Using English in Science and Technology*. Prakash Book Depot, Bareilly.

*Language of Science and Teaching Learning of...* 105

Sutton, C. 1998. 'New Perspectives on Language in Science'. B. J. Fraser and K. G. Tobin

(Eds.). *International Handbook on Science Education*. pp. 27-38. Kluwer Academic Publishers.

Tarancon, J-E. P. 2012. *ResearchGate*. Oct 21, 2012. Internet.

*The New Indian Express*. 3 January 2015. p. 2. Bhubaneswar.

Weaver, J. H . 1987 (Ed.) *The World of Physics*. Vol. III. p. 853. Simon and Schuster, New York.

Weijen, vanD. 2012. 'The Language of (Future) Scientific Communication'. *Research*

*Trends*. Country trends. Issue 31- November 2012. Internet. [www.aspiringminds.in](http://www.aspiringminds.in): National Employability Report - Engineers Annual Report 2014. [www.englishproject.co.uk/english-language-day/2013](http://www.englishproject.co.uk/english-language-day/2013): English Language Day 2013 –

English the Global Language.  
[www.openculture.com/2013/03/listen\\_as\\_albert\\_einstein\\_reads\\_the\\_common\\_language\\_of\\_science](http://www.openculture.com/2013/03/listen_as_albert_einstein_reads_the_common_language_of_science) (21 March 2013).  
[www.physics.nist.gov/cuu/Units/checklist.html](http://www.physics.nist.gov/cuu/Units/checklist.html).SI unit rules and style conventions: checklist for reviewing manuscripts.  
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[www.popsci.com/article/science/fyi-how-did-english-get-to-be-international-languagescience](http://www.popsci.com/article/science/fyi-how-did-english-get-to-be-international-languagescience): *FYI: How Did English Get To Be The International Language of Science?*

Everyone got mad at the Germans. By Daniel Engber, posted 11.06.2013.

Yadav, M. S . 2000 (Ed.). *Encyclopaedia o Teaching of Science*. Vol. 3. Anmol Publications

Pvt. Ltd., New Delhi. Young, H. D . and R. A . Freedman. 2004. *University Physics*. 11th Edition. Pearson Education, Delhi.

## Unit 4

**National Commissions & Policies: Kothari Commission (1964), National Education Policy (1968), National Policy on Education (1986), Revised National Policy of Education (1992), National Curricular Framework (2005), National Policy For Persons With Disabilities (2006) National Acts & Programs: IEDC (1974), RCI Act (1992), PWD Act (1995), National Trust Act (1999), SSA (2000), RTE (2006), RMSA (2009), IEDSS (2013)**

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## 4.1 Introduction

Disability has been understood in various contexts and different terms have been used for people with disability in different places and time. According to the Census 2011(Registrar General of India, 2011), there are 2,68,10,557 persons with disability in India who constitute 2.21 per cent of the overall population. This includes eight different types of disabilities. An approximated 69.5 per cent of people with disabilities live in the rural regions of the state. It is imperative to see a reflection of these data in the policy of education. It is likewise important to get an intellect that how education policies concerning people with disability have gradually developed and acquired a shape. There are spiritual, socio-historical and political facts which can be utilized to get an idea about the course of special education for the education of people with disability and inclusion in India. In this paper, a historical review has been presented of the policies which have an impact on the life of people with disability in India.

We have a number of models of disability such as moral, medical and social models which evolved as the time changed in India. It is constantly believed among a majority of people that disability is a curse, social stigma, an undesired problem, and caused by previous birth's bad karmas. Only in social model, shortcomings of the surroundings were emphasized which include attitudes of the community, policies and processes of organizations towards persons with disability. "The traditional joint family, which provided an inbuilt system of supporting people by fostering the old, sick and disable" (Karna, 2001), yet disabled people continued to remain neglected and ridiculed. The Hindu society in India is built of caste segments in a hierarchical social system. In certain regions of India, during the stage of ancient history, "Gurukul" system utilised to be the education institutions in which scholars, primarily; upper caste boys lived in the teacher's home and learnt skills relevant to their caste groups. In the 17th century, there were many institutions like Nalanda, Takshashila, etc. not with standing, no documentation is available about the presence of people with disability in these indigenous institutions of basic and higher instruction.

## 4.2 Historic Beginning during British Rule

The earliest documentation available is from the period when India was under British dominion. It is in 1869 that the first school for the blind was founded. As per Disability Status Report (RCI, 2012), in the British period of late 19th century, very few services were available for people with disability from private sectors and non-governmental organizations (NGO's) on charity basis or as religious deeds. During the 1800s, all the special schools for people with disabilities included only physical disabilities; in 1918, the first school for people with intellectual disabilities came into existence. In 1909, for the first time an effort was made in the legislation for establishing inclusive education in India. Gopal Krishna Gokhale, in the Imperial Legislative Council enacted a bill under the Indian Council Act of 1909 to make primary education compulsory and had a proposal offending for compulsory education for all. Unfortunately, this bill was not passed. In 1944, Sargent Report (Central Advisory Board of Education, 1944) stressed on the education of children with disabilities so that they can be integrated. In this period, many trade schools and workshops were started in urban areas for children with disability but because of the expensive fees, children with disability of weaker sections and rural areas could not attend these facilities. Even when India got independence, the context for people with a disability did not vary a great deal. They were least catered and there were no evidence of special provisions or services for people with disability at the time of partition.

### **4.3 Post-Independence Period in India**

In independent India, governed by constitutional rights, it is the major responsibility of the state governments to provide education, and the union (central) government kept on taking the responsibility for the coordination in technical and higher education and to form the educational standards. Sharma and Deppeler (2005) mention that "the segregated facilities for education of children with disabilities did well after India's independence from the Great Britain in 1947." In 1960, a division called the Ministry of Social Welfare was created, which was given the responsibility for the "marginalized" sections of society. It primarily focused on rehabilitation and started giving grants for instruction of minors and people with disability without giving emphasis on inclusion of people with disability. Kothari Commission (1964-66) (Education Commission, 1966) stressed the need for the development of a comparatively small but effective

programme for the education of people with disability for equalization of educational opportunities. Further, the Ministry of Education introduced a new division namely Ministry of Social Welfare (MSW) which took the responsibility of assisting NGO's. This transfers the responsibility of education and ministrations of people with disability and moved at once against the report and recommendations of Kothari Commission about inclusion, or at least integrated education. After that the Integrated Child Development Scheme (ICDS) was initiated in 1974 and was later revised in 1992. MHRD (1992) concedes that this scheme endeavors to provide pre-school and health facilities to weaker sections of the population, but it did not embrace people with disabilities. This scheme emphasized that children with mild and moderate disability should be grouped but children with severe disability must be catered separately. Thus, it was not totally inclusive, and generated stress among regular and segregated special education schools. Alur (2002) asserted that formation of MSW and ICDS stops the execution of action plan of Kothari Commission. Till 1970s, these schools were the primary method of service delivery for children with disabilities. According to Pandey and Advani (1997), by 1991 there were about 1,200 special schools for students with various types of disabilities in India.

#### **4.4 Educational Policies in India**

In India, the first national policy came in 1968 and was called NPE (National Policy on Education) 1968. It endeavors that "Educational facilities for the physically and mentally handicapped children should be expanded and attempts should be made to develop integrated programmes enabling the handicapped children to study in mainstream schools." (MHRD, 1968). In 1974, another scheme was introduced namely the Integrated Education of Disabled Children Scheme (IEDCS) created by the Ministry of Welfare, it should not to be confused with ICDS (above). IEDCS aims to cover up children with disabilities under the regular system of education in 27 states and 4 UTs (MHRD, 1992a). Though this scheme caters 15,000 schools and has enrolled 60,000 children (RCI, 2000), Rane (1983), in his evaluation of IEDCS programme in the State of Maharashtra, reported that there was a lack of trained teachers, materials and equipments. Various departments related to this scheme also showed poor coordination which



leads to failure of IEDCS. It was reported by Mani (1988) that till 1979-80, this programme benefitted only 1,881 children from 81 schools across the country.

In 1976, a Constitutional amendment made education a combined responsibility of both the governments — states and union. Article 45 of the Indian Constitution suggests that all the children have right to get free and compulsory education, which include people with disability. Parliament adopted The National Policy on Education (NPE) in May 1986. This policy also stressed on abolishing the discrimination and give equal opportunities to all by providing facilities to those who have been neglected. NPE states that children with “mild” disabilities should be permitted to receive an education in regular classrooms, whereas children in the class of “moderate to severe” disabilities should be placed in specialized schools. One can say that this policy contradicted Article 45 of Indian Constitution, which mentioned equality in education as a fundamental right for all, and not just those with “mild” disabilities. NPE was created in 1986; it was not implemented until the Programme of Action (POA) was created in 1992. The POA (MHRD, 1992b) suggested a pragmatic principle for placement. It suggested that children with disability who can be integrated in regular school must get education there only. And the children with disability who face problems in acquiring skills such as daily living skills, communication skills and basic academic skills, etc. may be entitled to special set-ups but when they learn these skills and can be integrated in regular schools, must be shifted to regular schools. However, POA did not define what constitutes basic living skills. The POA envisaged provision of an additional 400 special schools at the district headquarters. However, because of limited resources, the concerned authorities failed to establish even a single new special school. According to Verma, Christopher and Jha (2007), schools had opened many resource centres for the weaker and marginalised children which aimed to provide learning resources after regular school hours, but not during the normal school day, eliminating the possibility of inclusion for these students. In 1993, the Supreme Court’s Unnikrishnan judgment came which reads that Article 45 must be read in conjunction with Article 21 of the Constitution, where Article 21 states that “No person shall be deprived of his life or personal liberty except according to procedure established by law.” This law strengthened the educational welfare of weak and vulnerable section of society, including persons with disability.

#### **4.5 Special Acts and Policies Related to People with Disability**

In 1987, an act came for mentally ill persons called The Mental Health Act. This Act revoked the Indian Lunacy Act, 1912 with an objective to consolidate the law, enacted for mentally ill persons. The same year, in 1987, the MHRD allied with National Council of Educational Research and Training (NCERT) and The United Children's Fund (UNICEF) framed a Project for Integrated Education for the Disabled (PIED) which strives to reinforce the IEDC plan. PIED adopted a "Composite Area Approach" that transformed all regular schools into integrated schools within a specified area. According to Azad (1996), approximately 13,000 children with disabilities received educational services in regular schools. More than 9,000 teachers received training to work with children with disability in integrated schools.

In 1992, Rehabilitation Council of India Act (RCI) came and it became a statutory body in 1993. It notes that anyone offering services to people with disability, who do not have qualifications recognised by RCI, could be prosecuted. After three years of maintaining the same spirit, Persons with Disabilities Act (PWD) 1995, (Ministry of Law and Justice, 1996) stated to protect and encourage economic and social rights and made provisions of education, employment, creation of barrier free environment, social security i.e. complete participation and equality of the people with disability. This Act also protects the right of children with disability by ensuring that whoever, fraudulently avails or attempts to avail, shall be punishable. PWD acted as a catalyst for various other projects like "District Primary Education Program" (DPEP). In order to expand educational opportunities for differently abled children, the Central Government's last Five Year Plan (1997-2002), set aside 1,000 million rupees specifically for the provision of integrated education. DPEP was a combined effort of the Indian Government's Department of Education and the World Bank. The primary aim of the DPEP was to provide "education for all" by the year 2000. DPEP (2001) asserted that the main focus of DPEP was laid on the inclusion of children with mild to moderate disabilities. According to the World Bank (2007), by the year 2006, the DPEP act was enacted in 23 districts in 3 states; Rajasthan, Orissa and West Bengal, and 6,00,000 children with disabilities were enrolled and mainstreamed. Kumar, Priyam and Saxena (2001) concede that in India, the DPEP

was enacted in 240 districts across 16 states. Despite this, surveys mentioned a fall in growth at the primary enrolment stage in most Indian states. In 1999, National Trust for Welfare of Persons with Autism, Cerebral Palsy, Mental Retardation and Multiple Disabilities Act came. Later, a national level body was constituted. This Act is valid throughout India except Jammu and Kashmir. In this Act, definitions of terms such as 'autism', 'cerebral palsy', and 'Persons with disabilities', etc. were clarified. Ministry of Social Justice and Empowerment (MSJE) 1999 asserted that this trust provides financial assistance for these four disabilities only but it introduced various schemes namely "Reach and Relief Scheme" and "Samarth Scheme", etc. Majumdar (2001) analysed that only few facilities like government scholarships in some institutions for students with disability were available but there was not a single good scheme for the people with mentally disability. In 2002, education became a fundamental right for all children aged 6-14 years in the 86<sup>th</sup> amendment of Constitution.

#### **4.6 Other Schemes and Programmes**

Sarva Shiksha Abhiyan (SSA), an initiative which means "Education for All." was initiated by the Government of India, with the cooperation of World Bank. SSA has been operational since 2000-2001 as an intervention programme. SSA cannot be called a disability-specific programme. It is a disability-inclusive programme which comprises of specific facets in favour of people with disabilities. SSA (2005) asserted that under SSA, many NGOs were promoted to get the goal of universalisation of education. Integrated Education for

Disabled Children (IEDC) ascertained a range of activities by these NGOs. Aim of IEDS was to foster training of teachers about teaching techniques like individualized education plans (IEP). Under this, assistive devices such as hearing aids, spectacles, wheelchairs, braille kits, etc. were also distributed. But unfortunately no IEP was practiced and very few children were benefited by this scheme. According to Kohama (2012), 1,200 were allocated per annum per child with disability but practically there was no provision that would ensure that it will be spent on the children with disability. In addition, SSA has a 'no rejection' policy which means the children of 6-14 years cannot be turned away from schools for any reasons, including children with disability. Though this policy is inclusive, but to a large extent it is contradictory to the PWD, which aimed at the

most appropriate environment for the student. The MHRD also drafted the Action Plan for Inclusion in Education of Children and Youth with Disabilities (IECYD). This plan specifically looks to move from integration towards inclusion. Under this plan, adequate number of teachers were trained in inclusive education. This plan steps outside the Indian Constitution and includes students with disabilities outside the 6-14 age-range. 'One of the major contradicting elements for this policy is that IECYD allows children with severe intellectual disabilities to receive home-based training.' (Kalyanpur, 2007). In 2006, National Policy for Persons with Disabilities came which stressed on prevention of disabilities, rehabilitation and women empowerment.

#### **4.7 Reforming Past Schemes**

In 2008, IEDC reformed into the Inclusive Education of the Disabled at the Secondary Stage (IEDSS). It went into effect in 2009. It aims to enable all students with disabilities, after completing with elementary schooling for eight years, to get entitled for an additional four years of secondary schooling in an inclusive and enabling environment. This is the first policy that specifically admits the value of secondary education for people with disability. IEDSS came as there was a paradigm shift from charity to rights approach for people with disability. Next year, in 2009, another scheme called RMSA came to Endeavour universalisation of education at the secondary and higher secondary stage and for improvement of education with special references to weaker and marginalized sections of the society and girls with disability residing in rural areas. There were many other policies and bills which are not specifically for people with disability but these are beneficial for all, including people with disability like Right to Education Act (RTE) which was passed in 2009 and put into full effect in 2010. MHRD (2009) pointed that one important article of this Act was to ensure that students with and without disability are guaranteed education. The Act specifically prohibits schools from charging any type of fee for completing their elementary education. National Early Childhood Care and Education Policy (ECCE) has received attention in the National Policy for Children (1974), resultant to which the ICDS was initiated on a pilot basis in 1975 with the objective of laying the foundation for all round and integrated development of all children up to six years of age. In 2012, "Draft Rights of Persons with Disabilities

Bill' came which include eighteen disabilities, some being thalassemia, muscular dystrophy, multiple sclerosis, etc. (MSJE, 2012). In this bill, first time issues of women and girls with disabilities were considered. Latest we have Right of Persons with Disabilities Bill, 2014 (MSJE, 2014) which was introduced in the Rajya Sabha on 7 February 2013 by the Minister of Social Justice and Empowerment.

#### **4.8 India's Stand on International Policies and Guidelines Related to People with Disability**

With change in the policies and acts with time, India is also witnessing some international happenings also related to people with disability like the year 1981 was declared as 'International Year of Disabled Persons'. Also the years 1983 to 1992 as 'Decade of Disabled Persons' by General Assembly of United Nation. 1993 to 2002 was declared as 'Decade of Disabled Persons' by UNESCAP (United Nations Economic and Social Commission for Asia and Pacific). These international deeds again bring the focus on 'people with disability'. The World Conference on Special Needs Education in Salamanca in 1994 (UNESCO, 1994), have encouraged many countries, including India to think about the welfare of people with disability. India is also signatory to the Declaration on the Full Participation and Equality of People with Disabilities in the Asia Pacific Region. India is also a participant of the Biwako Millennium Framework for contributing in building an inclusive, barrier free and rights based society and the UN Convention on the Rights of Persons with Disabilities. The United Nations Convention on the Rights of Persons with Disabilities (UNCRPD) was signed in 2007 by India which was enacted later in 2008.

#### **4.9 Analysis of Policies and Acts**

In this section, an analysis of pertinent policies related to people with disabilities has been presented. Most of the policies and acts adopted 'binary perspectives' for handling issues of children with disability. First, all these policies emphasized on the mainstreaming of children with disability, i.e. they should not be segregated and on the contrary they stress on special schools too. Though Sargent Report-1944 (Preindependence) first time recognized the need of education of people with disabilities, but it adopted the 'binary perspectives' to cater to children with

disability. After twenty years, Kothari Commission-1966 (Post-independence) also alleged that “many handicapped children feel psychologically broken after being placed in an ordinary school”(Education Commission, 1966, p. 109). This statement conveyed the inclination of the Commission on sending children with disability to special schools. This shows that binary approach of reports continued in education policies from British rule to independent India. The NPE 1986 and POA-1992, both incorporated the educational well being of children with disability as a specific agenda. It was for the first time that education of the people with disability had been recognized as human resource development activity rather than a mere welfare activity. But in Section IV of the National Policy of Education (1986) entitled ‘Education for Equality’ states that ‘ where feasible children with motor handicaps and other mild handicaps will be educated with normal children, while special residential schools will be facilitated for severely handicapped children’ (MHRD, 1986). It also displays that in independent India even after twenty years, education policies keep going with ‘binary perspective’.

In 1995 also, ‘binary perspectives’ can be observed in the act meant for persons with disability called PWD-1995 (Ministry of Law and Justice, 1996), which notes that, “it endeavours to promote the integration of students with disabilities in the normal schools” and also encourages the “establishment and availability of special schools across the nation” in both Government and private sectors. Also, a major drawback of the enactment of the PWD was that in every clause, it was written “within the economic capability of state...”. Therefore, PWD did not immediately translate their promises into action because of lack of finance, though it acted as the impetus for a number of other development projects. After reviewing all the educational policies one can see that none of the policies has identified girl-students with disability as a separate group and realised that they are more vulnerable and need specific attention. Only in Draft rights of persons with disabilities bill, 2012, first time issues of women and girls with disabilities was considered. Secondly, most of the policies attempt to demonstrate an inclusive education system under the influence of international policies and guidelines as India is signatory to a number of international declarations. For example, Sargent Report -1944 was criticised to be a copy of the design of the education system practiced in England and the PWD -1995 Act also showed resemblance with the United State’s ‘Americans with Disabilities Act’ (ADA).

The term used and meaning of disability varies and gradually changes in policies and acts as the time changes. All the policies and acts of 1990's e.g. Sargent Report-1944, Kothari Commission-1966 and even in NPE, 'Handicap' term was used to refer people with disability. In these policies and acts, 'People First' terminology was not adopted. An example of gradually change of definitions was in RCI-1992, which defines many terms such as 'mental retardation' and 'rehabilitation professionals' and the term like 'Handicapped' was referred to PWD Act, 1995, then, later it was replaced by 'Persons with Disabilities' in the amendment of this Act in 2000. Afterwards all the policies and acts of late 1900's tried to pay attention to 'People First' terminology and called 'People with disability'. In National Trust for Welfare of Persons with Autism, Cerebral Palsy, Mental Retardation and Multiple Disabilities Act (1999), the definitions of terms such as 'autism', 'cerebral palsy', and 'Persons with disabilities', etc. were clarified. The definition of 'mental retardation' was same as RCI Act 1992 and the definition of 'Multiple Disabilities' was taken from PWD Act 1995. Yet one can pinpoint many places in these policies and acts, where they did not pay attention to 'People First' terminology. In the SSA framework, a new term 'Children with Special Needs' (CWSN) was used but the scenario did not change much for the people with disability. All the policies from late 1960's seem to lean towards inclusion. But in real terms these policies were not impeccably inclusive. Most of such policies were having discriminating elements against people with severe or intellectual disabilities, regarding regular vs. special schooling. Some policies did not specifically mention about people with disability. Even some acts gave very limited categories of disability. For example PWD defines disability by listing only seven categories of disability. National Trust for Welfare of Persons with Autism, Cerebral Palsy, Mental Retardation and Multiple Disabilities Act include only these four disabilities. (MSJE, 1999).

#### **4.10 A Psycho-educational Perspective**

The Preamble to the Constitution of India clearly states that all the citizens of India are equal before the law and everyone has the right to equality of status and opportunity without any discrimination. Although, the Articles ensuring these are general in nature and do not specifically refer to persons with disabilities, however, the Article 41 of the Directive Principles of the Indian Constitution

supports the right to work, to education and to public assistance in certain cases, including disablement. The Constitutional provisions are enacted through various legislations and Acts, laid down to protect the rights of persons with disabilities. To mention a few selected ones in this regard, Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1996 became landmark legislation in the history of special education in India as it ensured that every child with disabilities also has access to free education and an integration of students with disabilities in the normal schools. Besides this, the Right to Education (RTE) Act (2009) made elementary education (in the age group of 6–14 years) a fundamental right of every child, including children with disabilities. The faith instilled in the power of education to transform lives became instrumental in getting education, recognition as a human right. Likewise, since the past few decades, India has observed a considerable shift in the manner in which disability is understood. Disability has come to be viewed in the context of Human Rights. Henceforth, education of children with disabilities has become a priority for the Government of India. The Government's commitment has been reflected in various enactments, schemes and through establishment of relevant institutions. The education system in India can thus be perceived as a powerful means to achieve equality for all, including those with disabilities. It works as an apparatus in furthering the ideological stand of the state. In this regard, the National Curriculum Framework, 2005 acknowledges that 'Inclusion in education is one of the components of inclusive society'. It thus recognises the need to create an inclusive environment in the classroom for all students, especially, for students with disabilities, who may be at risk of marginalisation. The National Focus Group on Children with Special Needs also noted that, "Special and general education, in other words, are gearing for a significant move to come closer together". However, here it is important to draw attention to the fact that a critical analysis of the policy documents suggests that the primary steps taken for education of children with disabilities have largely been focused on the issues of access, and those associated with classroom based 'processes', which significantly determine the quality of the educational experience have been sparse. Anita (2000), stresses that the concept of inclusive education has not yet found linkages with the discussion on pedagogy. This paper focuses on pedagogical tools — more specifically it looks at the content of textbooks. In the Indian education culture, textbooks continue to dominate the educational process and occupy a



significant position within classrooms. Textbooks are produced in large numbers, have a large outreach (Mehrotra and Ramachandran, 2010) and are sometimes the only text the students read. Zevin (1992) notes that textbooks are the most used instructional resource in the classroom; sometimes even more than the classroom teacher. Sleeter and Grant (1991) argue that the textbook is the 'major conveyor' of the curriculum. The content presented in the textbooks influence students, who may accept this content as 'exhaustive', 'true' and 'right'. Since textbooks dominate what students learn, they thus emerge as one of the most powerful 'tools' of the education system through which constitutional, legal and social goals can be achieved. The CABE sub- committee on textbooks suggested that textbooks should be constructed in lines with constitutional principles. They should be free of prejudice and bias and should build a commitment towards democratic values such as equality (CABE, 2005). The images that textbooks build of those who are marginalized, including those of persons with special needs, directly or indirectly influence what children assume them to be. To some extent, they understand persons with disabilities vis-à-vis the society through the lens provided to them by the textbooks. Thus, keeping the centrality of textbooks in mind, the present paper aims to critically analyze the portrayal of persons with disabilities in textbooks used in elementary schools. The paper closely analyses the depictions of the issues and concerns pertaining to disabilities. The section below briefly presents the methodology undertaken for the study.

#### **4.11 Challenges Faced by Persons with Disabilities**

Persons with disabilities come across a number of challenges owing to their disabilities. Some may be on account of their physical limitations and others may be due to people's discriminatory attitudes towards them. The psycho-social challenges they face, may sometimes pose greater challenges to their social acceptance and well being. How these challenges have been articulated in the textbooks forms the content of the following sections. The physical, psycho-social and educational challenges faced by persons with disabilities are highlighted in the text that follows.

### 4.11.1 Physical Challenges

Persons with disabilities often come across physical challenges and structural barriers and this was pertinently demonstrated in 'Sunita ki Pahiya Kursi', 'Jahan Chaah Waha Raah' and 'Ek Maa ki Bebasi'. The excerpt from 'Sunita ki Pahiya Kursi' given below is significant in this regard- The text above explicitly brings forth the everyday physical challenges such as walking without help, using one's hands, changing one's clothes, wearing shoes and so forth that people with physical disabilities confront. The text, occasionally, evinces that owing to obstructive nature of architecture and structures of buildings and public spaces, persons with disabilities find it difficult to access them. The invisibility of persons with disabilities from social spaces and subsequently, in social participation is creatively emphasized by the poet in 'Ek Maa ki Bebasi' where the existence of the child with hearing impairment is rendered invisible by the use of the phrase '...wonder, from which invisible neighborhood, would he appear...'

This invisibility may be a matter of social access that is often denied as a repercussion of denial of physical access to the spaces that are ordinarily occupied by the able-bodied. When persons with disabilities lack physical spaces to mingle with those without disabilities, the chances of their social acceptance within mixed groups is likely to remain restricted. In terms of social participation, the text acknowledged that children with varying physical abilities do not participate in activities with other children in the 'typical' ways. Ratan, the child with hearing impairment, in 'Ek Maa ki Bebasi', found it difficult to connect with other children and vice-a-versa owing to his use of sign language. Nevertheless, the textbooks also portrayed pictures of positive participation such as Ila's engagement in singing with other children and wheelchair bound Sunita being playfully pushed by a child. Such alternate pictures open up opportunities of common participation between children with and without disabilities. A study conducted by Mehrotra and Ramachandran (2010) present a counter view to this interpretation and argue that Sunita's depictions are unreal to a certain extent. They contend that wheel-chair bound individuals are less mobile than Sunita; many need a basic attendant and find it impossible to go out alone on roads and markets with traffic.

### 4.11.2 Psycho-social and Educational Challenges

This section unravels the ways in which the textbooks have portrayed the psychosocial world of persons with disabilities. In particular, it explicates the personality traits and characteristics, thoughts, feelings and emotions of persons with disabilities. It also brings to light people's attitudes towards persons with disabilities. The educational vulnerability of persons with disabilities as presented in the text has also been looked at. Resilience and perseverance stood out as the most adorned human traits in the depictions pertaining to persons with disabilities. In 'Jo Dekh Kar Bhi Nahin Dekhte' Helen Keller's resilience was exhibited by the fact that she asks her friends to describe what they 'saw' through their jungle trail; and eventually in comparison to their descriptions, she displays her competence by describing many finer details that they missed out on. This act of resilience is legitimized by the fact that she did not surrender to her visual impairment and indeed developed her sense of touch much better than sighted individuals. Likewise, 'Jahan Chaah Waha Raah' also portrayed Ila, the protagonist as a strong willed and determined individual who did not give in to her situations and fought back to achieve the seemingly unachievable goal of embroidering using one's feet. The text did not merely put on view the challenges that persons with disabilities come across but went a step ahead and presented a picture of how these people found means to combat these challenges. As drawn out from the extract given below, the persons with disabilities did not succumb to their difficult circumstances; rather they found ways to cope and work out solutions to the difficulties.

Hence, the text carved out the picture of persons with disabilities as those who have learnt to manage their challenges and gained autonomy and control over one's life conditions. However, this does not hold applicable universally to all the characters portrayed in the textbooks since in 'Ek Maa ki Bebasi', the mother's and her child's helplessness were pictured and in 'Neelkanth', Kubja's character of a peahen with physical deformity was also painted negatively. As far as the thoughts, feelings and emotions of the persons with disabilities and other persons in contact with them are concerned, the text brought forth a gamut of feelings that form the emotional repository of persons with disabilities. At one end of the continuum, these human emotions ranged from joy, happiness and achievement to sadness, sorrow and helplessness at the other end. Being able to do one's work gave a sense of contentment and fulfillment to Sunita in 'Sunita ki Pahiya Kursi'. The text clearly mentioned that Sunita's eyes sparkled as she was to visit the

market by herself, for the first time. On the other hand, Sunita's sadness over the fact that unlike other children she cannot engage herself in outdoor street games was also enunciated. Likewise, fears and worries of the persons with disabilities and their significant others also found mention in the text and illustrations. It was interesting to note that 'Sunita ki Pahiya Kursi' threaded together two contradictory yet complementary ideas. In one instance, Sunita claimed that she was not different from other children and like other children she would also like to lead a 'normalised' childhood. She voices her frustration over the fact that people treated her 'differently'. Here, Amit argued that since Sunita used a wheel-chair and he himself was shorter in height; this 'does' make them different from others. The point that he implicitly stressed was that people are differently abled and each person is thereby different and unique in his/her own way. He pointed out the need to accept and celebrate differences and diversity. The textbooks presented various contours of people's attitudes towards persons with disabilities and those with other differences. Accounts of discrimination, apathy and indifference as well as sensitivity and support extended by people towards persons with disabilities were presented in the text. Two notable examples where the harsh social realities found expressions were in 'Sunita Ki Pahiya Kursi' and 'Saat Poonch ka Choocha', where Amit, for being shorter in height and the rat, for his unusual seven tails were mocked at and stigmatised. In the poem, 'Ek Maa ki Bebasi' as well as in 'Neelkanth' persons with disabilities were addressed as 'broken toy', 'strange' and 'damaged goods'. These examples point towards the stereotypic view that a majority of population still holds with reference to persons with disabilities. However, examples of change also featured within the text. Towards the end of the poem, 'Ek Maa ki Bebasi', the child accepts that he was able to empathise with the vows and fears of Ratan as he started understanding sign language. Also in 'Sunita ki Pahiya Kursi', Amit and Sunita's mother come across as sensitive, caring and empathetic towards her. The role of significant others was portrayed positively in this regard. The following excerpt is significant in understanding the same- Here, it is apparent that upon Sunita's request the mother did not rush to provide assistance to her. In fact, she showed her the way and empowered her to do her everyday tasks herself. This gesture is significant in building the self-esteem and self-confidence of persons with disabilities. Positive attitude builds in persons with disabilities when they can mutually contribute to the well being of the lives of others around them and believe themselves to be

productive members of their family and the society at large. This image of a legitimate contributing member of the family was explicated when Sunita asked her mother what she can bring from the market. This conversation between Sunita and her mother is significant in this regard-

Despite being aware of the difficulties Sunita might face, her mother wins over her own worries and promotes Sunita's independence. Thus, the text does not stop at shedding light on the challenges of the persons with disabilities but also gave space to the socio-emotional challenges of the people who come in close contact with them, may it be their mother or friends. Contrary to popular belief that persons with disabilities need continuous support from others to do their work, the text suggested that persons with disabilities appreciate only occasional and moderate assistance from others. When the shopkeeper readily extends help to Sunita by placing sugar upon her lap, Sunita dislikes it. However, within the same loop of episodes, to climb the stairs, Sunita had to take the help of Amit in pressing the pedal of her wheelchair. Hence, the balance between when to help and when not to help; when not to seek help and when to seek help, were contrasted. Mehrotra and Ramachandaran (2010) urge that people should be observant and should develop basic sensitivity to respond to the real needs of the differently able persons. Lastly, in terms of educational vulnerability, the text in the lesson 'Jahan Chaah Wahan Raah' elicits that persons with disabilities stumble upon educational barriers due to lack of information. Ila dropped out of school before tenth standard as she was unaware of the educational provisions such as an extra hour during examinations and facility of a scribe for writing, that she was entitled to. The need for timely support and action thus tacitly got advocated through the text.

#### **4.12 Parents' Concerns on Home Based Education**

##### **Is it in the best interest of their child?**

Although estimates vary from State to State, the number of children with disabilities in the Home Based Education Programme (HBE) of the Sarva Shiksha Abhiyan(SSA) has risen over the years. While the number of children with special needs (CWSN) under HBE programme was 1,38,133 in the year 2009-10 out of the total of 30,42,053 identified (MHRD, 2010), it was 2.06 lakh out of the 27.16

lakh till March 14 (SSA data till March 14 as presented in the expert group meeting in 2014).

The practice of HBE, however, has its roots in the year 2001, when *Sarva Shiksha Abhiyan* (SSA) was launched by the Government of India as an answer to implementing the Zero Rejection Policy. The SSA framework stated (MHRD, 2006) that “SSA will ensure that every child with special needs, irrespective of the kind, category and degree of disability, is provided education in an appropriate environment. SSA will adopt zero rejection policy so that no child is left out of the education system.” Further “the thrust of SSA will be on providing integrated and inclusive education to all CWSN in general schools. It will also support a wide range of approaches, options and strategies for education of children with special needs. This includes education through open learning system and open schools, non formal and alternative schooling, distance education and learning, special schools, wherever necessary, home based education, itinerant teacher model, remedial teaching, part time classes, community based rehabilitations (CBR) and vocational education and cooperative programmes.” In the year 2012, in the month of June, the Government of India made HBE a right for children with disabilities through the Right of Children to Free and Compulsory Education (Amendment) Act, 2012.

The Act stated that: “Provided that a child with multiple disabilities referred to in clause (h) and a child with severe disability referred to in clause (o) of section 2 of the National Trust Act for Welfare of Persons with Autism, Cerebral Palsy, Mental Retardation and Multiple Disabilities Act, 1999 may also have the right to opt for home based education.” The Amendment gives children with severe and multiple disabilities the choice between school and HBE. The idea behind this option was that there may be children with severe profound disabilities who may require intensive individualized support and attention which is not possible in a regular school system.

#### **4.13 Web 2.0 Tools in Teaching-Learning of Languages in an Inclusive Environment**

Language comprehension is the key to learn any subject in order to acquire functional literacy. The Annual Status of Education Report issued by Pratham displays the poor reading skills of students. In most states, Class V students are

unable to read Class II textbooks (ASER, 2014). The impact of this schooling failure is evident each day. One of the ways to deal with this situation can be the intervention of technology to enable children to comprehend languages. It will be contextual to mention here the 'Right to Read India,' which is a national initiative to promote technology-enabled reading and comprehension in government schools. It looks to urgently intervene and provide a scalable solution to India's reading challenge. It was launched in 2013, as a partnership between Dell, American India Foundation and English Helper™ (S. Gupta and P. Viswanath, 2015). The case of Partur which is a Municipal Council in Jalna district, Maharashtra can be taken as an example where recently technology enabled reading and comprehension platform is introduced under the campaign. In a Zilla Parishad School of this constituency, an audio-visual lab equipped with a solar powered e-Pathshala which is a multipurpose educational computer is used by the teachers especially for teaching English. The digitised version of the English textbook available with the reading platform is used. At first, the students read aloud with the voice of the reading software, which enables them to pronounce the typical words properly. To facilitate this process, there is a specific syllabification tool in the system. Several comprehension tools like the dictionary and picture dictionary and vernacular list in the mother tongue are used. This technology driven system allows the students to read English aloud, for the students belonging to agricultural communities and having no exposure to English, this is a great achievement. While talking about technology interventions in education, it is essential to address Web 2.0 tools which are the emerging applications between the creation of knowledge and knowledge sharing in order to accumulate the collective knowledge in a spiral mode. It is contextual that the Web 2.0 tools are concerned with active sharing of knowledge and also with the creation of knowledge; on the other hand, Web 1.0 is related to passive viewing or using of content available on the internet. In addition to this, Web 2.0 tools are free and easily usable.

#### **4.14 A Study on Awareness of RTE Act 2009 among the Parents of Minority Community of Varanasi City**

After independence the major problem for the Indian policy makers was to remove the illiteracy, and educate the whole nation. Government of India had

made a number of policies and Constitutional provisions to universalise the elementary education so that all the members of the country become educated citizens. In this process, Government of India had formulated Right to Education Act 2009 or Right of Children to Free and Compulsory Education Act 2009 and became one among the 135 countries of the world who had declared that it is the right of child to get education. RTE Act mandates the right to education of all children belonging to every section of our society irrespective of their caste, religion, race, etc. To place this Act in action it is essential that all the members of our society and parents participate and take part in providing education to everyone. Therefore, in this research an attempt is made to study the awareness level of the Muslim minority parents about the RTE Act 2009. A few researches on the RTE Act which have been reviewed are described in the following paragraphs. Kamath, AKVD and Somashekar, TV (2013) in their study on 'Awareness on RTE Act 2009 among Teacher Educators at Secondary Level' administered a Questionnaire to a sample of 27 Teacher Educators of southern India. The study revealed that the awareness level of teacher educators was not satisfactory as their mean score was only 33.32 per cent. Rahman A. (2013) conducted his study on sample of 160 Primary school teachers from Kanpur. It was found that about forty-five per cent of the teachers working in the private schools were not at all aware about the basic provisions of this Act, including the age group and level/classes covered therein, of the students. The level of awareness among the teachers' of government schools is comparatively more (54.6 per cent).

Rajput G. and Aziz T. (2013) conducted a study on 200 parents of urban slum dwellers of Delhi which revealed that 88 per cent of parents were unaware of RTE Act and only 5 per cent parents were aware of the duty of the parents to send their child to school. Sachar Committee Report (2006) revealed that around 25 per cent of Muslim children in the 6-14 year age group have either attended school or have dropped out. Muslims have the highest dropout rate in the country and the increase in enrolment in schools has been highest among SCs and STs (95 per cent) followed by Muslims (65 per cent). Report of the Standing Committee of the National Monitoring Committee for Minorities' Education (NMCME), (2012) recommends the Government to discuss and take remedial action for addressing the problem of low rates of transition of Muslim students from primary to upper



primary schools. The above studies show that, there is a need to publicise about the RTE Act. They also indicate that the level of enrolment of children at the elementary level among the Muslim community is low. If the children are to be sent to school, parents are supposed to know about the Act. Even if the Act is formulated, unless the parents are aware of the provisions of the Act, it may not be possible to completely achieve the objectives of the Act. Therefore, it was felt that there is a need to find out as to what extent the parents of the Muslim community are aware of the RTE Act.

#### **4.15 Conflict Resolution Education to Elementary School Learners**

##### **Building Peace for Life**

We all face conflict in our lives as a matter of routine. It is expected, natural, and accepted part of life and one can do little to avoid it. Dewey (1922, cited in Coleman, Deutsch and Marcus, 2014) said that "Conflict is the gadfly of thought. It stirs us to observation and memory. It instigates invention. It shocks us out of sheeplike passivity, and sets us at noting and contriving." The society at present is in crisis for it has utterly failed in resolving the conflicts. Since the school is a miniature of our society, the issue of conflicts has unfortunately seeped into our classrooms thus making the whole education system hollow. We have multiple conflicting issues in the classrooms and schools reflected through misunderstanding among student, teachers, between students and teachers, as well as between teachers and parents. The potential for conflict exists because students, parents, teachers, and other stakeholders have different needs, competing interests, and varied views, scarcity of choices, distinguishable understandings, and possibly different value systems. These yield emotions running high on a variety of issues. The nature of conflicts in the elementary classrooms is invariably different from what we see in our classrooms of secondary and higher secondary schools. The conflicts experienced by children are not about individual identities. but a reflection of the types of conflict, they often come across in the society. The followings are the glimpse of some common types of conflict which a teacher encounters in an elementary classroom:

#### **4.16 Children's Laughter and Language of Humour**

The recognition of humour and taking delight in the ludicrous incongruity are particularly human activity. Someone narrates a funny story or tells a joke, or makes a witty remark, and we are suddenly struck by its wittiness. Depending upon how amusing we perceive the humour to be, it can make us smile or burst into laughter. The laughter seems to arise from a subtle creative twist in the language expression underlining something incongruous. The ability to comprehend and appreciate humour is a critical aspect of social functioning. Modern day school learning focuses on the pedagogic trend towards the promotion of joyful learning, with an attention that children are much more likely to be motivated to learn, and to retain knowledge if they are happy, rather than anxious in the classrooms. The Yash Pal Committee report Learning without Burden (1993), has extensively reported on the flaws of the contemporary education system, pointing out that the contemporary education system has become highly centralized, examination driven and joyless. It highlights that the child has lost “the sense of joy in being involved in an educational process” (p.5). Moreover, it argues that the textbooks are impersonal, and somewhat irrelevant to the child’s world. “Words, expressions and nuances commonly used by children and others in their milieu are all absent from textbooks. So is humour... The language used in textbooks, thus, deepens the sense of ‘burden’ attached to all school-related knowledge” (p.10). It envisages, “...joy must be respected in a text written from a child-centered point of view” (p.9). For the first time, National Curriculum Framework (2005) recognized this, in its chapter ‘Systemic Reforms’ and recommended that “the curriculum will be designed so as to provide opportunities to directly observe learners at play and work; assignments to help teachers understand learners’ questions and observations about natural and social phenomena; insights into children’s thinking and learning; and opportunities to listen to children with attention, humour and empathy” (p. 108-109). The use of humorous content in the classroom allows a platform for interpreting the ambiguity of humour, and integrating teaching-learning practice with the children’s wishes. This paper will try to present the philosophical orientation to understand the expression of humour, in what way, the ironic humorous or joking speeches of daily life use a figurative meaning opposite to the literal meaning of the utterance.

#### 4.16.1 Language of Humour

To facilitate the discussion of meaning and kind of ambiguity humour possesses, we need to look at the language of humour and its nature. This area is always looked upon by the society as a non-serious or joking subject. Emerson (1969) writes: "for the very reason that the humour officially does not 'count', persons are induced to express messages that might be unacceptable if stated seriously" (p. 169-170). He emphasizes that it is a process of negotiation and a covert communication, which "may be regarded as bargaining to make unofficial arrangements about taboo topics" (p.170). Underpinning this form of communication allows a mode of disguise that implies that only joke was intended, and nothing serious. The review of literature points out that humour are incongruous and is regarded as a form of social play, a twist in the language expression with sheer creativity and spontaneity, which evokes laughter. The form of humour proposes that the appreciation of humorous material involves understanding and resolution of incongruity. Use of ambiguity or metaphor is an important feature of persuasive discourse in humorous expression because it mediates between the cognition and emotion. McGhee (1979) defines humour as "the mental experience of discovering or appreciating ludicrous or absurdly incongruous ideas, events, or situations" (p.6). The cognitive process of humour involves a social context, an intellectual appraisal comprising the perception of a playful incongruity with an emotional response of mirth or laughter. The simplest expression of that is the pun or joke, in which two different meanings of a word or phrase are brought together simultaneously. In explaining the role of incongruity in humour, Kant (1911) writes: "in everything that is to excite a lively laugh there must be something absurd (in which the understanding, therefore, can find no satisfaction)... laughter is an affection arising from the sudden transformation of a strained expectation into nothing" (p. 54). Freud (1905) writes: "pleasure could arise from the alternation between 'thinking it senseless' and 'recognising it as sensible" (p.160).

Koestler (1964) developed the concept of 'bisociation' to explain the mental processes involved in humour, as an incongruity. According to him, bisociation occurs when a situation, event, or idea is simultaneously perceived from the perspective of two self-consistent but normally incompatible or disparate frames of reference. Thus, a single event "is made to vibrate simultaneously on two different wavelengths, as it were" (p.35).

On the other hand, the language discourse on humour highlights the idea of ambiguity in expression of language or incongruity as a basis of origin of humour. Looking at our roots to understand the humorous incongruity and aesthetics, the enjoyment of incongruities forms the basis of aesthetic pleasure. In ancient Sanskrit literature, Humour is defined as Hāsya (हास्य). Humour or Hasya is seen as a *rasa* of joy, a prominent integral part of the '*Natyashastra*' for evoking mirth. Attardo (2001) suggests that humour in its simplest structure includes a set-up with an incongruity and a resolution. Considering joke, he writes that this structure has a disjuncture or punch line, a textual element that introduces the incongruity and forces a switch from one schema to another. Also, there has to be a connector which functions as a bridge between these schemas to achieve a 'resolution'. The two schemas have to be incongruous with each other. Attardo (2001) writes: "by forcing the hearer/ reader to backtrack and reinterpret the text, or by forcing her/him to produce a new and incompatible... interpretation of the text, the punch line cannot be integrated into the narrative it disrupts (which is the one that has set up the first script)" (cited in Goatly, 2012, p.22). In India, the most common form of humour among children is a riddle or question-answer structure (igsyh) in which, humour resolves the process in an unexpected way, inconsistent with the previous assumptions. The element of surprise is an evident component in the design of the humorous content. Another important aspect of humour is the punchline concept, which achieves its effect implicitly rather than overtly. It employs a twist in language expression through different vocabulary is applied in an unusual and new way that opens a new vista of thought process. Alexander (1997) writes: "jokes appear to flout/violate the maxim of manner: they often depend upon deliberate creation of ambiguity, which is eventually resolved in punchline" (cited in Goatly, 2012, p. 232). Traditionally, literal language has been distinguished from figure of speech, including metaphor, metonymy, simile, understatement, hyperbole or irony. All these figures of speech are utterances whose meanings fail to match the state of affairs, and thus involve a hidden or metaphorical meaning. Goatly (2012) says that metonymy or metaphor based text holds ambiguity, which jokes or puns may exploit. Its comprehension mainly depends upon contiguity in experience on some perceived similarity or analogy. From a cognitive aspect, a metaphorical use in language expression can be briefly defined as thinking of one thing or idea as though it refers to another thing or idea.

## 4.17 Language of Science and Teaching Learning of Science

### A Constructivism Oriented Interface Overview

It is generally observed that in our schools, when teachers teach science, students answer questions in science, whether verbally or in writing, language is hardly accorded due importance. Apparently, there are explicit instructions from boards of school examinations to ignore/ overlook language related faults of students while evaluating science papers. Perhaps all this stems from the perception that science as a discipline is isolated from language as a discipline and teachers and students of science need not worry about the accuracy/propriety of the language they use to communicate their knowledge and ideas. Even researchers in science sometimes have this kind of notion. However, the truth is that language plays a very significant role in science in all its forms, for everyone associated with it. The importance of language in science can be seen in the simple but profound statement ascribed to the great English lexicographer Samuel Johnson (1709-84): "Language is the dress of thought" (Weaver, 1987), when it is combined with the fact that science begins and flourishes with thought. It sounds trivial that scientific ideas are invariably expressed in language and they would fail to achieve their objectives if the language is inappropriate. On the other hand, developments in science have resulted in enrichment of language through coining of new terms or finding new connotations of existing words. The deep connection between science and language can be seen, for example, in *Physics and Philosophy*, an excellent book authored by Werner Heisenberg (1901-1976), the 1932 Physics Nobel Laureate. The book (Heisenberg, 2000, pp. 113-128) gives a lucid account of the evolution of scientific language beginning with Aristotle (fourth century BC) to the emergence of the path-breaking concepts of relativity and quantum mechanics (twentieth century AD). According to Albert Einstein (1879-1955), celebrated as the greatest theoretical physicist of the twentieth century and the 1921 winner of Nobel Prize in Physics, the wealth of scientific concepts and scientific language created and nurtured by excellent minds of the world has a far-reaching influence on human thinking, going beyond the national boundaries. It is a foregone conclusion that the mental development of an individual and her way of forming

concepts are dependent upon language to a great extent. ([www.openculture.com/2013](http://www.openculture.com/2013)).

However, the connection between science and language does not seem to be recognised in teaching learning situations to the extent desired. In our schools, science teachers and language teachers are almost like isolated bodies with hardly any cognitive exchanges on pedagogical and language issues that affect multitudes of students. Further, in most in-service teacher education programmes on science, the participants want elaborate discussions on 'content-cumpedagogy' of teaching science concepts without evincing interest in the role of language in teaching learning of science. Needless to say, content and pedagogy are both language dependent. The pre-service education programmes for science teachers are also deficient in the matter of language. Though language is a curricular subject in various courses such as the one-year B. Ed. (Science), the two-year B. Ed. (Science), and the four-year integrated B. Sc. B. Ed., it is mostly taught in a general manner without adequate reference to scientific language. These scenarios have an undesirable ramification leading to the notion that language is not a serious matter in the teaching of science. Clearly, this does not bode well for teachers or students. In fact, science teachers need to be more careful than even the language teachers as the former have to handle language in its multiple forms, from everyday words to domain specific technical vocabulary. It may be pointed out that language-mediated social interaction, as propounded by the Russian psychologist Lev Vygotsky (1896- 1934), has been recognized as a basic tenet of constructivism (Liu and Matthews, 2005). In practical terms, in constructivist approach to teaching learning, language plays a role more significant than in the traditional teacher dominated transmissions approach. Constructivism advocates pupil participation in classroom processes on a large scale using varied strategies such as cooperative learning, working in groups, analyzing a situation and voicing opinion, sharing ideas through dialogue/ debate, preparing and presenting a report, carrying out cognitive negotiation, etc. which give a learner ample scope to construct concepts as well as language. Realizing the same, the National Curriculum Framework – 2005 (NCERT, 2005, p. 38), recommends a 'language-across curriculum' approach, observing that all classes, whether science, mathematics, or social science, are *ipso facto* language classes. Besides its role in science and mathematics education, constructivism has been found to be useful in

teaching learning of language, online as well as offline (Kaufman, 2004; Can, 2009). Against the above backdrop, the present article attempts to give a broad perspective of language in teaching learning of science for the benefit of teacher educators, teachers, and students. The underlying motivation is to expose them to a variety of language-based tools, which they may use in the process of knowledge construction. Now a disclaimer is in order: the language used in this article does not claim to be 'the right language'; it may not even be the 'most appropriate language'. This is because there is nothing like 'the right language', 'a right language', or even 'the most appropriate language'. Whereas there is plenty of variation in language form and usage in informal and formal social and academic settings, domain specific technical language has less maneuverability and needs to be understood and used with a bit of care, while keeping in mind the fact that in science, content-appropriate language is more important than 'beautiful' or 'ornamental' language.

#### **4.18 Teacher Learning in In-service Professional Development**

##### **Insights from two In-service Training Programmes**

Teacher's while service training has been recognized as a major input for quality improvement in classroom transactions and learning outcomes (NCERT, 1968; GOI, 1986; GOI, 1992; NCERT, 2005). 'In-service teacher training (INSET) for English language teachers is an important but often relatively ineffective aspect of largescale English language teaching (ELT) curriculum development' (Waters and Vilches 2012:1). Though emphasis has been on ongoing and onsite teacher education and quite a number of teachers find opportunities to participate in the professional development programmes, the general view of teachers is that 'attend the professional development activities; listen to the trainers; and leave it there itself'. This, 'attend, listen to the trainer and leave it there' practice, though not open, is felt among the teachers. One can hear teachers say, this may be a good method or technique, but this will not work in my classroom. This paper makes an attempt to understand teacher learning through formal in service professional development activities conducted by agencies like the National Council of Educational Research and Training (NCERT) and the State Council of Educational Research and Training (SCERT) in India.

While the teachers at the primary and upper primary level are regularly trained in some form or other under the scheme of Sarva Shiksha Abhiyan(SSA), teachers at the secondary level in most state systems are not trained. School systems like the Kendriya Vidyalaya Sangathan (KVS), Navodaya Vidyalaya Samiti (NVS) and a few school education boards like the CBSE offer regular training programmes for their teachers at the secondary and senior secondary stages. Most of the teachers at the secondary stage (Classes IX and X) in the state run school systems are not trained for decades (Meganathan, 2012). Thanks to the Rashtriya Madhyamik Shiksha Abhiyan (RMSA) scheme, the Government of India's mission mode exercise for education for all up to the secondary stage, all teachers at the secondary stage will now be trained. Opportunities for in service training are crucial for the long-term development of teachers as well as for the long-term success of the school systems in which they work. Professional development of teachers at all levels is a necessity for achieving the goals of quality education for all. Richards and Farrell (2005) explain the need for it:

- (i) In any school or educational institution, there are teachers with different levels of experience, knowledge, skill, and expertise. Mutual sharing of knowledge and experience is a valuable source of professional growth.
- (ii) Teachers are generally motivated to continue their professional development once they begin their careers.
- (iii) Knowledge about language teaching and learning is in a tentative and incomplete state, and teachers need regular opportunities to update their professional knowledge.
- (iv) Classrooms are not only places where students learn—they are also places where teachers can learn.
- (v) Teachers can play an active role in their own professional development.
- (vi) It is the responsibility of schools and administrators to provide opportunities for continued professional education and to encourage teachers to participate in them.



(vii) In order for such opportunities to take place, they need to be planned, supported, and rewarded. (p13) Teacher learning from pre-service to an experienced or specialist stage is perceived in different dimensions. Richards and Farrell (2005: 14) further attempt to list them under three categories, viz.(i) Teacher learning as a cognitive process; (ii) Teacher learning as personal construction; and (iii) Teacher learning as a reflective practice. The first approach assumes that teaching is a 'complex cognitive activity' and the focus is on 'the nature of teachers' beliefs and thinking and how these influence their teaching and learning.' In the words of Borg (2003:81) "teachers are active, thinking decision-makers who make instructional choices by drawing on complex practically oriented, personalized, and context sensitive networks of knowledge, thoughts, and beliefs". Teacher learning as personal construction believes in the constructivist paradigm that knowledge is actively constructed by the learners, here teachers. Teachers based on their day-to-day classroom experience learn to be effective teachers while the third dimension teacher learning as reflective practice assumes that teachers make an attempt to learn from experience through focused reflection on the nature and meaning of teaching experiences (Wallace, 1998; Richards and Lockhart, 1994). Teacher learning is also seen from a novice and an experienced teacher's perspective. A novice teacher with less or no experience and a teacher with quite a number of years of experience makes a difference in their understanding of nature of the subject, profile of learners, the socio-political contexts and the understanding required for realizing the immediate and long term needs and demands (Needs and demands need not match. Teachers, like learners, need something, but demand some other thing.) of the curriculum and the learners. A teacher with many years of service may not have gained / learnt the knowledge or developed a perspective that is expected or needed for an experienced teacher. Johnson (in his classroom lectures at the Lancaster University and elsewhere) describes it as 'a teacher with 16 years, experience' or 'a teacher with one year experience repeated 16 times'. His humorous statement is no joke as there are teachers who from their inception (as teachers) do not get to learn much even after decades of experience. Tim (2010) draws the stages a teacher passes through from starting (inexperienced teacher) to a specialist teacher. What is not making in service professional development programmes effective? There are blames on the part of the trainers or trainer institutions as well as the teacher's willingness to participate and learn from the in-service

teacher orientations or training. Adey (2004) and Wedell (2009) regret that most of the in-service programmes do not achieve the desired results and also they tend not to inspire teachers. Fullan (2007) puts the reasons for this state of affairs as 'lack of awareness of and commitment to what is involved in planning for, implementing and sustaining meaningful teacher learning of this kind'. The last curricular revision in India culminated in the National Curriculum Framework – 2005

#### **4.20 Summary**

##### **(i) How do you think children learn a language?**

The first question addressed to them was 'How do you think children learn a language?' As can be seen, the responses of both the groups of teachers do not vary much. Majority of the teachers in both the groups have felt that children learn any language naturally. But the percentage varies in both the groups. Surprisingly, more percentage of teachers of CTSA felt that children learn any language naturally while the number of teachers in the Rajasthan group has increased after the orientation. Another surprise is that the number of teachers in the Rajasthan group (who feel that the learners should learn the words and their meaning) has increased slightly after the orientation. Orientation. But their understanding has differed after the orientation. If we take a close look at items 'b' and 'c' in table below number of teachers in both the groups marked as they would read aloud and then ask learners to read or ask the learners to read first and then read loudly but this has changed after the orientation. Many teachers from both the groups chose not to mark. We may infer that the orientation programme has not made them clear of the reading pedagogy. However, the responses of Rajasthan teachers for item 'd' show that they have got some insight into reading. The number of teachers who marked 'one-to-one translation' has come.

##### **(ii) On reading**

The second question relates to reading pedagogy. Responses from the groups show that teachers were somewhat aware of how to deal with the text in their classrooms before the down from 18 to 5. But surprisingly, two teachers wanted to follow this method even after the orientation. The table on the next page shows

how teachers responded to the question, 'Do you think children should understand the meaning of every word as they read?' We can see a marked increase in the percentage of teachers who believe that children need not understand the meaning of every word they read. The reorientation responses of both the groups reveal that the teachers were not willing to say yes, but quite a number of teachers chose not to say 'no' in the Rajasthan group. Surprisingly, there is a decrease in the percentage of teachers who said that there is no need to understand every word one reads.

**(iii) On vocabulary learning teaching**

The question relating to teaching learning of vocabulary brings out an interesting phenomenon. The teachers of Rajasthan group, it could be inferred,

**(iv) On teaching grammar**

Though the practice of teaching of grammar has undergone drastic transformations informed by research on language learning and acquisition, teachers tend to believe that teaching formal grammar would also help. The responses of teachers of both the groups show that the new orientations to teaching-learning of grammar (pedagogical grammar) are a felt necessity to enable learners internalizes the grammar of the language in context and through use of the language. As the table below shows that the teachers have developed a perspective for teaching of grammar in contexts. Teachers were also asked to say why they have marked what they have marked (a or b) in Table 7. The open ended responses of some teachers are shown below at the different stages, i.e., Pre-orientation and post orientation.

## **4.21 References**

- Alur, M. 2002. Special Needs Policy in India, in Seamus Hegarty and Mithu Alur (Eds.) Education and Children with Special Needs, *Handbook of Segregation to Inclusion, Thousand Oaks*. Sage Publications.
- Azad, Y. A. 1996. Integration of disabled in common schools: A survey-study of IEDC in the country. National Council of Educational Research and Training, New Delhi.
- Bonela, G. 2014. Does inclusive higher education can help for physical disability

handicapped people in India? A comparative analysis. *International Journal of Research in Applied, Natural and Social Sciences*. 2(5). pp. 1-2. Central Advisory Board of Education. 1944. Post-war educational development in India.

Ministry of Education, New Delhi. District Primary Education Programme. 2001. A report on national Level workshop:

Towards inclusive schools in DPEP. Ed.CIL, Noida. Education Commission. 1966. Education and National Development. Ministry of Education, New Delhi.

Karna, G. N. 2001. *Disability Studies in India: Retrospects and Prospects*. Gyan Publishing House, Delhi. Kalyanpur, M. 2007. *Equality, Quality and Quantity: Challenges in Inclusive Education Policy and Service Provision in India*. *International Journal of Inclusive Education*. 12 (3). pp. 243-262.

Kohama, A. 2012. *Inclusive Education in India: A Country in Transition*. Thesis Presented at the Department of International Studies, the University of Oregon.

Kumar, K., M. Priyam and S. Saxena. 2001. Looking beyond the Smokescreen, DPEP and Primary Education in India. *Economic and Political Weekly*. Majumdar, S. 2001. Educational Programmes for the Disadvantaged Groups. In M. Mukhopadhyay and R. S. Tyagi (Eds.), *Governance of School Education in India*. NIEPA, New Delhi. Mani, R. 1988. *Physically Handicapped in India*. Ashish Publishing House, Delhi. Ministry of Human Resource Development. 1968. *National Policy on Education 1968*. Government of India, New Delhi.

1986. *National Policy on Education 1986*. Government of India, New Delhi. 1992a. *Integrated Education for Disabled Children Scheme*. Government of India, New Delhi. 1992b. *Programme of Action*. Government of India, New Delhi.

2009. *Right to Education Act*. Government of India, New Delhi. Ministry of Law and Justice. 1996. *The Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995*. Government of India, New Delhi. Ministry of Social Justice and Empowerment. 1999. *National Trust for Welfare of Persons with Autism, Cerebral Palsy, Mental Retardation and Multiple Disabilities Act*. Government of India, New Delhi.

2012. Draft Rights of Persons with Disabilities Bill. Government of India, New Delhi. 2014. Draft rights of Persons with Disabilities Bill. Government of India, New Delhi. Pandey, R. S. and L. Advani.1997. Perspectives in Disability and Rehabilitation. Vikas Publishing House Pvt. Ltd., New Delhi.

Rane, A. 1983. An Evaluation of the Scheme of Integrated Education for Handicapped Children based on a Study of the Working of Scheme in Maharashtra. Unit for Child and Youth Research, Tata Institute of Social Sciences, Bombay. Registrar General of India. 2001. *Census of India 2001*. Available from: <http://www.censusindia.net>. 2011. Census of India. 2011. Available from: <http://www.censusindia.net>.

Rehabilitation Council of India.2000. *Status of Disability in India*. Author, New Delhi. Rousso, H.and M. L. Wehmeyer.2001. Double Jeopardy: Addressing Gender Equity in Special Education Supports and Services. United States: Suny Press.

Sarva Shiksha Abhiyan.2005. NGO initiative in inclusion: SSA experience. Department of EE and L (MHRD), Delhi.

Sharma, U. and J. Deppeler. 2005. Integrated Education in India: Challenges and Prospect. *Disability Studies Quarterly*. 25 (1). Retrieved from <http://dsqds.org/article/view/524/701>.

Tiwari, A. K. 2009. Psychological Perspectives on Social Issues and Human Development: Selected Papers from the Proceeding of 15th Annual Convention of National Academy of Psychology (NAOP). Delhi: Concept Publishing Company.

UNESCO. 1994. The Salamanca Statement and Framework for Action on Special Needs Education. Madrid: UNESCO/Ministry of Education and Science. Verma, G. K., R. B. Christopher andM. M. Jha. 2007. International Perspectives on Educational Diversity and Inclusion: Studies from America, Europe and India. London: Routledge. World Bank. 2007. People with Disabilities in India: From Commitments to Outcomes. New Delhi: Human Development Unit, South Asia Region.

**Block 3:**

**Adaptations Accommodations and Modifications**

- Unit 1:      Meaning, Difference, Need & Steps**
- Unit 2:      Specifics for Children with Sensory Disabilities**
- Unit 3:      Specifics for Children with Neuro-Developmental  
Disabilities**
- Unit 4:      Specifics for Children with Loco Motor & Multiple  
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**UNIT 1**

**Meaning, Difference, Need & Steps**

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## **1.1 Introduction**

There is no recipe for adapting general education curriculum to meet each student's needs. Each teacher, each student, each classroom is unique and adaptations are specific to each situation. Keep in mind that curriculum does not always need to be modified. By providing multi-level instruction you will find that adapting a lesson may not always be necessary. Differentiating instruction and providing multiple ways assess allows more flexibility for students to meet the standards and requirements of the class. At other times, the curriculum can be made more accessible through accommodations. In addition, supports for one student may not necessarily be the same in all situations, e.g., a student who needs full time support from a paraprofessional for math may only need natural supports from peers for English, and no support for art. And, supports should not be determined by the disability label, instead supports should be used when the instructional or social activity warrants the need for assistance. (Fisher and Frey, 2001). The forms and examples on the following pages provide information about curriculum and types of adaptations that could be considered in developing the appropriate strategy for a particular student. Examples are provided for both elementary and secondary levels.

### **1.2 A GUIDE TO ADAPTATIONS AND MODIFICATIONS**

In British Columbia, three principles of learning guide practice in the development of Integrated Resource Packages (IRPs), which contain the provincially prescribed learning outcomes for grades and subjects. These are:

- Learning requires the active participation of the student.
- Students learn in a variety of ways and at different rates.
- Learning is both an individual and group process.

These same three principles should guide the differentiation of instruction, assessment methods, and/or materials--particularly the principle that people learn in a variety of ways and at different rates.

Today's classrooms are diverse and inclusive by nature. Differentiation of instruction and assessment and the principles of universal design are now recognized practices for teachers. Both differentiation and universal design provide systematic approaches to setting goals, choosing or creating flexible materials and media, and assessment. To undertake differentiation and universal design, teachers need to be aware of a range of accommodations (multiple means of representation, of expression, and/or of engagement) that may be necessary to help each student in the classroom succeed. These accommodations may take the form of adaptations and/or modifications.

Many students with special needs and significant learning challenges will be able to achieve the learning outcomes for subjects or courses with no or minor adaptations. Some may be able to achieve the learning outcomes of some subjects or courses with adaptations. A small proportion will need to work on individualized outcomes, goals different than the curriculum; this is referred to as modification.

### 1.3 Adaptations

In BC policy, all students should have equitable access to learning, opportunities for achievement and the pursuit of excellence in all aspects of their educational programs. (Policy Document: Special Education:

[http://www.bced.gov.bc.ca/policy/policies/special\\_ed.htm](http://www.bced.gov.bc.ca/policy/policies/special_ed.htm).) Adaptations are teaching and assessment strategies especially designed to accommodate a student's needs so he or she can achieve the learning outcomes of the subject or course and to demonstrate mastery of concepts. Essentially, adaptations are "best practice" in teaching. A student working on learning outcomes of any grade or course level may be supported through use of adaptations. Adaptations do not represent unfair advantages to students. In fact, the opposite could be true. If appropriate adaptations are not used, students could be unfairly penalized for having learning differences, creating serious negative impacts to their achievement and self-concept.

### 1.3.1 Examples of Adaptations

Accommodations in the form of adaptations occur when teachers differentiate instruction, assessment and materials in order to create a flexible learning environment. For example, a student could be working on below grade level learning outcomes in Language Arts and at grade level in all other subjects or courses, some of which require reading materials at the lower reading level.

Adaptations include, but are not limited to:

- Audio tapes, electronic texts, or a peer helper to assist with assigned readings
- Access to a computer for written assignments (e.g. use of word prediction software, spell-checker, idea generator)
- Alternatives to written assignments to demonstrate knowledge and understanding
- advance organizers/graphic organizers to assist with following classroom presentations
- extended time to complete assignments or tests

- Support to develop and practice study skills; for example, in a learning assistance block
- Use of computer software which provides text to speech/speech to text capabilities
- Pre teaching key vocabulary or concepts; multiple exposure to materials
- working on provincial learning outcomes from a lower grade level

Best practice in teaching suggests that a record of successful adaptations for any student should be kept within a student's file to both document current practice and support future instructional needs. In the case of a student with special needs who has an Individual Educational Plan (IEP) or English as a Second Language students who have Annual Instructional Plans, successful adaptations are recorded in these plans to document how the student is being supported currently and also so other teachers will know what works well for that student.

For students with special needs, adaptations that are used for tests and exams must be included in their IEPs in order for them to be considered for adaptations to the provincial exam conditions (adjudication).

Students whose education programs include adaptations will generally be working toward graduating with a Dogwood Diploma.

### **1.4 Grading and Reporting When There Are Adaptations**

Grading for students who have been provided with adaptations should be in relation to the outcomes of the curriculum. If the learning outcomes that a student is working toward are from the curriculum of a grade level lower than the current grade placement, this should be indicated in the IEP or learning plan and in the body of the student's progress report. Further information on this subject is available in the Ministry document:

## 1.5 Modifications

This section may not apply to students in ESL programs unless they are also identified as a student with special needs as determined by Ministry and district processes. Accommodations in the form of modifications are instructional and assessment-related decisions made to accommodate a student's educational needs that consist of individualized learning goals and outcomes which are different than learning outcomes of a course or subject.

### 1.5.1 When To Use Modifications

The decision to use modifications should be based on the same principle as adaptations—that all students must have equitable access to learning, opportunities for achievement, and the pursuit of excellence in all aspects of their educational programs. Before modifying the outcomes for a student, schools should review all instructional interventions tried and consider assessment information, utilizing a process that is ongoing and consultative—similar to IEP development practices overall.

Modifications should be considered for those students whose special needs are such that they are unable to access the curriculum (i.e., students with limited awareness of their surroundings, students with fragile mental/physical health, students medically and cognitively/multiply challenged.) Using the strategy of modifications for students not identified as special needs should be a rare practice.

In many cases, modifications need only form part of an educational program for a student with special needs, and they need not be a permanent or long term solution. Whether to use modifications should be reviewed on a regular basis. Decisions about modifications should be subject or course specific wherever possible. For example, a student with an intellectual disability may require modifications to a specific subject area such as mathematics; however, modifications may not be required to meet the provincial outcomes in physical education.

Although decisions about modifications to a student's courses or subjects may take place in grades earlier than Grade 10, a formal decision that an overall program is modified does not need to occur until Grade 10. The decision to

provide modifications, particularly at the secondary school level, will result in students earning a School Completion Certificate upon leaving school rather than credits toward graduation or a Dogwood Diploma. Therefore, the critical decision of whether a students' education program should include modifications should not be made in isolation by a single classroom teacher. The decision should be carefully and thoughtfully made, in consultation with parents, school administration, and/or instructional support personnel. This decision should address longer term educational, career and life goals of students and encompass plans for attaining these goals.

### **1.5.2 Examples of Modifications**

An educational program for a student might include a combination of accommodations which includes modifications. For example, a student could be working on grade level learning outcomes in Physical Education and Health and Career Education and below grade level learning outcomes in Mathematics, all with adaptations while at the same time working on individualized learning outcomes that meet the student's IEP goals in all other subjects. The individualized outcomes address functional life skills and foundational academic skills. For students with special needs, modifications that consist of individualized learning outcomes or goals must be included in the IEP. Some further types of modifications include:

- Content and evaluation related to the course or subject but at a lower level of conceptual difficulty that is based on a student's individualized outcomes or goals. When students do well on this especially designed material, they have a chance to feel successful. For example, while students in a Grade 3 class are researching for presentations on the solar system, a student with special needs in this class uses a computer to drag and click planets into a template of the solar system and learns to say the names of each planet. At the secondary level, a Grade 9 student with special needs learns how to count change and manage a personal budget while other students are introduced to algebraic expressions.
- Only portions of the learning outcomes are addressed so that a student may participate in the classroom and feel success even though they are working at a

conceptual level significantly different from the other students. For example, in a science class a student with special needs learns to identify safe and dangerous chemicals used in the lab, while other students carry out a chemistry experiment.

- Although related to the outcomes of the curriculum, the goals for a student with special needs are significantly different. For example, while other students are learning how to read and respond to text in a Grade 4 classroom, a student with special needs is learning how to listen to stories at a pre-primary level and when to turn the page at the appropriate time using assistive technology.

## **1.6 Grading and Reporting When there are Modifications**

If schools are using BCeSIS or Student Achievement Data Exchange (SADE) to record progress for students in Grades 4 to 12, a value is required to be entered to maintain student records over time. For more information about BCeSIS, please contact your local school district. For more information about SADE, please see the following link: <http://www.bced.gov.bc.ca/datacollections/sade/>

Progress reports to parents for students with special needs who are working toward individualized outcomes or goals in an IEP rather than the outcomes of the curriculum for that subject or course may be done using structured written comments or letter grades. The most appropriate form of reporting for the student should be determined collaboratively at the school level. If letter grades are used when modifications have been made, the body of the student progress report should state that the evaluation is in relation to the individualized outcomes or goals and not in relation to learning outcomes for the subject or course. The specific IEP outcomes or goals evaluated should be included in the student progress report. Further information on this subject is available in the Ministry document:

Is the student struggling with some course or subject? Continue with differentiation of instruction using adaptations and universal design for learning concepts noting strategies that work particularly well for the student.

Try different strategies and monitor. Did the student demonstrate improvement? Consult with others, review assessment information, initiate further assessments or make referrals, gather ideas for other

### **1.7 Adaptations.**

Did the student demonstrate improvement? Consult with others. Does the student require individualized goals/outcomes other than those of the course or subject? Modifications In which courses or subjects? Which learning outcomes? Is this a short term plan? Monitor the plan within the regular IEP cycle. Include goals to assist in transitioning back to the course or subject learning outcomes (wherever possible) and monitor within the regular IEP cycle.

### **1.8 Adaptation or Modification Decision Path**

This guide reflects the collaborative process which might be used to determine if a student requires adaptations or modifications. Foundational to the process are the following;

- The principle that students learn in a variety of ways and at different rates
- Teachers engage in differentiation of instruction as best practice
- Students who require adaptations or modifications may only need them in some subjects or courses
- Modifications to a student are learning outcomes might be considered as a short term solution with the goal of transitioning back to course or subject outcomes wherever possible.

### **1.9 Curriculum Modifications & Adaptations**

#### **1.9.1 A Curricular Adaptation and Decision-making Process**

This decision-making flowchart can be used to conceptualize the process of selecting and implementing curricular adaptations. It should be used as a tool for a



team in determining an individual student's needs. Identify the student's individual educational goals and objectives to be emphasized during general education activities

Articulate the expectations for the student's performance in general education activities

### **1.9.2 Determine what to teach**

As a team, determine the content of the general education activity, theme or unit study

### **1.9.3 Determine how to teach**

As a team, determine if, without modification, the student can actively participate and achieve the same essential outcomes as non-disabled classmates. If the student cannot achieve the same outcomes.

## **1.10 A Curricular Adaptation and Decision-making Model**

1. Can the student actively participate in the lesson without modification? Will the same essential outcome be achieved?

2. Can the student's participation be increased by changing the instructional arrangement? From traditional arrangements to:

- Cooperative groups
- Small groups
- Peer partners
- Peer or cross-age tutors
- Interdisciplinary/thematic units
- Activity-based lessons, games, simulations, role-play
- Group investigation or discovery learning

- Experiential lessons
- Community-referenced lessons 4, Can the Student's participation and understanding be increased by changing the delivery of instruction or teaching style?

### **1.11 Examine the Demands and Evaluation Criteria of the Task**

5. Will the student need adapted curricular goals?

- Adjust performance standards
- Adjust pacing
- Same content but less complex
- Similar content with functional/direct applications
- Adjust the evaluation criteria or system (grading)
- Adjust management techniques

### **1.12 Examine the Learning Environment**

6. Can the changes he made in the classroom environment or lesson location that will facilitate participation?

- Environmental/physical arrangements

### **1.13 Examine the Structure of the Instruction**

From. Udvari-Solner, A. (1994). Curriculum Adaptations Project.

- Social rules
- Lesson location

### **1.14 Examine the Materials for Learning**

7. Will different materials be needed to ensure participation?

- Same content but variation in size, number, format

- Additional or different materials/devices
- Materials that allow a different mode of input
- Materials that allow a different mode of output
- Materials that reduce the level of abstraction of information

### **1.15 Examine the Support Structure**

8. Will personal assistance be needed to ensure participation?

- From peers or the general education instructor?
- From the support facilitator'?
- From therapists'?
- From paraprofessionals?
- From others?

### **1.16 Arrange Alternative Activities that Foster Participation and Interaction**

9. Will a different activity need to be designed and offered for the student and a small group of peers?

- In the classroom
- In other general education environments
- In community-based environments

### **1.17 Curriculum Adaptations**

It is important to correlate adaptations with the IEP. In other words, we are not adapting for adaptations sake but, to meet the student's needs as identified on an IEP.

**a. Curriculum as is.** This is the type we forget most frequently. We need to constantly be looking at the general education curriculum and asking if the students on IEPs may gain benefit from participating in the curriculum as is. We need to keep in mind that incidental learning does occur. Curriculum as is supports outcomes as identified in standard curriculum.

**b. Different objective within the same activity and curriculum.** The student with an IEP works with all the other students in the classroom participating in the activity when possible but, with a different learning objective from the other students. This is where the principle of partial participation fits. Examples include.

- A student with a short attention span staying on task for 5 minutes.
- Using a switch to act as a communication device to share during a class discussion.
- Expressing one's thoughts by drawing in a journal instead of writing.
- Holding a book during reading time.
- Understanding the effect World War II has on the present rather than knowing the names and dates of key battles.

**c. Material or environmental adaptations.** The material or environmental changes are utilized so that participation in the general education curriculum by the student with the IEP may occur. Examples include:

- 5 spelling words from the weekly list instead of the standard 20.
- Completing a cooking assignment by following picture directions rather than written directions
- Changing the grouping of the class from large group to small groups (possible with the additional support staff).
- Changing the instructional delivery from lecture to the cooperative learning format
- Using a computer to write an assignment instead of paper and pencil.

- Reading a test to a student.
- Highlighting the important concepts in a textbook.
- Having the student listen to a taped textbook.
- Using enlarged print
- Using an assistive technology device
- Using visual cues such as picture and/or word schedules for those who have difficulty staying on task.
- Using a note taking guide listing the key concepts during a lecture.

**d. Providing Physical assistance.** Assistance from another person may be needed for a student to participate in a classroom activity. If possible, it is better to use natural supports (peers) as these will be the people always present in the student's life. If the use of peers is not possible, then either the support teacher, the paraprofessional, the classroom teacher, the classroom aide, or a parent volunteer may provide the assistance. Most peers and staff will need training in the correct way of providing physical assistance. In addition, we need to keep in mind the principle of partial participations.

Examples include:

- Starting a computer for an student with an IEP to use.
- Guiding a hand during handwriting.
- Assisting in activating a switch.
- Completing most of the steps of an activity and having a student with an IEP do the remainder
- Pushing a student in a wheelchair to the next activity.

**e. Alternative/substitute curriculum.** This is sometimes referred to as functional curriculum as it usually involves the acquisition of "life skills." The decision to use alternative/substitute curriculum is a major change and needs to be reflected

on the IEP. This decision should be carefully made after weighing all of the pros and cons of using an alternative curriculum. The alternative curriculum may or may not take place in the general education classroom.

Examples include:

- Community-based instruction (which all students may benefit from!)
- Learning job skills in the school cafeteria.
- Learning how to use a communication device.
- Doing laundry for the athletic department
- Learning cooking/grooming skills at the home.

### **1.18 Nine Types of Adaptions**

#### **Size**

Adapt the number of items that the learner is expected to learn or compete.

*For example:* Reduce the number of social studies terms a learner must learn at any one time.

**Time** Adapt the time allotted and allowed for learning, task completion or testing.

*For example:* Individualize a timeline for completing a task; pace learning differently (increase or decrease) for some learners.

#### **Input**

Adapt the way instruction is delivered to the learner.

*For example:* Use different visual aids; plan more concrete examples; provide hands-on activities; place students in cooperative groups.

#### **Difficulty**

Adapt the skill level, problem type, or the rules on how the learner may approach the work.

For example: Allow a calculator for math problems; simplify task directions; change rules to accommodate learner needs.

### **Degree of Participation**

Adapt the extent to which a learner is actively involved in the task.

*For example:* In geography, have a student hold the globe, while others point out the locations.

### **Alternate Goals**

Adapt the goals or outcome expectations while using the same materials.

*For example:* In social studies, expect one student to be able to locate just the states while others learn to locate capitals as well.

### **Level of Support**

Increase the amount of personal assistance with specific learner.

*For example:* Assign peer buddies, teaching assistants, peer tutors or cross age tutors.

### **Output**

Adapt how the learner can respond to instruction

*For example:* Allow a verbal vs. written response; use a communication book for students; allow students to show knowledge with hands-on materials.

### **Substitute Curriculum**

Provide the different instruction and materials to meet a learner's individual goals.

*For example:* Individualize a timeline for completing a task; pace learning differently (increase or decrease) for some learners.

### **Accommodations**

Who deserves accommodations? **Everyone!** Instructional accommodations are not just for students who are struggling. When accommodations are made, all students benefit.

Accommodations do not fundamentally alter or lower expectations or standards in instructional level (conceptual difficulty), content, or performance criteria. Instead, changes are made in the instructional delivery method, assessment method, or both to enable the student to have access to the same learning and equal opportunity to demonstrate learning.

Accommodations fall under four major categories:

**Content:** What the student needs to learn. The instructional concepts should be broad based, and all students should be given access to the same core content. However, the content's complexity should be adapted to students' learner profiles. Teachers can vary the presentation of content, (e.g., textbooks, lecture, demonstrations, taped texts) to best meet students' needs.

**Process:** Activities in which the student engages to make sense of or master the content. Examples of differentiating process activities include scaffolding, flexible grouping, interest centers, manipulative, varying the length of time for a student to master content, and encouraging an advanced learner to pursue a topic in greater depth.

**Products:** The culminating projects that ask students to apply and extend what they have learned. Products should provide students with different ways to demonstrate their knowledge as well as various levels of difficulty, group or individual work, and various means of scoring.

**Learning Environment:** The way the classroom works and feels. The differentiated classroom should include areas in which students can work quietly as well as collaborate with others, materials that reflect diverse cultures, and routines that allow students to get help when the teacher isn't available (Tomlinson, 1995, 1999; Winebrenner, 1992, 1996). Designing Lessons for Diverse Learners 2



### **1.19 Use the following steps to providing accommodations:**

**(cec.sped.org) Step 1. Create a Plan for Adapting Materials** Effective adaptations require sustained development and support. They must be made within the framework of a larger plan that includes consideration of (a) basic and strategic skills instruction and (b) the roles of people involved in the adaptation process. In some cases, it is important to involve your administrator and curriculum or program coordinator from the beginning, and identify exactly who will be responsible for making, implementing, supporting and evaluating the adaptation over the course of the year. As much as possible, involve students, parents, paraprofessionals, and others. Adaptations that can benefit an entire class or several classes are more likely to be supported and maintained.

**Step 2. Identify and Evaluate the Demands that Students Are Not Meeting** The purpose of this step is to define the problem to be addressed by the adaptation. Observe students' performance when they use typical instructional materials. They may have difficulty acquiring or getting the important information from written materials, storing or remembering the information presented in the materials, or expressing the information or demonstrating competence on written tests. If students have difficulty with a given task, different solutions may be required depending on the level of difficulty and the student's individual needs.

**Step 3. Develop Goals for Teaching Strategies and Making Adaptations** Some problems can be solved by adaptations; other problems may signal the need for intensive instruction in skills or strategies. Often, teachers may need to provide adaptations while simultaneously teaching the student the learning strategies he or she needs in order to perform the work. All adaptations lead students to become dependent on the person who makes them. Before an adaptation is made for an individual student, educators must carefully consider the best approach to addressing the student's difficulty and promoting success. Adaptations should be approached as short-term solutions within a long-term plan for teaching skills and strategies that will promote the student's independence as a learner and ultimately reduce the need for adaptations.

**Step 4. Determine Whether Content or Format Adaptations Are Needed** Content adaptations may be made only when the student's Individualized Educational Program (IEP) notes that the general curriculum is inappropriate for

this student. Content adaptations must also meet local and state education standards. In some cases, the IEP may address the degree to which the requirements associated with meeting state standards and taking assessments may be modified. The teacher must decide which parts of the curriculum the student will be required to learn and will constitute mastery of the course content.

When the curriculum is considered appropriate for the student, adaptations may focus on format rather than content. Again, the teacher must identify the critical elements of course content that students must learn: First, identify the critical course ideas or concepts. Then identify the information that must be mastered in each unit to ensure that Designing Lessons for Diverse Learners 3the critical course ideas are mastered. Finally, determine how students will demonstrate their mastery at the end of each unit and at the end of the course. Format adaptations are made to compensate for mismatches between the presentation or design of the materials and the skills and strategies of the student. In format adaptations, the content is not altered.

**Step 5. Identify the Features of the Materials that Need To Be Adapted** The design of materials can present many different types of problems for students who struggle. Teachers adapting materials should examine each curricular unit for features that might cause a learning problem. For example, the content may be very abstract, complex, or poorly organized, or it might present too much information. It may not be relevant to students or it may be boring. Further, it may call for skills or strategies or background information that the student does not possess. It may present activities that do not lead to mastery, or it may fail to give students cues about how to think about or study the information. Materials also may not provide a variety of flexible options through which students can demonstrate competence. Guidelines for identifying these and other problems in the design of instructional materials may be found in resources like those listed at the end of this article.

**Step 6. Determine the Type of Adaptation That Will Enable the Student To Meet the Demand** Once the materials have been evaluated and possible problem areas identified, the type of format adaptation must be selected. Format adaptations can be made by

Altering existing materials-Rewrite, reorganize, add to, or recast the information so that the student can access the regular curriculum material independently, e.g., prepare a study guide and audiotape.

Mediating existing materials-provide additional instructional support, guidance, and direction to the student in the use of the materials. Alter your instruction to mediate the barriers presented by the materials so that you directly lead the student to interact with the materials in different ways. For example, have students survey the reading material, collaboratively preview the text, and create an outline of the material to use as a study guide. Selecting alternate materials-Select new materials that are more sensitive to the needs of students with disabilities or are inherently designed to compensate for learning problems. For example, use an interactive computer program that cues critical ideas, reads text, inserts graphic organizers, defines and illustrates words, presents and reinforces learning in smaller increments, and provides more opportunities for practice and cumulative review.

**Step 7. Inform Students and Parents About the Adaptation** Adaptations are more successful when they are offered and introduced to students at the beginning of the year. Parents should also be informed about them at the beginning of the year. Students should be taught explicit strategies to use any adaptation effectively and how to process the information received through the adaptation. As students progress, they should be taught how to recognize the need for and request materials adaptations. *Designing Lessons for Diverse Learners 4*

**Step 8. Implement, Evaluate, and Adjust the Adaptation** As the adaptation is implemented, the teacher should evaluate its effects to determine whether the desired outcomes are being achieved. If not, adjustments will need to be made either in the adaptation or the instructions to the student in its use. Adaptations should significantly reduce failure and learning difficulties.

**Step 9. Fade the Adaptation When Possible** Adaptations usually are short-term solutions to allow classroom learning and participation until the needed skills and strategies can be taught. Once the adaptation is in place, the teacher should begin to plan with other teachers how to teach the needed skills and strategies. Once the

student has learned the necessary skills and strategies, the adaptation should be faded. The adaptation should not be removed until the student possesses the skills and strategies to learn and complete tasks independently. For some students, an adaptation may be required for several months, while for others; it may be maintained for years.

The remaining part of this article presents suggestions for adaptations and accommodations for students, along with suggestions for instruction. Each section is organized around specific learning problems that students may exhibit. For each learning problem, a series of questions are listed that teachers can ask to learn more specifics about the student who is struggling. Adaptations and accommodations should be matched to specific skill deficits within each learning problem. For example, there are several causes of word reading difficulties. A student who has deficits in phonological awareness will need different adaptations and accommodations than a student who is able to read single syllable words but struggles with multisyllabic words. Additionally, these students require different instruction to remediate their skill deficits (see the Suggestions for Instruction column).

It is important to note that teachers should pair instruction along with the use of adaptations or accommodations in two areas. First, sometimes students need instruction in how to use and apply the adaptation or accommodation to their learning. The teacher should not assume that the student will be able to benefit from the adaptation or accommodation without this instruction. Second, as mentioned previously, adaptations or accommodations increase dependence in the student. Instruction in the learning deficit ensures that the student builds his or her abilities while being supported, and then the support is reduced or removed as the student's skills improve. While the specific instruction will vary depending on individual student needs, all instruction for struggling students should be explicit (directly taught), systematic (sequenced so that skills build on one another, not left to incidental learning), scaffold (supported instruction that is gradually withdrawn as students become more proficient) and modeled (teacher models both the task/skill and the thought processes to complete the task/skill). In many cases, students will require adaptations or accommodations in several areas. The teacher

should determine the most effective and efficient package of adaptations or accommodations for the student. Other students in the class also may benefit from

<b>Learning Problem: Reading (Assignments and Assessments)</b>	<b>Questions:</b>	<b>Accommodations:</b>	<b>Suggestions for Instruction (Explicit, systematic, scaffolded, and modeled)</b>
Students have difficulty reading the words	Does the student have difficulty in perceiving or producing complex sounds? Does the student have a deficiency in awareness of sounds (phonological awareness)? Does the student have difficulty reading one/two/multisyllabic words? Does the student have difficulty reading words with affixes?	Provide tape-recorded versions of material Use videotape or movie that presents the same information Use assistive technology to transfer printed words to speech Have a reading buddy read aloud textbooks or other printed material Provide opportunities for several re-readings of the same text Reduce the amount of required reading Reduce the complexity of the required reading Provide a glossary of content-related terms Allow for extra time	Teach phonemic awareness skills Teach word reading strategies (e.g., letter-sound relationships, reading by analogy, variable vowels sounds, affixes) Use flexible grouping strategies so that students can work on key skills in small groups

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<p>Students have difficulty finding the main idea or identifying important information in the text (either listening or reading comprehension )</p>	<p>Does the student have difficulty reading the words (see Word reading difficulties)?</p> <p>Does the student have appropriate reading fluency (see Fluency difficulties)?</p> <p>Does the student have the relevant background knowledge?</p>	<p>Highlight important ideas and have the student read those first</p> <p>Provide a study guide for the student to follow when reading independently</p> <p>Let the student use books written slightly below their reading level</p> <p>Provide visual/audio support for ideas in text</p>	<p>Teach pre-reading strategies (e.g., activate prior knowledge, identify text structure, set purpose for reading)</p> <p>Teach vocabulary strategies (e.g., how to determine meaning of unfamiliar words,)</p> <p>Teach comprehension strategies (e.g., summarization, prediction, clarification, inferences, questioning)</p>
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these adaptations or accommodations.

## 1.20 Summary

Curriculum modification is necessary for learners with special needs even when an inclusive curriculum is being followed. The suggestions posed by Sear are applicable in the case of Botswana. Botswana has an enabling environment for such modifications to be done given that government policies do recognize the need to educate equally all citizens. Accommodation, adaptation, parallel curriculum outcomes and overlapping curriculum as modification strategies would require that teachers have training in handling learners of diverse abilities and be committed to teaching. Special education teachers and the regular teachers would need to work together and this will be facilitated by having regular teachers also having some training on handling special needs learners. The support structures need to be strengthened to facilitate this cooperation. The assessment of such a modified curriculum will also benefit from the preparedness of teachers and the schools as well as the national curriculum unit. The suggested modifications of assessment procedures and materials need coordinated efforts on both the government side and that of service providers(teachers). Parents also have to be brought on board even more than for regular learners as they need to play a role to ensure that the special need child does not fall behind with their school work.

## 1.21 References

- Comfort, R. (1990). On the idea of curriculum modification by teachers. *Academic Therapy*, 25(4), 397-405.
- King-Sears, M. E. (2001). Three steps for gaining access to the general education curriculum for learners with disabilities. *Intervention in School and Clinic*, 37(2), 67-76.
- Koga, N., & Hall, T. (2004). *Curriculum modification*. Wakefield, MA: National Centre on Accessing the General Curriculum.
- MacMackin, M. C. & Elaine, M. B. (1997). A change in focus: Teaching diverse learners within an inclusive elementary school classroom. *Equity & Excellence in Education*, 3 (1), 32-38.

Reisberg, L. (1990). Curriculum evaluation and modification: An effective teaching perspective. *Intervention in School and Clinic*, 26(2), 99-105.

Switlick, D. M. (1997). Curriculum modifications and adaptations. In D.F. Bradley & M.E. King-Sears & D. M. Switlick (Eds.), *Teaching students in inclusive settings* (pp. 225-239). Needham Heights, MA: Allyn & Bacon.



## UNIT 2

### Specifics for Children with Sensory Disabilities

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## **2.1 Introduction**

This policy analysis paper examines the nuanced issue of education for students with sensory disabilities in the developing country context of Nicaragua. Through an analysis of the key issue, a review of the literature, a rigorous application of policy frameworks utilizing the resources of Bardach (2012) and logical frameworks, and a look at current field efforts, this paper will recommend a policy solution to increase equity of access to education in Nicaragua for children with sensory disabilities.

## **2.2 Background and Context**

### **2.2.1 Equitable Access with Sensory and Physical Disabilities**

In order to access an education, one must first be able to access the classroom. Many Nicaraguan children with sensory disabilities cannot overcome this first barrier to education. For this paper, I will utilize UNICEF's definition of education access: "all children, regardless of their gender, socioeconomic background or circumstances, have access to free, compulsory and quality education" (2011). This is a nuanced definition that acknowledges that discriminatory practices and economic disadvantage should not dictate whether a child receives a quality education, not just education as an end in itself. Moreover, education must be relevant, and all children must be able to access the curriculum, regardless of ability level (Thomas, 2012b).

Disability exists on a continuum, with each disability experience being unique to the individual (Wiman, 2003). For the intents of this paper, I will define disability in terms of sensory disability. I opted to focus on sensory disabilities, for they are much easier to diagnose than other forms of disabilities, such as behavioral disabilities and learning disabilities. Moreover, since sensory disabilities are more "visible" than other forms of disability, there is a greater social stigma associated with sensory disabilities. Such a focus also allows policy recommendations to be more precisely targeted to benefit students. For this analysis, sensory disability signifies a disability in which one or more senses is impaired, but typical cognition and Sensory Disabilities Nicaragua IQ is maintained. Sensory disability refers to students with hearing, visual, and mobility limitations in which one or

more of an individual's senses is impaired (UNICEF, 2007). For the rest of this paper, the term "disability" may be used to signify any sensory and/or physical disabilities for the sake of concision. There is a wide variety of disability; however, the scope of this paper focuses solely on increasing equitable access to education for students with sensory or physical disabilities.

### **2.2.2 Prevalence of Disability**

Disproportionately large populations of children with disabilities reside in the developing world: 80% of children with disabilities live in developing countries (UNICEF, 2007, p. 3). In Nicaragua alone, at least 12.5% of the population of over 5.7 million people indicates that they are disabled ("International disability rights," 2004, p. 291). Little information is available for Nicaraguan disability prevalence, disaggregated by type. Coupling various resources, about 0.5% of the population is classified as blind or low-vision, about 16.5% of the population has a physical disability or mobility impairment, and 9.5% of the Nicaraguan population is deaf or hard of hearing, as demonstrated in Figure 6, Appendix K (CIA, 2012; Ministry of Health, 2003; Parks, 2012; University of Central America, 2006). The Nicaraguan prevalence of deaf individuals—and people with disabilities in general—is much larger than other Central American nations. It is possible that Nicaragua's Civil War, which ended in 1979, and the more recent, devastating 2008 hurricane, have augmented the number of disabilities found in Nicaragua (Parks, 2012). The violence of war and effects of this natural disaster have caused permanent injuries and sensory disabilities, including limb loss, contraction of degenerative diseases, sensory organ trauma, and other disabling conditions (Parks, 2012). As indicated by the aforementioned disability population demographics, the number of physical disabilities outnumbers the number of overall self-reported disabilities. This attests to the fact that disability is widely underreported in Nicaragua and that a more accurate reporting mechanism is necessary to truly understand the magnitude of disability.

### **2.3 Legal Support for Sensory Disability Population**

The Nicaraguan government supports education of children with disabilities in theory, but not always in action. International and Nicaraguan policies explicate that children with disabilities have the right to attend schools and receive

necessary accommodations (Causton-Theoharis, Theoharis, Orsati, and Cosier, 2011, p. 62; "International disability rights," 2004). Various laws in place protect the rights of children with sensory disabilities. For example, Law 202, established in 1995, requires that individuals with disabilities receive an education and adequate job training that is compatible with the individual's unique needs (Martinez Garcia, 2011, p.13). However, Nicaraguan Ministry of Health study found that only 3% of Nicaraguans surveyed knew about Law 202's existence (Martinez Garcia, 2011, p.13).. Also, Law 287 supports the specific needs of children with disabilities in Nicaragua, while the 2008 "Sign Language Law" dictates that children with auditory disabilities—a type of sensory disability—have the right to receive an education in Nicaraguan sign language (Martinez Garcia, 2011, p.13). Nicaraguan law and policy supports disability rights in education. Law 202 states that students with disabilities should receive an education and or job-training, but it does not provide the specifics of delivery (Martinez Garcia, 2011, p.13). Currently, students with sensory disabilities in Nicaragua must fight individual legal battles to access schooling, even though provisions exist in the law. The country needs to put the laws and policies into practice for the benefit of the sensory disability population to ensure truly equitable access to education.

## **2.4 Social Stigma of Disabilities**

Perceptions of disability are often developed through cultural lenses; one's ethnic, racial, socioeconomic, or peer culture influences how one views disability (Harry, 2002). In Latin Sensory Disabilities Nicaragua America, family is the central entity of social organization—and children with sensory disabilities are included socially in the family unit (Stone, 2004, p. 8). However, it is a separate battle to have children with sensory disabilities included in formal institutions—including schools (Dudzik, Elwan, and Metts, 2009). Nicaraguans tend to view individuals with sensory disabilities as a group that exists but is not talked about (Stone, 2004). Consequently, cultural norms dictate that the family will care for disabled family members for the lifespan of the individual with the disability (Gilbert and Ellwein, 2008). In fact, family members spend 10 hours a day caring for disabled family members, on average (Ministry of Health, 2003, p.56). Moreover, 80% of caregivers for individuals with disabilities are female family members (Ministry

of Health, 2003). Due to the isolated nature of caring for children with sensory disabilities in the home, families of children with disabilities often do not know about educational resources for children with disabilities or eschew them for traditional family care (Dudzik, Elwan, and Metts, 2009). Consequently, children with sensory disabilities are vastly underrepresented in schooling, resulting in a variety of negative consequences.

## **2.5 Disability and Education**

The Ministry of Education places a high value on special education and want to support various special education initiatives in education, but the necessary resources—financial support, qualified educators, and clear demographic numbers explaining the magnitude of disability on Nicaraguan education, among others—are not in place to allow such initiatives to succeed. For example, disability services and accessible schooling options are only offered in the urban centers of Nicaragua, while other areas—especially the rural Atlantic Coast which is culturally and geographically isolated as seen in Figure 5 in Appendix J—remain underserved ("The salamanca statement," 1994). Accordingly, students with sensory disabilities do not fit into the "one-size-fits-all" model of pedagogy typical in Latin American countries (Reimers, 2000, p. 75). As a result of few resources, children with disabilities are more likely to drop out of school than their non-disabled peers, isolating children with disabilities further. In Nicaragua, only 12% of disabled children graduate from primary school, but just 2% of youth cite disability as a reason for nonattendance (Parks, 2012, p.7; Porta, 2002, p. 14). Nicaraguan students complete 5.8 years of schooling on average, resulting in one of the highest attrition rates in Latin America ("Sustainability and equity," 2011, p. 1). Moreover, grade repetition is common in both urban and rural areas of Nicaragua; this indicates that individual learning needs are not being met in the classroom (Sahlberg, 2011). Nicaragua's education system does not adequately meet the needs of children with sensory disabilities in its current form. About 3.9% of the school-age population (ages six to sixteen) in Nicaragua suffers from a sensory disability—a visual, hearing, or physical mobility impairment (Ministry of Health, 2003, p.19). Of this population of students with sensory disabilities, only 56% of the children are literate (Parks, 2012, p.7). Educators and

policymakers must address the inequality of access to education for children with sensory disabilities in order to rectify this issue of disparity.

## 2.6 Key Issue

Children with sensory disabilities in Nicaragua shoulder the burden of inequitable access to education. Societal factors fuel this norm. The major reasons for such inequality are a lack of knowledge about services and disability rights in Nicaragua, too few disability resources in country—for example, there is just one deaf education school in Nicaragua that has capacity for just 20 deaf students, and social norms and stigma surrounding disability explained through Parks' research in the region (Parks, 2012). In an education system with many issues to address, why should this concern take the forefront?

As educators, we have moral imperative to ensure that education for all is “for all” in both word and deed. The moral objective of education for all makes the inclusion of minority student groups—like students with sensory disabilities—all the more important. Moreover, there are myriad economic and political benefits of engaging students with disabilities in Nicaraguan schools (Thomas, 2012a). Additionally, schooling comes with important developmental screening, health programs, and nutrition programs that children with sensory disabilities could especially benefit from due to their precarious health status that may accompany some of their disabilities, if they had equitable access to schooling (McConkey, 2001, p. 42; UNICEF, 2007, p. 13). Finally, disability represents a difference that people can allow to divide or diversify a community. Nicaraguan communities must protect the rights of children with sensory disabilities and increase equitable access to education for the benefit of *all* students in Nicaragua.

## 2.7 Education and Disability Grounding Theory

Various international organizations have voiced the importance of equitable access to education for all. For example, the United Nation's Millennium Development Goals call for education for all—specifically children with disabilities (McConkey, 2001). Education for children with sensory disabilities may require innovation and a specialized approach. However, various special education approaches can make the classroom more accessible for students with—

and without—sensory disabilities, as explained below. Ideally, any educational initiative strives to educate the child with a disability in an environment that maximizes the child's potential and minimizes the impact of his or her disability. Researchers and practitioners in the field of special education have vetted and commended the following approaches for their ability to minimize the negative impact of disability, maximize student outcomes, and make a classroom environment more accessible for students with sensory disabilities (Hehir and Katzman, 2012). *Principal Strategies and Approaches*

**Full Inclusion.** Fully inclusive education of children with sensory disabilities has become more common worldwide in the last decade, especially in developed countries. Inclusive education is an education model in which children of varying ability levels are educated side-by-side, (Hehir and Katzman, 2012). Two core beliefs of inclusive education are that all students are capable of learning and that all children should have equitable access to education. In an inclusive classroom, students with disabilities learn alongside their typical peers. For successful classroom inclusion, a teacher must individualize the curriculum for students—whether they have a disability or not—and ensure that class material is within students' zones of proximal development—or content that a student has not yet mastered but has the ability to comprehend and learn. For this to occur, teachers must be highly-skilled and intentional in their lesson-planning and classroom design (Hehir and Katzman, 2012). However, without adequate training and skill, inclusive education could be a negative learning environment for students with and without sensory disabilities, if teachers are not prepared to teach special needs students, typically developing students see inclusion as a distraction from their studies, and children with disabilities are excluded and/or ignored. Inclusive classrooms and their stakeholders must fully commit to the mission in order to best serve all parties.

Inclusive schools are becoming more widespread in public education, especially in developed nations (Hehir and Katzman, 2012). Moreover, international and Nicaraguan laws protect students' rights to attend schools and receive necessary accommodations in the classroom to allow inclusive education models to work (Causton-Theoharis, Theoharis, Orsati, and Cosier, 2011, p. 62; "International disability rights," 2004; Martinez Garcia, 2011). Studies have demonstrated that

students with disabilities perform better in inclusive environments, and typical students access the curriculum at higher levels, too ("The salamanca statement," 1994; Hehir, 2011). Some researchers attribute academic gains to the positive influence of typically developing peer role models, while others believe that children with sensory disabilities did not receive rigorous instruction in separate special education classrooms (Hehir and Katzman, 2010).

**Separate Specialized Education.** In contrast, some children with sensory disabilities may benefit from receiving instruction in a school geared toward their specific sensory disabilities. Some disability educators argue that it is beneficial for students with disabilities to learn in an environment designed with their unique needs in mind (Hehir, 2011). For example, students at a school for the blind know that they will receive braille training and will have access to audio files that might not exist at a typical school. Furthermore, specialized schools generally have teachers that are knowledgeable about the learning challenges of students with sensory disabilities, in contrast with a majority of Nicaraguan typical classroom teachers. Additionally, some students with disabilities argue that it is important to build relationships with fellow students with disabilities (Asch, 1989).

Conversely, some argue that specialized schools set lower academic standards for students with disabilities (Kent, 2010). Moreover, many disability rights advocates argue that "separate but equal is not equal" (T. Hehir, personal communication, October 23, 2012). Historically, many students with disabilities had no other educational avenues besides specialized schools (Gartner and Lipsky, 1987). In a country with limited educational resources—such as just one school for the deaf and a limited number of special education schools outside of the major cities of Managua and Granada—is increasing access to specialized schools the best option for children with disabilities in Nicaragua? (Parks, 2012).

**Universal Design for Learning.** Universal Design for Learning (UDL) is an education model that attempts to make the curriculum more accessible to students of all ability levels through multiple means of representation, action and expression, and engagement, as indicated in Figure 2 in Appendix B (Rose & Gravel, 2012). In lieu of teaching using a "one-size-fits-all" approach typical in the region, teachers design learning to be accessible to students of all ability levels (Reimers, 2000). UDL has been effective in many school environments and has



been lauded in the education community (Rose and Gravel, 2012). UDL uses technology and specific curriculum and classroom design maxims to ensure that the classroom is accessible to all students. For example, a reading unit in a typical classroom may involve student silent reading, teacher instruction, and teacher-facilitated discussion with the students seated. However, the same unit in a UDL classroom may look very different. Students may read individually—but use screen readers, audio books, braille texts, or read aloud to digest the material in the manner best suited to a student’s ability level. Additionally, a UDL reading unit may incorporate group work, physical activities, artistic responses, or role-playing to best engage students in the material and best facilitate their learning. Studies have demonstrated that student learn just as much—if not more—from creative UDL practices in curriculum design (Hehir and Katzman, 2010).

The term “Universal Design” is borrowed from the field of architecture, where it means that buildings should be designed expecting that they will be used by a wide range of people, including individuals with disabilities, and their needs should be included in the initial planning stages (Rose and Gravel, 2012).

UDL is a research-based educational model that can benefit a whole school community, if a school utilizes it correctly. It must have full community support to work. Teachers and administrators must embrace and use UDL practices in and outside of the classroom for students to receive full benefit. This requires training for school leaders and, oftentimes, an investment in technology (i.e. screen readers, digital texts, alternative seating for students with mobility limitations, etc.). Consequently, implementing UDL can absorb a great deal of financial and temporal resources that may prove prohibitive in the educational contexts of Nicaragua.

**Response to Intervention.** Additionally, schools may opt to incorporate Response to Intervention (RTI) practices to promote inclusion of children with disabilities in the classroom. RTI is a research-based model that advocates for early intervention for struggling learners—disabled or not—to best access the curriculum (Fletcher and Vaughn, 2009). In an RTI model, an assessment evaluates a student’s educational baseline—where they currently “are.” Then, tiered interventions aim to get students to where they need to “be.” An RTI model is unique in that children are met at their current skill level and educators work to

bridge the gap. Additionally, this model does not isolate students with sensory disabilities. Rather, they are part of the universal RTI group. Educators stage three tiers of interventions, as seen in Figure 3 in Appendix H, with the aim of supporting as many children in their learning as possible. A majority of students can be helped by the first tier of intervention, but some students may have to continue until individualized intensive interventions can meet their needs, as seen in Appendix H. A similar model has been used successfully for primary grades in Finland (Sahlberg, 2009).

## **2.8 Introduction to Policy Options**

Research uncovers a plethora of policy options to address equitable access to education for children with disabilities. Screening measures highlight the following options due to their feasibility, emphases of non-discrimination, universality, quality, and their abilities to be contextually transferred to Nicaragua (Reimers, 1997). The policies descend from the macro level to the micro level, as indicated in Figure 1 in Appendix A. I chose to focus on policy options that challenged social norms instead of input-based programs because attitudes toward children with disabilities will not change unless reforms identify and address social barriers.

Additionally, various medically-oriented disability prevention initiatives have proven effective in Nicaragua and the region, including nutrition programs, medical interventions, and drug therapies (UNICEF, 2005; USAID, 2009; WHO, 2000). However, I chose to omit these studies in this review in order to best address the current plight of students with sensory disabilities and best help the students who currently have irreversible disabilities. Nevertheless, it is important to acknowledge that such public health initiatives limiting the prevalence of childhood disability are important and complement the efforts of disability-focused education and social initiatives proponed in this paper in order to lessen the negative impact of disability on Nicaraguan children. Moreover, it can be challenging to initiate successful social reforms, so I wanted to elucidate best practices that may be of use to policymakers in the education and disability communities.

I will evaluate each policy option based on the evaluation criteria laid out in Table 4 in Appendix F. First, I want to ensure that education is the main focus of the policy alternative. Although children with sensory disabilities have a myriad of needs, education is a necessity. Therefore, a program designed to increase equitable access to education, as defined previously in this paper using the UNICEF construct, must truly provide the best possible education for its students, regardless of disability status (2011). Next, the program must be culturally appropriate; it must be able to succeed in the social and educational culture of Nicaragua and Central America. Various special education approaches have aided children with sensory disabilities across the globe; however, in order for Nicaraguan children and families to benefit from the initiative, it must be consider cultural norms, values, and contexts no matter where the original program may have begun. Additionally, the policy must be scalable so that it can eventually benefit all communities in Nicaragua and may even be replicated in other countries.

Furthermore, the program should promote greater social inclusion and tolerance of children with sensory disabilities. As previously mentioned, a social stigma against disability exists in Nicaragua. The ideal program would help to combat these discriminatory norms in order to benefit children with sensory disabilities in the long run. The program must be feasible in terms of costs, time, scale, etc. Also, the initiative should be responsive to stakeholder feedback. In order for a program to promote social change, it must have social investment of stakeholders. Therefore, the ideal program would have feedback mechanisms in place for stakeholders and be responsive to the needs of those being served by the program. Finally, the program must have children with sensory disabilities as the primary beneficiary of the program. In order to address the issue of inequitable access to education for children with sensory disabilities, this program must consider the population's unique needs and, first and foremost, aim to meet the needs of the children with sensory disabilities. This framework, laid out in Appendix F, will allow me to highlight key benefits of the policy options and demonstrate shortfalls in order to recommend the best program to address inequitable access to education in Nicaragua for children with sensory disabilities.

I will follow the policy analysis steps outlined in Bardach's *A Practical Guide to Policy Analysis* (2012) and will utilize the logical framework to critique each outline policy option. A logical framework for the recommended policy option is available in Appendix G. The following policy options fit the original search criteria and will be assessed in terms of my evaluation criteria outlined in Appendix F. Furthermore, a thorough review of the literature of best practices in education for children with sensory disabilities informs the following policy options.

## **2.9 Full Inclusion Approach**

### **2.9.1 Inclusive Educational Policy**

The Colombian Ministry of Education, with support from various partners, has developed a policy-focused reform for widespread inclusive education, called "Quality Inclusive Education for Colombia" (UNESCO, 2012). Expanding inclusive education could boost enrollment numbers in Colombian schools; just 12.5% of disabled Colombian children attend school—a figure similar to the comparatively smaller country of Nicaragua's 12% of disabled students who graduate from basic schooling ("Atención a población," 2010; Parks, 2012). Accordingly, the Ministry of Education of Colombia has implemented an initiative to create inclusive policies, inclusive cultures, and inclusive classroom practices to make schools more inclusive of children with sensory disabilities ("Atención a población," 2010).

Current policies regarding education of children with sensory disabilities have been readjusted in light of policy dialogues. The country worked to strengthen current policies and national disability rights laws instead of drafting new legal guidelines. In so doing, Colombia strives to develop an education system inclusive of all ability levels, ethnicities, gender, and other differences (UNESCO, 2012).

In order to showcase best practices in inclusive education, the Minister of Education will host an event for education leaders in Colombia: a "Workshop for the Participatory Construction of Inclusive Education Policy in Colombia" (UNESCO, 2012). Through policy reform, training, and greater publicity of

inclusive schooling, Colombia aims to alter its existing national education system to be more inclusive for children with sensory disabilities.

### 2.9.2 Assumptions Made and Application

This initiative implies that expanding policies of inclusion will increase access to schooling for disabled students—and that enrollment is not hindered by an external or larger societal factor. This model assumes that the current educational system can handle a dramatic increase in enrollment of disabled students. This program only addresses concerns within the school system and policy. It aims to publicize the new initiative among teachers and school leaders, but not necessarily families. This suggests that the issue of inclusion is a school-centered problem and societal factors are not at play. Finally, to adopt this policy a country needs sufficient financial resources to institute this program. Research-based special education models like UDL and RTI may be expensive to implement at the outset, due to the expenses of technological inputs and staff training (Rose and Gravel, 2012). Colombia is a wealthier nation with a per capita GDP of \$10,200 versus Nicaragua's \$3,200 per capita GDP (CIA, 2012). Cost may be a substantial barrier to implement a similar initiative in Nicaragua. For more country comparisons, see Table 1 in Appendix C.

This initiative has the ambitious goal of instituting fully inclusive education through policy ("Atención a población," 2010). This nation-wide policy attests to the political importance placed on disability rights in Colombia. In lieu of creating a policy that says all children with disabilities have a right to education, but does not specify school type, length of education, and/or the provision of necessary accommodations—as Nicaragua has in place through Law 202—Colombia holds schools accountable, saying that schools *must educate* all children with disabilities. Colombia's policy places the blame on schools that are not willing to accommodate students with disabilities instead of instructing the family of the child with a disability to seek out educational opportunities for the child when such opportunities may not yet exist in the system.

In contrast, the following problems should be addressed in future efforts. The policy was put forth without much support; few teachers are prepared to teach in inclusive classrooms, and many school facilities are inaccessible, a serious barrier

for children with physical limitations (“Atención a población,” 2010). Also, the program lacks a grassroots social outreach component. One cannot change culture through the letter of the law alone; it takes more.

A nationwide policy of inclusion of children with disabilities across education is a powerful statement regarding disability rights. However, when schools are not prepared for inclusion, they may follow the letter of the law instead of the spirit of the law. Inclusive education is not an easy model to put in place; such a reform requires significant educational, political, and financial support and preparation.

Using the policy evaluation framework in Appendix F, more shortfalls of such a policy came to light. First, this option lacks a mechanism to gather and respond to stakeholder feedback. It is a top-down approach that does not possess a way for communities to hold schools accountable for maintaining the policy in their localities. Also, such a policy-driven approach would be difficult to implement in Nicaragua; such a top-down technique is not culturally supported and would likely lack community support (Stone, 2004). Finally, as previously mentioned, this alternative is not financially feasible due to great financial disparities between Colombia and Nicaragua. Nicaragua does not have the finances to implement such a program.

### **2.9.3 Specialized Educational Efforts**

The organization Un Mundo has developed the Cangrejal Special Education and Health Project to increase access to education for deaf children from the disadvantaged rural Cangrejal Valley area of Honduras. In this area, 80% of all children do not attend school. This initiative provides full scholarships for 15 qualified special needs students from the Cangrejal Valley to attend a specialized disability school—the Emilia D’Cuire School for Special Education (Un Mundo, 2011). Currently, this program has a small impact—a maximum of 20 to 30 deaf students can benefit from the initiative in its current form. In the long term, the organization aims to build a local special education school in the Honduran Cangrejal Valley. However, this project would begin in 2014 at the earliest (Un Mundo, 2011). For the time being, this initiative will continue to provide funding for some disabled children to attend a separate special education school.

## 2.10 Assumptions Made and Application

First, it is assumed that the specialized schools provide a relevant education for deaf students. It assumes that an area has sufficient pre-existing specialized schools—which Nicaragua and many other developing nations lack—Nicaragua just has one small school for the deaf ("International disability rights," 2004: Parks, 2012). Also, one must assume that it could be scaled up to provide educational access for more students. Moreover, to increase access to education for all children with sensory disabilities, one must assume that this model would transfer well to help other students with different sensory disabilities, whether in the same special needs school or a different environment. Furthermore, this option assumes that obtaining an education at a specialized school allows students to participate fully in society, even though the effort does not directly address community perceptions of disability. Finally, one must assume that as neighboring nations with similar levels of development (HDI ranking of 129 for Nicaragua and 121 for Honduras) this model would translate across borders. For further comparative data.

This model benefits from a variety of features. At a specialized school, curriculum can be designed for the special needs of individual students and take individualized feedback into consideration. Also, students with sensory disabilities may have qualified trained special education teachers and accessible school buildings. Finally, this initiative provides transportation

to and from school for children with disabilities—transportation can serve as a major barrier for children with mobility and sensory impairments.

The following program features diminish the successes of the program. Firstly, there is little local leadership in this program; all board members are non-Hondurans. Also, the quantitative impact of the program is small, with just 15 students served annually. There is a significant student travel commitment of an hour per day; not all children with disabilities would be able to sustain this amount of travel (Un Mundo, 2012). Finally, this effort provides access to an education, but it does not provide access to the mainstream education system.

The evaluation framework (Appendix F) illustrates further policy shortcomings. First, this program advocates for separate schooling—that may have educationally beneficial effects for students depending on the school environment (Hehir, 2011). However, this policy alternative does not support greater social inclusion and tolerance of children with sensory disabilities. As previously iterated, greater social inclusion requires social engagement around the issue. The lack of social outreach to non-disabled individuals is a key criticism of this program. Additionally, this alternative assumes that such a program would be scalable and could work in other communities. However, even with this assumption, how can it be scalable without a sufficient number special needs schools in a country? Consequently, this program would not be scalable in a country like Nicaragua, which lacks a sufficient number of schools specialized for children with sensory disabilities outside of the major cities of Granada and Managua, as seen on the map in Appendix I.

## **2.11 Family-Level Support Initiatives**

### **2.11.1 Family Empowerment and Community Organizing**

The Association for Children with Language, Speech, and Hearing Impairments (CLaSH) initiated a program to educate parents about children with communication disabilities. These parents had little to no knowledge about disability at the start of the initiative. Through the program, families met frequently under the guidance of a “community facilitator,” a local Namibian who facilitated education meetings for families of deaf children (Deaf Child Worldwide, 2008). The community facilitator empowered parents to voice their goals for the meetings in lieu of designing a formal curriculum. For example, CLaSH anticipated that families would benefit from sign language training; however, they also wanted information about the causes of deafness, success stories of disabled adults, and knowledge about deaf education (Deaf Child Worldwide, 2008).

In order to transfer agency to the families, the community facilitator condensed her role each week, parents were appointed to leadership roles, and families set the agenda for upcoming meetings. Membership grew as word spread; 75 families participated in the program. Efforts ranged from learning Namibian sign language



to developing plans for a local preschool for deaf children (Deaf Child Worldwide, 2008). The agency and initiatives developed by this family-based group elucidate the power of community participation in education development efforts.

### **2.11.2 Assumptions Made and Application**

First, one must assume that parents will attend meetings and act in their children's best interests. Also, one must assume that social stigma will not deter participation. The original program targeted families of deaf children; one must assume that the program could be scaled up to be inclusive of all children with sensory disabilities. Finally, one must assume that Nicaragua and Namibia are comparable enough to allow for contextualized transfer (Reimers and McGinn, 1997). Both countries have similar levels of development as indicated by their Human Development Index scores in Appendix E. Also, both countries have large youth populations, as observed in Table 3 in Appendix E. Furthermore, education researchers have stated that many parallels can be made across the education sectors and school climates of Latin America and Africa (Artiles, Kozleski, and Waitoller, 2011, p. 190).

This option boasts various beneficial practices that justify replication. Most importantly, local parents and adults with disabilities set the agenda and guided group efforts (Deaf Child International, 2007). Also, this model allows families to learn alongside one another—parents, children with sensory disabilities, typically developing children, and other community members, such as educators and adults with sensory disabilities. Local agency is reinforced by the leadership of a Namibian instructor.

Conversely, as the program stands, children are not participating in the formal education sector, even if they receive educational instruction. One would want to ensure that access to formal schooling was a realistic enduring goal of the program. Also, the family-centered program's success relies on successful participation of families. One would want to complete a thorough feasibility study before bringing such a community-driven initiative to an area. However, if assumptions hold this initiative meets evaluation criteria (Table 4 in Appendix F)

and addresses key policy drivers for the benefit of children with sensory disabilities.

## **2.12 Final Policy Recommendation**

Through the policy analysis outlined in Bardach and the sound flow of the logical framework (Table 5 in Appendix G), I would advocate for a family-based outreach program to best benefit children with sensory disabilities in Nicaragua and their families. Such a model, such as the one in the Namibia case study, allows for a personalization of reforms and truestakeholder-informed contextualized transfer (Reimers and McGinn, 1997). Moreover, this policy option meets all of the evaluation criteria, laid out in Appendix F, as outlined below.

### **2.12.1 Education as Primary Focus**

This policy option allows for both education for children with sensory disabilities and their families, to best address social dimensions of disability. Although the program is not school-based in nature, its central goals are education and expanding access to existing education opportunities for children with sensory disabilities. Consequently, families have the opportunity to be agents of change in the disability community if they possess the necessary skills and knowledge (Minow, 1990). Nicaragua has current special education policies in place, but children with disabilities remain underserved ("International disability rights," 2004). Family and student education fosters greater family advocacy—a key ingredient for a fair and inclusive application of disability rights policy to education.

### **2.12.2 Culturally Appropriate**

Since the basic unit of Latin American society is the family—both nuclear and extended—and Latin Americans highly value family unity across generations, a family-based approach is culturally salient (Stone, 2004). Additionally, the family-based model supports local community-building. It may be helpful for families with disabilities to informally network with one another to better understand their circumstances and learn from one another (Biklen, 1992, p. 137). Moreover, since the formal education system is frequently slow to respond to

individual student needs unless families assertively argue for accommodations (Asch, 1989). Accordingly, an informal education approach is more culturally appropriate for Nicaragua. Furthermore, the family-based model builds on the Latin American norm of close family ties and would be a natural mode of engagement (Stone, 2004, p. 8). Finally, through the community-building aspect of the family-based model, children with disabilities can informally begin to be included with their typical peers; although symbolic and informal, this form of inclusion may help to set the stage for further integration of children with disabilities in Nicaragua society-at-large.

### **2.12.3 Scalability**

This policy option appears to be scalable in the Nicaraguan context. Although Nicaragua is a small country of just over 5.7 million people, it boasts great internal diversity (CIA, 2012). A grassroots family-based model, like the one employed in Namibia, allows for personalization of reforms. This is especially salient due to the great differences between urban and rural areas in Nicaragua—a divide typical of Latin American countries (Stone, 2004). Additionally, since this initiative is community-based, it allows for personalization for individual communities. Consequently, a community with a higher than average prevalence of deaf students can target programs to meet unique needs of the sensory disability population in the community. The natural opportunities for personalization within this program allow this family-level support initiative to be scaled to a variety of contexts in Nicaragua and beyond.

### **2.13 Promotes Greater Tolerance and Inclusion**

As previously mentioned, the recommended policy option allows for greater inclusion of children with sensory disabilities. Through the family-level outreach program, families of children with special needs can informally network. This can allow families and caregivers to understand the true prevalence of sensory disabilities and exchange important information about disability experience (Biklen, 1992). Additionally, through welcoming all sensory disability stakeholders in the community, children with sensory disabilities may have the opportunity to interact with successful role models with similar disabilities in an informal setting. This may provide children with encouragement to seek further

education and personal development (Asch, 1989). Also, this policy option provides children with sensory disabilities with an opportunity to informally interact with their typically developing peers. This models inclusion in an informal way and shows that it may be a feasible strategy to increase equitable access to education for children with sensory disabilities. Moreover, interaction among children of varying ability levels helps to diminish the social stigma of sensory disabilities, especially among younger children. This informal inclusion aspect of the program may help to further promote tolerance and inclusion of children with sensory disabilities.

### **2.14 Feasibility**

This policy is feasible for the Nicaraguan context due to low overhead costs and ease of replication and scalability. This policy is initially low-cost through its grassroots model. The only major cost of employing the family outreach model is the cost of hiring and compensating the local facilitator. In comparison to the national inclusion policy alternative and the funding for specialized schools policy alternative, costs for the family outreach model pale in comparison. Additionally, this initiative requires few materials at the outset. The program may benefit from providing attendance incentives at the outset, such as food or educational materials that can be used at home, in order to encourage initial attendance. As the agenda is set by local stakeholders, fundraising and/or seeking more materials may be taken on by the group. However, the Ministry of Education, NGOs, individual schools, or other funders may financially support these efforts. Additionally, the program will need a handicap-accessible location for its regular meetings. This location should be community-based and may be acquired for little to no costs. Suggestions for meeting locations include the home of the group facilitator, local school buildings, or church halls, as each potential location could be leased for little to no cost and is of symbolic value in the community.

Additionally, the community-based model allows for easy replication across diverse areas of Nicaragua. Through including stakeholders at the outset, local opinions inform group efforts. This model also allows Nicaraguans to describe the state of disability among children in their community and petition for changes that are most needed. This aspect is especially crucial for a setting in which little reputable demographic information is available.

### **2.15 Community Participation-Driven Program**

As demonstrated in various public health and economic development models, developing agency through community-based sessions for families can yield great benefits for both parents and children (Comer and Haynes, 1991; Fugelsang and Chandler, 1994; Buckshee, 1997). Participation in the family education model is essential and helps to sustain knowledge exchange and improve advocacy efforts (Comer and Haynes, 1991). A participation-based model in Namibia may offer a solution for children with disabilities seeking education in Nicaragua.

Families and children with disabilities can advocate for the most needed and salient educational programs and technologies. Moreover, Nicaraguan community groups can work to develop initiatives that are as diverse and personal as the range of disabilities experienced by Nicaraguan children. Community participation is especially important in Nicaragua since there is little formal data on the prevalence and impact of disability on children (“International Disability Rights,” 2004). Through developing agency among community-based groups, Nicaraguans will be able to describe the state of disability among children in their community and petition for changes that are most needed.

### **2.16 Students with Sensory Disabilities are Central Beneficiary**

Finally, students with sensory disabilities remain the central beneficiary of this program. Although possibly counterintuitive, through including more stakeholders in the reform efforts, a greater social change may occur, benefitting children with sensory disabilities. This effort allows for attainment of educational goals of students with sensory disabilities, allows for accurate information about sensory disabilities to be shared with families and children, and enlists feedback mechanisms through community participation to ensure that children with sensory disabilities remain the central beneficiary of the program and promote inclusion. Through addressing social attitudes toward sensory disabilities, greater social inclusion, and educational needs of children with sensory disabilities in Nicaragua, this program stands to greatly improve equitable access to education for Nicaraguan children with sensory disabilities.

### **2.17 Summary**

Through grassroots engagement, this highlighted community-engagement policy option can provide sustainable social change and greater inclusion of children with sensory disabilities in education in Nicaragua. Through directly targeting families and developing a grassroots initiative, the family outreach program for families of children with sensory disabilities may catalyze a generational shift, in which young Nicaraguan students come to view inclusion of peers with sensory disabilities as a right—both in and out of the classroom. Such a program has the ability to increase the quality of instruction and equitable access to education for all children to the benefit of all Nicaraguan children—disabled or not (Thomas, 2012a).

## 2.18 References

Artiles, A. J., Kozleski, E. B., & Waitoller, F. R. (2011). *Inclusive education: Examining equity on five continents*. (1st ed.). Cambridge, Massachusetts: Harvard Education Press.

Asch, A. (1989). Has the law made a difference? In D. Lipsky & A. Gartner (Eds.), *Beyond separate education: Quality education for all* (pp. 181-205). Baltimore: Paul H. Brookes.

*Atención a población vulnerable*. (2010). Retrieved from <http://www.mineducacion.gov.co/1621/w3-article-235112.html>

Aurora. (2012). *Detailed map of nicaragua*. [Web Map]. Retrieved from <http://www.aurorabeachfront.com/nicaragua-maps.php>

Bardach, E. (2012). *A practical guide for policy analysis: The eightfold path to more effective problem solving*. Los Angeles: Sage.

Biklen, D. (1992). *Schooling without labels: Parents, educators, and inclusive education*. Philadelphia: Temple University Press.

Buckshee, K. (1997). Impact of roles of women on health in India. *International Journal of Gynecology & Obstetrics* 58, 35-42.

Causton-Theoharis, J., Theoharis, G. Orsati, F. and Cosier, M. (2011). Does self-contained special education deliver on its promises? A critical inquiry into research and practice. *Journal of Special Education Leadership*, 24(2), 61-78.

CIA. (2012.). *Cia world factbook*. Retrieved from <https://www.cia.gov/library/publications/the-world-factbook/geos/wa.html>

Comer, J. P., and Haynes, N. M. (1991). Parent involvement in schools: An ecological approach. *The Elementary School Journal*, 91(3), 271-277. Retrieved from <http://www.jstor.org/stable>

Deaf Child Worldwide. (2007). *a parents empowerment project in namibia*. Retrieved from [http://www.deafchildworldwide.info/learning\\_from\\_experience/project\\_case\\_studies/a\\_parents.html](http://www.deafchildworldwide.info/learning_from_experience/project_case_studies/a_parents.html)

Dudzik, P., Elwan, A., and Metts, R. (2009). Disability policies, statistics, and strategies in latin america and the caribbean: A review. Retrieved from [http://unipd-centrodirittiumani.it/public/docs/31863\\_statistics.pdf](http://unipd-centrodirittiumani.it/public/docs/31863_statistics.pdf)

Fletcher, J., and Vaughn, S. (2009). Response to intervention: Preventing and remediating academic difficulties. *Child Development Perspectives*, 3(1), 30 – 37. <http://www3.interscience.wiley.com.ezp-prod1.hul.harvard.edu/journal/122270953/abstract>

Fuglesang, A., and Chandler, D. (1994). *Participation as process: Process as growth (what we can learn from grameen bank, bangladesh)*. Kumarian Press Incorporated.

Gartner, A., & Lipsky, D. K. (1987). Beyond special education: Toward a quality system for all students. In T. Hehir & T. Latus (Eds.), *Special education at the century's end: Evolution of theory and practice since 1970*. Cambridge: Harvard Educational Review. <http://her.hepg.org.ezp-prod1.hul.harvard.edu/content/kj517305m7761218/?p=0304eb0b172944c4942a1248abdc25ac&pi=0>

Gilbert, C. E., & Ellwein, L. B. (2008). Prevalence and causes of functional low vision in school-age children: Results from standardized population surveys in asia, africa, and latin america. *Investigative Ophthalmology & Visual Science*, 49(3), 877-881. Retrieved from <http://www.iovs.org/content/49/3/877.full.pdf.html>

Harry, B. (2002). Trends and issues in serving culturally diverse families of children with disabilities. *The Journal of Special Education*, 36(3), 131-138.

Hehir, T. (2011). Reflections on inclusion. In R. Elmore (Ed.), *I used to think... and now I think* (pp. 57-64). Cambridge, MA: Harvard Education Press.

Hehir, T., & Katzman, L.I. (2012). *Effective inclusive schools: Designing successful schoolwide programs*. San Francisco: John Wiley & Sons.

International Disability Network, (2004). *International disability rights monitor (idrm) regional report of the americas*. Retrieved from Center for International Rehabilitation website:  
[http://www.ideanet.org/cir/uploads/File/IDRM\\_Americas\\_2004.pdf](http://www.ideanet.org/cir/uploads/File/IDRM_Americas_2004.pdf)

Kent, E. G. (Director) (2010). In Nevins, S. (Executive Producer), *I can't do this but i can do that*. USA: HBO.

Martinez Garcia, A. (2011, Jan). La discapacidad en nicaragua--una realidad. *Informacion sobre la accion*, 6, DOI: [www.cawn.org/assets/toolkit\\_FEMUCADI.doc.pdf](http://www.cawn.org/assets/toolkit_FEMUCADI.doc.pdf)

McConkey, R. UNESCO, Division of Basic Education. (2001). *Understanding and responding to children's needs in inclusive classrooms: A guide for teachers*. Retrieved from UNESCO website:  
<http://unesdoc.unesco.org/images/0012/001243/124394e.pdf>

Ministry of Health. (2003). *La discapacidad en nicaragua: Situacion actual y perspectiva*. Retrieved from website:  
[http://new.paho.org/nic/index2.php?option=com\\_docman&task=doc\\_view&gid=127&Itemid=235](http://new.paho.org/nic/index2.php?option=com_docman&task=doc_view&gid=127&Itemid=235)



- Parks, E. SIL International, (2012). *The deaf people of nicaragua*. Retrieved from website: <http://www.sil.org/silestr/2012/silestr2012-004-ESR352.pdf>
- Reimers, Fernando. Editor. (2000). *Unequal Schools, Unequal Chances*. Harvard University Press. Chapter 4, Pages 55-111
- Reimers, F., & McGinn, N. F. (1997). *Informed dialogue: Using research to shape education policy around the world*. Westport, Conn.: Praeger.
- Rose, D.H., & Gravel, J.W. (2012). *Curricular opportunities in the digital age*. Boston, MA: Jobs for the Future. <http://studentsatthecenter.org/papers/curricular-opportunities-digital-age>.
- Sahlberg, P. (2011). *Finnish lessons: What can the world learn from educational change in Finland?* New York: Teachers College Press.
- Stone, J. H. (2004). *Culture and disability: Providing culturally competent services*. (1st ed.). Sage Publications. Retrieved from <http://books.google.com>
- Thomas, A. R. (2012). *Equitable access to education for all: Education for nicaraguan children with disabilities*.
- Thomas, A. R. (2012). *Overcoming barriers: Education for nicaraguan children with disabilities*
- Wiman, R. United Nations, (2003). *Disability difference in development action: Manual on inclusive planning*. Retrieved from STAKES website: [http://www.un.org/disabilities/documents/toolaction/FF-DisabilityDim0103\\_b1.pdf](http://www.un.org/disabilities/documents/toolaction/FF-DisabilityDim0103_b1.pdf)
- Un Mundo. (2012). *Cangrejal special education and health project*. Retrieved from <http://www.unmundo.org/projects/public-health/cangrejal-special-education/>
- UNDP. (2011). *Country profile: Human development indicators*. Retrieved from <http://hdr.undp.org/en/data/profiles/>
- UNESCO. (2012). *Quality inclusive education in colombia initiative*. Retrieved from <http://www.ibe.unesco.org/en/global-news-archive/single-news/news/quality-inclusive-education-in-colombia-initiative.html>

UNICEF. (2007). Promoting the rights of children with disabilities. *Innocenti Digest, 13*, Retrieved from /children\_disability\_rights.pdf

UNICEF. (2005, May 5). *Helen keller international and unicef team up for children*. Retrieved from [http://www.unicef.org/media/media\\_26673.html](http://www.unicef.org/media/media_26673.html)

*Unicef*. (2011). Retrieved from [http://www.unicef.org/education/index\\_access.html](http://www.unicef.org/education/index_access.html)

United Nations. (2004). *Data and statistics for disability-sensitive policies and programmes*. Retrieved from <http://www.un.org/esa/socdev/enable/monitor/dme62.htm>

University of Central America. (2006, April). Miracle missions. *Revista Envisto, 267*, Retrieved from <http://www.envio.org.ni/articulo/3249>

USAID. (2009, March 3). *Usaid blindness program assists one million children in 23 countries*. Retrieved from <http://www.usaid.gov/news-information/press-releases/usaid-blindness-program-assists-one-million-children-23-countries>

WHO. (2000). *Preventing blindness in children: Report of a who/iapb scientific meeting*. Retrieved from [http://www.who.int/ncd/vision2020\\_actionplan/documents/WHO\\_PBL\\_00.77.pdf](http://www.who.int/ncd/vision2020_actionplan/documents/WHO_PBL_00.77.pdf)  
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## UNIT 3

### Specifics for Children with Neuro-Developmental Disabilities

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### 3.1 Introduction

Neuro developmental disorders are disabilities associated primarily with the functioning of the neurological system and brain. Examples of neuro developmental disorders in children include attention-deficit/hyperactivity disorder (ADHD), autism, learning disabilities, intellectual disability (also known as mental retardation), conduct disorders, cerebral palsy, and impairments in vision and hearing. Children with neuro developmental disorders can experience difficulties with language and speech, motor skills, behavior, memory, learning, or other neurological functions. While the symptoms and behaviors of neuro developmental disabilities often change or evolve as a child grows older, some disabilities are permanent. Diagnosis and treatment of these disorders can be difficult; treatment often involves a combination of professional therapy, pharmaceuticals, and home- and school-based programs.

Based on parental responses to survey questions, approximately 15% of children in the United States ages 3 to 17 years were affected by neuro developmental disorders, including ADHD, learning disabilities, intellectual disability, cerebral palsy, autism, seizures, stuttering or stammering, moderate to profound hearing loss, blindness, and other developmental delays, in 2006–2008.<sup>1</sup> Among these conditions, ADHD and learning disabilities had the greatest prevalence. Many children affected by neuro developmental disorders have more than one of these conditions: for example, about 4% of U.S. children have both ADHD and a learning disability.<sup>2</sup> Some researchers have stated that the prevalence of certain neuro developmental disorders, specifically autism and ADHD, has been increasing over the last four decades.<sup>3-7</sup> Long-term trends in these conditions are difficult to detect with certainty, due to a lack of data to track prevalence over many years as well as changes in awareness and diagnostic criteria. However, some detailed reviews of historical data have concluded that the actual prevalence of autism seems to be rising.<sup>4,8-10</sup> Surveys of educators and pediatricians have reported a rise in the number of children seen in classrooms and exam rooms with behavioral and learning disorders.<sup>11-13</sup>

Genetics can play an important role in many neuro developmental disorders, and some cases of certain conditions such as intellectual disability are associated with specific genes. However, most neuro developmental disorders have complex and

multiple contributors rather than any one clear cause. These disorders likely result from a combination of genetic, biological, psychosocial and environmental risk factors. A broad range of environmental risk factors may affect neurodevelopment, including (but not limited to) maternal use of alcohol, tobacco, or illicit drugs during pregnancy; lower socioeconomic status; preterm birth; low birth weight; the physical environment; and prenatal or childhood exposure to certain environmental contaminants.

Lead, methylmercury, and PCBs are widespread environmental contaminants associated with adverse effects on a child's developing brain and nervous system in multiple studies. The National Toxicology Program (NTP) has concluded that childhood lead exposure is associated Neuro developmental Disorders with reduced cognitive function, including lower intelligence quotient (IQ) and reduced academic achievement.<sup>22</sup> The NTP has also concluded that childhood lead exposure is associated with attention-related behavioral problems (including inattention, hyperactivity, and diagnosed attention-deficit/hyperactivity disorder) and increased incidence of problem behaviors (including delinquent, criminal, or antisocial behavior).<sup>22</sup>

EPA has determined that methylmercury is known to have neurotoxic and developmental effects in humans.<sup>23</sup> Extreme cases of such effects were seen in people prenatally exposed during two high-dose mercury poisoning events in Japan and Iraq, who experienced severe adverse health effects such as cerebral palsy, mental retardation, deafness, and blindness.<sup>24-26</sup> Prospective cohort studies have been conducted in island populations where frequent fish consumption leads to methylmercury exposure in pregnant women at levels much lower than in the poisoning incidents but much greater than those typically observed in the United States. Results from such studies in New Zealand and the Faroe Islands suggest that increased prenatal mercury exposure due to maternal fish consumption was associated with adverse effects on intelligence and decreased functioning in the areas of language, attention, and memory.<sup>26-32</sup> These associations were not seen in initial results reported from a similar study in the Seychelles Islands.<sup>33</sup> However, further studies in the Seychelles found associations between prenatal mercury exposure and some neuro developmental deficits after researchers had accounted for the developmental benefits of fish consumption.<sup>34-36</sup> More recent studies

conducted in the United States have found associations between neuro developmental effects and blood mercury levels within the range typical for U.S. women, after accounting for the beneficial effects of fish consumption during pregnancy.

Several studies of children who were prenatally exposed to elevated levels of polychlorinated biphenyls (PCBs) have suggested linkages between these contaminants and neuro developmental effects, including lowered intelligence and behavioral deficits such as inattention and impulsive behavior.<sup>39-44</sup> Studies have also reported associations between PCB exposure and deficits in learning and memory.<sup>39,45</sup> Most of these studies found that the effects are associated with exposure in the womb resulting from the mother having eaten food contaminated with PCBs,<sup>46-51</sup> although some studies have reported relationships between adverse effects and PCB exposure during infancy and childhood.<sup>45,51-53</sup> Although there is some inconsistency in the epidemiological literature, several reviews of the literature have found that the overall evidence supports a concern for effects of PCBs on children's neurological development.<sup>52,54-58</sup> The Agency for Toxic Substances and Disease Registry has determined that "Substantial data suggest that PCBs play a role in neurobehavioral alterations observed in newborns and young children of women with PCB burdens near background levels."<sup>59</sup> In addition, adverse effects on intelligence and behavior have been found in children of women who were highly exposed to mixtures of PCBs, chlorinated dibenzofurans, and other pollutants prior to conception.<sup>60-63</sup>

A wide variety of other environmental chemicals have been identified as potential concerns for childhood neurological development, but have not been as well studied for these effects as lead, mercury, and PCBs. Concerns for these additional chemicals are based on both laboratory Health.

Animal studies and human epidemiological research; in most cases, the epidemiological studies are relatively new and the literature is just beginning to develop. Among the chemicals being studied for potential effects on childhood neurological development are organophosphate pesticides, poly brominated diphenyl ether flame retardants (PBDEs), phthalates, bisphenol A (BPA), polycyclic aromatic hydrocarbons (PAHs), arsenic, and perchlorate. Exposure to

all of these chemicals is widespread in the United States for both children and adults.

Organophosphate pesticides can interfere with the proper function of the nervous system when exposure is sufficiently high.<sup>65</sup> Many children may have low capacity to detoxify organophosphate pesticides through age 7 years.<sup>66</sup> In addition, recent studies have reported an association between prenatal organophosphate exposure and childhood ADHD in a U.S. community with relatively high exposures to organophosphate pesticides,<sup>67</sup> as well as with exposures found within the general U.S. population. Other recent studies have described associations between prenatal organophosphate pesticide exposures and a variety of neuro developmental deficits in childhood, including reduced IQ, perceptual reasoning, and memory.

Studies of certain PBDEs have found adverse effects on behavior, learning, and memory in laboratory animals. A recent epidemiological study in New York City reported significant associations between children's prenatal exposure to PBDEs and reduced performance on IQ tests and other tests of neurological development in 6-year-old children.<sup>75</sup> Another study in the Netherlands reported significant associations between children's prenatal exposure to PBDEs and reduced performance on some neuro developmental tests in 5- and 6-year-old children, while associations with improved performance were observed for other tests.

### **3.2 Attentions-Deficit/Hyperactivity Disorder (ADHD)**

Attention-deficit/hyperactivity disorder (ADHD) is a disruptive behavior disorder characterized by symptoms of inattention and/or hyperactivity-impulsivity, occurring in several settings and more frequently and severely than is typical for other individuals in the same stage of development.<sup>98</sup> ADHD can make family and peer relationships difficult, diminish academic performance, and reduce vocational achievement.

As the medical profession has developed a greater understanding of ADHD through the years, the name of this condition has changed. The American Psychiatric Association adopted the name "attention deficit disorder" in the early 1980s and revised it to "attention-deficit/hyperactivity disorder" in 1987.<sup>99</sup> Many children with ADHD have a mix of inattention and hyperactivity/impulsivity

behaviors, while some may display primarily hyperactive behavior traits, and others display primarily inattentive traits. It is possible for an individual's primary symptoms of ADHD to change over time. Children with ADHD frequently have other disorders, with parents reporting that about half of children with ADHD have a learning disability and about one in four have a conduct disorder.

Other disorders, including anxiety disorders, depression, and learning disabilities, can be expressed with signs and symptoms that resemble those of ADHD. A diagnosis of ADHD requires a certain amount of judgment on the part of a doctor, similar to diagnosis of other mental disorders. Despite the variability among children diagnosed with the disorder and the challenges involved in diagnosis, ADHD has good clinical validity, meaning that impaired children share similarities, exhibit symptoms, respond to treatment, and are recognized with general consistency across clinicians

A great deal of research on ADHD has focused on aspects of brain functioning that are related to the behaviors associated with ADHD. Although this research is not definitive, it has found that children with ADHD generally have trouble with certain skills involved in problem-solving (referred to collectively as executive function). These skills include working memory (keeping information in mind while briefly doing something else), planning (organizing a sequence of activities to complete a task), response inhibition (suppressing immediate responses when they are inappropriate), and cognitive flexibility (changing an approach when a situation changes). Children with ADHD also generally have problems in maintaining sustained attention to a task (referred to as vigilance), and/or maintaining readiness to respond to new information (referred to as alertness).

While uncertainties remain, findings to date indicate that ADHD is caused by combinations of genetic and environmental factors. Much of the research on environmental factors has focused on the fetal environment. Maternal smoking during pregnancy has been associated with increased risk of ADHD in the child in numerous studies, however, this continues to be an active area of research as scientists consider whether other factors related to smoking (e.g., genetic factors, maternal mental health, stress, alcohol use, and low birth weight) may be responsible for associations attributed to smoking. Findings regarding ADHD and



maternal consumption of alcohol during pregnancy are considered more limited and inconsistent.<sup>19,20</sup> Preterm birth and low birth weight have also been found to increase the likelihood that a child will have ADHD.<sup>16,18,20</sup> Psychosocial adversity (representing factors such as low socioeconomic status and in-home conflict) in childhood may also play a role in ADHD.

The potential role of environmental contaminants in contributing to ADHD, either alone or in conjunction with certain genetic susceptibilities or other environmental factors is becoming better understood as a growing number of studies look explicitly at the relationship between ADHD and exposures to environmental contaminants.

Among environmental contaminants known or suspected to be developmental neurotoxicants, lead has the most extensive evidence of a potential contribution to ADHD. A number of recent epidemiological studies (all published since 2006, with data gathered beginning in 1999 or more recently) conducted in the United States and Asia have reported relationships between increased levels of lead in a child's blood and increased likelihood of ADHD. In most of these studies, blood lead levels were comparable to levels observed currently in the United States. The potential contribution of childhood lead exposure to the risk of ADHD may be amplified in children of women who smoked cigarettes during pregnancy.<sup>110</sup> In addition, several studies have reported relationships between blood lead levels and the aspects of brain functioning that are most affected in children with ADHD, including sustained attention, alertness, and problem-solving skills (executive functions, specifically cognitive flexibility, working memory, planning, and response inhibition). Similar results have been observed in laboratory animal studies. The NTP has concluded that childhood lead exposure is "associated with increased diagnosis of attention-related behavioral problems."

Although no studies evaluating a potential association between PCBs and ADHD itself have been published, a study in Massachusetts reported a relationship between levels of PCBs measured in cord blood and increased ADHD-like behaviors observed by teachers in children at ages 7 to 11 years. PCB levels in this study were generally lower than those measured in other epidemiological studies of PCBs and childhood neurological development. Other research findings also suggest that PCBs may play a role in contributing to ADHD. Several studies

in U.S. and European populations, most having elevated exposure to PCBs through the diet, have found generally consistent associations with aspects of brain function that are most affected in children with ADHD, including alertness and problem-solving skills (executive functions, specifically response inhibition, working memory, cognitive flexibility, and planning). Studies in laboratory animals have similar findings regarding the mental functions affected by PCB exposure.

Studies of other environmental chemicals reporting associations with ADHD or related outcomes have been published in recent years, but findings tend to be much more limited than for lead and PCBs. Findings for phthalates and organophosphate pesticides were noted above. In addition, three studies have reported associations between ADHD or impulsivity and concentrations of certain per fluorinated chemicals measured in the blood of children.<sup>123-125</sup> Studies of mercury have produced generally mixed findings of associations with ADHD or related symptoms and mental functions

### 3.3 Learning Disability

Learning disability (or learning disorder) is a general term for a neurological disorder that affects the way in which a child's brain can receive, process, retain, and respond to information. A child with a learning disability may have trouble learning and using certain skills, including reading, writing, listening, speaking, reasoning, and doing math, although learning disabilities vary from child to child. Children with learning disabilities usually have average or above-average intelligence, but there are differences in the way their brains process information. As with many other neuro developmental disorders, the causes of learning disabilities are not well understood. Often learning disabilities run in the family, suggesting that heredity may play a role in their development. Problems during pregnancy and birth, such as drug or alcohol use during pregnancy, low birth weight, lack of oxygen, or premature or prolonged labor, may also lead to learning disabilities.<sup>130</sup>

As is the case with other neuro developmental outcomes, there are generally many more studies of lead exposure that are relevant to learning disabilities than for other environmental contaminants. Several studies have found associations

between lead exposure and learning disabilities or reduced classroom performance that are independent of IQ. Exposures to lead have been associated with impaired memory and difficulties or impairments in rule learning, following directions, planning, verbal abilities, speech processing, and classroom performance in children. Other findings that may indicate contributions from environmental contaminants to learning disabilities include a study that found associations of both maternal smoking during pregnancy and childhood exposure to environmental tobacco smoke with parent report of a child with a learning disability diagnosis; associations of prenatal mercury exposure with dysfunctions in children's language abilities and memory, and associations of prenatal PCB exposure with poorer concentration and memory deficits compared with unexposed children.

### **Autism Spectrum Disorders**

Autism spectrum disorders (ASDs) are a group of developmental disabilities defined by significant social, communication, and behavioral impairments. The term "spectrum disorders" refers to the fact that although people with ASDs share some common symptoms, ASDs affect different people in different ways, with some experiencing very mild symptoms and others experiencing severe symptoms. ASDs encompass autistic disorder and the generally less severe forms, Asperger's syndrome and pervasive developmental disorder-not otherwise specified (PDD-NOS). Children with ASDs may lack interest in other people, have trouble showing or talking about feelings, and avoid or resist physical contact. A range of communication problems are seen in children with ASDs: some speak very well, while many children with an ASD do not speak at all. Another hallmark characteristic of ASDs is the demonstration of restrictive or repetitive interests or behaviors, such as lining up toys, flapping hands, rocking his or her body, or spinning in circles.

To date, no single risk factor sufficient to cause ASD has been identified; rather each case is likely to be caused by the combination of multiple genetic and environmental risk factors. Several ASD research findings and hypotheses may imply an important role for environmental contaminants. First, there has been a sharp upward trend in reported prevalence that cannot be fully explained by factors such as younger ages at diagnosis, migration patterns, changes in

diagnostic criteria, inclusion of milder cases, or increased parental age. Also, the neurological signaling systems that are impaired in children with ASDs can be affected by certain environmental chemicals. For example, several pesticides are known to interfere with acetylcholine (Ach) and  $\gamma$ -aminobutyric acid (GABA) neurotransmission, chemical messenger systems that have been altered in certain subsets of autistic individuals.<sup>147</sup> Some studies have reported associations between certain pharmaceuticals taken by pregnant women and increased incidence of autism, which may suggest that there are biological pathways by which other chemical exposures during pregnancy could increase the risk of autism.

Furthermore, some of the identified genetic risk factors for autism are *de novo* mutations, meaning that the genetic defect is not present in either of the parents' genes, yet can be found in the genes of the child when a new genetic mutation forms in a parent's germ cells (egg or sperm), potentially from exposure to contaminants. Many environmental contaminants have been identified as agents capable of causing mutations in DNA, by leading to oxidative DNA damage and by inhibiting the body's normal ability to repair DNA damage. Some children with autism have been shown to display markers of increased oxidative stress, which may strengthen this line of reasoning. Many studies have linked increasing paternal and maternal age with increased risk of ASDs. The role of parental age in increased autism risk might be explained by evidence that shows advanced parental age can contribute significantly to the frequency of *de novo* mutations in a parent's germ cells. Advanced parental age signifies a longer period of time when environmental exposures may act on germ cells and cause DNA damage and *de novo* mutations. Finally, a recent study concluded that the role of genetic factors in ASDs has been overestimated, and that environmental factors play a greater role than genetic factors in contributing to autism.<sup>144</sup> This study did not evaluate the role of any particular environmental factors, and in this context "environmental factors" are defined broadly to include any influence that is not genetic.

Studies, limited in number and often limited in research design, have examined the possible role that certain environmental contaminants may play in the development of ASDs. A number of these studies have focused on mercury exposures. Earlier studies reported higher levels of mercury in the blood, baby

teeth, and urine of children with ASDs compared with control children; however, another more recent study reported no difference in the blood mercury levels of children with autism and typically developing children.<sup>163</sup> Proximity to industrial and power plant sources of environmental mercury was reported to be associated with increased autism prevalence in a study conducted in Texas.

Thimerosal is a mercury-containing preservative that is used in some vaccines to prevent contamination and growth of harmful bacteria in vaccine vials. Since 2001, thimerosal has not been used in routinely administered childhood vaccines, with the exception of some influenza vaccines. The Institute of Medicine has rejected the hypothesis of a causal relationship between thimerosal-containing vaccines and autism.

Some studies have also considered air pollutants as possible contributors to autism. A study conducted in the San Francisco Bay Area reported an association between the amount of certain airborne pollutants at a child's place of birth (mercury, cadmium, nickel, trichloroethylene, and vinyl chloride) and the risk for autism, but a similar study in North Carolina and West Virginia did not find such a relationship. Another study in California reported that mothers who lived near a freeway at the time of delivery were more likely to have children diagnosed with autism, suggesting that exposure to traffic-related air pollutants may play a role in contributing to ASDs.

Finally, a study in Sweden reported an increased risk of ASDs in children born to families living in homes with polyvinyl chloride (PVC) flooring, which is a source of certain phthalates in indoor environments.

### **3.4 Intellectual Disability (Mental Retardation)**

The most commonly used definitions of intellectual disability (also referred to as mental retardation) emphasize sub average intellectual functioning before the age of 18, usually defined as an IQ less than 70 and impairments in life skills such as communication, self-care, home living, and social or interpersonal skills. Different severity categories, ranging from mild to severe retardation, are defined on the basis of IQ scores.

“Intellectual disability” is used as the preferred term for this condition in the disabilities sector, but the term “mental retardation” continues to be used in the contexts of law and public policy when designating eligibility for state and federal programs.

Researchers have identified some causes of intellectual disability, including genetic disorders, traumatic injuries, and prenatal events such as maternal infection or exposure to alcohol. However, the causes of intellectual disability are unknown in 30–50% of all cases. The causes are more frequently identified for cases of severe retardation (IQ less than 50), whereas the cause of mild retardation (IQ between 50 and 70) is unknown in more than 75% of cases. Exposures to environmental contaminants could be a contributing factor to the cases of mild retardation where the cause is unknown. Exposure to high levels of lead and mercury has been associated with intellectual disability. Furthermore, lead, mercury, and PCBs all have been found to have adverse effects on intelligence and cognitive functioning in children, and recent studies have reported associations of a number of other environmental contaminants with childhood IQ deficits, including organophosphate pesticides, PBDEs, phthalates, and PAHs. Exposure to environmental contaminants that reduce IQ has the potential to increase the proportion of the population with IQ less than 70, thus increasing the incidence of intellectual disability in an exposed population.

### **3.5 Indicators in this Section**

The four indicators that follow provide the best nationally representative data available on the prevalence of neuro developmental disorders among U.S. children over time. The indicators present the number of children ages 5 to 17 years reported to have ever been diagnosed with ADHD (Indicator H6), learning disabilities (Indicator H7), autism (Indicator H8), and intellectual disability (Indicator H9). These four conditions are examples of neuro developmental disorders that may be influenced by exposures to environmental contaminants. Intellectual disability and learning disabilities are disorders in which a child’s cognitive or intellectual development is affected, and ADHD is a disorder in which a child’s behavioral development is affected. Spectrum disorders are disorders in which a child’s behavior, communication, and social skills are affected. Indicators H6 to H9 have been updated since the publication of the

America's Children and the Environment, Third Edition(January 2013) to include data through 2013.

**About the Indicators:** Indicators H6, H7, H8, and H9 present information about the number of children who are reported to have ever been diagnosed with four different neuro developmental disorders: attention-deficit/hyperactivity disorder (ADHD), learning disabilities, autism, and intellectual disability. The data come from a national survey that collects health information from a representative sample of the population each year. The four indicators show how the prevalence of children's neuro developmental disorders has changed over time, and, when possible, how the prevalence differs between boys and girls.

The National Health Interview Survey (NHIS) provides nationally representative data on the prevalence of ADHD, learning disabilities, autism, and intellectual disability (mental retardation) in the United States each year. NHIS is a large-scale household interview survey of a representative sample of the civilian noninstitutionalized U.S. population, conducted by the National Center for Health Statistics (NCHS). The interviews are conducted in person at the participants' homes. From 1997–2005, interviews were conducted for approximately 12,000–14,000 children annually. From 2006–2008, interviews were conducted for approximately 9,000–10,000 children per year. From 2011–2013, interviews were conducted for approximately 11,000–13,000 children per year. The data are obtained by asking a parent or other knowledgeable household adult questions regarding the child's health status. NHIS asks "Has a doctor or health professional ever told you that <child's name> had Attention Deficit/Hyperactivity Disorder (ADHD) or Attention Deficit Disorder (ADD)? Autism? Mental Retardation?" Another question on the NHIS survey asks "Has a representative from a school or a health professional ever told you that <child's name> had a learning disability?"

### **3.6 Data Presented in the Indicators**

The following indicators display the prevalence of ADHD, learning disabilities, autism, and intellectual disability among U.S. children, for the years 1997–2013. Diagnosing neuro developmental disorders in young children can be difficult: many affected children may not receive a diagnosis until they enter preschool or kindergarten. For this reason, the indicators here show children ages 5 to 17 years.

Where data are sufficiently reliable, the indicators provide separate prevalence estimates for boys and girls.

Although the NHIS provides national-level data on the prevalence of neuro developmental disorders over a span of many years, NHIS data could underestimate the prevalence of neuro developmental disorders. Reasons for underestimation may include late identification of affected children and the exclusion of institutionalized children from the NHIS survey population. A diagnosis of a neuro developmental disorder depends not only on the presence of particular symptoms and behaviors in a child, but on concerns being raised by a parent or teacher about the child's behavior, as well as the child's access to a doctor and the accuracy of the doctor's diagnosis. Further, the NHIS relies on parents reporting that their child has been diagnosed with a neuro developmental disorder, and the accuracy of parental responses could be affected by cultural and other factors.

Long-term trends in these conditions are difficult to detect with certainty due to a lack of data to track prevalence over many years, as well as changes in awareness and diagnostic criteria, which could explain at least part of the observed increasing trends.<sup>184-186</sup> The NHIS questions also do not assess whether a child currently has a disorder; instead, they provide data on whether a child has ever been diagnosed with a disorder, regardless of their current status.

Survey responses for learning disabilities may be more uncertain than for the other three disorders presented. Whereas survey respondents are asked whether the child has been diagnosed with ADHD, autism, or intellectual disability (mental retardation) by a health professional, for learning disabilities an affirmative response may also include a school representative. It is possible that some parents may respond "yes" to the question regarding learning disabilities based on informal comments made at school, rather than a formal evaluation to determine whether the child has any specific learning disability; similarly, they may give a "yes" answer for children with diagnosed disorders that are not learning disabilities. For example, parents of children with intellectual disability might also respond "yes" to the learning disability question, thinking that any learning problems may apply, even though intellectual disability and learning disabilities are distinct conditions.<sup>2</sup>



Because autism is the only autism spectrum disorder (ASD) referred to in the survey, it is not clear how parents of children with other ASDs, i.e., Asperger's syndrome and PDD-NOS, may have responded. The estimates shown by Indicator H8 could represent underestimates of ASD prevalence if parents of children with Asperger's syndrome and PDD-NOS did not answer yes to the NHIS questions about autism.

In addition to the data shown in the indicator graphs, supplemental tables provide information regarding the prevalence of neuro developmental disorders for different age groups and prevalence by race/ethnicity, sex, and family income. These comparisons use the most current four years of data available. The data from four years are combined to increase the statistical reliability of the estimates for each race/ethnicity, sex, and family income group. The tables include prevalence estimates for the following race/ethnicity groups: White non-Hispanic, Black non-Hispanic, Asian non-Hispanic, Hispanic, and "All Other Races." The "All Others Races" category includes all other races not specified, together with those individuals who report more than one race. The limits of the sample design and sample size often prevent statistically reliable estimates for smaller race/ethnicity groups. The data are also tabulated for three income groups: all incomes, income below the poverty level, and greater than or equal to the poverty level.

Please see the Introduction to the Health section for discussion of statistical significance testing applied to these indicators.

### **3.7 Other Estimates of ADHD and Autism Prevalence**

In addition to NHIS, other NCHS studies provide data on prevalence of ADHD and ASDs among children. The National Survey of Children's Health (NSCH), conducted in 2003 by NCHS, found that 7.8% of children ages 4 to 17 years had ever been diagnosed with ADHD. The same survey, when conducted again in 2007, found that 9.5% of children ages 4 to 17 years had ever been diagnosed with ADHD.<sup>7</sup> Both estimates are somewhat higher than the ADHD prevalence estimates from the NHIS for those years. The 2007 NSCH also estimates that 7.2% of children ages 4 to 17 years currently have ADHD. The 2007 NSCH also provides information at the state level: North Carolina had the highest rate, with

15.6% of children ages 4 to 17 years having ever been diagnosed with ADHD; the rate was lowest in Nevada, at 5.6%.<sup>7</sup>

In 2002 and 2006, the Centers for Disease Control and Prevention performed thorough data gathering in selected areas to examine the prevalence of ASDs in eight-year-old children. The ASD prevalence estimate for 2002 was 0.66%, or 1 in 152 eight-year-old children, and the estimate for 2006 was 0.9%, or 1 in 110 eight-year-old children.<sup>8,187</sup> The 2007 NSCH also provides an estimate of 1.1% of children ages 3 to 17 years reported to have ASDs, or about 1 in 90.

### 3.8 Data characterization

- Data for this indicator are obtained from an ongoing annual survey conducted by the National Center for Health Statistics.
- Survey data are representative of the U.S. civilian non institutionalized population.
- A parent or other knowledgeable adult in each sampled household is asked questions regarding the child's health status, including if they have ever been told the child has Attention Deficit/Hyperactivity Disorder (ADHD).
  - From 1997 to 2013, the proportion of children ages 5 to 17 years reported to have ever been diagnosed with attention-deficit/hyperactivity disorder (ADHD) increased from 6.3% in 1993 to 10.7% in 2012 and 9.9% in 2013.
  - The increasing trend was statistically significant for children overall, and for both boys and girls considered separately.
  - For the years 2010–2013, the percentage of boys reported to have ADHD (13.7%) was higher than the rate for girls (6.0%). This difference was statistically significant. (See Table H6a.)
  - In 2010–2013, 11.9% of White non-Hispanic children, 11.8% of children of "All Other Races," 10.1% of Black non-Hispanic children, 6.2% of Hispanic children, and 2.1% of Asian non-Hispanic children were reported to have ADHD. (See Table H6b.) ■ These differences were statistically significant, with two

exceptions: there was no statistically significant difference between children of “All Other Races” and White non-Hispanic children, or between children of “All Other Races” and Black non-Hispanic children.

\* In 2010–2013, 13.1% of children from families living below the poverty level were reported to have ADHD compared with 9.1% of children from families living at or above the poverty level. This difference was statistically significant. (See Table H6b.)

### 3.9 Conclusions

Developmental disabilities or neuro developmental disabilities (include intellectual disability) are a diverse group of chronic disorders that begin at anytime during the development process (including conception, birth, and growth) up to 22 years of age and last throughout an individual’s lifetime. The World Health Organization has developed the International Classification of Functioning, Disability, and Health (ICF), which consists of three key components – body function and structure, activity, and participation – that provides a framework for delineating disabilities. The three key components of functioning and disability are inter-related and may interact with the health condition (e.g., disorder or disease) and personal and environmental factors. The reported prevalence of intellectual disability reflects consideration of the definition used, method of ascertainment of the data, and the characteristics of the population studied. Based on the typical bell-shaped distribution of intelligence in the general population and 2 standard deviations below the mean as a cutoff point, approximately 2.5% of the population is expected to have intellectual disability. Specific reading disability is fairly common, with up to 17.5% of children being affected. Centers for Disease Control and Prevention reports that the overall prevalence of ASDs in the United States is 9.0 per 1,000 population in children aged 8 years. The worldwide incidence of CP is estimated to be 2–3 per 1,000 live births. The prevalence of NTDs varies in different regions of the world. In the United States, the incidence of NTDs is 1 in 4,000 live births. The prevalence and causes of vision impairment vary in different parts of the world depending on multiple factors.

### 3.10 References

1. Boyle, C.A., S. Boulet, L.A. Schieve, R.A. Cohen, S.J. Blumberg, M. Yeargin-Allsopp, S. Visser, and M.D. Kogan. 2011. Trends in the prevalence of developmental disabilities in US Children, 1997–2008. *Pediatrics* 127 (6):1034-42.
2. Pastor, P.N., and C.A. Reuben. 2008. Diagnosed attention deficit hyperactivity disorder and learning disability: United States, 2004-2006. *Vital and Health Statistics* 10 (237).
3. Grandjean, P., and P.J. Landrigan. 2006. Developmental neurotoxicity of industrial chemicals. *Lancet* 368 (9553):2167-78.
4. Newschaffer, C.J., M.D. Falb, and J.G. Gurney. 2005. National autism prevalence trends from United States special education data. *Pediatrics* 115 (3):e277-82.
5. Prior, M. 2003. Is there an increase in the prevalence of autism spectrum disorders? *Journal of Paediatrics and Child Health* 39 (2):81-2.
6. Rutter, M. 2005. Incidence of autism spectrum disorders: changes over time and their meaning. *Acta Paediatrica* 94 (1):2-15.
7. Centers for Disease Control and Prevention. 2010. Increasing prevalence of parent-reported attention-deficit/hyperactivity disorder among children --- United States, 2003 and 2007. *Morbidity and Mortality Weekly Report* 59 (44):1439-43.
8. Centers for Disease Control and Prevention. 2009. Prevalence of autism spectrum disorders --- autism and developmental disabilities monitoring network, United States, 2006. *Morbidity and Mortality Weekly Report* 58 (SS 10):1-20.
9. Hertz-Picciotto, I., and L. Delwiche. 2009. The rise in autism and the role of age at diagnosis. *Epidemiology* 20 (1):84-90.
10. Newschaffer, C.J. 2006. Investigating diagnostic substitution and autism prevalence trends. *Pediatrics* 117 (4):1436-7.

11. Grupp-Phelan, J., J.S. Harman, and K.J. Kelleher. 2007. Trends in mental health and chronic condition visits by children presenting for care at U.S. emergency departments. *Public Health Reports* 122 (1):55-61.
12. Kelleher, K.J., T.K. McInerney, W.P. Gardner, G.E. Childs, and R.C. Wasserman. 2000. Increasing identification of psychosocial problems: 1979-1996. *Pediatrics* 105 (6):1313-21.
13. U.S. Department of Education. 2007. *27th Annual (2005) Report to Congress on the Implementation of the Individuals with Disabilities Education Act, Vol. 1*. Washington, DC.
14. Aarnoudse-Moens, C.S.H., N. Weisglas-Kuperus, J.B. van Goudoever, and J. Oosterlaan. 2009. Meta-analysis of neurobehavioral outcomes in very preterm and/or very low birth weight children. *Pediatrics* 124 (2):717-728.
15. Banerjee, T.D., F. Middleton, and S.V. Faraone. 2007. Environmental risk factors for attention-deficit hyperactivity disorder. *Acta Paediatrica* 96 (9):1269-1274.
16. Bhutta, A.T., M.A. Cleves, P.H. Casey, M.M. Cradock, and K.J.S. Anand. 2002. Cognitive and behavioral outcomes of school-aged children who were born preterm. *JAMA: The Journal of the American Medical Association* 288 (6):728-737.
17. Herrmann, M., K. King, and M. Weitzman. 2008. Prenatal tobacco smoke and postnatal secondhand smoke exposure and child neurodevelopment. *Current Opinion in Pediatrics* 20 (2):184-190.
18. Institute of Medicine. 2007. *Preterm Birth: Causes, Consequences, and Prevention*. Edited by R. E. Behrman and A. S. Butler. Washington, DC: The National Academies Press.
19. Linnet, K.M., S. Dalsgaard, C. Obel, K. Wisborg, T.B. Henriksen, A. Rodriguez, A. Kotimaa, I. Moilanen, P.H. Thomsen, J. Olsen, et al. 2003. Maternal lifestyle factors in pregnancy risk of attention deficit hyperactivity disorder and associated behaviors: review of the current evidence. *The American Journal of Psychiatry* 160 (6):1028-40.

20. Nigg, J.T. 2006. *What Causes ADHD? Understanding What Goes Wrong and Why*. New York: The Guilford Press.
21. Weiss, B., and D.C. Bellinger. 2006. Social ecology of children's vulnerability to environmental pollutants. *Environmental Health Perspectives* 114 (10):1479-1485.
22. National Toxicology Program. 2012. *NTP Monograph on Health Effects of Low-Level Lead*. Research Triangle Park, NC: National Institute of Environmental Health Sciences, National Toxicology Program. <http://ntp.niehs.nih.gov/go/36443>.
23. U.S. Environmental Protection Agency. 1997. *Mercury Study Report to Congress Volumes I to VII*. Washington DC: U.S. Environmental Protection Agency Office of Air Quality Planning and Standards and Office of Research and Development. EPA-452/R-97-003. <http://www.epa.gov/hg/report.htm>.
24. Amin-Zaki, L., S. Elhassani, M.A. Majeed, T.W. Clarkson, R.A. Doherty, and M. Greenwood. 1974. Intra-uterine methylmercury poisoning in Iraq. *Pediatrics* 54 (5):587-95.
25. Harada, M. 1995. Minamata disease: methylmercury poisoning in Japan caused by environmental pollution. *Critical Reviews in Toxicology* 25 (1):1-24.
26. National Research Council. 2000. *Toxicological Effects of Methylmercury*. Washington, DC: National Academy Press.
27. Budtz-Jorgensen, E., P. Grandjean, and P. Weihe. 2007. Separation of risks and benefits of seafood intake. *Environmental Health Perspectives* 115 (3):323-7.
28. Crump, K.S., T. Kjellstrom, A.M. Shipp, A. Silvers, and A. Stewart. 1998. Influence of prenatal mercury exposure upon scholastic and psychological test performance: benchmark analysis of a New Zealand cohort. *Risk Analysis* 18 (6):701-13.
29. Debes, F., E. Budtz-Jorgensen, P. Weihe, R.F. White, and P. Grandjean. 2006. Impact of prenatal methylmercury exposure on neurobehavioral function at age 14 years. *Neurotoxicology and Teratology* 28 (5):536-47.

30. Grandjean, P., P. Weihe, R.F. White, F. Debes, S. Araki, K. Yokoyama, K. Murata, N. Sorensen, R. Dahl, and P.J. Jorgensen. 1997. Cognitive deficit in 7-year-old children with prenatal exposure to methylmercury. *Neurotoxicology and Teratology* 19 (6):417-28.
31. Kjellstrom, T., P. Kennedy, S. Wallis, and C. Mantell. 1986. *Physical and mental development of children with prenatal exposure to mercury from fish. Stage 1: Preliminary tests at age 4*. Sweden: Swedish National Environmental Protection Board.
32. Oken, E., and D.C. Bellinger. 2008. Fish consumption, methylmercury and child neurodevelopment. *Current Opinion in Pediatrics* 20 (2):178-83.
33. Myers, G.J., P.W. Davidson, C. Cox, C.F. Shamlaye, D. Palumbo, E. Cernichiari, J. Sloane-Reeves, G.E. Wilding, J. Kost, L.S. Huang, et al. 2003. Prenatal methylmercury exposure from ocean fish consumption in the Seychelles child development study. *Lancet* 361 (9370):1686-92.
34. Davidson, P.W., J.J. Strain, G.J. Myers, S.W. Thurston, M.P. Bonham, C.F. Shamlaye, A. Stokes-Riner, J.M. Wallace, P.J. Robson, E.M. Duffy, et al. 2008. Neurodevelopmental effects of maternal nutritional status and exposure to methylmercury from eating fish during pregnancy. *Neurotoxicology* 29 (5):767-75.
35. Lynch, M.L., L.S. Huang, C. Cox, J.J. Strain, G.J. Myers, M.P. Bonham, C.F. Shamlaye, A. Stokes-Riner, J.M. Wallace, E.M. Duffy, et al. 2011. Varying coefficient function models to explore interactions between maternal nutritional status and prenatal methylmercury toxicity in the Seychelles Child Development Nutrition Study. *Environmental Research* 111 (1):75-80.
36. Strain, J.J., P.W. Davidson, M.P. Bonham, E.M. Duffy, A. Stokes-Riner, S.W. Thurston, J.M. Wallace, P.J. Robson, C.F. Shamlaye, L.A. Georger, et al. 2008. Associations of maternal long-chain polyunsaturated fatty acids, methyl mercury, and infant development in the Seychelles Child Development Nutrition Study. *Neurotoxicology* 29 (5):776-782.

37. Lederman, S.A., R.L. Jones, K.L. Caldwell, V. Rauh, S.E. Sheets, D. Tang, S. Viswanathan, M. Becker, J.L. Stein, R.Y. Wang, et al. 2008. Relation between cord blood mercury levels and early child development in a World Trade Center cohort. *Environmental Health Perspectives* 116 (8):1085-91.
38. Oken, E., J.S. Radesky, R.O. Wright, D.C. Bellinger, C.J. Amarasiriwardena, K.P. Kleinman, H. Hu, and M.W. Gillman. 2008. Maternal fish intake during pregnancy, blood mercury levels, and child cognition at age 3 years in a US cohort. *American Journal of Epidemiology* 167 (10):1171-81.
39. Jacobson, J.L., and S.W. Jacobson. 2003. Prenatal exposure to polychlorinated biphenyls and attention at school age. *Journal of Pediatrics* 143 (6):780-8.
40. Sagiv, S.K., S.W. Thurston, D.C. Bellinger, P.E. Tolbert, L.M. Altshul, and S.A. Korrick. 2010. Prenatal organochlorine exposure and behaviors associated with attention deficit hyperactivity disorder in school-aged children. *American Journal of Epidemiology* 171 (5):593-601.
41. Stewart, P., S. Fitzgerald, J. Reihman, B. Gump, E. Lonky, T. Darvill, J. Pagano, and P. Hauser. 2003. Prenatal PCB exposure, the corpus callosum, and response inhibition. *Environmental Health Perspectives* 111 (13):1670-7.
42. Stewart, P., J. Reihman, B. Gump, E. Lonky, T. Darvill, and J. Pagano. 2005. Response inhibition at 8 and 9 1/2 years of age in children prenatally exposed to PCBs. *Neurotoxicology and Teratology* 27 (6):771-80.
43. Stewart, P.W., E. Lonky, J. Reihman, J. Pagano, B.B. Gump, and T. Darvill. 2008. The relationship between prenatal PCB exposure and intelligence (IQ) in 9-year-old children. *Environmental Health Perspectives* 116 (10):1416-22.
44. Stewart, P.W., D.M. Sargent, J. Reihman, B.B. Gump, E. Lonky, T. Darvill, H. Hicks, and J. Pagano. 2006. Response inhibition during Differential Reinforcement of Low Rates (DRL) schedules may be sensitive to low-level polychlorinated biphenyl, methylmercury, and lead exposure in children. *Environmental Health Perspectives* 114 (12):1923-9.



45. Vreugdenhil, H.J., P.G. Mulder, H.H. Emmen, and N. Weisglas-Kuperus. 2004. Effects of perinatal exposure to PCBs on neuropsychological functions in the Rotterdam cohort at 9 years of age. *Neuropsychology* 18 (1):185-93.
46. Darvill, T., E. Lonky, J. Reihman, P. Stewart, and J. Pagano. 2000. Prenatal exposure to PCBs and infant performance on the Fagan test of infant intelligence. *Neurotoxicology* 21 (6):1029-38.
47. Jacobson, J.L., and S.W. Jacobson. 1996. Intellectual impairment in children exposed to polychlorinated biphenyls in utero. *New England Journal of Medicine* 335 (11):783-9.
48. Jacobson, J.L., and S.W. Jacobson. 1997. Teratogen update: polychlorinated biphenyls. *Teratology* 55 (5):338-347.
49. Patandin, S., C.I. Lanting, P.G. Mulder, E.R. Boersma, P.J. Sauer, and N. Weisglas-Kuperus. 1999. Effects of environmental exposure to polychlorinated biphenyls and dioxins on cognitive abilities in Dutch children at 42 months of age. *Journal of Pediatrics* 134 (1):33-41.
50. Stewart, P., J. Reihman, E. Lonky, T. Darvill, and J. Pagano. 2000. Prenatal PCB exposure and neonatal behavioral assessment scale (NBAS) performance. *Neurotoxicology and Teratology* 22 (1):21-9.
51. Walkowiak, J., J.A. Wiener, A. Fastabend, B. Heinzow, U. Kramer, E. Schmidt, H.J. Steingruber, S. Wundram, and G. Winneke. 2001. Environmental exposure to polychlorinated biphenyls and quality of the home environment: effects on psychodevelopment in early childhood. *Lancet* 358 (9293):1602-7.
52. Schantz, S.L., J.J. Widholm, and D.C. Rice. 2003. Effects of PCB exposure on neuropsychological function in children. *Environmental Health Perspectives* 111 (3):357-576.
53. Jacobson, J.L., S.W. Jacobson, and H.E. Humphrey. 1990. Effects of exposure to PCBs and related compounds on growth and activity in children. *Neurotoxicology and Teratology* 12 (4):319-26.

54. Boucher, O., G. Muckle, and C.H. Bastien. 2009. Prenatal exposure to polychlorinated biphenyls: a neuropsychologic analysis. *Environmental Health Perspectives* 117 (1):7-16.
55. Eubig, P.A., A. Aguiar, and S.L. Schantz. 2010. Lead and PCBs as risk factors for attention deficit/hyperactivity disorder. *Environmental Health Perspectives* 118 (12):1654-1667.
56. Ribas-Fito, N., M. Sala, M. Kogevinas, and J. Sunyer. 2001. Polychlorinated biphenyls (PCBs) and neurological development in children: a systematic review. *Journal of Epidemiology and Community Health* 55 (8):537-46.
57. Schantz, S.L.; J.C. Gardiner, D.M. Gasior, R.J. McCaffrey, A.M. Sweeney, and H.E.B. Humphrey. 2004. Much Ado About Something: The Weight of Evidence for PCB Effects on Neuropsychological Function. *Psychology in the Schools* 41 (6):669-679.
58. Wigle, D.T., T.E. Arbuckle, M.C. Turner, A. Berube, Q. Yang, S. Liu, and D. Krewski. 2008. Epidemiologic evidence of relationships between reproductive and child health outcomes and environmental chemical contaminants. *Journal of Toxicology and Environmental Health Part B Critical Reviews* 11 (5-6):373-517.
59. Agency for Toxic Substances and Disease Registry (ATSDR). 2000. *Toxicological Profile for Polychlorinated Biphenyls (PCBs)*. Atlanta, GA: U.S. Department of Health and Human Services, Public Health Service. <http://www.atsdr.cdc.gov/toxprofiles/tp.asp?id=142&tid=26>.
60. Chen, Y.C., Y.L. Guo, C.C. Hsu, and W.J. Rogan. 1992. Cognitive development of Yu-Cheng ("oil disease") children prenatally exposed to heat-degraded PCBs. *Journal of the American Medical Association* 268 (22):3213-8.
61. Chen, Y.C., M.L. Yu, W.J. Rogan, B.C. Gladen, and C.C. Hsu. 1994. A 6-year follow-up of behavior and activity disorders in the Taiwan Yu-cheng children. *American Journal of Public Health* 84 (3):415-21.
62. Lai, T.J., X. Liu, Y.L. Guo, N.W. Guo, M.L. Yu, C.C. Hsu, and W.J. Rogan. 2002. A cohort study of behavioral problems and intelligence in children with

high prenatal polychlorinated biphenyl exposure. *Archives of General Psychiatry* 59 (11):1061-6.

63. Rogan, W.J., B.C. Gladen, K.L. Hung, S.L. Koong, L.Y. Shih, J.S. Taylor, Y.C. Wu, D. Yang, N.B. Ragan, and C.C. Hsu. 1988. Congenital poisoning by polychlorinated biphenyls and their contaminants in Taiwan. *Science* 241 (4863):334-6.

64. Centers for Disease Control and Prevention. 2009. *Fourth National Report on Human Exposure to Environmental Chemicals*. Atlanta, GA: CDC. <http://www.cdc.gov/exposurereport/>.

65. Eskenazi, B., A. Bradman, and R. Castorina. 1999. Exposures of children to organophosphate pesticides and their potential adverse health effects. *Environmental Health Perspectives* 107 (Suppl. 3):409-19.

66. Huen, K., Harley, K., Brooks, J., Hubbard, A., Bradman, A., Eskenazi, B., Holland, N. 2009. Developmental changes in PON1 enzyme activity in young children and effects of PON1 polymorphisms. *Environmental Health Perspectives* 117 (10):1632-8.

67. Marks, A.R., K. Harley, A. Bradman, K. Kogut, D.B. Barr, C. Johnson, N. Calderon, and B. Eskenazi. 2010. Organophosphate pesticide exposure and attention in young Mexican-American children: the CHAMACOS study. *Environmental Health Perspectives* 118 (12):1768-74.

68. Bouchard, M.F., D.C. Bellinger, R.O. Wright, and M.G. Weisskopf. 2010. Attention-Deficit/Hyperactivity Disorder and urinary metabolites of organophosphate pesticides. *Pediatrics* 125 (6):e1270-e1277.

69. Bouchard, M.F., J. Chevrier, K.G. Harley, K. Kogut, M. Vedar, N. Calderon, C. Trujillo, C. Johnson, A. Bradman, D.B. Barr, et al. 2011. Prenatal exposure to organophosphate pesticides and IQ in 7-year old children. *Environmental Health Perspectives* doi: 10.1289/ehp.1003185.

70. Engel, S.M., J. Wetmur, J. Chen, C. Zhu, D.B. Barr, R.L. Canfield, and M.S. Wolff. 2011. Prenatal exposure to organophosphates, paraoxonase 1, and

- cognitive development in childhood. *Environmental Health Perspectives* doi: 10.1289/ehp.1003183.
71. Rauh, V., S. Arunajadai, M. Horton, F. Perera, L. Hoepner, D.B. Barr, and R. Whyatt. 2011. 7-Year neurodevelopmental scores and prenatal exposure to chlorpyrifos, a common agricultural pesticide. *Environmental Health Perspectives* doi: 10.1289/ehp.1003160.
72. Costa, L.G., G. Giordano, S. Tagliaferri, A. Caglieri, and A. Mutti. 2008. Polybrominated diphenyl ether (PBDE) flame retardants: environmental contamination, human body burden and potential adverse health effects. *Acta Biomed* 79 (3):172-83.
73. Gee, J.R., and V.C. Moser. 2008. Acute postnatal exposure to brominated diphenylether 47 delays neuromotor ontogeny and alters motor activity in mice. *Neurotoxicology and Teratology* 30 (2):79-87.
74. Rice, D.C., E.A. Reeve, A. Herlihy, R.T. Zoeller, W.D. Thompson, and V.P. Markowski. 2007. Developmental delays and locomotor activity in the C57BL6/J mouse following neonatal exposure to the fully-brominated PBDE, decabromodiphenyl ether. *Neurotoxicology and Teratology* 29 (4):511-20.
75. Herbstman, J.B., A. Sjodin, M. Kurzon, S.A. Lederman, R.S. Jones, V. Rauh, L.L. Needham, D. Tang, M. Niedzwiecki, R.Y. Wang, et al. 2010. Prenatal exposure to PBDEs and neurodevelopment. *Environmental Health Perspectives* 118 (5):712-9.
76. Roze, E., L. Meijer, A. Bakker, K.N. Van Braeckel, P.J. Sauer, and A.F. Bos. 2009. Prenatal exposure to organohalogens, including brominated flame retardants, influences motor, cognitive, and behavioral performance at school age. *Environmental Health Perspectives* 117 (12):1953-8.
77. Engel, S.M., A. Miodovnik, R.L. Canfield, C. Zhu, M.J. Silva, A.M. Calafat, and M.S. Wolff. 2010. Prenatal phthalate exposure is associated with childhood behavior and executive functioning. *Environmental Health Perspectives* 118 (4):565-71.

78. Miodovnik, A., S.M. Engel, C. Zhu, X. Ye, L.V. Soorya, M.J. Silva, A.M. Calafat, and M.S. Wolff. 2011. Endocrine disruptors and childhood social impairment. *Neurotoxicology* 32 (2):261-267.
79. Cho, S.-C., S.-Y. Bhang, Y.-C. Hong, M.-S. Shin, B.-N. Kim, J.-W. Kim, H.-J. Yoo, I.H. Cho, and H.-W. Kim. 2010. Relationship between environmental phthalate exposure and the intelligence of school-age children. *Environmental Health Perspectives* 118 (7):1027-1032.
80. Kim, B.N., S.C. Cho, Y. Kim, M.S. Shin, H.J. Yoo, J.W. Kim, Y.H. Yang, H.W. Kim, S.Y. Bhang, and Y.C. Hong. 2009. Phthalates exposure and attention-deficit/hyperactivity disorder in school-age children. *Biological Psychiatry* 66 (10):958-63.
81. National Toxicology Program. 2008. *NTP-CERHR Monograph on the Potential Human Reproductive and Developmental Effects of Bisphenol A*. Research Triangle Park, NC: National Institute of Environmental Health Sciences, National Toxicology Program. <http://ntp.niehs.nih.gov/ntp/ohat/bisphenol/bisphenol.pdf>.
82. Braun, J.M., K. Yolton, K.N. Dietrich, R. Hornung, X. Ye, A.M. Calafat, and B.P. Lanphear. 2009. Prenatal bisphenol A exposure and early childhood behavior. *Environmental Health Perspectives* 117 (12):1945-1952.
83. Perera, F.P., Z. Li, R. Whyatt, L. Hoepner, S. Wang, D. Camann, and V. Rauh. 2009. Prenatal airborne polycyclic aromatic hydrocarbon exposure and child IQ at age 5 years. *Pediatrics* 124 (2):e195-202.
84. Perera, F.P., S. Wang, J. Vishnevetsky, B. Zhang, K.J. Cole, D. Tang, V. Rauh, and D.H. Phillips. 2011. PAH/Aromatic DNA Adducts in Cord Blood and Behavior Scores in New York City Children. *Environmental Health Perspectives* doi:10.1289/ehp.1002705.
85. Smith, A.H., and C.M. Steinmaus. 2009. Health effects of arsenic and chromium in drinking water: recent human findings. *Annual Review of Public Health* 30:107-22.

86. Sambu, S., and R. Wilson. 2008. Arsenic in food and water--a brief history. *Toxicology and Industrial Health* 24 (4):217-26.
87. U.S. Environmental Protection Agency. 2011. *Perchlorate* Retrieved February 11, 2011 from <http://www.epa.gov/safewater/contaminants/unregulated/perchlorate.html>.
88. Kirk, A.B., P.K. Martinelango, K. Tian, A. Dutta, E.E. Smith, and P.K. Dasgupta. 2005. Perchlorate and iodide in dairy and breast milk. *Environmental Science & Technology* 39 (7):2011-7.
89. Sanchez, C.A., L.M. Barraj, B.C. Blount, C.G. Scrafford, L. Valentin-Blasini, K.M. Smith, and R.I. Krieger. 2009. Perchlorate exposure from food crops produced in the lower Colorado River region. *Journal of Exposure Science & Environmental Epidemiology* 19 (4):359-68.
90. Greer, M.A., G. Goodman, R.C. Pleus, and S.E. Greer. 2002. Health effects assessment for environmental perchlorate contamination: the dose response for inhibition of thyroidal radioiodine uptake in humans. *Environmental Health Perspectives* 110 (9):927-37.
91. National Research Council. 2005. *Health Implications of Perchlorate Ingestion*. Washington, DC: National Academies Press. [http://www.nap.edu/catalog.php?record\\_id=11202](http://www.nap.edu/catalog.php?record_id=11202).
92. Haddow, J.E., G.E. Palomaki, W.C. Allan, J.R. Williams, G.J. Knight, J. Gagnon, C.E. O'Heir, M.L. Mitchell, R.J. Hermos, S.E. Waisbren, et al. 1999. Maternal thyroid deficiency during pregnancy and subsequent neuropsychological development of the child. *New England Journal of Medicine* 341 (8):549-55.
93. Miller, M.D., K.M. Crofton, D.C. Rice, and R.T. Zoeller. 2009. Thyroid-disrupting chemicals: interpreting upstream biomarkers of adverse outcomes. *Environmental Health Perspectives* 117 (7):1033-41.
94. Morreale de Escobar, G., M.J. Obregon, and F. Escobar del Rey. 2000. Is neuropsychological development related to maternal hypothyroidism or to maternal hypothyroxinemia? *The Journal of Clinical Endocrinology and Metabolism* 85 (11):3975-87.

95. Bellinger, D.C. 2008. Lead neurotoxicity and socioeconomic status: conceptual and analytical issues. *Neurotoxicology* 29 (5):828-32.
96. Rice, D.C. 2000. Parallels between attention deficit hyperactivity disorder and behavioral deficits produced by neurotoxic exposure in monkeys. *Environmental Health Perspectives* 108 (Suppl. 3):405-408.
97. Rodier, P.M. 1995. Developing brain as a target of toxicity. *Environmental Health Perspectives* 103 Suppl. 6:73-6.
98. American Psychiatric Association. 2000. *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition Text Revision*. Washington D.C.: American Psychiatric Association.
99. American Psychiatric Association. 1987. *Diagnostic and Statistical Manual of Mental Disorders, Third Edition Text Revision (DSM-III-R)*. Washington, D.C.
100. Larson, K., S.A. Russ, R.S. Kahn, and N. Halfon. 2011. Patterns of comorbidity, functioning, and service use for U.S. children with ADHD, 2007. *Pediatrics* 127 (3):462-470.
101. Aguiar, A., P.A. Eubig, and S.L. Schantz. 2010. Attention deficit/hyperactivity disorder: a focused overview for children's environmental health researchers. *Environmental Health Perspectives* 118 (12):1646-53.
102. Barkley, R.A. 2006. *Attention-Deficit Hyperactivity Disorder: A Handbook for Diagnosis and Treatment, Third Edition*. New York: The Guilford Press.
103. Biederman, J., and S.V. Faraone. 2005. Attention-deficit hyperactivity disorder. *Lancet* 366 (9481):237-48.
104. Faraone, S.V., and E. Mick. 2010. Molecular genetics of attention deficit hyperactivity disorder. *Psychiatric Clinics of North America* 33 (1):159-80.
105. Kieling, C., R.R. Goncalves, R. Tannock, and F.X. Castellanos. 2008. Neurobiology of attention deficit hyperactivity disorder. *Child and Adolescent Psychiatric Clinics of North America* 17 (2):285-307, viii.

106. Thapar, A., K. Langley, P. Asherson, and M. Gill. 2007. Gene-environment interplay in attention-deficit hyperactivity disorder and the importance of a developmental perspective. *The British Journal of Psychiatry* 190:1-3.
107. Langley, K., F. Rice, M.B. van den Bree, and A. Thapar. 2005. Maternal smoking during pregnancy as an environmental risk factor for attention deficit hyperactivity disorder behaviour. A review. *Minerva Pediatrica* 57 (6):359-71.
108. Nigg, J., M. Nikolas, and S.A. Burt. 2010. Measured gene-by-environment interaction in relation to attention-deficit/hyperactivity disorder. *Journal of the American Academy of Child and Adolescent Psychiatry* 49 (9):863-73.
109. Braun, J.M., R.S. Kahn, T. Froehlich, P. Auinger, and B.P. Lanphear. 2006. Exposures to environmental toxicants and attention deficit hyperactivity disorder in U.S. children. *Environmental Health Perspectives* 114 (12):1904-9.
110. Froehlich, T.E., B.P. Lanphear, P. Auinger, R. Hornung, J.N. Epstein, J. Braun, and R.S. Kahn. 2009. Association of tobacco and lead exposures with attention-deficit/hyperactivity disorder. *Pediatrics* 124 (6):e1054-63.
111. Ha, M., H.J. Kwon, M.H. Lim, Y.K. Jee, Y.C. Hong, J.H. Leem, J. Sakong, J.M. Bae, S.J. Hong, Y.M. Roh, et al. 2009. Low blood levels of lead and mercury and symptoms of attention deficit hyperactivity in children: a report of the children's health and environment research (CHEER). *Neurotoxicology* 30 (1):31-6.
112. Nigg, J.T., G.M. Knottnerus, M.M. Martel, M. Nikolas, K. Cavanagh, W. Karmaus, and M.D. Rappley. 2008. Low blood lead levels associated with clinically diagnosed attention-deficit/hyperactivity disorder and mediated by weak cognitive control. *Biological Psychiatry* 63 (3):325-31.
113. Nigg, J.T., M. Nikolas, G. Mark Knottnerus, K. Cavanagh, and K. Friderici. 2010. Confirmation and extension of association of blood lead with attention-deficit/hyperactivity disorder (ADHD) and ADHD symptom domains at population-typical exposure levels. *The Journal of Child Psychology and Psychiatry* 51 (1):58-65.



114. Roy, A., D. Bellinger, H. Hu, J. Schwartz, A.S. Ettinger, R.O. Wright, M. Bouchard, K. Palaniappan, and K. Balakrishnan. 2009. Lead exposure and behavior among young children in Chennai, India. *Environmental Health Perspectives* 117 (10):1607-11.
115. Wang, H.-L., X.-T. Chen, B. Yang, F.-L. Ma, S. Wang, M.-L. Tang, N.-G. Hao, and D.-Y. Ruan. 2008. Case-control study of blood lead levels and attention-deficit hyperactivity disorder in Chinese children *Environmental Health Perspectives* 116 (10):1401-1406.
116. Canfield, R.L., M.H. Gendle, and D.A. Cory-Slechta. 2004. Impaired neuropsychological functioning in lead-exposed children. *Developmental Neuropsychology* 26 (1):513-40.
117. Chiodo, L.M., S.W. Jacobson, and J.L. Jacobson. 2004. Neurodevelopmental effects of postnatal lead exposure at very low levels. *Neurotoxicology and Teratology* 26 (3):359-71.
118. Nicolescu, R., C. Petcu, A. Cordeanu, K. Fabritius, M. Schlumpf, R. Krebs, U. Kramer, and G. Winneke. 2010. Environmental exposure to lead, but not other neurotoxic metals, relates to core elements of ADHD in Romanian children: performance and questionnaire data. *Environmental Research* 110 (5):476-83.
119. Surkan, P.J., A. Zhang, F. Trachtenberg, D.B. Daniel, S. McKinlay, and D.C. Bellinger. 2007. Neuropsychological function in children with blood lead levels <10 microg/dL. *Neurotoxicology* 28 (6):1170-7.
120. Rice, D.C. 1996. Behavioral effects of lead: commonalities between experimental and epidemiologic data. *Environmental Health Perspectives* 104 (Suppl. 2):337-51.
121. Rossi-George, A., M.B. Virgolini, D. Weston, M. Thiruchelvam, and D.A. Cory-Slechta. 2011. Interactions of lifetime lead exposure and stress: behavioral, neurochemical and HPA axis effects. *Neurotoxicology* 32 (1):83-99.
122. Virgolini, M.B., A. Rossi-George, R. Lisek, D.D. Weston, M. Thiruchelvam, and D.A. Cory-Slechta. 2008. CNS effects of developmental Pb exposure are

enhanced by combined maternal and offspring stress. *Neurotoxicology* 29 (5):812-27.

123. Gump, B.B., Q. Wu, A.K. Dumas, and K. Kannan. 2011. Perfluorochemical (PFC) exposure in children: associations with impaired response inhibition. *Environmental Science & Technology* 45 (19):8151-9.

124. Hoffman, K., T.F. Webster, M.G. Weisskopf, J. Weinberg, and V.M. Vieira. 2010. Exposure to polyfluoroalkyl chemicals and attention deficit/hyperactivity disorder in U.S. children 12-15 years of age. *Environmental Health Perspectives* 118 (12):1762-7.

125. Stein, C.R., and D.A. Savitz. 2011. Serum perfluorinated compound concentration and attention deficit/hyperactivity disorder in children aged 5 to 18 years. *Environmental Health Perspectives* 119 (10):1466-71.

126. Cheuk, D.K., and V. Wong. 2006. Attention-deficit hyperactivity disorder and blood mercury level: a case-control study in Chinese children. *Neuropediatrics* 37 (4):234-40.

127. Julvez, J., F. Debes, P. Weihe, A. Choi, and P. Grandjean. 2010. Sensitivity of continuous performance test (CPT) at age 14 years to developmental methylmercury exposure. *Neurotoxicology and Teratology* 32 (6):627-632.

128. Plusquellec, P., G. Muckle, E. Dewailly, P. Ayotte, G. Begin, C. Desrosiers, C. Despres, D. Saint-Amour, and K. Poitras. 2010. The relation of environmental contaminants exposure to behavioral indicators in Inuit preschoolers in Arctic Quebec. *Neurotoxicology* 31 (1):17-25.

129. National Dissemination Center for Children with Disabilities. 2010. *Disability Fact Sheet-No. 7: Learning Disabilities*. Retrieved April 6, 2010 from <http://www.nichcy.org/InformationResources/Documents/NICHCY%20PUBS/fs7.pdf>.

130. National Center for Learning Disabilities. 2010. *LD at a Glance*. Retrieved April 6, 2010 from <http://www.nclld.org/ld-basics/ld-explained/basic-facts/learning-disabilities-at-a-glance>.

131. Bellinger, D.C. 2008. Very low lead exposures and children's neurodevelopment. *Current Opinion in Pediatrics* 20 (2):172-177.
132. Marlowe, M., A. Cossairt, K. Welch, and J. Errera. 1984. Hair mineral content as a predictor of learning disabilities. *Journal of Learning Disabilities* 17 (7):418-21.
133. Pihl, R.O., and M. Parkes. 1977. Hair element content in learning disabled children. *Science* 198 (4313):204-6.
134. Leviton, A., D. Bellinger, E.N. Allred, M. Rabinowitz, H. Needleman, and S. Schoenbaum. 1993. Pre- and postnatal low-level lead exposure and children's dysfunction in school. *Environmental Research* 60 (1):30-43.
135. Lyngbye, T., O.N. Hansen, A. Trillingsgaard, I. Beese, and P. Grandjean. 1990. Learning disabilities in children: significance of low-level lead-exposure and confounding factors. *Acta Paediatrica Scandinavica* 79 (3):352-60.
136. Needleman, H.L., C. Gunnoe, A. Leviton, R. Reed, H. Peresie, C. Maher, and P. Barrett. 1979. Deficits in psychologic and classroom performance of children with elevated dentine lead levels. *New England Journal of Medicine* 300 (13):689-95.
137. Needleman, H.L., A. Schell, D.C. Bellinger, A. Leviton, and E.N. Allred. 1990. The long term effects of exposure to low doses of lead in childhood, an 11-year follow-up report. *New England Journal of Medicine* 322 (2):83-8.
138. Anderko, L., J. Braun, and P. Auinger. 2010. Contribution of tobacco smoke exposure to learning disabilities. *Journal of Obstetric, Gynecologic, & Neonatal Nursing* 39 (1):111-117.
139. Centers for Disease Control and Prevention. 2010. *Autism Spectrum Disorders: Signs & Symptoms*. Retrieved March 25, 2010 from <http://www.cdc.gov/ncbddd/autism/signs.html>.
140. Beaudet, A.L. 2007. Autism: highly heritable but not inherited. *Nature Medicine* 13 (5):534-6.

141. Hallmayer, J., S. Cleveland, A. Torres, J. Phillips, B. Cohen, T. Torigoe, J. Miller, A. Fedele, J. Collins, K. Smith, et al. 2011. Genetic heritability and shared environmental factors among twin pairs with autism. *Archives of General Psychiatry* 68 (11):1095-102. Neurodevelopmental Disorders | References 30 America's Children and the Environment | Third Edition, Updated October 2015
142. Levy, D., M. Ronemus, B. Yamrom, Y.-h. Lee, A. Leotta, J. Kendall, S. Marks, B. Lakshmi, D. Pai, K. Ye, et al. 2011. Rare de novo and transmitted copy-number variation in autistic spectrum disorders. *Neuron* 70 (5):886-897.
143. King, M., and P. Bearman. 2009. Diagnostic change and the increased prevalence of autism. *International Journal of Epidemiology* 38 (5):1224-1234.
144. King, M.D., C. Fountain, D. Dakhlallah, and P.S. Bearman. 2009. Estimated autism risk and older reproductive age. *American Journal of Public Health* 99 (9):1673-1679.
145. Liu, K.Y., M. King, and P.S. Bearman. 2010. Social influence and the autism epidemic. *American Journal of Sociology* 115 (5):1387-434.
146. Shelton, J.F., D.J. Tancredi, and I. Hertz-Picciotto. 2010. Independent and dependent contributions of advanced maternal and paternal ages to autism risk. *Autism Research* 3 (1):30-9.
147. Pessah, I.N., R.F. Seegal, P.J. Lein, J. LaSalle, B.K. Yee, J. Van De Water, and R.F. Berman. 2008. Immunologic and neurodevelopmental susceptibilities of autism. *Neurotoxicology* 29 (3):532-45.
148. Newschaffer, C.J., L.A. Croen, J. Daniels, E. Giarelli, J.K. Grether, S.E. Levy, D.S. Mandell, L.A. Miller, J. Pinto-Martin, J. Reaven, et al. 2007. The epidemiology of autism spectrum disorders. *Annual Review of Public Health* 28:235-58.
149. Sanders, S.J., A.G. Ercan-Sencicek, V. Hus, R. Luo, M.T. Murtha, D. Moreno-De-Luca, S.H. Chu, M.P. Moreau, A.R. Gupta, S.A. Thomson, et al. 2011. Multiple Recurrent De Novo CNVs, Including Duplications of the 7q11.23 Williams Syndrome Region, Are Strongly Associated with Autism. *Neuron* 70 (5):863-85.

150. Sebat, J., B. Lakshmi, D. Malhotra, J. Troge, C. Lese-Martin, T. Walsh, B. Yamrom, S. Yoon, A. Krasnitz, J. Kendall, et al. 2007. Strong association of de novo copy number mutations with autism. *Science* 316 (5823):445-9.
151. Kinney, D.K., D.H. Barch, B. Chayka, S. Napoleon, and K.M. Munir. 2010. Environmental risk factors for autism: do they help cause de novo genetic mutations that contribute to the disorder? *Medical Hypotheses* 74 (1):102-6.
152. James, S.J., P. Cutler, S. Melnyk, S. Jernigan, L. Janak, D.W. Gaylor, and J.A. Neubrandner. 2004. Metabolic biomarkers of increased oxidative stress and impaired methylation capacity in children with autism. *American Journal of Clinical Nutrition* 80 (6):1611-7.
153. James, S.J., S. Melnyk, S. Jernigan, M.A. Cleves, C.H. Halsted, D.H. Wong, P. Cutler, K. Bock, M. Boris, J.J. Bradstreet, et al. 2006. Metabolic endophenotype and related genotypes are associated with oxidative stress in children with autism. *American Journal of Medical Genetics Part B: Neuropsychiatric Genetics* 141B (8):947-56.
154. Deth, R., C. Muratore, J. Benzecry, V.A. Power-Charnitsky, and M. Waly. 2008. How environmental and genetic factors combine to cause autism: A redox/methylation hypothesis. *Neurotoxicology* 29 (1):190-201.
155. Croen, L.A., D.V. Najjar, B. Fireman, and J.K. Grether. 2007. Maternal and paternal age and risk of autism spectrum disorders. *Archives of Pediatric & Adolescent Medicine* 161 (4):334-40.
156. Grether, J.K., M.C. Anderson, L.A. Croen, D. Smith, and G.C. Windham. 2009. Risk of autism and increasing maternal and paternal age in a large North American population. *American Journal of Epidemiology* 170 (9):1118-26.
157. Lauritsen, M.B., C.B. Pedersen, and P.B. Mortensen. 2005. Effects of familial risk factors and place of birth on the risk of autism: a nationwide register-based study. *Journal of Child Psychology and Psychiatry* 46 (9):963-71.
158. Chandley, A.C. 1991. On the parental origin of de novo mutation in man. *Journal of Medical Genetics* 28 (4):217-23.

## Unit 4

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### 4.1 INTRODUCTION

Today, it is estimated, 1.6 per cent of the Indians-the figure comes to around 16 million in absolute terms-are inflicted with locomotor disabilities. The very dawn of creation, perhaps, was accompanied by physical challenges. Advancement of human Endeavour for the better only aggravated them. The first millennium bore witness to it, and all the millenniums yet to come may or may not prove any exception. And, at least in the coming millennium, physical disabilities cannot be wished away. Yet we can strive to minimize its impact through a concerted effort of us all-may we be medicos, technologists, administrators, public opinion makers, or just the commFers. Theirs, as Konard Biesalashi stressed, is not the medical problem alone. The German orthopaedic surgeon's remark, made at the turn of the nineteenth century, held good for the next century and cannot be said will not for the next. For, the social overtones attached will remain so alive that any overlooking would be on the society's own peril. The silver lining in the cloud is the light Konard kindled. It has brought an awakening in the world to the problem. And the U N Decade of the Disabled People was a pointer. Locomotor impairments, though need medical attention and in certain cases specialized ones, social problems that it poses need an integrated approach. For a locomotor patient, as the experience goes, the need of a medico is as much as that of a congenial surrounding, which cannot be provided in isolation. The society as a whole has to come forward to accept the challenge of providing the physically challenged a wholesome ambience. No single section of the society can handle the problem on its own. It has to be an integrated approach in which the medicos, social scientists, engineers, administrators and a whole lot of others have to come together to come



to grips with the challenges to the satisfaction of that section of the society which got a raw deal for far too long. They should not feel left alone.

## 4.2 Impairment

Impairment is a permanent or transitory anatomical, physiological or psychological loss or abnormality. For instance, a missing limb, paralysis after polio, mental retardation and so on. Impairment may cause functional limitations which may be partial or total inability to perform those activities necessary for motor, sensory or mental functions within the range and manner of which a human being is normally capable of, say walking, seeing, hearing or speaking and so on.

## 4.3 LOCOMOTOR IMPAIRMENT - CAUSES

A person's inability to execute distinctive activities associated with moving, both personally and objects, from place to place, and such inability resulting from afflictions of musculo-skeletal and, or nervous system, has been defined as the Locomotor Disability. Locomotor disability can be classified as: congenital and acquired. The common causes of these two forms of affliction can be classified as: congenital and developmental.

Common examples being: cerebral palsy, CTEV, meningocele, meningo myelocele, phocomelias, congenital dislocation of hip. Causes of the acquired disability can be put within the following jackets: Infective and Traumatic. The infective ones are: tuberculosis of spine or other joints, chronic osteomyelitis, septic arthritis, acute poliomyelitis, G.B. syndrome, leprosy, encephalitis, AIDS etc. Traumatic ones are: traffic accidents (air, water, road), domestic accidents, industrial accidents, agricultural accidents, fall from height, bullet injuries, explosions, violence, sports injuries, natural catastrophes like earthquakes, floods etc. Then there can be other causes as well, such as *vascular*. Common examples are: cerebro vascular disease, peripheral vascular disease, perthe's disease. Neoplastic conditions are yet another cause of locomotor disability. For example, brain tumors like astrocytoma, meningioma, spinal tumors like meningioma, astrocytoma, and osteo sarcoma etc.

Metabolism, as has been said earlier, too can be the villain. Common examples are: rickets, diabetes mellitus, gout etc. There can be degenerative causes too. Examples are: motor neuron disease, parkinson's disease, multiple sclerosis, osteo arthritis, spondylosis etc. Among the miscellaneous causes can be musculus dystrophies, rheumatoid arthritis, systemic lupus erythematoses, lathyrism, ankylosing spondylitis, iatrogenic, and so on. A brief numeration of common conditions causing locomotor disability is given below:

### 4.3.1 Poliomyelitis

The number of polio disabled people in India is quite colossal. A 1994 World Health Organization (WHO) report on global situation on polio estimated that of the 10 million people affected with polio, approximately 60% live in India alone. The recent reports on India have, however, shown a decline in the number of cases, which is encouraging. Whereas over 20,000 cases of poliomyelitis were reported in 1986, the number came down to 3400 odd cases in 1995. The decline may be attributed to the National Immunisation Programme, and the recent introduction of Pulse Polio Programme, aimed at eradication of poliomyelitis. Poliomyelitis is an acute infective disease caused by the Poliovirus. There are three distinct serotypes of the virus, viz., 1, 2 and 3. Humans are the sole natural reservoir for poliovirus. Infection is transmitted by the oropharyngeal faecal circuit. Poliovirus enters the human body through the mouth and alimentary tract. The virus multiplies in the intestines. It then travels to the regional lymph nodes and reticulo endothelial structures.

Viremia may occur for a short period. As a result of this, type specific antibodies are produced in the blood and gut. If the immune response is adequate and fast, the virus is neutralized and illness does not occur. If conditions for spread of the virus are present, the virus involves the nervous system. Poliovirus selectively damages some special areas in the nervous system, the most commonly affected area being the anterior horn of the spinal cord. There is no sensory involvement. Poliomyelitis occurs mostly in, young children. It is uncommon in adolescents and adults. The clinical picture ranges from inapparent illness to extensive paralysis of the muscles, respiratory failure and even death. Either of the following manifestations may present:

### 4.3.2 Asymptomatic Infection

**Abortive poliomyelitis:** Illness lasts for 1-4 days. Symptoms are fever, headache, sore-throat, nausea, vomiting, loss of appetite, vague abdominal pain. Neurological manifestation is absent.

**Aseptic meningitis like syndrome without paralysis:** The symptoms are like those of abortive type. In addition, there is pain and stiffness of the back and legs. Neck rigidity is usually present and is necessary for diagnosis.

**Paralytic poliomyelitis:** It is the least common of all. The manifestations are similar to non-paralytic type. In addition, there is weakness of one or more muscle groups. Distribution of paralysis is characteristically patchy. Depending on the site of involvement, it may be classified as follows:

**Spinal:** There is weakness of muscles of the neck, abdomen, trunk diaphragm, thorax or extremities.

**Bulbar:** There is weakness in the motor, distribution of one or more cranial nerves and may affect voice, breathing and swallowing.

**Bulbospinal:** is combination of bulbar and spinal forms.

**Encephalitic:** the child is irritable and may become disoriented and drowsy, tremors and convulsions may occur. There are three stages of paralytic poliomyelitis-acute, convalescent and residual. Recovery may occur noticeably in the first six months of the illness, but after a period of two years. the paralysis does not show further recovery.

**Post polio syndrome:** Decades after recovering much of their muscle strength, survivors of paralytic polio experience unexpected fatigue, pain and weakness. The cause appears to be degeneration of motor neurons.

### 4.3.3 Arthritis

The word 'arthritis' literally means joint inflammation. It is characterized by pain, swelling and limitation of joint movement. There are many types of arthritis, such as: Osteo arthritis (OA): This is the most common type of arthritis. Osteo-arthritis

is a degenerative joint disease. It is characterized by loss of joint cartilage and the formation of bony out growths at the edges of the affected joints. Usually one or two of the larger joints are affected. The joints most frequently involved are those of spine, hips and knees. The exact mechanism for loss of cartilage is not known but obesity and stress to the joint contributes to the damage. The likelihood of OA increases with advancing age. It is estimated that nearly 75% of people over 60 years of age will experience symptoms of OA. Young people can also get osteoarthritis when the joint has been damaged by disease or injury or congenital deformity. OA may manifest as pain, stiffness, limited range of motion and swelling of the joint. Osteophyte or bone spur is the single most common feature of OA. Muscular wasting is always present to a greater or lesser extent. quality of life is affected by OA by limiting mobility and functioning. Rheumatoid Arthritis (*RA*) : It is far less common than osteo arthritis but potentially more serious. Rheumatoid Arthritis is a systemic disease. The common symptoms are joint pain, stiffness, fatigue, anorexia, weight loss and fever. Small joints in the hands and feet, wrists, ankles and knees are commonly affected, usually in a fairly symmetric pattern. Subcutaneous nodules may appear over pressure joints (for example, just distal to the elbow). Range of motion of joint is restricted and correctable in early cases. In later stages of the disease, severe restriction with contractures and fixed deformities occur. The disease may occur at all ages, but the usual onset is in the fourth decade. It affects women 3 times more than men. The exact cause is unknown, but it is thought to be the result of several factors, some of which may be genetically determined, while others may be of environmental origin that triggers an abnormal immune response. The disease may be self limiting or run a prolonged course; there are times when the disease is "quiet" and times when it flares up. During the "quiet" periods of remission, the symptoms of the disease disappear. The severity of *RA* varies widely, from minor pain and inflammation in the joints to life-threatening complications involving the internal organs.

#### 4.3.4 Spinal Cord Injury

It is a traumatic insult to the spinal cord that can result in alteration of normal motor, sensory or autonomic functions. It can result in paraplegia i.e. involvement of lower extremities, or quadriplegia i.e. involvement of all extremities. The

involvement may be complete or incomplete. The injury is termed incomplete when there is sparing of some sensation, or motor function, or both, distal to the injury. Common causes of spinal injuries are fall from height (roof, tree, stairs), motor vehicle accidents, gunshot injury, stab wounds, sports injuries and iatrogenic injuries of cord following surgical procedures. The incidence of spinal cord injury is 5-15 per million populations. It is estimated that in our country there are 12000 fresh cases of paraplegia every year. In general, spinal cord injury should be suspected in patients where there is a history of trauma, who have head injury with loss of consciousness, and in those who have multiple injuries following a motor vehicle accident. A fall from a height associated with tenderness over the spinal column or parenthesis in the lower limbs should arouse suspicion. A gap or angular deformity may be palpated on careful examination. Gross paralysis may be present. Spinal cord injury is a devastating injury. Except in cases where substantial or complete recovery occurs, the person is confined to bed or wheelchair existence for the rest of his life. In addition, he may have inadequate or loss of control over his bowel and bladder functions adding to his incapacitation. The spinal cord injury patient is prone to develop pressure sores and urinary tract infection. At the same time, mental and emotional functions are affected. In our country, large number of spinal cord injury patients succumbs to complications for want of appropriate treatment.

#### **4.3.5 Amputation**

Amputation implies the absence of all or part of the limb. Amputations are musculo skeletal problems of a special nature because the disability results not from a pathologic condition, but from treatment that has eliminated the pathologic condition. It can also occur due to congenital skeletal deficiency and trauma. The causes of amputation may be broadly classified as congenital or acquired. Congenital skeletal deficiencies can be transverse or longitudinal. Transverse is defined as absence of all skeletal elements distal to the deficiency. It can further be described as total, upper one third, middle one third, distal one third. Longitudinal deficiency is an absence extending parallel to the long arm of the limb. The deficiency may be partial or total. Probable causes of congenital skeletal deficiencies are hereditary abnormalities, teratogenic agents, excessive radiation etc. The causes of acquired limb loss are : accidents, malignant tumors,

death of tissue from peripheral vascular insufficiency of atherosclerosis and diabetes, death of tissue due to peripheral vasospastic diseases such as Buerger's disease and Raynaud's disease, thermal injuries both from heat and cold, long standing infections of bone and other tissues that leave no chance of restoration of function, uselessness of a deformed limb that is objectionable to the patient, neurogenic resorption. Global incidence of amputation is estimated at 30 per 100,000 population. Figures in India are not available. Traumatic amputation is the major cause followed by vascular diseases, infections, tumors, and congenital causes.

#### 4.4 INTERNATIONAL PERSPECTIVE

History records first ever attempt on prosthesis to the pre-Christianity era. It was a successful one. It was practised by a prisoner to escape death. And the death he did escape and even moved about but then, luck failed him and not the artificial limb. Hegesistnatus, incarcerated and condemned to death in 484 BC, cut off his foot chained to a stock and vamoosed. And to be able to walk around after his wound healed, he crafted a wooden foot for himself. He put it on his footless leg and moved around. The Persian army even found him a good soothsayer. But then his luck ran out. The Spartans, from whom he had fled, spotted him. He was taken as a prisoner again and ultimately put to sword. Herodotus has chronicled this piece of Greek tragedy as an essay in the annals of the medical history. One of the oldest prosthesis, dating back to the Samnitian war of 300 BC, still exists. It was found in Italy. The artificial limb, made of wood and reinforced with leather, iron and bronze, had been on display at the Royal College of surgeons in London.

Ironically, it took centuries for humanity to take cognizance of the disabled within itself. For the first time 'custodial care' homes for crippled children got established through a wave of humanitarianism that ripped through Europe in early 19th century. Even then the concept of 'rehabilitation' of the disabled people - to cater to the individual needs - remained conspicuous because of lack of such an awareness. It was given to a German Orthopaedic Surgeon, Dr. Konard Biesalashi, to arouse the public conscience towards the responsibility to the crippled children. It was sometime in 1906 that Konard Biesalshi spoke of the crippled children, not as a social problem alone, since, he emphasized, such children were also 'sick' and thus a 'medical' problem too. What his observation implied was that the medicos

could not absolve themselves by taking care of the medical problem alone but had to play a key role in the adjustment of their such medical wards to the world around. For the German surgeon, a physician was not just to diagnose the problem and initiate subsequent medication. He or she was to act also as a guide and philosopher and not to the patient alone but to the society as a whole to make it to work for the welfare of the disabled children through legislation and otherwise. And to give a concrete shape to his, then a revolutionary concept, Konard Biesalshi established the Oscar Helene Hein in Berlin in 1913 to reach to the problem in an integrated approach. The new institute was holistic from all aspects for the care of the crippled child. It was equipped with all the medical and surgical facilities, besides physiotherapy and occupational therapies, prosthetic and orthotic systems and educational and vocational training facilities to take care of a disabled child from infancy to adulthood. A child-patient, admitted as a disabled, came out as a skilled one to face the world at large on one's own terms instead of looking for sympathy.

An individual's effort shone like a lighthouse. It was truly an example to be followed for the care of locomotor disabled. The second world war, which left thousands of able adults disabled, came as a catastrophe which loomed large the world over. A crying demand rose for the institutes which could once again put the disabled people back on their feet. The German surgeon's institute showed the way. In Europe and North America a large number of comprehensive management centres flowered for the locomotor disabled. Thousands upon thousands of disabled military men and civilians, who would have been condemned to live on the sympathies of others, were up and kicking, taking the world on their own terms.

## **4.5 ROLE OF UNION MINISTRIES**

### **4.5.1 Health and Family Welfare**

The Ministry of Health and Family Welfare is responsible for the implementation of health programmes of national importance, including those for prevention and control of diseases, which form the main plank of development efforts and have an impact on the recurrence of morbidity and disability in the country. The Ministry has, through successive Five Year Plans and at the recommendations of

various committees, set up a large health infrastructure at the primary, district and state central levels, rendering preventive, promotive and curative services.

The National Health Policy approved by the Indian Parliament in 1983 commits the Union and State governments and the people to the cause of "Health For All". The policy laid stress on preventive, promotive, curative and rehabilitation aspects of health care and points to the need of establishing comprehensive primary health care services to reach the population in the remotest areas of the country. Under the National Scheme of Medical Rehabilitation, conceived in the Sixth Five Year Plan, a pilot project of Rural Rehabilitation was undertaken by the Department of Rehabilitation, Safdarjang Hospital, New Delhi, to provide disability prevention and rehabilitation services in the rural sector. The Department of Rehabilitation of Safdarjang Hospital in New Delhi and the All India Institute of Physical Medicine and Rehabilitation in Mumbai were strengthened to meet the challenges in this field. The National Institute of Mental Health and Neuro-Sciences of Bangalore was established in 1974 as an autonomous institution - as a joint venture of the Central Government and the Karnataka Government. It is the premier research and training centre in the field of mental health and neuro sciences. The three important activities are directed towards manpower development, patient care and research. The National Board of Examinations, established by the Government of India in 1975, became an independent autonomous body of the Ministry of Health and Family Welfare in March, 1982. The Board holds examinations in February and August each year in 33 disciplines including physical medicine and rehabilitation. The Board's aim is to elevate the standards of postgraduate examinations in medical subjects. Candidates are awarded certificates as Diplomate of NBE in various broad and super specialities. A pilot project on medical rehabilitation, under the auspices of Mumbai's AIIPMR, was launched in November 1995, with an emphasis on provision of rehabilitation services through primary health care. The project was started in five districts each of Andhra Pradesh, Kerala, Madhya Pradesh, Maharashtra and Tamil Nadu. The main objective of the project was disability prevention and provision of basic rehabilitation services by training, re-orientation and equipping strengthening Primary Health Centres.



#### 4.5.2 Social Justice and Empowerment

The Ministry of Social Welfare, rechristened as Ministry of Social Justice and Empowerment, was made the nodal ministry to provide rehabilitation services to the disabled in India. It has developed National Institutes in each area of disability, which are engaged in providing services, training of manpower, development of educational material and research activities. The institutions engaged in rehabilitation of the locomotor disabled are National Institute for Rehabilitation Training and Research (NIRTAR), Olatpur in Orissa, National Institute for Orthopaedically Handicapped (NIOH), Calcutta, Institute for the Physically Handicapped (IPH), New Delhi. The National Institute of Rehabilitation Training and Research, originally known as NIPOT or National Institute of Prosthetics and Orthotics Training, was started in 1975. The main aims and objectives of the institute are: to promote the use of ALIMCO products; to undertake, sponsor or coordinate training for the rehabilitation personnel; to conduct, sponsor, coordinate or subsidise research on bio-medical engineering, surgical or medical procedures for orthopedically handicapped; to promote, distribute, subsidise manufacture of prototype designed aids and appliances; to develop models of service delivery programmes for rehabilitation; to undertake vocational training, placement and rehabilitation of the physically handicapped, and to document and disseminate information on rehabilitation in India and abroad. The National Institute for Orthopaedically Handicapped established in 1976 is the apex organization in the country for the welfare of locomotor disabled. It is the premier institution for development of manpower, specialized research services, standardization of aids and appliances, documentation and information, consultancy to the state government and non-government organisations. The Artificial Limbs Manufacturing Corporation of India (ALIMCO), set up at Kanpur as a Government undertaking, mainly for social services and not for profits, started production in October 1976. Its objectives include: to establish facilities for manufacture of artificial limbs, accessories and constituents thereof and to promote, encourage and develop the availability, supply and distribution, at reasonable cost of artificial limbs, accessories and constituents thereof to needy persons including disabled personnel, hospitals and other welfare institutions. The product range includes Orthotic (Calipers) and Prosthetic (Artificial Limbs), appliances for both upper and lower extremities, spinal braces, cervical collars,

traction kits, rehabilitation aids like wheel chairs, crutches, three-wheelers and special tools and equipments required for fitment of prosthetic and orthotic assemblies by limb fitting centres. The District Rehabilitation Centre (DRC) Scheme was initiated in 1985 by the Ministry of Welfare as a pilot study at 11 centres of 11 districts in 10 States in collaboration with the National Institute of Disability and Rehabilitation Research (NIDRR) and Department of Education and UNICEF.

#### 4.5.3 Human Resources Development

With a view to integrate the disabled children with mild handicaps, with others in common schools, Ministry of Welfare initiated a centrally sponsored scheme of Integrated Education of the Disabled in 1974. The scheme is now handled by the Ministry of Human Resource Development and the latest revision was made in 1992. The scheme purports to provide educational opportunities for the disabled children in common schools, to facilitate their retention in the school system, and also to place in common schools such children already placed in special schools after they acquire the communication and daily living skills at the functional level. The scope of the scheme includes pre-school training for the disabled children, counselling for the parents, etc. The project of Integrated Education for the Disabled was not, however, as popular as expected. It was felt that the lack of expected result was perhaps due to inadequate awareness and lack of co-ordination the school authorities, who were generally government employees, voluntary agencies, implementing the scheme, and availability of manpower. In order to tackle the problem, Ministry of Human Resource Development, with UNICEF assistance, adopted in 1987 project called Integrated Education for the Disabled. Here a cluster, usually a block of population, instead of the individual school, is taken as the project area. Teachers are subjected to three types of training programme: [1] Level I - A general one-week training is given to all the primary teachers in the project area, [2] Level II - A more intensive training of six week duration is imparted to some teachers in each school, which is expected to equip the teachers to handle the children with disability in the school and [3] Level-III-Training is of the duration of one year and is provided in the colleges of NCERT, as a multicategory training. The project has been implemented in one administrative block each in ten States.

The Integrated Child Development Scheme (ICDS) was started in 1975 in pursuance of National Policy for Children with the aim that the beneficiaries will be children, below 6 years, pregnant and lactating women and women in the age group 15-44 years. The services included pre-school education, immunization, primary health care and referral services, supplementary nutrition and health education. Prevention and early detection of disabilities is an integral part of this package of services.

#### **4.5.4 Rural Development**

The Integrated Rural Development Programme (IRDP) is a major instrument of government strategy to alleviate rural poverty. Main objectives of IRDP are to raise families of the identified target group above poverty line and create substantial additional opportunities of self-employment in rural sector. The programme is financed by means of subsidies provided by the government and loans advanced by banks. There is provision of three per cent reservation for the disabled.

Training of Rural Youth for Self-employment (TRYSEM) is an allied programme of the IRDP. It aims at development of technical skills among the rural people. The Council for Advancement of Peoples' Action and Rural Technology, or CAPRAT, has developed a strategy to promote the participation of people with disabilities in programmes for rural development. As a part of this strategy, CAPART will extend support to voluntary organisations whose project proposals are in consonance with the overall thrust and guiding principles of this strategy, and which will further its implementation.

#### **4.5.5 Rehabilitation Council of India**

The Rehabilitation Council of India, or RCI was set up in 1986 by the Ministry of Welfare to improve the quality of trained manpower in the field of disability by bringing uniformity in the training programmes of the various courses being conducted in the country. The Council was given statutory powers by an Act of Parliament that came into force in July 1993. The objectives of the Council are: [1] to regulate the training policies and programmes in the field of rehabilitation of disabled people, [2] to prescribe and regulate minimum standards of education and training of various categories of professionals dealing with disabled people,

[3] to recognize institutions/universities running degree/diploma certificate courses in the field of rehabilitation of the disabled, [4] to recognize foreign degrees/diplomas/certificates awarded by universities/institutions on reciprocal basis, [5] to maintain Central Rehabilitation Register of persons possessing the recognized rehabilitation qualifications and [6] to encourage continuing rehabilitation education in collaboration with organizations working in the field of disability. As mentioned earlier, the prime objective of the Rehabilitation Council of India is to improve the quality of trained manpower in the field of disability by bringing uniformity in the training programme of the various courses being conducted in the country. The Council has prepared a perspective plan of manpower required for providing services to the disabled persons in the country during Ninth and Tenth Plans. In order to impart knowledge to the existing manpower in the field of health and social welfare regarding rehabilitation of people with disabilities and to sensitize them about their problems, it was felt essential to conduct short term orientation courses. The RCI, which is the regulatory authority for manpower training in the field of rehabilitation, planned to conduct the un dermentioned courses.

#### **4.6 EARLY IDENTIFICATION AND PREVENTION**

Rehabilitation of locomotor disabilities is demanding, and it is challenging too. It is all the more so, for the resource strapped developing economies like India. For, the battle against the infliction on medical or the social fronts consumes a lot of funds, which are in short supply. Also, it calls for high level of professionalism, costly equipment and a higher degree of social understanding. All round cooperation and coordination, thus, becomes the keyword to take on the scourge. More importantly the persons inflicted with the disability may themselves become a burden on the society if the measures to prevent it, or at least lessen its ferocity, are not taken in time. Of course, the agony the disability causes to the inflicted person cannot be set aside. In the wake of rising incidence of disability--on account of causes, most of which are preventable, what is of paramount importance is prevention of the onset of the disformation. 'Prevention is better than cure' may sound a cliché but it conveys the message in more ways than one in the prevailing domestic scene. A small chart on the disability process, given

below, should bring home to the reader as to how the tormenting malady creeps in, which, naturally, calls for rehabilitation.

#### **4.7 DISABILITY PREVENTION**

Disability prevention includes all actions taken to reduce the occurrence of impairment (first level prevention) and its development into functional limitation (second level prevention), and to prevent the transition of functional limitation to disability (third level prevention). It includes, intervention in the health sector plus a wide range of social interventions, acting upon the individual, his immediate surroundings and the society as a whole.

##### **First Level Prevention**

This includes all measures directed at reducing the occurrence of impairment i.e. action taken prior to the onset of disease. First level prevention of locomotor disability may be accomplished by measures designed to promote general health and well being and quality of life of the people, or by specific protective measures. The concept is also now being applied to the prevention of chronic diseases such as coronary heart disease, hypertension and cancer, based on elimination or modification of risk factors of the disease. Prevention measures for other levels include the following: Prevention of congenital diseases through prospective counselling (high risk cases) or retrospective counselling (by MTP, contraception etc.). a Prevention of communicable diseases by immunisation, hygiene, health education Prevention of malnutrition and vitamin deficiency. Prevention of accidents by provision of safety measures at home and work place, and enforcement of legislation e.g. wearing of helmets to prevent head injury. a Prevention of production, use and sale of anti-personnel landmines. Elimination of exposure to situations in which locomotor disabilities may occur, in particular, war and other forms of violence, and chemical and environmental pollution. Reduction of incidence of locomotor disability at first level primarily calls for health education for the general public and also at the level of health personnel, especially attached to a PHC, village workers and anganwadis. Information, education and communication (IEC) activities are essential to accomplish proper health education to the masses.

### **Second Level Prevention**

When impairment occurs, it is necessary to try to prevent any long term functional limitation from occurring. To achieve it, measures are required specifically in the following three areas : a Ability to identify the impairment that might lead to functional limitation (i.e. development of diagnostic ability) e.g. to diagnose tuberculosis, Leprosy, Polio- myelitis, fractures etc. Proper and prompt care of impairment in the acute stage to avoid subsequent functional limitation i.e. care of acute cases e.g. administration of first aid measures, proper nursing care etc. e Proper care of impairment in the chronic stage to avoid functional limitation i.e. care of chronic cases. This includes provision of appropriate drugs for chronic diseases e.g. Tuberculosis, leprosy, hypertension, diabetes, mellitus etc. provision of therapeutic exercises and proper positioning to avoid deformities e.g. in polio myelitis, stroke etc.

### **Third Level Prevention**

When long term functional limitation has developed, measures instituted should aim at prevention of disability. Such measures may be divided into medical, psycho-social, educational and vocational. Third Level Prevention of locomotor disability aims at enabling the individuals to perform the varying roles expected by the family, community and society at large to the extent possible and thereby restore the patient back to normal or near normal condition. The measures include training to increase independence in self care (ADL), educational and vocational measures aimed at achieving economic independence and psycho-social measures aimed at restoration of personal dignity and to ensure full integration and acceptance in the community.

## **4.8 NATIONAL HEALTH PROGRAMME FOR PREVENTION OF LOCOMOTOR DISABILITY**

The Government of India has taken several measures towards locomotor disability prevention. Research in areas of prevention of disability, screening of "at risk" cases, provision of training to medical and paramedical personnel and provision of awareness campaigns on causes and prevention of locomotor disability, are some of the important actions taken. Also, National Health Programmes which have a

direct bearing on the prevention of locomotor disabilities are being implemented. They include:

### **Universal Immunisation Programme**

Universal Immunisation Programme was started in India in 1985. It has two vital components: immunization of pregnant women against tetanus, and immunisation of children in their first year of life against the six EPI (Expanded Programme on Immunisation) targeted diseases, which are the most common preventable childhood diseases viz. tuberculosis, diphtheria, pertussis (whooping cough), tetanus, poliomyelitis and measles. The impact of the programme is seen in the declining trends of the diseases e.g. poliomyelitis which has shown a significant drop in the number of cases reported. With the aim to eradicate poliomyelitis, in addition to the regular immunisation programme, Government of India has introduced the Pulse Polio Immunisation programme since 1995. This is a mass polio vaccination programme given to all children irrespective of their immunization status on two National Immunisation days at interval of 30 days each year. Initial target age was 0-3 year but later all children in age group 0-5 years were included. From the year 1999, the programme has been further modified by giving 4 doses in a year from November to February, with the aim to eradicate Polio by the end of 2000 AD.

### **National Leprosy Eradication Programme**

The National Leprosy Control Programme (NLCP) has been in operation since 1955 to achieve control of leprosy through early detection of cases and DDS (dapsone) mono therapy on an ambulatory basis. In 1983, the control programme was redesignated National Leprosy Eradication Programme. The goal was to eradicate leprosy by the year 2000. Multi-drug chemotherapy was recommended aimed to reduce the quantum of infection in the population, reduce the sources of infection and break the chain of transmission of disease.

### **National Tuberculosis Control Programme**

This programme was started in 1962. The objectives included: [a] reduction of tuberculosis in the community to that level when it ceases to be a public health problem [b] detection and effective treatment of T13 cases [c] vaccination of

newborns and infants with BCG and [d] undertaking of the objectives in an integrated manner through all the health institutions of the country.

A revised strategy for National Tuberculosis Programme was evolved in 1982. The salient features included [a] Achievement of at least 85 per cent cure rate of infectious cases through supervised short course Chemotherapy involving peripheral health functionaries [b] Augmentation of case finding activities through spectrum microscopy to detect at least 70 per cent of estimated cases, and; [c] involvement of NGOs, information, education and communication, and improved operational research.

#### **National AIDS Control Programme**

National AIDS Control Programme was launched in 1987. In the year 1991, a strategic plan for prevention and control of AIDS was developed. The Ministry of Health and Family Welfare has set up a National AIDS Control Organisation (NACO) as a separate wing to implement and closely monitor the various components of the programme. Important components of the national strategic plan include : establishment of surveillance centres to cover the whole country, identification of high risk groups and their screening; issuing specific guidelines for management of detected cases and their follow up, formulating guidelines for blood banks, blood product manufacturers, blood donors, and dialysis units, information, education and communication activities by involving mass media, research, reduction of personal and social impact of the disease, control of sexually transmitted diseases and condom programme.

#### **National Cancer Control Programme**

National Cancer Control Programme was started during the year 1975-76 by providing financial assistance to institutions for purchase of Cobalt Therapy Units for treatment of cancer patients. Over the Sixth and Seventh Five Year Plan periods, the scheme continued, and at the same time, ten major institutions were recognised as Regional Cancer Centres which received central financial assistance. During the Eighth Five Year Plan emphasis was on prevention, early detection and augmentation of treatment facilities in the country. Other schemes include: scheme for District Projects; Development of Oncology Wings in



medical collegeshospitals; and scheme for financial assistance to voluntary organisations for the purpose of undertaking health education and early detection activities in cancer.

#### **4.9 CONTRIBUTION BY PUBLIC TOWARDS PREVENTIONOF LOCOMOTOR DISABILITIES**

The lay man and the public at large have a vital role to play in locomotor disability prevention. Information, education and communication regarding the causes of locomotor disability and its prevention will help the public to a large extent in contributing towards prevention of locomotor disabilities. Important guidelines for the common person are : Maintaining good personal hygiene and sanitation and avoidance of pollution. Immunisation against diseases like poliomyelitis and other communicable diseases. Education regarding appropriate dietary pattern and physical activity, and avoidance of smoking to prevent obesity and hypertension which can result in locomotor disabilities. Prevention of vitamin deficiency disorders e.g. rickets and osteomalacia by adequate exposure to sunlight and adequate intake of milk and other dairy products. Avoiding marriage among close relatives to prevent genetically linked locomotor disabling diseases.

Disability is an affliction which traumatizes living the disabled and those around. Thus, it turns out to be an agony which calls for medical, social and environmental corrections to tackle it. In other words, it can be said, it is the rehabilitation of the physically challanged person that is what is needed. And this is how the World Health Organisation, or simply WHO, has defined it. Rehabilitation, it says, is 'all measures aimed at reducing the impact of disabling and handicapping conditions, and enabling the disabled and handicapped to achieve social integration.' Thus, rehabilitation does not mean just the training of the disabled and handicapped to lead them to their environs. It also denotes effective intervention in their immediate environment and the society as a whole to facilitate their social integration. Measures to reduce the impact of the disabling and handicapping conditions, as per the WHO'S 198 1 definition, mean medical rehabilitatioid intervention, such as surgical correction of deformities, provisions of aids, exercise therapy and so on. It is to reduce the impact of impairment as well as to improve functional status of such patients. The patients' and their families' education regarding the impairment, its potential complications along

with early identification of the problem and its prevention go a long way in minimizing the risk of developing such complications.

#### **4.10 PRINCIPLES OF MANAGEMENT OF LOCOMOTOR IMPAIRMENTS**

##### **Spasticity**

Muscle tone is a state of contraction or tension found in a normal muscle. Spasticity means increased tone in the muscles. Spinal injuries, Stroke, TB of the spine, Cerebral Palsy etc. can cause spasticity. If muscles are spastic there is loss of power and coordination. This can lead to muscle imbalance, and development of deformities. For controlling spasticity, passive range of movement exercises is carried out. Drugs like Diazepam, Baclofen, Dantrolene etc. can be prescribed and, also procedures like nerve blocks can be contemplated. Surgical methods like release of tight tendons and selective cutting of nerve roots and nerves, are undertaken, wherever, indicated

##### **Sensory Loss**

Sensory loss often accompanies motor weakness. Loss of sensations leads to loss of sensory feedback i.e. awareness of what the limb or the part of the body is doing. This leads to in coordination and loss of dexterity. Loss of sensations also cause injuries, pressure sores etc. in the affected area. Patients are educated to avoid any further injury by undertaking appropriate care and are also taught self inspection of the skin of the affected area so that they can prevent any pressure sore from developing. They are also advised protective gloves, footwear, padding, frequent change of posture in bed to avoid constant pressure on a particular part specially bony prominences. "Sensory consciousness" is to be inculcated in the mind of the patient to prevent the complications arising out of the sensory loss. If pressure sores develop, daily dressing and removal of dead tissue should be done. If there is any infection, proper antibiotic coverage is to be instituted. After the wound is clean, skin grafting or flaps are applied.

## **4.11 Deformities and Contractures**

A deformity is defined as an abnormal position which is not passively correctible, assumed by a part of the body as a result of some disease or injury. Factors contributing to the development of deformity are habitually faulty posture, muscular weakness, muscle imbalance, gravity, faulty walking pattern, inequality in length of limbs etc. Appliances used to prevent and correct deformities and contractures are called orthoses. Surgical correction of deformities and contractures can also be done, if these are not correctible by non operative means.

### **4.11.1 Amputations**

Loss of a limb in part or whole can be due to trauma or disease. Artificial limbs or prostheses are fitted to the stump at the earliest and the patient is trained in their use. Use of artificial limb usually restores functional independence in lower limb amputation. In upper limb amputation, unilateral amputee usually manages with one limb. In bilateral amputations of upper limbs, artificial upper limb and good training in their use is needed.

### **4.11.2 Neurogenic Bladder and Bowel**

Bladder and Bowel problems are common in paraplegia and quadriplegia. These include retention of urine, loss of voluntary control over urination, overflow, recurrent infections of the urinary tract, constipation etc. Repeated infection can lead to kidney failure. Bladder management is aimed at avoidance of overdistension, prevention of infection and restoration of continence by bladder training. For preventing infection the patient should have abundant water intake, antibiotics, if needed, and, bladder wash daily. Self intermittent catheterisation is now a commonly used method, in which patient or attendant is trained to catheterise himself at regular intervals so as to remain continent. Bowel care includes softening of stools by laxatives, digital evacuation, use of suppositories and enemas. High roughage diet and plenty of fluids help in easy bowel evacuation.

## **4.12 PSYCHO-SOCIAL REHABILITATION**

Rehabilitation of the locomotor disabled would not be complete unless the physical rehabilitation is accompanied by their psycho-social rehabilitation. The main difficulty faced in this regard is that a disabled person is not acceptable to the society in whatever position he or she is in. Conflicting societal attitudes ranging from pity/charity to aversion confront physically challenged persons. The attitude of the family also greatly influences the psycho-social dimensions of the problem of the disabled. Physical impairments of a disabled person, substantially limiting his activity, place him/her under great emotional stress. The effect disabilities can have on the suffering of an individual depends on the way he/she reacts and adjusts to his/her unusual or changed life situation. The common reactions of an individual to his/her disabled condition are: feelings of inferiority, self-devaluation, fear, hostility, resignation and a tendency to accept the role of a recluse.

### **4.12.1 SOCIETAL ATTITUDES**

Members of the society show conflicting attitudes towards a disabled person. Most people exhibit pity or believe in charity for them. Many treat them with indifference, while some demonstrate a tendency of aversion. Only a small number have a positive attitude towards them. The negative attitudes shown by a large number of people leave an adverse effect, thus emotionally undermining the capacity of the disabled to cope with the disability. Attitude of the family exerts a great influence on the disabled person. For example, some parents regard the disabled child as useless. Consequently, the child develops feelings of worthlessness. Some parents, on the other hand, pamper such a child so much that he/she becomes completely a dependent. The dependence causes frustration and hinders development. Other members of the family turn jealous of the disabled child who then faces isolation.

Even able-bodied persons, at times, experience depression, anxiety, uncertainty and pain. A disabled person has obviously more reason to face such a phenomenon. Greater effort, therefore, is needed to solve emotional problems of the disabled. Claim to love and sympathy, both from the family and society, is greater from such people.

#### **4.12.2 Change of Attitudes**

Change in social attitudes is essential for psycho-social rehabilitation of the disabled. The public should be educated about the abilities and handicaps of the disabled with regard to their contribution to the society. Particularly those, like doctors, nurses, social workers, employers, government officials, etc. need intimately be connected with the disabled. In our country where a vast majority of people are illiterate, audio-visual methods such as exhibition of films and documentaries would be more effective. Moreover, use of T.V. and radio, seminars and cultural programmes, holding of exhibitions depicting problems of the disabled and focusing on their achievements would create general awareness of the predicament of the disabled. Parental attitudes too need a change. They must be advised to avoid extremes of attitudes, and accept the disabled child as it is, fully recognising his her handicap. Proper understanding of the child by the parents would make adjustment with the family and society easier.

### **4.13 MEDICAL EMERGENCIES**

Locomotor disability, although, usually arises due to chronic diseases, which at times are prone to develop certain problems, requires urgent medical intervention, otherwise an uncalled for delay can lead to death. Some of the important medical emergencies faced by the locomotor impaired are :

#### **4.13.1 Autonomic Dysreflexia**

This is one of the commonest and important emergencies seen in the practice of rehabilitation medicine. Sudden onset of headache, sweating, nasal stuffiness, facial flushing, pounding pulse, goose skin and so are some of the symptoms which manifest in the patient. If not treated immediately, life threatening complications, such as brain haemorrhage, fits, heart failure, lung congestion, loss of consciousness, visual disturbances, may arise, resulting into death finally.

This complication is commonly seen in spinal cord injured patients. The autonomic nervous system is responsible for maintaining the blood pressure, heart rate, skin blood flow and breathing in a normal human being. If the spinal cord injury is at a higher level the integrity of autonomic nervous system is lost and it can act haphazardly, causing damage to the body. The common precipitating

factors are bladder and bowel distension, pressure sores, tight fitting clothes, urinary infections, in growing toe nails etc.

The treatment should be urgent and immediate. The first action taken is to raise the head end of bed, monitor blood pressure, remove the painful stimuli or the cause which is causing dysreflexia [most commonly evacuate the bladder or bowel]. Drugs that reduce the blood pressure like nifedipine can be used. Recurrent episodes of dysreflexia can be prevented by proper bladder and bowel management and skin care. Patient and family education is very important in the prevention and early identification of autonomic dysreflexia.

#### **4.13.2 Blocked Catheter**

The patients with blocked catheter present themselves with pain in lower abdomen, distension of abdomen and, at times, dribbling of urine by the side of catheter. Painless enlargement of urinary bladder can also be seen in spinal cord injured patients. If untreated, it can cause autonomic dysreflexia. It may also cause acute kidney failure due to backflow of urine to the kidney. The catheters kept inside the body for longer time tend to get blocked due to discharges, calcium deposits etc. Immediate step is evacuation of bladder by replacement of the catheter with a new one and treatment of autonomic dysreflexia, if it is present.

#### **4.14 EDUCATING LOCOMOTOR DISABLED**

Notwithstanding the descriptions the two luminaries have given to the word 'education', the term is said to have its roots in classic Latin. The term, 'education', is said to have been derived from the Latin word of 'educare', which simply means 'to bring up'. Another possibility is that it was the similar looking Latin term, 'educare', meaning 'to draw out', which wumbed the term education. Whichever of the two Latin phrases gave birth to the English word 'education', one can see both had a close link with the human activity. 'To bring up' denotes nursing or rearing. For the well being of the human child, it has to be trained and for that drawing the child out becomes imperative. It is only with such a process the child can have his innate qualities drawn out and learn to be a better human being. Even the authoritative English dictionary, Chambers, has defined 'education' as, 'bringing up or training, as of a child', among other things. *Rig Veda*, the most ancient

Indian philosophical treatise, has called the education as something which makes a man self-reliant and selfless. And for Upanishads, another treatise of the Indian hoary past, education is the end product for salvation. Kautilya, that Indian master of statecraft, whose expositions on economics, nay, *Arthshastra*, are still viewed with an awe and respect, called the education a means of training for the country and bringing out awakening for the love of the nation. Adi Shankara considered the education as the means of self realisation.

#### **4.15 EDUCATION:A BASIC HUMAN RIGHT**

Even otherwise right to education is a fundamental human right, recognized as such globally. Article 26 of the Universal Declaration of Human Rights stipulates that everyone has the right to education. Similarly, Article 13 of the International Covenant of Economic, Social and Cultural Rights provides that the States, parties to the present Covenant, recognize the right of everyone to education. Para 22 of Section I of the Vienna Declaration and Programme of Action, adopted on June 25,1993 by the World Conference on Human Rights, lays down that special attention needs to be paid to ensuring non-discrimination, and the equal enjoyment of all human rights and fundamental freedoms by disabled persons, including their active participation in all aspects of society. Para 63 of Section II thereof reaffirms "that all human rights and fundamental freedoms are universal and thus unreservedly include persons with disabilities. Every person is born equal and has the same rights to life and welfare also to education and work. Any direct discrimination or other negative discriminatory treatment of a disabled person is, therefore, a violation of his or her rights. The World Conference on Human Rights calls on Governments, where necessary, "to adopt or adjust legislation to ensure access to these and other rights for disabled persons". Para 64 ibid further stipulates that the place of disabled persons is everywhere. Persons with disabilities should be guaranteed equal opportunity through the elimination of all socially determined barriers, be they physical, financial, social or psychological, which exclude or restrict full participation in society. It is unfortunate that the sacred declarations and covenants adopted by the International fora are yet to be implemented appropriately by most of the governments or societies. This is the bounden duty of all concerned to secure this fundamental human right to education to all disabled people around the world.

#### **4.16 PROGRAMMES, TRAINING ANDEMPLOYMENT**

How pithily one of the great US Presidents brought home the simple truth that no person is unequal to the given task, it is the societal attitude which makes it so. For Rocsevelt, one can surmise, the immediate need must have been to pull his fellow Americans out of the centuries old prejudice against the disabled in the wake of thousands of American troops returning home maimed by the insane Second World War. And it is heartening that his timely message has sunk in. For, there is now a greater appreciation of the fact that disabilities, like loss of sight, hearing or a limb, do not necessarily close the doors of knowledge or work on the disabled. But it cannot be left at that. An aggressive approach has to be adopted for imparting of education, appropriate skills and finally job placement to the disabled. It is all the more so since in many countries realisation is dawning that the limitations of the disabled get aggravated due to barriers that get created by the social negative social attitudes towards the physically challanged. A world-wide programme got initiated on December 3, 1982, when the United Nations General Assembly adopted resolution 37/52 with the aim to promote effective measures for prevention of disability, rehabilitation and the realisation of the goals of 'equality' and full participation of the disabled in the social life and developmental work. Obviously, the basic focus is to get equal opportunity to the physically challanged in the society and to allow them to breathe in an environment which upholds the human dignity for all in equal measure. Soon after came the adoption of Convention no. 159 and Recommendation no. 168 by none other than the International Labour Organisation. The adoption came in June of 1983. It concerned vocational rehabilitation of the disabled. The two instruments also stress on full participation in the social, and developmental work by the disabled, without discrimination or prejudice. In India too, public awareness and state's eagerness to respond to the needs of the physically challanged has shown remarkable increase in the post-independence era. The Union Government is fully committed to the full participation and integration of the disabled in the mainstream of the society. Even a central legislation, adopted by the two Houses of Parliament, called : 'The Persons with Disabilities [equal opportunities, protection of rights and full participation] Act of 1995, received the Presidential consent on Programmes, Training and Employment 273 January 1,1996. It aims at promotion of effective measures for realisation of the goal of full participation of



disabled in social life and development. And to achieve the objective, the Union Government has devised various schemes to arm the disabled with enough skills to fit in the appropriate job slots. A chart below will give a fair idea of these schemes.

#### **4.16.1 ROLE OF EMERGING TECHNOLOGY**

Locomotor impairment is a major disability problem, if quantified in sheer numbers of inflicted, or qualified in the form of difficulties it poses in the daily chores of the afflicted. What is even worse, it maintains no calendar. It can creep in at any age--childhood, youth or senescence. What we know for certain is its remarkably uniform incidence. Accidents dominate the adult group. In the advanced years it is the degenerative diseases which cause it. It could be congenital, or maladies like Polio take their toll in stripling. Muscular and skeletal system abnormalities are principal ultimate, though neural, hormonal or any other body system may fall into it. In face of causative factors being too many, the risk of an individual falling victim to such a physical challenge at any time cannot be ruled out. Such being the case it becomes imperative that prevention and management of locomotor disability gets equal attention on priority. Luckily, technology has made a lot of advancement in the medical field too, and thus, it can be harnessed to the advantage of the disabled.

#### **4.16.2 PREVENTIVE TECHNOLOGY**

In the course rehabilitation of the afflicted, a number of facets come to fore, one among which is, what has come to be known as, Preventive Technology. A very vital aspect of the technology is to advise steps to the patient which do not aggravate disability. Assessment of movement pattern has been seen to have shown considerable benefits. Determination of excessive stresses and strains can help in suggesting such movement patterns which do not worsen the disability. In muscle and joint problems the technique has definite value. Bio-feedback can be added to train muscle segments to avoid undue stresses to the joints. Use of technology comes handy in preventive rehabilitation. For, many a disabilities have cropped up directly from the use of technological products. Vehicular accidents, to name, are one such instance. Paradoxical as it may appear but it is the same technology which can be first applied to study the human

ergonomics, and then used for safer technological structures and protective devices. A shin-guard on a motorcycle, is a commonly used protective, provides a fine example. Yet another facet is the aids for the use of the disabled whose use helps psychologically. The benefits may not be so perceptible as that of some prosthetic aids, but the benefits are of far reaching nature. Preventive measures notwithstanding, the prevalence of locomotor impairments cannot be wished away. Technology has been developed as an aid to help the management of locomotor disability, and not as an end in itself.

#### **4.17 POST-INDEPENDENCE DEVELOPMENT:A CRITIQUE**

A locomotor disabled, to put it mildly, is doubly disadvantaged. To wit : physical challenge and then societal apathy. It makes the problem of rehabilitation of persons so afflicted formidable thus. What adds severity to the situation is the grim reality of mounting figures of such disabled if they do not get the consideration it calls for. The National Sample Survey Organisation indicated in 1991 that some nine million odd people in the country were suffering from the trauma of locomotor disability. And the fears are the number might have scaled further up on account of various reasons, some of which, ironically though, may have led to such progressive steps as drastic increase in longevity of an average Indian and reduction in infant mortality rate.

A vast network of health care system developed through successive developmental Five Year Plans for the country's gargantuan population, sadly enough, lacked the medical rehabilitation component. Furthermore, the specialised institutions developed over the years to afford specialised health services are still small in number compared to the vastness of population. But what adds insult to the injury is the confinement of such specialised health service institutions to the big cities, and thus, bypassing the villages where in majority of the Indians live. No doubt there is an army of city, primary and subhealth centres, numbering something like 170,000 or near about, dotting all over the country.

The first ever endeavour towards medical rehabilitation came in 1956 with the setting up of the All-India Institute of Physical Medicine and Rehabilitation at Bombay lately christened as Mumbai. Since then, partly on account of lack of planning, and partly because of paucity of funds, it has remained the lone

institution of its kind, though there is a crying need for similar institutions elsewhere because of physical vastness of the country. Obviously, it deprived majority of our denizens of the medical rehabilitation facility. For the disabled, who deserved the medical rehabilitation most alongwith the social one, even the next two decades of sixties and seventies could not bring any cheer as no notable place for them could be located when the courses of the national level health policies were being chartered. The silver lining, however, came in the form of establishment of National Institutes by the then Union Ministry of Welfare as they were equipped to deliver complete range of medical attention to the disabled people. Preventive, promotive, curative and rehabilitative aspects, though formed the core component of the health care following the Alma Ata Declaration of 1978, it missed out on the rehabilitative feature. Thus, the health care services got further distanced from the locomotor disabled. The observation of 1981 as the International Year of the Disabled saw the flowering of the rehabilitation services for the disabled in the country. The then Ministry of Social Welfare, now baptised as the Ministry of Social Justice and Empowerment, was declared as the 'nodal ministry' for the welfare of the handicapped. The four National Institutes for the disabled: Institute for the Orthopaedically Handicapped at Calcutta, Institute of Rehabilitation, Training and Research at Orissa, the Institute for Physically Handicapped,

#### **4.18 BARRIER FREE ENVIRONMENT**

Locomotor disabilities greatly restrict mobility of the persons concerned. This adversely affects their social integration. Lack of mobility even has detrimental effects on their daily living and life style. In this scenario, barrier free environment is a necessity. However, there is lack of awareness in this respect in our country which is evidenced by the fact that most of the public buildings present physical barriers, and even our homes are not free from such barriers. Charity begins at home, is the age old experience. Therefore, first of all, we must have a barrier free home where the disabled can move freely while using aids and appliances. In many cases special toilets catering to the needs of individual disabled persons are needed. Sections 45 and 46 of the Persons With Disabilities Act deal with the question of removal of barriers on roads and public places. In keeping with these provisions, ramps must be provided in all public buildings,

such as, government offices, post offices, banks, railway stations, airports, hospitals, municipal buildings etc. In some such places ramps are already provided. But where such ramps do not exist, necessary architectural modifications must be made to make these places accessible to the disabled people, especially using wheelchairs. Toilets in all public places must be so built that they can be utilized by persons with locomotor disabilities. It should be made mandatory for the shopping central complexes to have ramps. All newly planned structures in future should take care of accessibility for disabled persons. As regards roads, to facilitate their outdoor mobility, the disabled need to be provided suitable aids and appliances to enable them to go on to the road. It is also necessary that curbs/cuts and slopes are made in the pavements for the easy access of wheel chair users. This facility is invariably provided in the developed countries and there is no reason why this provision cannot be made in our country. Similarly, separate parking places should be provided for the disabled persons for whatever vehicle they may possess.

#### **4.18.1 AWARENESS BUILDING**

Lack of right attitude in society about the persons with disability, lack of awareness about their problems, lack of knowledge regarding their potentialities and absence of information as to what could and should be done about them have been the main obstacles in their rehabilitation process. Not only people at large but also planners, teachers and social leaders etc. need in one way or the other to be made aware of the various implications of the rehabilitation processes of the disabled.

It is suggested that like messages disseminated through the media regarding prevention of diseases etc. the media could also cover messages relating to prevention of disabilities and rehabilitation of the disabled people. Wide publicity through the media of the different centres/organisations offering different facilities of rehabilitation would go a long way in educating the people in this regard. Media can be usefully employed for the purposes of moulding and changing the prevalent negative attitude and reinforcing positive attitude amongst the persons with disabilities, parents, families, and the society in general; creating awareness about potentialities of the disabled persons and the social and economic benefits of rehabilitation and preventive measures; providing right and adequate

information to persons with disabilities, parents, families, society in general and the professionals about various schemes, technologies, availability of services etc.; and Highlighting employability of the disabled persons to foster encouragement amongst them and to prepare them to undertake jobs suited to their ability and capacity. There is also need for creating awareness both amongst disabled persons and their parents families about the importance of education. Counselling of parents is particularly necessary as many people tend to think that disability of their children have made them useless and education would not benefit them. Career guidance is equally important to the disabled persons and their families to enable them to become productive members of society. Adequate information systems should also be evolved to enlighten business community, industrialists, government officials, etc. about the jobs that can be usefully undertaken by the disabled people. Jobs in which the disabled persons can be employed commensurate with the type of their disabilities need to be properly identified.

#### **4.18.2 WORKING HOSTELS**

There is provision for hostels for the working women in major cities. The Central Social Welfare Board has sponsored a scheme of hostels for the blind where working adults live. Many such hostels have come up. The facility of working hostels on the lines of the afore-mentioned provision should also be provided to persons with locomotor disabilities working in different organisations. These persons should be charged rent on a nominal basis. The hostel should have the facility of food for the residents. Provision for suitable transport to take the disabled to their work place and back should also be made at concessional rates. The hostels could also provide recreational facilities.

#### **4.18.3 TRAVEL TRANSPORT**

The persons with locomotor disabilities would be in need of special transportation system. This facility is almost non-existent in our country. Necessarily, provision should be made for specially designed buses for the disabled with ramps for those using wheelchairs. Hoists to lift them onto the coach are also needed. Seats should have safety belts. Travel is not only a luxury but a social necessity for the persons with locomotor disabilities. Travel becomes necessary also on many occasions

when these people have to travel to participate in social family functions. Therefore, travel by rail may be unavoidable in many circumstances. However, ordinary railway coaches are not suitable for the disabled to travel. These do not have adequate space for easy movement of disabled people using aids and appliances. Similarly there is no facility for entering of such people into the compartments, except by physically lifting them and putting them into the train. It is thus necessary that special coaches should be designed by the Railway Department keeping in view the requirements of people with locomotor disabilities. Until this is done, mobility of these people would again be jeopardised.

#### **4.18.4 SELF HELP ORGANISATIONS**

Every locomotor disabled person must cultivate the spirit of self-help to achieve a dignified place in society. He must be fully conversant with the nature of his problems and should be alive to his potentialities. In the past, lack of adequate participation of the people with disabilities themselves has restricted the development of rehabilitation services in the country. There is, therefore, great need for adequate social mobilization of the disabled people along with the communities in which they live. A few self-help organizations consisting of the disabled people have come up in the recent past. These organizations are doing useful work in furthering the cause of the disabled people. They can better serve this cause by their own activities as shown below: a Creating awareness and familiarizing masses about the precise needs of the disabled people and their potentialities; a Giving patient hearing to the disabled people to relieve them of their pent-up feelings, and counseling with the family members of the disabled to sort out problems faced by either of them; a Keeping the disabled acquainted with information about various facilities and beneficial schemes of government and other agencies; a Serving as pressure groups in drawing attention of the community to their different problems and thus prompting remedial measures to be taken; Encouraging social interaction amongst the disabled persons and between the disabled persons and able-bodied persons; Providing economic rehabilitation to the disabled by mobilizing their own resources;

Arranging vocational training to the disabled to enable them to become economically independent; Publishing and circulating literature to highlight the

problems of the disabled and their potentialities to become productive citizens. There is need for a large number of self-help organisations throughout the country, may be with one such organization having branches at more than one place. The existence of such organizations will by itself stimulate attention and concern of the society to the cause of the disabled.

#### **4.19 PARTICIPATION OF LOCOMOTOR DISABLED IN DECISION MAKING**

Experience has shown that locomotor disabled persons are not generally consulted at the time of framing of policies, programmes and schemes for their rehabilitation. Consequently, such schemes when implemented fail to achieve the desired results. It is necessary that the disabled people are adequately involved in the decision making stage whenever any policy/programme is drawn up for their upliftment. They should also be represented at committees/commissions set up in connection with rehabilitation of the disabled. This will create a conducive atmosphere for the rehabilitation process to proceed to its successful completion.

The locomotor disabled people constitute almost 2 per cent of our population. They have a legitimate claim for reservation of proportional seats in Parliament and State Legislatures so that their voice is also heard when legislation relating to their rehabilitation is being enacted.

#### **4.20 FACILITIES AND CONCESSIONS FOR LOCOMOTOR DISABLED**

Whatever is the stage of economic development of a country, none of its citizens (specially, the physically handicapped) could be left out of planning to bring about an improvement in their conditions in a welfare state. With this end in view, a number of concessions for purposes of employment, training, travel, medical examination etc. have been granted, to the physically handicapped persons by the Central as well as State Governments.

The persons with locomotor disability constitute a significant section of our population whose potentials should be utilised to the optimum limit. They are gradually coming to be recognized as useful citizens of society. The Central as

well as the State Governments have launched several schemes to educate and train the disabled persons and to place them in useful and suitable employment in offices, commercial organizations and industrial houses. Both the Central and the State Governments have taken a number of steps in this direction by way of providing certain concessions to the handicapped.

#### 4.21 SUMMARY

Locomotor disabilities, being the largest group of disabling disorders, call for a gigantic effort to tackle. The government as well as the public need to work hand in hand. Though, all of the locomotor disabling disorders are not preventable, a significant proportion is fully preventable. Prevention can be achieved by first level, second level or third level intervention measures. In a developing country like ours where health services and infrastructure are still inadequate, and rehabilitation services are still in infancy, first level intervention would play a major role in preventing or minimizing the occurrence of locomotor disabilities.

*How aptly Dr. Hafden Mahler, Former Director-General of the World Health Organisation, has summed it up: "Disability is a problem of such magnitude, severity and duration that efforts to reduce it should be a matter of priority for the people and the governments. It is estimated that about half of all disability in developing countries can be prevented or postponed by action taken in the context of primary health care".*

Human being is a complex entity consisting of the physique and psyche, that is, the body and mind. Physical disability is accompanied by some sort of psychological disturbance. A psychological upheaval affects general health. Moreover, a disability affects the personality of the suffering individual in two ways: first, by handicapping him/her in the matter of performing ordinary tasks of life, and, second, by inviting prejudicial and sometimes discriminatory societal attitudes towards him/her. First and foremost is the attitudinal change of the family, for it can undermine the personality of a disabled. Social workers can play a vital role in easing family tensions, say, by home-visits, as some parents need counselling. Attitude of the society towards the disabled having various ramifications also needs reorientation.



## 4.22 REFERENCES

- Advaita Ashrama (1991) *The Complete Works of Swami Vivekananda*, Volumes 1, 2 and 6, Calcutta.
- American Academy of Orthopaedic Surgeons (1981) *Atlas of Limb Prosthetics*, C.V. Mosby Company, New York.
- Annual Report 1995-96* (1996) Government of India, Ministry of Health & Family Welfare, New Delhi.
- Annual Report 1995-96* (1996) Rehabilitation Council of India, New Delhi.
- Annual Report 1998-99* (1999) Ministry of Social Justice and Empowerment, Government of India, New Delhi.
- Annual Report 1998-99* (1999) Ministry of Labour, Govt. of India, New Delhi.
- Baquer Ali and Sharma, Anjali (1997) *Disability : Challenges V/s Responses*, Concerted Action Now (CAN), New Delhi.
- Behrman, Richard E. (1987) *Nelson Textbook of Pediatrics*, W.B. Saunders Co., Philadelphia.
- Bernstein, J. J. and Goldberg, W. J. (1995) Experimental spinal cord transplantation as a mechanism of spinal cord regeneration. *Paraplegia* 33(5): 250-3
- Bhatt, Usha (1963) *The Physically Handicapped in India*, Popular Book Depot, Bombay.
- Braddom R.L. (1996) *Physical Medicine and Rehabilitation*, W.B. Saunders Co., Philadelphia.
- Chancellor, M. B., Rivas, D. A. and Linsenmeyer, T. (1994). Multicenter trial in North America of urolume sphincter prosthesis. *J. Urol.* 152: 924-30
- Chowdhary, D.Paul (1981) *A Handbook of Social Welfare*, Atma Ram and Sons, Delhi.

Coleman, James C. (1970) *Abnormal Psychology and Modern Life*, Indian Edition, D. B. Taraporevala Sons & Co., Bombay.

Coob, (1 992) *The Physically Impaired Athlete. Athletic Training & Sports Medicine*, A Report on Paralympic Sports.

Cruickshank, William M. and Johnson, G. Orville *Education of Exceptional Children and Youth*, University of Michigan, University of South Florida, Prentice Hall, New Jersey.

DeLisa, Joel A (1993) *Rehabilitation Medicine-Principles and Practice*, 2 nd Edition, J.B. Lippincott Co., Philadelphia.

Department of Rehabilitation (1997) *Proceedings of Orientation Workshop of National Trainers for Medical Rehabilitation*, DGHS-WHO sponsored Workshop, New Delhi.

Department of Rehabilitation (1995) *Proceedings of Orientation Workshop on 'Care of Elderly and Geriatric Rehabilitation' for G.P.S. and NG.O.s*. Ministry of Welfare, Govt. of India, New Delhi.

Desmurget, M., Prablanc, C., Rossetti, Y., Arzi, M., Paulignan, Y. Urquizar, C. and Mignor, J. C. (1995) Postural and synergic control for three-dimensional movements of reaching and grasping. *J.*

*Neurophysiol.* 74(2): 905- 10, *Dorland's Pocket Medical Dictionary* (1995), Oxford & IBH Publishing Co., New Delhi.

Edwards, Christopher R. W. and Bouchier, Ian A. D. (1991) *Davidson's Principles and Practice of Medicine*, 16 th Edition, Churchill Livingstone, Edinburgh, U.K.

Edwards, J.W. (1952) *Orthopaedic Appliances Atlas*, Volume I, Michigan.

Fauci, A. S. et al (1998) *Harrison's Principles of Internal Medicine*, McGraw-Hill, New York.

Ghai, O. P. (1996) *Essential Pediatrics*, 4 th Edition, Interprint, New Delhi.

Govt. of India (1996) *The Persons With Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995*, New Delhi.

Govt. of India *Report of the Working Group on Labour Policy - Ninth Five Year Plan*, GOI, New Delhi.

Goyal, H. C. et al. *Vocational Text Book for Physiotherapy and Occupational Therapy*, Government of Karnataka : Directorate of Vocational Educational, Ed CIL, New Delhi.

Goyal H. C. (1998) Barrier free environment in schools, paper presented at the Workshop on Education of People with Disabilities, organised by the Ministry of Social, Justice & Empowerment, at Vigyan Bhawan, New Delhi.

Halstead, Lauro S. (1998) *Post Polio Syndrome*, Scientific American.

Hastings, J. A., Vannah, W. M., Stand, J. A., Haming, D. M. and Orvaric, D. M. (1998) Frequency content of prosthetic and orthotic shapes: A requirement for CAD/CAM digitizer performance. *J. Prosthet.*

*Orthot.* 10(1): 2-6, Helander E., Mendis P., Nelson G. and Goerdts A. (1989) *Training in the community for people with disability*, WHO, Geneva.

Helga Binder, et al. (1991) *Cerebral Palsy. A Handbook of Parents*, Children's National Medical Centre, Washington D.C.

Houston, V. L., Mason, C. P., Beattie, A. C., LaBlanc, K. P., Garbarini, M. Lorenze, E. J. and Thongpop, C. M. (1995). The VA Cibenvare lower limb prosthetics-orthotics optical laser digitizer. *J. Rehab. Res. Dev.* 32(1): 55-73.

Indian Spinal Injury Centre (1997) *Fact Sheets*, Patients Education Series, ISIC, New Delhi.

International Labour Office *International labour standards on vocational rehabilitation*, ILO, Geneva.

International Labour Office *Basic principles of vocational rehabilitation of the disabled*, ILO, Geneva.

ILO; UNESCO; WHO *Multi sectoral collaboration for the equalisation of opportunities for people with disabilities*, Geneva.

Jaeger, R. J., Langbein, E. W., Kralj, A. R. (1994). Augmenting cough by FES in tetraplegia: a comparison of results at three clinical centres. *Basic and Applied Myology* 4 (2):195-200, Johnson, K., Denning, R., Simth, P. J., Smith, J. W. and Simon, S. R. (1996). Gait 111: A multimedia system for gait analysis. *Gait Posture* 4: 195-6, Kautilya, Arthashastra Book 11, Chap.1, *ibid*, p.97 Kautilya, *ibid*, Book 11, Chap. 23

Khalaf, K., Pamiampour, M. and Sparto, P. (1994).Development of 3-D surface response of trunk strength as a function of position and angular velocity. *Proc. Am. Soc. Biomechanics* (Annual Meeting) pp 59- 60.

Kottke, Frederic J. et al (1982) *Krusen's Handbook of Physical Medicine & Rehabilitation*, 3 rd Edition, W. B. Saunders Company, Philadelphia.

Kottke, Frederic J. et al (1990) *Krusen 's Handbook of Physical Medicine & Rehabilitation*, 4 th Edition, W. B. Saunders Company, Philadelphia.

Laisram, Nonica (1995) *Profile of Childhood Disability*, Indian Pediatrics.

Lilja, M. and Oberg, T. (1995) Volumetric determinations with CADICAM in Prosthetics and Orthotics: Error of Measurement. *J. Rehab. Res. Dev.* 32(2): 141-8.

Loring, James and Burn, Graham, Routledge and Paulin, Kegan (1 976) *Integration of Handicapped Children in Society*, Spastic Society, London.

Magnifico L. X. *Education for the Exceptional Child*, University of Tennessee. Longmans, Green and Co., New York.

Maheshwari, M.C.and Singh, K.K. (1996) *Stroke and Rehabilitation..* National Book Trust of India, New Delhi.

Mandl P. E. (1981) *The disabled child. A new approach to prevention and rehabilitation* Assignment Children., UNICEF.

- Mendis P. (1997) *Disability Prevention and Rehabilitation*, WHO Bi-Regional Course in Community Based Rehabilitation, Sri Lanka.
- Ministry of Social Justice and Empowerment *Press note on International Day of the Disabled Persons*, Govt. of India, New Delhi.
- Ministry of Human Resource Development (1992) *Scheme of Integrated Education for the disabled children*, Govt. of India, New Delhi.
- Mohanty, Jagannath *Education for All (EFA)*, Deep & Deep Publications, Rajouri Garden, New Delhi.
- Munn, Norma L. (1969) *Introduction to Psychology*, Indian Edition, Oxford & IBH Publishing Co., New Delhi.
- Narasirnhan M. C. and Mukherjee A. K. (1986) *Disability - A Continuing Challenge*, Wiley Eastern Ltd., New Delhi.
- Neeman, R. L. and Neeman, M. (1991). Orthokinetic orthoses: Clinical efficacy study of orthokinetic treatment for a patient with upper extremity movement dysfunction in late post-acute CVA. *Rehabilitation R & D Progress Reports; Veterans Health Administration*, pp. 152-53.
- Oberg, T., Lilja, M., Johansson, T. and Karszinia, A. (1993) Clinical evaluation of trans-tibial prosthesis sockets: a comparison between CADICAM and conventionally produced sockets. *Prosthet Orthot. Int.* 17(3): 164-71.
- Pandey, R.S. and Advani, Lal (1995) *Perspectives in Disability and Rehabilitation*, Vikas Publishing House Pvt. Ltd., New Delhi.
- Park K. (1997) *Park's Text Book of Preventive and Social Medicine*, Banarsidas Bhanot Publishers, Jabalpur, India.
- Pathak, P. D. (1982) *Play & Play Way Educational Psychology*.
- Prasad, Lakshman (1994) *Rehabilitation of the Physically Handicapped*, Monark Publishers Pvt. Ltd., New Delhi.

Rehabilitation Council of India (1996) *Report on Manpower Development*, New Delhi.

Rehabilitation Council of India *Proceedings of the Seminar - Developing Linkages Between RCI and the International Organisations*, RCI, New Delhi.

Rehabilitation Council of India. (1999) *Manual for Training of PHC Medical Oficers*, New Delhi.

Rodger, M. M., Gayle, G. W., Fighi, S. F., Kobayashi, M. and Glaser, R. M. (1994), Biomechanics of wheelchair propulsion during fatigue. *Arch. Phy. Med. Rehab.* 75: 85-93.

St. Louis, New York. Rusk, H.A. (1977) *Rehabilitation Medicine*, 4<sup>th</sup> Edition, C.V. Mosby Company, Sanders, J. E. (1 995).Interface mechanics in external prosthetics: review of interface stress measurement techniques. *Med. Biol. Eng. Comput.* 33(4): 509- 16.

Sanders, J. E., Berglund, D. N. and Zachariah, S. G. (1997).A modular six-directional force sensor for prosthetic assessment: A technical note. *J. Rehab. Res. Dev.* 34(2): 195-202.

Sartori, A., Simoni, A., Maloberti, F. and Torelli, G. (1995) A 2-D photosensor array with integrated charge amplifier. *Sensors and actuators* 46: 247-50.

Scott, F. B., Bradley, W. E. and Timon, G. W. (1973).Management of erectile impotency; use of implantable inflatable prosthesis. *Urology* 2: 80.

Small, M. P., Carrion, H. M. and Gordon, J. A. (1975).Small-Carrion prosthesis; new implant for the management of impotence. *Urology* 5: 479.

Sodhi, T. S. and Suri A. *Philosophical and Sociological Foundations of Education*, Bawa Publication, Patiala.

Srivastava, R. K. and Agarwal, A. K. (1997) *Rehabilitation Education Series - Vol. I. Prosthetics &Orthotics in Physical Medicine &Rehabilitation*, IAPMR, New Delhi.

Taylor, M. B. (1996). Comparison of energy expenditure by a high level trans-femoral amputee using an intelligent prosthesis and conventionally damped prosthetic limbs, *Prosthet. Orthot. Int.* 20(2): 116- 2 1.

Tura, A., Lambert, C., Davalli, A. and Sacchetti, R. (1998) Experimental development of a sensory control system for an upper limb myoelectric prosthesis and cosmetic covering. *J. Rehab. Res. Development* 35(1): 14-26.

Tushberg W.A. *Upper and Lower Extremity Prostheses* Charles C, Thomas Spring Field, Illinois, USA.

United Nations *World Programme of Action Concerning Disabled Persons*, New York.

United Nations (1993) *Human Rights, the International Bill of Human Rights*, New York.

United Nations (1995) *World Conference on Human Rights, the Vienna Declaration and Programme of Action* ,June, 1993, New York.

## Unit 5

### Engaging Gifted Children

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## **5.1 Introduction**

This handbook is the seventh in a series of informational handbooks prepared by the First Nations Education Steering Committee (FNESC) and the First Nations Schools Association (FNSA). The handbooks are intended to provide some basic information about a range of special education issues. Some of the topics covered in the other handbooks include FAS/FAE, ADD/ADHD, IEP development, and information specifically for parents. We hope that this information proves useful to everyone who is working to ensure that all First Nations learners have every possible opportunity to fulfill their potential and achieve success.

## **5.2 What is Giftedness?**

Of course, all children have particular strengths and things they are very good at. In that way, we commonly think of all children as being “gifted” in one way or another. However, for the purposes of special school programs and services, a

more specific definition of “gifted children” is used. In the special education sense, a “gifted student” is defined generally as a learner who has an “exceptional ability to learn.” Gifted children also have been defined as those who, because of their outstanding abilities, are capable of uncommonly high performance. A gifted student may possess exceptionally high abilities in terms of one or more of the following aspects:

academic achievement;

intellect (including curiosity, motivation, and attention span);

creativity;

personality traits (including leadership, ability, independence, and intuitiveness); and/or

one or more specific disciplines, such as the arts or athletics.

Generally, gifted children are creative, innovative thinkers who are able to see multiple approaches to a problem and work out innovative and unusual solutions. Gifted students, however, should not be expected to have strengths in all areas. Also, some gifted children have hidden learning disabilities that may go unnoticed for years, because gifted children are able to compensate for their disabilities in the early years. Later, it may become harder and harder for them to excel, which can cause depression and behavior problems. Some people may believe that gifted children do not need special support because “they are smart enough to succeed on their own.” However, all learners need help, encouragement and appropriate learning experiences in order to be successful, and gifted children do require different educational programs in order to reach their full potential. Many gifted learners will become underachievers and/or dropout from learning or from school unless they receive guidance and adequate challenge. For that reason, as for all students, it is important to develop programming to reflect the uniqueness of gifted students and help them to fulfill their potential.

### **5.3 Identifying Gifted Students and Understanding Their Strengths and Talents**

Identifying gifted students and their strengths and talents should be an ongoing process. Assessment procedures usually involve the following:

formal testing and indicators of cognitive (intellectual) ability, achievement, aptitude, and creativity;

teacher observations, including anecdotal records, checklists and inventories; and

records of student achievement, including assignments, portfolios, grades, and outstanding talents and accomplishments. Some factors may make it difficult to identify a student's giftedness, including:

students' exceptional talents may not be obvious because of language delays or differences;

formal tests may not reflect cultural factors;

physical disabilities may affect students' identification as gifted;

children may have learning or sensory disabilities which make it difficult to identify their giftedness; and

testing and identifications may be affected by personality styles.

Exceptional potential may be also be unclear if the learning environment does not provide an opportunity for a gifted student to develop his or her talents. For all of those reasons, identifying a child as gifted can be very challenging. Therefore, assessments usually require input from teacher(s), parents, and a person with expertise in special education.

#### **5.4 Developing a Student Profile**

To provide a deeper understanding of a student's unique interests, styles and abilities, sometimes a student profile is very helpful. Gathering data from a variety of sources will ensure a well-rounded view to assist in educational planning. Five areas that may be considered in developing a student profile include:

academic achievement;  
learning styles and strengths;  
interests;  
special interests; and  
visions and goals for the future.

### **5.5 Gifted Students in the School Setting**

Gifted children may be put in to a variety of different educational settings once they are in school.

In some cases, gifted children participate in regular classes with peers their own age.

An alternative to full-time schooling in the regular classroom is the “pull-out” gifted program, in which gifted students leave the class for several hours a week to join a special group for advanced instruction.

Both of those options have benefits and challenges associated with them. Keeping gifted children in regular classes may be useful in terms of their social development and/or may be necessary because of school resources. However, gifted children generally cover course materials faster than their classmates. As a result, they may become bored and develop a negative attitude toward school if they are not adequately challenged.

Underachievement in school is a common result for such students. In addition, some gifted children may feel compelled to hide their talents in order to fit in socially with their peers. Pull-out programs may be beneficial in terms of offering gifted students special instruction directed at their level of ability.

However, a gifted student who leaves class for several hours each week may feel self-conscious or not accepted. Pull-out programs can also make the pupils who don't leave feel bad, as well. Other types of programs may be used in different settings. For example, in multi-age classrooms, gifted students may be able to

work more independently or in small groups with other students with similar ability levels.

The type of programs available for gifted students can vary significantly depending on the school they are attending and the resources available. Ideally, parents and school staff will work together to choose an educational setting that is right for each child.

## 5.6 Characteristics of Gifted Children and Possible Challenges

It is important not to make overgeneralizations about any learners. Gifted children may perform exceptionally well or do very poorly in school. They may be cheerful and well adjusted or lonely and unhappy. They may be learning disabled. There are all "kinds" of gifted children. However, many gifted students display common, identifying characteristics, some of which are highlighted below. Gifted children's behavior often differs from that of their age-mates in the following ways:

many gifted children learn to *read early*, they often read widely and quickly, and they have large vocabularies;

gifted children commonly *learn basic skills* better, more quickly, and with less practice;

gifted children often are better able to construct and handle *abstractions*, and they can pick up and interpret nonverbal cues;

they can *work independently* at an earlier age and can concentrate for longer periods of time;

gifted children often have seemingly *boundless energy*, which sometimes leads to a misdiagnosis of hyperactivity;

they usually respond and *relate well to parents, teachers, and other adults*, and they may prefer the company of older children and adults to that of their peers;

they like to *learn new things*, are willing to examine the unusual, and are highly inquisitive;

many gifted children tackle tasks and problems in a *well-organized*, goal-directed, and efficient manner; and

they exhibit a natural *motivation to learn*, find out, or explore and are often very persistent. "I'd rather do it myself" is a common attitude for gifted students. Gifted children also may display some of the following *learning* characteristics:

gifted children may show keen powers of *observation* and an eye for important details;

they may *read a great deal on their own*, preferring books and magazines written for children older than they are;

they often display a *questioning attitude* and seek information for its own sake as much as for its usefulness;

gifted children often have a *large storehouse of information* about a variety of topics, which they can recall quickly;

they can readily *grasp underlying principles*, and quickly perceive similarities, differences, and anomalies; and

many gifted children attack *complicated material* by separating it into components and analyzing it systematically. Gifted children's *creative* abilities may also set them apart from other students their age, exhibiting the following characteristics:

gifted children are often *flexible thinkers*, able to use many different alternatives and approaches to problem solving;

they are *original thinkers*, seeking new and unusual combinations among items of information;

they can also *see relationships* among seemingly unrelated objects, ideas, or facts;

they often show great *emotional sensitivity*;

gifted children often display intellectual playfulness and like to *fantasize* and imagine; and

they can be more open in *expressing opinions* and ideas, and they often disagree spiritedly with others' statements.

## **5.7 GIFTED STUDENTS: RECOMMENDATIONS FOR TEACHERS**

It is estimated that students who are gifted and highly talented encompass 5 to 15% of the school age population. These advanced students can have increased capabilities in academics, creativity, music, dance, art, and/or leadership. The following are recommended:

- 1. Compact the curriculum and provide enrichment activities.** Provide environments that are stimulating, and address cognitive, physical, emotional, and social needs of gifted children in the curriculum. Let the students move quickly through the required curriculum content and onto more advanced material. Allow for academic rigor.
- 2. Implement a multi-level and multi-dimensional curriculum.** Differentiate the curriculum in order to address differences in the rate, depth, and pace of learning. This will enable all students in the class to learn about a specific area by creating projects at their own ability level. For example, if students are learning about the state of Delaware, students of different ability levels can be assigned to different types of tasks. At the conclusion of the class, all of the students can present what they have learned to the entire group.
- 3. Be flexible with the curriculum.** Take advantage of real-life experiences that can be translated into problem-solving academics for all students. For example, an impending snowstorm can be used to instruct students. Students of different ability levels can be given different tasks, such as figuring out what snow is made of, predicting the amount of snowfall, or determining how many snow plows will be needed if 8 inches fall.

- 4. Make the curriculum student-centered.** Engage gifted students in the curriculum decision-making process, giving them an opportunity to learn how to take responsibility for their own learning. Draw the curriculum from the students' interests and educational needs.
- 5. Allow students to pursue independent projects based on their own individual interests.** Independent projects can be assigned on the basis of ability level. Encourage creativity and original thinking among gifted students. Allow them to explore ways of connecting unrelated issues in creative ways.
- 6. Allow gifted children to assume ownership of their own learning through curriculum acceleration.** Instruct them to work ahead to problems of skills that they do not know. To help children learn the value of attaining knowledge in their lives, encourage learning for its own sake, rather than emphasizing the end results or accomplishments. Teach research skills for accessing information; higher level thinking skills for processing it; creative thinking and problem-solving skills for flexibility in approach and generation of information; and communication skills for sharing it. Practical Recommendations and Interventions: Gifted Students 2
- 7. Try to maximize your students' potential by expecting them to do their best.** Encourage them to advance as quickly as they can. Assist in developing projects that allow them to achieve success one step at a time.
- 8. Teach interactively.** Have students work together, teach one another, and actively participate in their own and their classmates' education. Note: This does not advocate gifted children being peer tutors in the classroom; the gifted student should be challenged as well. Emphasis should be on working together in the classroom. Cluster gifted children together as a table within the regular classroom and utilize advanced materials, as well as other suggested resources and modification, to meet their exceptional needs.
- 9. Explore many points of view about contemporary topics and allow opportunity to analyze and evaluate material.** Allow open forums and debates in the classroom about controversial issues. As a teacher of gifted children, take an active stance. Be an advocate for gifted students. Utilize specialized training to



ensure the ability to meet the needs of gifted students. Share personal interests with all students, to enrich and expand their world.

**10. Consider team teaching, collaboration, and consultation with other teachers.** Use the knowledge, skills, and support of other educators or professionals in the schools.

**11. Provide opportunities for gifted children to interact with other gifted children across grade levels and schools through competitions or collaborative projects.**

**12. Encourage gifted students to participate in extracurricular activities that involve academic skills.** Examples include math and debate teams. Because gifted children are often natural leaders, it is important to invite them to use their talents and abilities in beneficial, rather than disruptive, manners. For example, encourage the gifted student to run for office in student council, or another extracurricular activity in which he/she is involved.

**13. Involve students in academic contests.** Gifted students tend to be competitive by nature. Therefore, participating in regional and national competitions such as spelling bees, science fairs, and essay competitions will be fun challenges.

**14. Allow gifted children to create and publish a class newspaper to distribute.** This consists of assisting students in understanding their special capabilities and the training necessary for them to reach their full potential.

**15. Set individual goals.** Help guide students in creating their own goals and set goals that are specific, measurable, aggressive, realistic, and within a reasonable time frame. Be sure not to place expectations that are too high or too low.

**16. Consider parental input about the education of their gifted children.** Practical Recommendations and Interventions: Gifted Students 3

**17. Always remember that gifted children are similar in many ways to the average child in the classroom.** Do not place unrealistic expectations and pressures on gifted children.

**18. Address the counseling needs of each student to support emotional growth, as needed.** Some gifted students have issues regarding anger, boredom, bullying, delinquency, isolation, depression, peer relations, perfectionism, dropping out of school, stress, frustration, and underachievement. About 20-25% of gifted students have emotional difficulties.

**19. Remember that gifted children may not excel in all areas.** They may be ahead of other students in some areas and behind in some areas. Become aware of the strengths and weaknesses of the children in your class.

**20. Do not assign extra work to gifted children who finish assignments early.** This is unfair and frustrating to them. Simply offering more of the same only restricts further learning. Instead, allow those children to work on independent projects or other unfinished work when they finish an assignment early.

**21. If a child attends resource rooms, communicate with the specialist for suggestions on how to enrich daily class work.** Avoid penalizing the child for special class attendance. Have another child in the regular classroom take notes and assignments for him/her.

**22. Provide plenty of opportunities for gifted children and average children to engage in social activities.** Some gifted children may need help in developing social skills.

**23. Try to find the joy and uniqueness in each child.** Children may exhibit their gifts on non-typical levels, rather than in general intellectual aptitude of specific academic abilities. Keep in mind that every child will have different needs.

**24. Organize resources in order to free yourself to work with individual children and give the children greater control of the learning situation.** Supplementary books and learning tools, community resources, and the use of community members with specific skills as mentors can be helpful.

**25. Establish and maintain a warm, accepting classroom.** Teach your classroom community to embrace diversity and honor differences. Provide an environment in which the child can demonstrate his or her potential or aptitude to learn and perform. Teachers should strive to establish a noncompetitive,

individualized, and open classroom, which allows all students to advance at their own rate of learning.

**26. Remember that implementing some of these strategies will benefit all of the children in the classroom, not just the gifted ones.** Practical Recommendations and Interventions: Gifted Students 4

## **5.8 Potential Challenges**

Giftedness has the potential to enrich a child's life in many ways. However, some of the characteristics and personality traits common to gifted children can also create a variety of problems for the children, as well as for their parents, and their teachers. Being aware of these potential problems can enable parents and others who work with these children to be on the lookout for ways to help them.

Gifted children often demonstrate high levels of independent thinking. This trait can lead children to question authority in ways that create disciplinary problems.

Some gifted children have very high levels of natural curiosity and energy, which may result in them being labeled as difficult.

Many gifted children would rather work alone than in groups, and in some cases they may not develop adequate social skills.

The long attention span and concentration typical of many gifted children may make it hard for them to readily shift from one activity to another. As a result, the students may miss instructions and other important information being shared because they are intensely absorbed in another task.

Sometimes gifted children develop an unusually wide or narrow range of interests, either of which can pose problems.

Another trait common to gifted children is a heightened degree of emotional sensitivity, which may cause unusually strong reactions to events that would be less traumatic for other children.

Perfectionism is another frequent challenge to the emotional well-being and academic success of gifted children.

Gifted children may operate differently from others; they are likely to be more grownup, they may use big words that other children don't understand. Sometimes gifted children are seen as "bossy" or "the brain," and it is sometimes difficult for gifted students to make friends. As a result, they can be very lonely.

### **Strategies for Workingwith Gifted Students**

There are a variety of approaches that can be used to meet the needs of gifted learners. In the school setting, changes in the following areas may be useful:

#### **Content**

Gifted learners generally absorb materials at a faster pace, work well with abstractions, make learning connections easily, and often have interests more like older students. Therefore, they respond well to a variety of materials presented at a faster pace and at higher instructional levels than other students their age. Strategies to provide content at an appropriate learning levelinclude accelerated learning, learning more materials in a shorter period of time, more independent study opportunities, and the use of learning or study centers.

#### **Process**

To engage gifted students, their learning will ideally involve skills such as higher-level thinking, creative thinking, problem solving, and research skills. Including these skills in their learning will help keep gifted students challenged and motivated.

#### **Products**

Some examples of ways a student can show their learning are through models, diagrams, letters, videos, debates, displays, multimedia presentations, sculptures, and dramatizations.

#### **Learning Environment**

Changes in the learning environment to assist gifted students can include providing physical, social, and emotional stimuli and support, as well as involving the study of famous people, bibliotherapy, and groupings for instruction. Gifted

students can also be helped by people around them in their homes, schools, and communities. Some of the strategies to try include those outlined below.

Gifted students require a great deal of understanding. Sometimes it is difficult for gifted students to be different from their peers. At times, they may feel that they do not fit in, and they may feel isolated. Showing gifted children that you understand their feelings is important.

Support is very important. Because they learn differently from their peers, gifted children sometimes have trouble making friends. Because they often know answers quickly, other children sometimes find gifted students "bossy" or "know-it-alls." If gifted children feel lonely, they need support from those around them.

It is crucial that people be aware of potential challenges for gifted children, including the fact that they may often experience learning difficulties or trouble interacting socially.

Gifted children should have access to adequately challenging learning materials and tools. Books, games and toys of the appropriate level are key. It is also useful for gifted children with a special skill or talent to interact with adults who have a similar interest or skill. Stimulation is very useful.

Engaging gifted children in special hobbies, sports, or activities is often helpful. Doing so can keep them from becoming bored and frustrated. It can also help them make friends and build their social skills. Even the number of activities for the children should be kept at a reasonable level, always remembering the need for adequate sleep, rest, and relaxation.

Realistic expectations are the key. Gifted children need to be adequately challenged, but it is also important to not expect too much of them. Some gifted children have particular strengths in some areas, but they may not excel at everything. It is crucial that the children not be put under too much pressure to perform.

## **5.9 THE SCOPE AND PURPOSE OF GIFTED EDUCATION HAVE**

Undergone a number of significant changes over the past two decades. The criteria governing which students are identified and labeled as gifted have evolved according to new theories about the nature of intelligence. Educational reform has also had an impact, as schools strive to raise standards and expectations for all students. Charges of elitism and discrimination have forced gifted specialists and advocates to defend their programs. At the same time, such charges have inspired schools to examine the methods they use to identify gifted students— potentially opening up opportunities to a broader spectrum of students. Is the idea of giftedness truly relevant in an educational climate that emphasizes equity and excellence for all students? When exploring this question, it is essential to remember that although some students learn more quickly than others or are ready to take on more challenging content, those students are not more important or more deserving than others. Recognizing these differences simply means acknowledging that students differ from one another. Expecting gifted students to fend for themselves as the class repeats concepts that they have already mastered is just as unfair as forging ahead while some students are still trying to grasp a concept. Unfortunately, many educational traditions make it difficult to address student differences. Teachers, students, and parents share an image of what teaching is supposed to look like: The teacher presents the lessons to the whole class and all students complete the same assignments at the same time. Many educators believe that this has seldom been the best way to promote learning. It has become increasingly ineffective as classrooms become more inclusive and diverse. Consequently, strategies for differentiating instruction are an important part of every teacher's repertoire. It is not a matter of giving gifted students more attention or better resources, only of meeting all students' unique learning needs. Although this publication is primarily concerned with gifted students, the ideas presented here have a much broader application. Most of the strategies are used to create the potential for higher levels of challenge in the classroom. They are not intended to be used exclusively with highability groups, advanced classes, or students identified by the school district. In fact, many of the strategies for teaching gifted students mathematics and science will be appropriate for the whole

class. This is a theme that resounds continuously in this publication and in much of the literature on teaching gifted students.

## **5.10 Evolving Definitions of Giftedness**

### **IN THE PAST, THE CONCEPT OF GIFTEDNESS WAS ASSOCIATED**

Primarily with high IQ. It was assumed that gifted students were born with high intelligence, were identifiable by their high grades and test scores, and were capable of excelling in all areas of school and of life. These assumptions are still prevalent, although they are beginning to change. Cognitive science, developmental psychology, and new understandings of how learning takes place are influencing the way giftedness is defined and conceptualized. It is clear that there are different ways of being gifted rather than a definitive list of gifted qualities.

## **5.11 Theories of Intelligence**

Many of the programs and strategies for teaching gifted students are based on the traditional definition of intelligence. This definition has also influenced the way many people think about education. According to the traditional view, intelligence is a single quality that affects abilities across all domains. It has also been presented as an inherent trait that does not change over time. Researchers are beginning to challenge the traditional definition of intelligence. Two of the most influential and frequently cited theorists are Robert Sternberg and Howard Gardner. Sternberg has developed the "Triarchic" theory of intelligence, suggesting that there are actually three dimensions to intelligence (Sternberg, 1986). "Componential" intelligence consists of mental mechanisms for processing information. "Experiential" intelligence involves dealing with new tasks or situations and the ability to use mental processes automatically. "Contextual" intelligence is the ability to adapt to, select, and shape the environment. Howard Gardner's theory of multiple intelligences is more widely known among educators, possibly because it reflects what teachers know about their students: that there are many different ways of being "smart." Gardner developed his theory by combining studies of the brain with research on the contextual aspects of intelligence. So far, he has identified eight different types of intelligence

(Gardner, 1983; 1999): logical-mathematical, linguistic, visual-spatial, body-kinesthetic, musical, interpersonal, intrapersonal, and naturalistic. Schools usually concentrate on the realms of logical-mathematical and linguistic intelligence. Traditional IQ tests and most other standardized tests also measure these two types of intelligence exclusively. However, this may be beginning to change as teachers become interested in Gardner's theory and attempt to weave all eight intelligences into their teaching. In his book *Outsmarting IQ: The Emerging Science of Learnable Intelligence*, David Perkins synthesizes much of the research and theories of intelligence and groups them into three strands. Neural intelligence is rooted in a biological system and determined by neural efficiency—the brain's physical processes. This is the most traditional view of intelligence. Experiential intelligence involves "know-how" or knowledge of typical patterns or situations. As a result, intelligence is a matter of experience with thinking in particular contexts. Reflective intelligence is based on knowledge of thinking strategies—knowing how to think, how to monitor one's thinking, and how to persist. Perkins suggests that instead of choosing one, all three strands contribute to intelligent behavior (Perkins, 1995). Joseph S. Renzulli, an educational researcher and director of the National Research Center on the Gifted and Talented, has developed a "three-ring" definition of giftedness, which consists of above-average ability, creativity, and task commitment or motivation (Renzulli, 1998). While a few students will demonstrate these behaviors consistently and across the disciplines, other students may demonstrate them in specific activities or interest areas. Renzulli suggests that the most effective approach to educating high-ability students is for teachers to choose content, instruction, and opportunities according to students' learning needs. As the concept of intelligence becomes more fluid and multidimensional, the concept of giftedness also evolves. If intelligence is not a single quality, there cannot be a single definition of giftedness. Schools must become more specific about identifying abilities and areas of strength rather than giving students a generic gifted label (Treffinger & Feldhusen, 1996). If intelligence is not static and can be learned, then giftedness can also be developed. There must be an open system for providing curriculum and instruction appropriate to students' needs, rather than a closed system of labeling and self-contained programs.



## 5.12 Identifying Gifted Students

### GOOD GRADES AND HIGH SCORES ON IQ AND ACHIEVEMENT

Tests are certainly two indications that a student is gifted. However, there are a number of ways beyond grades and test scores that students demonstrate their abilities and strengths. When schools limit their identification efforts to only these traditional measures, there are many unidentified students whose needs will not be acknowledged or addressed. In addition, there are many high-ability students who do not meet state or district requirements for the label “gifted,” but who are capable of exemplary work and who need higher levels of challenge.

One of the most pernicious problems that schools face in identifying gifted students is that African American, Hispanic, and Native American students are underrepresented in gifted programs while white and Asian students are overrepresented (U.S. Department of Education, 1993; Zappia, 1989). In addition, gifted students with limited English proficiency are often overlooked because most tests require oral or written language skills (Cohen, 1990). Ultimately, teachers, school leaders, parents, and students must acknowledge that students from all cultures and backgrounds have the potential to be high ability learners.

Providing instruments and strategies for identifying culturally and linguistically diverse students is beyond the scope of this publication. However, there are a number of materials that focus on these issues. Two of the most thorough resources are *Reducing Disproportionate Representation of Culturally Diverse Students in Special and Gifted Education* (Artiles & Zamora-Durán, 1997) and *Critical Issues in Gifted Education: Defensible Programs for Cultural and Ethnic Minorities* (Maker & Schiever, 1989). Teachers and schools must use multiple sources of data in order to identify gifted students effectively. In addition to grades and test scores, there are a variety of other forms of assessment that provide a richer and more accurate picture of students’ strengths and abilities, such as interviews with students, information from parents, and portfolios of student work (Smutny, Walker, & Meckstroth, 1997).

Teacher observations are often the best source of information for identifying high-ability students. Students who are gifted in mathematics and science may not

excel in other school subjects, and therefore may not be formally identified. Even within mathematics and science disciplines, students' abilities may vary depending on the topic or the activity. Therefore, it is important for all teachers to learn about gifted behaviors and characteristics. Also, teachers who establish relationships with their students are able to use that knowledge to guide instruction, rather than relying on a list of gifted students identified by the district or the school. Some indicators of mathematical and scientific giftedness are included in the sidebar on this page.

It is also important to remember that high ability students may not fit the traditional mold of a "good student." Relying on observations to identify students requires that teachers become aware of any assumptions or stereotypes they may have about who can be gifted. For example, gifted students may have behavior problems. Some students cause disruptions when they are frustrated or unchallenged. Students may ask a lot of questions or generate off-topic discussions. They may take longer to complete assignments when they add details and extend ideas, or they may race through their work, turning in messy papers with careless mistakes. Opportunities for challenge and extended learning must be open to all students whenever possible. This is especially true of advanced classes. If a student is interested in taking a high level class and is willing to put in the extra effort and time required, she should be allowed to demonstrate that she is capable of advanced learning.

### **Indicators of Mathematical Giftedness**

- Unusual curiosity about numbers and mathematical information
- Ability to understand and apply ideas quickly
- High ability to see patterns and think abstractly
- Use of flexible and creative strategies and solutions
- Ability to transfer a mathematical concept to an unfamiliar situation
- Use of analytical, deductive, and inductive reasoning
- Persistence in solving difficult and complex problems (Holton & Gaffney, 1994; Miller, 1990)

### **Indicators of Scientific Giftedness**

- Strong curiosity about objects and environments
- High interest in investigating scientific phenomena
- Tendency to make observations and ask questions
- Ability to make connections between scientific concepts and observed phenomena
- Unusual ability to generate creative and valid explanations
- Interest in collecting, sorting, and classifying objects (Yager, 1989)

### **5.13 CHALLENGE IS ONE OF THE KEY COMPONENTS OF EFFECTIVE**

Curriculum and instruction. Brain research indicates that learning takes place when students' abilities and interests are stimulated by the appropriate level of challenge (Caine & Caine, 1991). This often leads to problems for gifted students: If the content and tasks that have been deemed suitable for their grade level are too easy, they will not be engaged, and as a result, they will not be learning. Brain research provides a physical explanation for students' failure to learn. When tasks are not sufficiently challenging, the brain does not release enough of the chemicals needed for learning: dopamine, noradrenalin, serotonin, and other neurochemicals (Schultz, Dayan, & Montague, 1997, cited in Tomlinson & Kalbfleisch, 1998). Evidence about high-ability students' experiences in school indicates that, typically, they are not being challenged and their learning needs are not being met. Mathematics and science curricula, as they are traditionally taught, are often inappropriate for gifted students because they are highly repetitive and provide little depth (Johnson, Boyce, & Van Tassel-Baska, 1995; Johnson & Sher, 1997). In fact, at the elementary level, a national study found that an average of 35 to 50 percent of the regular curriculum could be eliminated for gifted students (Reis & Purcell, 1993). The National Research Center on the Gifted and Talented has conducted extensive research about the instruction that gifted students receive in the regular classroom. In the Classroom Practices Survey, in which researchers gathered data from a sample of 7,000 educators, teachers reported making only minor modifications, if any, for the gifted students in their classrooms (Archambault et al., 1993). The teachers who did report making adjustments usually did so by assigning more advanced reading materials, providing enrichment worksheets, or asking students to complete extra reports. In the

Classroom Practices Observation Study, researchers found that in 84 percent of classroom activities, gifted students received no differentiation of any kind (Westberg, Archambault, Dobyns, & Slavin, 1993). In spite of the available strategies, it appears that teachers are finding it difficult to meet the needs of gifted learners. There are several possible reasons for this, all of them equally valid and powerful. To begin, schools are organized around the idea that students who are the same age will also have the same level of readiness and ability. In addition, teachers have seldom received training in how to differentiate instruction. They often rely on familiar methods rather than choosing strategies based on the needs of the gifted students (Starko & Schack, 1989). Teachers are beginning to receive more training as mainstreaming becomes more prevalent and schools begin to acknowledge students' diversity, but the tradition of one-size-fits-all instruction is pervasive and strong.

### **5.14 Ability Grouping**

Ability grouping is a complex and often divisive issue in education. It is difficult to deal with such a complicated subject in the limited space this publication allows. However, as teachers strive to implement collaborative learning strategies and to meet the needs of diverse learners, an overview of the various arguments and research about ability grouping seems essential. Before delving into the issue, it is important to define the differences between "tracking" and "ability grouping." Tracking is the practice of sorting students into different classes based on their grades, tests scores, and perceived abilities. Ability grouping refers to groups organized by the teacher within heterogeneous classrooms.

Critics of gifted education and tracking claim that heterogeneous grouping is necessary in order to ensure equal opportunities for all students. Students who get stuck in low-level tracks are deprived of opportunities to develop higher-level skills and study rich content. Tracking practices have also played a part in preserving the stratification of society, which is demonstrated by the overrepresentation of minority and low-socioeconomic students in remedial classes and special education (Oakes, 1990). While they do not support tracking, advocates for high-ability students claim that homogeneous grouping is appropriate at least some of the time in order to meet the needs of gifted students. They worry that a slower pace will fail to challenge students and that these students will miss

opportunities to pursue advanced work. Because of the strong arguments on either side, the ability-grouping issue has generated a great deal of research, much of it inconclusive, about the benefits or weaknesses of heterogeneous and homogeneous grouping. The two most frequently cited studies are meta-analyses conducted by Slavin (1990) and Kulik and Kulik (1992). Both studies found that ability grouping has essentially no effect on student achievement across all ability levels. However, some research on ability grouping does indicate that when instruction and materials are tailored to student ability, grouping has a positive effect on student achievement. The instructional strategies that teachers use with groups have a greater effect on achievement than the actual placement itself (Rogers, 1998). Research on schools with inclusive classrooms shows that differentiated instruction is an essential ingredient for success. In a study of "detracked" schools, Gamoran and Weinstein (1998) found that heterogeneous classes were most effective when teachers used differentiated instruction. "High quality instruction relied on individualization, varied expectations (but at a high level for all students), and complex authentic assignments" (Gamoran & Weinstein, 1998). Ultimately, it is not necessary or realistic to use only one grouping method. Heterogeneous and homogeneous groups can both be effective, depending on the activity and the students. Sometimes, gifted students benefit from the challenge and the extended possibilities of working with other students of similar abilities. Yet they also need to work in heterogeneous groups where they learn from their classmates and have opportunities to deepen their understanding by explaining what they have learned to others. Specialists in gifted education make the following recommendations about grouping students:

- Heterogeneous groups are most appropriate when students are working on open-ended problem-solving tasks or science inquiry activities
- It is also appropriate for students to work in heterogeneous groups when they are discussing concepts that are new to all students
- Homogeneous groups are more appropriate when students are working on skill development or reviewing material that they have already learned
- grouping strategies should be flexible, and students should be allowed to work independently at least occasionally according to their preferences
- Students should have opportunities to select their own groups based on common interests

- All students need to learn the skills of working together before cooperative learning activities will be successful

### 5.15 Providing Challenging Mathematics for All Students

#### IT IS A GRAY AND FOGGY DAY IN LEBANON, OREGON—

Familiar fall weather in the central Willamette Valley. The students at Seven Oak Middle School are unaffected by the gloomy skies as they bustle into Sue Garnier's eighth-grade mathematics classroom. In Garnier's classroom, the walls are filled with pictures from all over the world, as well as postcards, foreign currency, masks, and souvenirs. "I try to find things that the students will look at and wonder, 'What does that have to do with math?' Hopefully, they will be inspired to try to figure it out." Garnier loves to travel, often with students. Her room is full of things that she has collected from various parts of the world. A banner on the wall reads: *Mathematics is the language of creation*. "I try to help my students understand that math is much more than just numbers. *Math happens*, math explains the world. Numbers are just the shorthand for writing math down." Lebanon is a rural town in Oregon's Willamette Valley near Salem. The decline of the timber industry has transformed the town into a bedroom community, but the storefronts at the heart of Main Street seem to have changed very little in the last 50 years. The depressed economy means that the Lebanon Community School District must struggle to make the best of very limited resources. Seven Oak Middle School is one of two middle schools in the district, serving 340 students in sixth, seventh, and eighth grades. At Seven Oak, the mathematics classes are not grouped by ability—a district wide policy. The mathematics classes are also integrated rather than divided into subjects. The teachers combine algebra, geometry, probability, statistics, and other topics whenever possible. Because her classes include students with different ability levels, Garnier has focused her energy on developing strategies for differentiating instruction. "My approach is to offer opportunities for students to explore mathematics to the level that they want to be challenged, to go as deep as they can go. I don't categorize kids as being at just one particular level. What they know and can do may change depending on what we're studying. I look for clues about how they think and what their interests are, and use those to determine the level that they're best suited for."

At the beginning of a unit, Garnier uses a pretest, as well as information from students' discussions and writings, to determine their readiness and areas of strength. "I do receive a list of students every year that the district has identified as talented and gifted. But I rely more on my own observations and what I see in the classroom to guide what types of instruction I give my students." Some students may not be formally identified as gifted, but they are highly motivated. There may be a topic in which they are very strong or that really appeals to them.

Garnier tries to ensure that students are challenged by encouraging them to reason and by asking them higher-level questions. She also provides time for students to ask questions and make choices, and she uses ideas and questions that come up in discussion.

In a typical unit in Garnier's class, the students will start out with an introduction to the topic using the textbook. The series is designed to teach mathematics as an exploratory process. Students work through a series of ideas or steps in order to arrive at a mathematical rule or concept. Students begin with the basic ideas, experimenting with a concept and drawing conclusions. The textbook also provides problems from all different domains and provides many entry points that pull in students' interests.

Today, students are learning about squares and square roots, building an understanding of what a square root really is. The students use their calculators to practice with the new concept. After this exploratory phase, the students use graph paper to draw squares, creating a visual representation of what they did with their calculators.

Garnier provides the students who have a firm grasp of the concept with a different activity. They are using a textbook from a higher grade level to begin exploring rational and irrational numbers. The advanced activity is challenging for the students. One by one, they begin to gather at a table in the back of the room. They discuss the problem, attempting to pool their knowledge. "What is an irrational number?" asks a student. One of his classmates tries to explain: "It's like pi." "What do you mean?" "The number just keeps going," volunteers another.

In a different unit on statistics, students use what they have learned about coordinate grids and data tables to map the ocean floor. Garnier will vary the lesson for students by providing different levels of possible activities. For students who need the concrete ideas to work with and more direction, Garnier will provide students with some data and explain how the students will need to use it to make a map.

Other students may get the concept quickly and be ready to work at a more abstract level. These students may create their own data and identify what part of the ocean it would come from. Or the students might develop a contour map of an area they are familiar with or create a map of a trail they have walked. All the students are learning about taking data and applying it to a physical surface—the same core concept. It is the way in which they go about developing their understanding and the level to which they go that varies. Garnier uses students' own responses to a challenge to guide the level at which students will work. Most students need to work through basic processes, building on past understanding and clarifying what they know. Others grasp the concept quickly and are ready to go into greater depth, or connect to other ideas. Some are only beginning to understand the concept at its most concrete level, and some are in-between.

Garnier's role is to provide opportunities for each level of learning. "Most students fall clearly into one of the three or four levels. For those who could go to the next-highest level, I basically leave it up to them. If they want to challenge themselves, it's there for them. Some students would accept far less than what they're capable of, which results in boredom and apathy. I will direct those students toward a bigger challenge, but even then, it will be their choice as to how far they go with their ability."

Garnier emphasizes that the students are not all going in different directions and working on different projects. There are clusters of students working on different things—usually two or three (sometimes four or five) different levels of the same basic assignment. The most differentiation takes place when students are working on longer-term projects. At other times, everyone is closer to the same page, with less difference between levels.



“Differentiating instruction is difficult. It is not something I feel that I have mastered, because it requires constantly reflecting on what works with my students and what doesn’t.” Garnier notes that one of the most difficult parts of differentiating instruction is actually beginning. “I had the advantage of being pushed off the cliff and being told to fly. The year I was hired, Seven Oak (and the district) had made a decision to move toward heterogeneous math groupings. I just started—I made a lot of false starts, but I am persisting. I’ve also had a lot of really good learning experiences. I didn’t even know in the beginning that what I was trying to do was called differentiation. I was just trying to teach in a way that provided a challenge for all, and still keep the powerful advantages that diversity brings to learning groups.”

## **5.16 Strategies for Teaching Gifted Students in the Inclusive Classroom**

### **ALTHOUGH THERE IS A WIDE RANGE OF LITERATURE ABOUT**

Meeting the needs of gifted students in the regular classroom, there are a number of gaps in the research. Experts in gifted education suggest practices that they use and know to be effective, but there is very little research that formally tests their experience and recommendations. Few studies concentrate on gifted students in the regular classroom, and even fewer examine the effects of instructional strategies on both gifted and non gifted students.

In a review of research on gifted students in the regular classroom, Johnsen and Ryser (1996) describe five overall areas for differentiation: modifying content, allowing for student preferences, altering the pace of instruction, creating a flexible classroom environment, and using specific instructional strategies. The bulk of the research concentrates on instructional strategies that have been linked to improved student achievement and have been shown to increase critical thinking, problem-solving abilities, and creativity. The following have been established as effective strategies (Johnson & Ryser, 1996):

- Posing open-ended questions that require higher-level thinking
- Modeling thinking strategies, such as decision making and evaluation
- Accepting ideas and suggestions from students and expanding on them

- Facilitating original and independent problems and solutions
- Helping students identify rules, principles, and relationships
- Taking time to explain the nature of errors one of the most extensive studies on teaching gifted students in inclusive settings is a survey of classroom practices in schools that have a well established reputation for meeting the needs of gifted students. Westberg and Archambault (1997) compiled case studies of teachers in elementary schools, identifying themes and common approaches to teaching gifted students in regular classroom settings. The following strategies occurred most frequently:
  - Establishing high standards
  - Making curriculum modifications
  - Finding mentors for students
  - Encouraging independent investigations and projects
  - Creating flexible instructional groups

(Westberg & Archambault, 1997) The research on which strategies and methods are appropriate for gifted students only and which ones work well for all students is not conclusive. Many of the strategies established by research and recommended by experts are similar to, if not the same as, recommendations from the national standards documents for mathematics and science (National Council of Teachers of Mathematics [NCTM], 1989; National Research Council [NRC], 1996). As is so often the case, teachers are the most reliable experts. They will need to try the strategies for themselves and use their own judgment in determining how well they work for students.

### **5.17 The Learning Environment**

#### **THE PROCESS OF DIFFERENTIATING INSTRUCTION IS MOST**

Effective in a flexible and supportive learning environment, which encompasses both the physical setting of the classroom and its climate. The teacher sustains a relaxed yet challenging environment by encouraging responsibility and autonomy, supporting students' different needs, and emphasizing students' strengths. In addition, sharing responsibility for the classroom climate with students helps to ensure that it is productive and comfortable for everyone.

## Classroom Organization and Management

The classroom itself must be organized for flexibility and openness. There will be space for students to engage in a variety of activities, both independently and in small groups. Students are free to move as they need to, as long as they remain on task. They are able to leave the classroom in order to go to the library, for example, or to a resource room or computer lab (Feldhusen, 1993). When students work on different content, use different learning strategies, and create different products, the teacher takes on an altered role in the classroom. Presenting the curriculum to students is no longer the teacher's primary focus. Instead, she concentrates on creating and selecting learning opportunities for students, guiding them, and working with them to assess their progress. Giving students choices and allowing them to schedule their activities encourages independence and keeps students engaged (Feldhusen, 1993). It is recommended that students be allowed to choose what they want to work on at least part of the time. Students are still accountable for completing specific activities or demonstrating what they have learned within a certain period of time, but they choose when or how they will work. The following strategies are helpful in organizing and managing the classroom for differentiated instruction:

- Using “anchor activities” that students can complete with little supervision—tasks such as writing journal entries or working on a portfolio—provides time for the teacher to work directly with other students (Feldhusen, 1993; Tomlinson, 1999).
- When students are working on different activities, it will be helpful to have instructions available for easy access. The teacher may want to create assignment cards rather than giving directions orally or writing multiple sets of directions on an overhead (Tomlinson, 1999).
- Teachers will also need to be sure that all students know how to get help when they need it, either by asking another student, going back to the directions, or working on another task until an appropriate moment for asking the teacher (Tomlinson, 1999). A student might serve as “Expert of the Day” when she has shown a deep understanding of the concept or task.
- Involving the students in creating classroom procedures and rules and in organizing their time helps them to build important skills in decision

making, negotiating, and planning. It also ensures that students feel at home and involved in the classroom (Feldhusen, 1993).

### **5.18 What is Differentiated Instruction?**

Differentiated instruction is an approach to teaching that is comprehensive and guides teachers in all aspects of their practice. It does not mean grading gifted students harder than other students or assigning extra work to keep students busy (Tomlinson, 1995). It is a continuous process of learning about students' needs and interests and using that knowledge to guide instruction. Teachers use their knowledge of students to determine how content is presented, what activities are appropriate, and how to guide students in demonstrating what they have learned (Tomlinson, 1999). All of the strategies in the following sections are a part of providing differentiated instruction.

### **5.19 Social and Emotional Climate**

A nonthreatening atmosphere is important for all students, including high ability learners. Gifted students are often perfectionists, and they may place great significance on getting the right answers or completing tasks quickly. They are sometimes outsiders among their classmates because of their unusual abilities, or they may be accustomed to having a higher status than other students in the classroom.

The foundation of a good learning environment is a feeling of safety and acceptance. Teachers help to create this atmosphere by modeling respect and care for all members of the classroom. Emphasizing every student's strengths is another important element of an effective atmosphere for learning. All students need to feel and recognize the value of the abilities and experiences of themselves and others.

Sometimes gifted students feel insecure when they are presented with open-ended inquiry or problem-solving activities. Students may insist that they need procedures spelled out for them so that they can follow directions and "do it the right way." The teacher might remind students that mistakes are an important part

of learning. It is possible to communicate understanding for students' feelings while also being firm about the requirements of the task.

Gifted students may also resist when they are asked to show their work or explain their thinking processes. If they are accustomed to finishing tasks quickly, some students resist what they see as unnecessary work that slows them down. Explain to the students that it is just as important to show how they got an answer as it is to be correct. Using a scoring guide with descriptive criteria helps students understand how their work will be evaluated and articulates high standards.

## **5.20 Supports for Gifted Minority Students**

Although there has recently been a significant increase in research about identifying gifted students from cultural minority groups, there is not yet comparable attention to the challenge of providing support for gifted minority students. All gifted students may experience isolation and pressure to hide their abilities, but minority students tend to feel the weight of these forces to an even greater degree. Gifted minority students report feelings of inferiority, as well as the need to constantly choose between using their talents and fitting in with their peers (Cropper, 1998). Providing students with extra support is especially important in mathematics and science. In these fields, cultural stereotypes have contributed to the underrepresentation of minorities. Although there is not yet a substantial body of published research, there are many suggestions and strategies developed by educators for meeting the needs of gifted minority students:

- Communicate high expectations.
- Be sensitive to the experiences and beliefs of people from different cultural groups. Get to know all students and their cultures. Consider the challenges that students may face in school.
- Continuously and firmly encourage students to go to college. Discuss the necessary coursework, tests, and other preparations with students and parents.
- Create a multicultural learning environment and make sure the curriculum reflects a variety of cultures.
- Help students connect with role models and mentors. Organize peer support groups for students with similar interests and abilities.

- Reach out to parents and family members. Enlist their support in providing encouragement and high expectations.
- Provide students with a variety of learning options. Create or select activities that are engaging, active, and grounded in reality.
- Listen to students' concerns, fears, and beliefs about their experiences and their education.

### **5.21 Support for Gifted Girls**

Gifted female students face many unique challenges and problems that tend to undermine their abilities and potential. Gifted girls do not achieve at expected levels, especially in middle school and high school, and they often do not pursue careers appropriate to their abilities (Badolato, 1998). Researchers have identified a number of reasons for female students' underachievement: gender stereotypes pervasive in society, lack of role models, declining confidence in their abilities, mixed messages and conflicting expectations from teachers and parents, and peer pressure to hide their abilities and intelligence (Smutny & Blocksom, 1990).

More specifically, teachers often have less tolerance for girls who call out answers in class, ask numerous questions, and are confident in their opinions and willing to argue—behaviors that are likely to be accepted as evidence of giftedness in boys (Kerr, 1994). Often girls are socialized in school and at home to be attractive, obedient, caring, agreeable, and submissive. As a result, girls have a tendency to hide their intelligence and downplay their abilities in order to conform to the socially accepted stereotypes of femininity (Ryan, 1999).

To counteract the forces that work against gifted girls' achievement, teachers and parents must become aware of their biases about gender and appropriate behavior for females. It is also important to strike a balance between encouraging girls to pursue nontraditional fields while not devaluing traditional female strengths and interests. Some recommended practices in meeting the needs of gifted girls include:

- Communicate with parents about their daughter's abilities and the importance of mathematics and science for higher education and careers. Encourage them to identify and address sources of gender bias.

- Organize peer support groups for girls. Mathematics and science clubs encourage girls to develop their skills and abilities and help connect them to other girls who share their interests.
- Avoid praising girls for their neatness or behavior. Point out specific examples of their excellent work and achievements. Actively correct them if they attribute their accomplishments exclusively to luck or hard work.
- Provide opportunities for girls to use their leadership abilities.
- Expose students to women in nontraditional careers. Help them to identify and connect with role models and mentors.
- Openly discuss gender stereotypes and the mixed messages that society broadcasts about femininity, intelligence, and achievement.
- Provide a safe environment for girls to share their confusion and fears.
- Actively recruit girls to participate in advanced courses and extracurricular activities related to mathematics, science, and technology.
- Encourage students to research and report on female contributions to mathematics and science.

## 5.22 Differentiating Content

### MAKING MODIFICATIONS TO MATHEMATICS AND SCIENCE

Content is one aspect of in providing challenging learning opportunities. Gifted educators recommend that science curriculum for high-ability students should move at a faster pace and feature less repetition. It should also allow students to delve into important ideas and thought processes (Boyce et al., 1993). In mathematics, students should study advanced content in earlier grade levels (Johnson & Sher, 1997).

Organizing the curriculum around major themes and ideas is one of the first steps in differentiating content. Using broad concepts helps to create opportunities for students to learn and apply integrated and complex ideas (Berger, 1991). Some key themes in mathematics include functions, patterns, scale, rates, and change (Johnson & Sher, 1997). Systems, models, reductionism, and evolution are among the major concepts in science (Van Tassel-Baska, Bailey, Gallagher, & Fetting, 1993). The following publications may be helpful in identifying other major themes and concepts in mathematics and science:

It is important that mathematics and science content focus on more than computation, formulas, and vocabulary. All students benefit from a curriculum that does not focus exclusively on basic skills. A broader focus allows students who may not have strong computation or memorization skills to demonstrate their abilities in abstract reasoning, creativity, and conceptual understanding. There are different methods for encouraging students to move beyond the basic concepts of the mathematics and science curriculum. One recommendation for differentiating content for gifted students is increasing the level of abstractness and complexity (Maker & Nielson, 1996). For example, students might study a concept at the theory level: identifying and testing mathematical or scientific laws or connecting seemingly disparate ideas. Students might learn about or develop complex systems that have many sections and processes. Adding variety to the content that students work with is another important strategy. Students are exposed to new materials, books, tools, and people, which helps to stimulate curiosity and creativity. Gifted students might work on projects in which they investigate the history of an idea or generate formulas or laws from their own observations (Tirosh, 1989). Adding topics that are not part of the regular curriculum can also be effective. For example, in mathematics, students might learn about transformational geometry, topology, number theory, and logic (Wilmot & Thornton, 1989). Bloom's Taxonomy of Educational Objectives can be helpful in designing content for gifted students (Bloom, 1956). Bloom's six levels of knowledge are knowledge, comprehension, application, analysis, synthesis, and evaluation. The final three levels are most appropriate for gifted students and may help teachers to identify ways for students to work with content in more advanced and more challenging ways (Smutny & Blocksom, 1990). Analysis involves using content to classify, compare, contrast, investigate, and deduce information and ideas. Synthesis will require students to use ideas and knowledge to create original work, using it to invent, design, and plan—for example, developing a theory or hypothesis. Evaluation requires students to interpret, verify, criticize, defend, and judge ideas and information.

### **5.23 Curriculum Compacting and Flexible Pacing**

Curriculum compacting is a method of differentiating content for highability learners developed by Renzulli and Reis (1998). There are three basic steps:



pretesting students at the beginning of a unit, eliminating content or skills that students already know, and replacing the skipped content with alternative topics or projects.

In order to plan for curriculum compacting, the teacher analyzes an upcoming unit to determine the key concepts and skills. Next, she selects the best way to identify students who have already met the learning objectives. The choice of pretest will depend on the type of knowledge or skills that need to be assessed. Some options include unit tests, essay questions, brief interviews, and observations (Reis & Renzulli, 1992). Students who demonstrate their proficiency on a pretest will collaborate with the teacher to select alternative activities. Students may use the time to work on independent projects of their own design. Or the teacher might assign an enrichment activity that the class is not yet ready to pursue. The students who complete the activity may wish to act as advisors when the whole class is ready to begin (Smutny et al., 1997).

Sometimes there will be specific areas in which the student is still developing skills. In this case, the teacher might ask the student to rejoin the class at certain points during the unit. Alternatively, the student might complete skill-building activities on her own. The student may also need to join the class for discussions and problem-solving or inquiry activities. Curriculum compacting should be an option for all students in the classroom, not just those labeled "gifted" (Renzulli & Reis, 1998). Students who have strengths in a particular content area or who have studied a topic that they are interested in on their own time will benefit from having an opportunity to pursue other activities. Another strategy for changing the pace of the curriculum is called "Most Difficult First" (Winebrenner, 1992), and it is most appropriate for mathematics. Students are allowed to work on the five most difficult problems instead of completing the whole assignment. If the students are successful, they are allowed free time or are asked to work on an alternative activity (Winebrenner, 1992). Again, this option is available to all students in the class.

Flexible pacing means that students are allowed to work at the level most appropriate to their abilities (Miller, 1990). There are several ways to provide students with suitable options. Advanced students might join higher level classes in mathematics or science. A group of students might move through material at an

accelerated pace. Or high-ability students might be allowed to work independently at their own pace (Daniel, 1989). As they plan for flexible pacing, teachers will probably find it necessary to consult with their colleagues who teach higher grade levels or advanced classes. Their guidance will help to identify the advanced content and skills that students learn. They will also need to be aware of the students who have been working at an accelerated pace when those students join their classes in the future (Conroy, 1993).

### **5.24 Models for Differentiating Content**

The Enrichment Triad Model (Renzulli & Reis, 1986) is intended to guide the development of enrichment activities, but it can also be used as a method for structuring a unit for the whole class. The model consists of three sequential levels of activities that are increasingly challenging and complex. Type One activities are exploratory and expose students to new topics. The primary purpose of these activities is to engage students and spark their interest. Some possible activities include demonstrations, guest speakers, field trips, and exploration through open-ended discovery tasks (Renzulli & Reis, 1986).

Type Two activities are designed to help students learn and develop the information and skills related to the subject of the unit. They will involve such concepts and skills as problem solving, critical thinking, interviewing, analyzing and organizing data, and communicating orally and in writing (Renzulli & Reis, 1986). These skills are often needed for the next level, Type Three activities, which are very challenging and require a high level of creativity and persistence. Students become firsthand inquirers and experimenters, working as if they were professional scientists or mathematicians, and creating authentic products (Renzulli & Reis, 1986).

The Cognitive-Affective Interaction model was designed to help students develop the skills for divergent and creative thinking (Williams, 1986). Williams defines eight factors—four cognitive and four affective—needed for divergent thinking. The four cognitive qualities are fluent thinking, flexible thinking, original thinking, and elaborative thinking. Risk-taking, complexity, curiosity, and imagination are the four affective qualities (Williams, 1986).

Williams also suggests 18 teaching approaches that will encourage creative thinking and that can be used across the disciplines. The following are some of the strategies from the model:

- Present students with paradoxes to analyze and test
- Use analogies to introduce new concepts; ask students to create their own
- Allow students to think about discrepancies in what is known
- Ask provocative questions and provide time for inquiry
- Examine examples of change and the process of change
- Use examples of habit and the results of habit-bound thinking
- Encourage tolerance for ambiguity with open-ended problems
- Encourage students to use their intuition and follow their hunches
- Study creative people and their thinking processes
- Evaluate situations by analyzing possible consequences and implications
- Help students practice creative reading, listening, and writing skills

## 5.25 Knowing Your Students Is the Key

### GINGER REDLINGER TEACHES SCIENCE AND MATHEMATICS

at Inza Wood Middle School in Wilsonville, Oregon, a town in the southern metropolitan area of Portland. Wilsonville is a rapidly growing area, the home to a variety of high-tech companies, including Tektronix, Mentor Graphics, and In Focus. There are approximately 500 sixth-, seventh-, and eighth-grade students at Inza Wood Middle School.

Red linger sees a wide range of abilities and interests in her students. While some are formally identified as being gifted by the school district, she finds that this identification is not as meaningful as her own knowledge of her students. "The most important part of differentiating instruction is getting to know your students. Once you see how different your kids really are, you can't really go back to a single approach." Red linger uses learning styles and multiple intelligences as the basis for differentiating science instruction. "I started out using multiple assessments, providing students with a variety of ways to show what they had learned: taking a test, writing an essay, creating a mural. I learned so much from these assessments that I thought, 'Imagine what would happen if I used multiple

activities throughout a unit.” After finding out how students learn best—writing, drawing pictures, reading, using graphic organizers—Red linger then creates a menu of instructional options.

At the beginning of a unit, Red linger uses a pretest to establish what students already know about the topic area. Pretesting is important because she finds that her students’ abilities often vary from unit to unit—there are not established groups of high-ability or low-ability students. All students have the option of testing out of a unit. “I create a science pretest by looking at the key concepts of a unit and asking myself what the students really need to know.” After the pretest, students can choose from multiple paths and activities, selecting options based on their abilities, interests, and learning styles. Red linger requires students to record their activities in a planner and checks in with them weekly to monitor their learning. Students who test out of a unit can choose alternative activities, including team projects. They use a learning contract to plan their work and record their progress. This year, most of Red linger’s students tend to be either kinesthetic learners or language-based learners. Therefore, the projects they work on are usually based on either writing or building a model. “The students are more engaged and excited about what they are learning,” says Red linger. She emphasizes that it is important that the projects are equal in the amount of work and time that go into them.

## **5.26 Differentiating Processes**

### **Self-Directed Learning**

Independence is often cited as a characteristic of gifted students. But that does not mean all gifted students have the skills for self-directed learning. Students will be at different levels of readiness. If students struggle with making choices or planning their work, it does not mean they are not ready and that they must go back to teacher-directed activities. Students will never be ready unless they have opportunities to learn how to take responsibility for their learning (Pirozzo, 1987).

Self-directed learning is not a single strategy, such as allowing students to choose topics for independent study, but a range of methods. The appropriate strategies will depend on students’ levels of readiness. Some students will be able to choose

their own topics for study or design a final product, while other students will need a list of ideas from which to choose. There are a number of basic skills of independent learning, such as making choices, planning, setting goals, identifying resources, and self-evaluating (Tomlinson, 1993). As students practice and master these skills with guidance from the teacher, they will be able to become increasingly independent. Students who already demonstrate the skills of self-guided learning will benefit from opportunities to pose questions or problems to investigate, decide what activities will further their knowledge, choose products to demonstrate their learning, and monitor their own progress toward their goals (Tomlinson, 1993).

Self-directed learning does not mean that students work in isolation or are not accountable for their learning. The primary goals of self directed learning are for students to be able to: make decisions based on self-knowledge, assume responsibility for completing their work at an acceptable level and in a timely manner, seek and articulate problems and determine a method for solving them, and evaluate their own work. George Betts developed the Autonomous Learner Model to help gifted students develop the skills of independent learning. The model has five stages or dimensions:

- 1. Orientation.** Students develop an understanding of their abilities, skills, interest, and learning styles.
- 2. Enrichment activities.** Students are exposed to a wide range of content areas, including cultural activities and field trips, and discuss their emerging interests.
- 3. Seminars.** Students explore topics of interest in small groups.
- 4. Individual development.** Students learn skills for problem solving, goal setting, creativity, and self-assessment, as well as knowledge about careers and interpersonal skills.
- 5. Indepth study.** Students pursue their individual interests and become producers of knowledge, often conducting original research.

(Betts & Neihart, 1986; Feldhusen, Van Tassel-Baska, & Seely, 1989) One of the central issues of self-directed learning is ensuring that students are learning the knowledge and skills that they will be accountable for, especially with standards and benchmarks in place. One strategy is to use agendas for students, outlining the activities they will be responsible for completing and the skills they will be expected to develop within a certain time frame, usually two or three weeks (Tomlinson, 1999). The student is responsible for deciding when to complete the items on the agenda. The agendas should be adjusted to students' rates of learning and ability levels, but that does not mean that each student in the class must have a tailor-made agenda.

### **5.27 Learning Centers**

Learning centers are a means of enriching and adding variety to the curriculum when they feature advanced materials and activities. Interest-based or enrichment centers can be used to introduce students to a topic or to allow them to pursue challenging activities independently. A teacher might create two centers on the same topic with different types of activities.

In planning learning centers that will challenge gifted students, the first step is to look over the curriculum for possible topics and to take a survey of student interests. The teacher might look for topics that are connected to but not usually included in the curriculum. The activities should be challenging and address students' learning styles and preferences—for example, thought-provoking essay questions, suggestions for experiments, and open-ended problems or projects (Lopez & MacKenzie, 1993). Some teachers organize learning centers around multiple intelligences, especially at the elementary level. These centers provide a range of books, materials, and tools selected to engage students' interests and encourage them to develop their abilities. A mathematics center might include puzzles, dice, games, calculators, blocks, and problem-solving activities. A center for students who are interested in science might have magnets, mirrors, thermometers, magnifying glasses, models, and questions to ponder (Smutny et al., 1997).

Other learning centers are more specific and focused. A learning center about tessellations may be appropriate for a unit in which students are studying

geometry or patterns. The center will have pictures, puzzles, and tiles that all students will find interesting. In addition, the teacher can provide some advanced activities, such as reading and writing about the history or the uses of tessellations, discovering the different types of tessellations and drawing examples, or solving some problems involving translating and transforming tessellations (Cantey, 1988). Students can also create learning centers for their classmates as independent projects. Students should choose a topic they are interested in or knowledgeable about that they would like to share with the other students. They will be responsible for designing the visual display, writing materials, creating activities, and gathering resources. When the project is complete, the student can briefly introduce the center to the class.

### **5.28 Differentiating Products**

#### **AN IMPORTANT ASPECT OF TEACHING GIFTED STUDENTS IS**

Helping them create large-scale, complex products (Parke, 1989). Products that require students to stretch their abilities and extend their knowledge provide authentic and challenging learning experiences, as well as meaningful assessments. Gifted education specialists suggest that the products students create should be similar to those created by professionals (Maker & Nielson, 1996). They should address real problems and be intended for real audiences. Whenever possible, the products should be evaluated by experts in the field—for example, college professors, researchers, or other professionals (Tomlinson, 1995).

In addition, students should be allowed to choose products that will enable them to use their strengths as they demonstrate their learning. Products that fit a student's learning style and preference will be more effective than requiring all students to complete a test. For example, students might wrap up a science unit by creating a product for "publication" that will communicate what they have learned, such as news articles, technical reports, letters, or drawings based on their findings from an inquiry activity (Bull, 1993).

## 5.29 Summary

Presented in this publication will be effective for all students in the classroom. This idea is essential in providing opportunities for all students to learn challenging mathematics and science and to demonstrate their strengths and talents. Differentiating instruction is a challenging process. Teachers will need both time and support as they adapt the strategies according to their students and their own teaching styles. The following pages include resources that teachers may find helpful for meeting the needs of gifted students in mathematics and science.

## 5.30 References

Callahan, C. (1997). Giftedness. In G.G. Bear & K.M. Minke (Eds.), *Children's needs II: Development, problems, and alternatives*. Bethesda, MD: National Association of School Psychologists.

*Designing & developing programs for gifted students*. (2003). Thousand Oaks, CA: Corwin Press.

*Handbook of gifted education*. (2003). Boston, MA: Allyn & Bacon.

Henage, D. (1990). *The Gifted Intervention Manual*. Columbia, MO: Hawthorne.

Heward, W.L. (2009). *Exceptional Children: An Introduction to Special Education (9<sup>th</sup> ed.)*. New Jersey: Pearson.

Taylor, S. (2003). *Your top students: Classroom strategies that meet the needs of the gifted*. Portland, ME: Stenhouse Publishing.

Winner, E. (1996). *Gifted children: myths and realities*. New York: Basic Books.

[www.canteach.ca/links/linkgifted.html](http://www.canteach.ca/links/linkgifted.html): Challenging Gifted Students in Regular Classrooms.

[www.nagc.org](http://www.nagc.org): National Association for Gifted Students: Supporting the needs of high potential learners.



[www.nwrel.org/msec/just\\_good/9/ch4.html](http://www.nwrel.org/msec/just_good/9/ch4.html): Strategies for Teaching Gifted Students in the Inclusion Classroom.

[www.teachersfirst.com/gifted.shtml](http://www.teachersfirst.com/gifted.shtml): Working with Gifted and Talented Students.

**Block 4: Inclusive Academic Instructions**

Unit 1:

Universal Design for Learning: Multiple Means of Access, Expression, Engagement & Assessment

Unit 2:

Co-Teaching Methods: One Teach One Assist, Station-Teaching, Parallel Teaching, Alternate Teaching & Team Teaching

Unit 3:

Differentiated Instructions: Content, Process & Product

Unit 4:

Peer Mediated Instructions: Class Wide Peer Tutoring, Peer Assisted Learning Strategies

Unit 5:

ICT for Instructions

## UNIT 1

### **Universal Design for Learning: Multiple Means of Access, Expression, Engagement & Assessment**

#### Content

#### 1.1 Introduction

#### 1.2 Basic Principles of Universal Design for Learning

1.3 Importance of Planning From a Universal Design for Learning Framework for Instruction and Assessment for Students with Diverse Needs: Historical, Legal, and Policy Foundations of Universal Design for Learning

#### 1.4 Components of the Innovation Configuration

1.5 Understand how the Universal Design for learning framework can reduce barriers to learning and support high expectations for learning.

1.6 Understand how the four curricular pillars of Universal Design for learning implementation (i.e., goals, instruction, materials, and assessment) are applied in different instructional contexts.

1.7 Understand the three principles of Universal Design for Learning framework and how they apply to instructional planning, instruction, and environments that support learning.

1.8 Understand how the nine Universal Design for Learning guidelines and accompanying checkpoints can be used to create instructional environments that support learning.

1.9 Proactively plan instruction using the Universal Design for Learning three principles, nine guidelines, and accompanying checkpoints.

1.10 Create and evaluate learning environments that align with the Universal Design for learning framework.

1.11 Identify and strategically use materials, curricula, and technologies that align instruction with the Universal Design for learning framework.

1.12 Use progress monitoring and data-based decision making to inform instruction and student learning in order to provide timely mastery-oriented feedback.

1.13 Strategically integrate evidence-based practices into Universal Design for Learning planning, teaching, and assessment.

1.14 Summary

1.15 References

## **1.1 Introduction**

This paper features an innovation configuration (IC) matrix that can guide teacher preparation professionals in the development of appropriate Universal Design for Learning (UDL) content. This matrix appears in the Appendix.

An IC is a tool that identifies and describes the major components of a practice or innovation. With the implementation of any innovation comes a continuum of configurations of implementation from non-use to the ideal. ICs are organized around two dimensions: essential components and degree of implementation (G. E. Hall & Hord, 1987; Roy & Hord, 2004). Essential components of the IC—along with descriptors and examples to guide application of the criteria to course work, standards, and classroom practices—are listed in the rows of the far left column of the matrix. Several levels of implementation are defined in the top row of the matrix. For example, no mention of the essential component is the lowest level of implementation and would receive a score of zero. Increasing levels of implementation receive progressively higher scores.

ICs have been used in the development and implementation of educational innovations for at least 30 years (G. E. Hall & Hord, 2001; G. E. Hall, Loucks,

Rutherford, & Newton, 1975; Hord, Rutherford, Huling-Austin, & Hall, 1987; Roy & Hord, 2004). Experts studying educational change in a national research center originally developed these tools, which are used for professional development (PD) in the Concerns-Based Adoption Model (CBAM). The tools have also been used for program evaluation (G. E. Hall & Hord, 2001; Roy & Hord, 2004).

Use of this tool to evaluate course syllabi can help teacher preparation leaders ensure that they emphasize proactive, preventative approaches instead of exclusive reliance on behavior reduction strategies. The IC included in the Appendix of this paper is designed for teacher preparation programs, although it can be modified as an observation tool for PD purposes.

The Collaboration for Effective Educator, Development, Accountability, and Reform (CEEDAR) Center ICs are extensions of the seven ICs originally created by the National Comprehensive Center for Teacher Quality (NCCTQ). NCCTQ professionals wrote the above description.

UDL is an instructional planning and delivery framework intended to increase meaningful access and reduce barriers to learning for students with diverse learning needs, including, but not limited to, students with disabilities, English language learners, and those from diverse cultural and socioeconomic backgrounds. Educational researchers, policymakers, and practitioners have embraced this instructional framework for meeting the needs of an increasingly diverse student population. The purpose of this IC was to provide recommendations for embedding UDL in general and special education pre-service teacher preparation programs and including this content in PD for in-service teachers. It is important to note that when we describe UDL, we are not doing so for a specific population of learners; rather, the point of UDL is to meet the needs of the widest range of learners while acknowledging that there will always be students who require individualization related to areas such as explicit strategy instruction, assistive technology (AT), and modifications to the curriculum. However, when teachers use the UDL framework to proactively plan for student diversity, the need for individualization decreases.

This IC configuration broadly focuses on UDL implementation and practical recommendations rather than on the evidence-based practices (EBPs) because UDL should be considered a framework in which EBPs are embedded. When teachers implement instruction using the UDL framework, they make choices regarding how to deliver EBPs within their instruction in a manner consistent with UDL. Consequently, UDL looks different in different settings and results in different implementation models. However, the UDL principles, guidelines, and checkpoints include a wealth of research available through the National Center on Universal Design for learning (2012) website (<http://www.udlcenter.org/aboutudl/udlguidelines>). This website provides citations directly tied to each of the UDL-related principles, guidelines, and checkpoints that we have addressed in this IC.

## **1.2 Basic Principles of Universal Design for Learning**

The basis of UDL lies in the conviction that teachers and curriculum developers should identify and ameliorate students' learning barriers through effective instructional planning focused on engagement, flexible use of materials, and meaningfully accessible instruction. UDL is based on foundational research within the neurosciences, developmental psychology, and learning differences (Rose & Gravel, 2010). This research has suggested that to accomplish effective instructional planning, teachers should consider how to integrate three principles into their instruction and assessment practices that are based on three interrelated types of brain networks (i.e., recognition, strategic, and affective networks). Considering teaching and learning through these three brain networks provides a framework for planning instruction for diverse learners (T. E. Hall, Meyer, & Rose, 2012). The UDL framework is based on the following three principles:

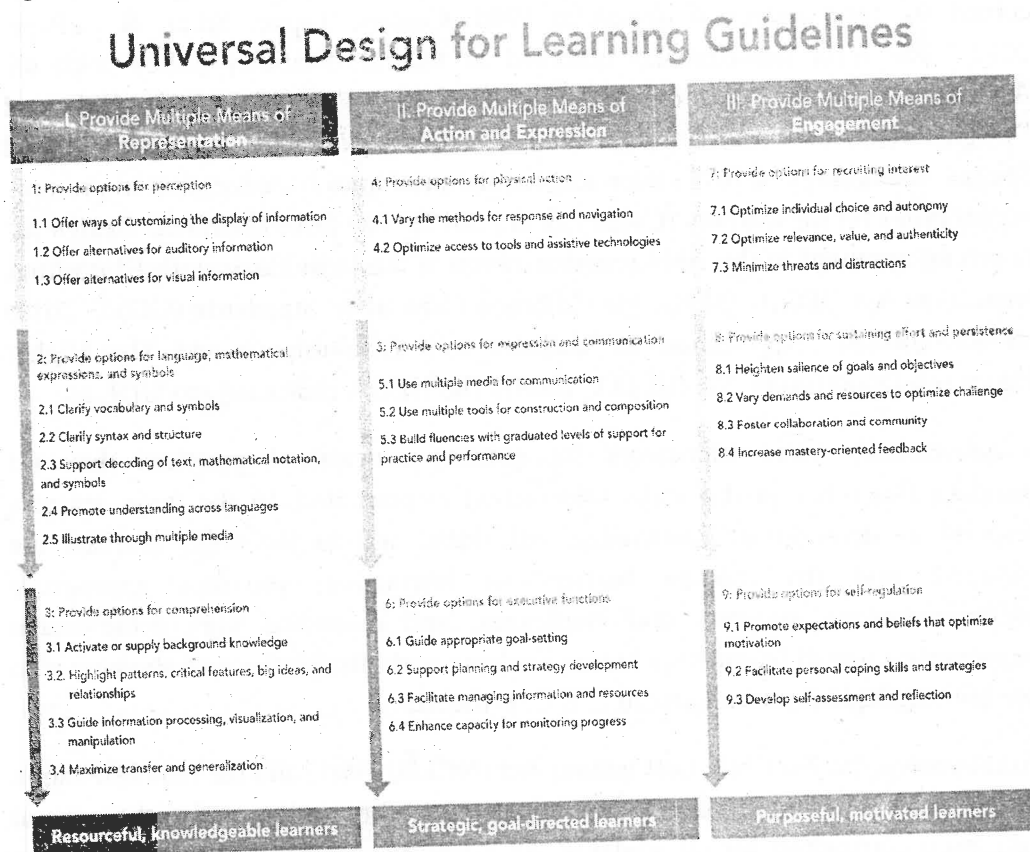
- ☐ Multiple means of representation to support the ways in which we assign meaning to what we see and recognize (i.e., what we learn): Providing content through multiple channels such as discussion, readings, digital texts, and multimedia presentations.
- ☐ Multiple means of action and expression to support strategic ways of learning (i.e., how we learn): Providing opportunities for students to demonstrate their

understanding in multiple ways such as through traditional tests or papers as well as through art, multimedia presentations, and digital recordings.

☐ Multiple means of engagement to support affective learning (i.e., why we learn): Considering how to engage students in learning through activities such as collaborative learning, instructional games and simulations, and real and virtual tours.

These three principles expand into more detailed guidelines and checkpoints that teacher educators and PD providers should explicitly introduce, explain, and practice within teacher preparation programs and PD so that new and continuing general and special education teachers can effectively integrate them into their teaching practices (see Figure 1; CAST, 2011).

Figure 1. Universal Design for Learning principles and checkpoints.



Although UDL was conceptualized in special education, the focus is on use in general education classrooms (Edyburn, 2013); therefore, it is critical for both general and special education teachers to have strong foundations in UDL. Thus, in this IC, we have provided a road map for integrating the three principles, guidelines, and accompanying checkpoints into teacher preparation programs and PD to equip all teachers to work with diverse learners.

### **1.3 Importance of Planning From a Universal Design for Learning Framework for Instruction and Assessment for Students with Diverse Needs: Historical, Legal, and Policy Foundations of Universal Design for Learning**

It is important to consider the foundational elements of UDL, including policy and legislative components. Ron Mace, an architect and disability rights advocate, coined the term *universal design* in 1988 (Courey, Tappe, Siker, & LePage, 2012). The term subsequently emerged in federal disability policy with the Assistive Technology Act of 1998 (U.S.C. § 3002). The Center for Universal Design (CUD) at North Carolina State University and the Center for Applied Special Technology (CAST) later adapted the principles for education to promote accessibility for all learners (Courey et al., 2012). The term *Universal Design for Learning* appeared in the 2004 reauthorization of the Individuals with Disabilities Education Act (IDEA, 2004); the Common Core State Standards (CCSS, 2012) section entitled “Application to Students with Disabilities”; and The Higher Education Opportunity Act (HEOA, 2008). The HEOA characterized UDL as

a scientifically valid framework for guiding educational practices that: (a) provides flexibility in the ways information is presented, in the ways learners respond or demonstrate knowledge and skills, and in the ways learners are engaged; and (b) reduces barriers in instruction, provides appropriate accommodations, supports and challenges, and maintains high achievement expectations for all learners including students with disabilities and students who are limited English proficient. (20 U.S.C. § 1022d)

Additionally, the No Child Left behind Act (NCLB; 2001) and the reauthorization of IDEA in 2004 emphasized increased accountability and access to the general education curriculum for all students. As a result, students with disabilities are



increasingly educated in inclusive settings. Based on this changing educational landscape, it is imperative for both general and special education teacher educators to provide instruction related to UDL. The HEOA (2008), in fact, requires states to describe how teacher educators integrate technology into their instruction in a manner consistent with the UDL framework. Last, the *National Education Technology Plan* reaffirmed this importance by stating that implementation of the three UDL principles can lead to improved outcomes for diverse learners (U.S. Department of Education, 2010), pointing to additional evidence that teacher educators, as well as professional developers, should take a proactive role in preparing future teachers to implement UDL in an effective manner.

#### **1.4 Components of the Innovation Configuration**

This section features the components of the IC matrix as well as recommendations for integrating them within teacher preparation programs and continuing PD within schools. We acknowledge that teacher preparation programs and K-12 instructional settings differ and that any single recommendation may not be appropriate for all settings; therefore, we have provided general descriptions of effective UDL implementation and suggestions that should be adapted to programs and needs.

#### **1.5 Understand how the Universal Design for learning framework can reduce barriers to learning and support high expectations for learning.**

Experts in the field indicate that a general understanding of the UDL framework is a necessary prerequisite for successful UDL implementation (Edyburn, 2010; Hehir, 2009; Spooner, Baker, Harris, Ahlgrim-Delzell, & Browder, 2007). This understanding is especially important as students with disabilities and other struggling learners spend more time within inclusive classrooms due to various policy and best-practice recommendations (Courey et al., 2012).

Teacher educators and professional developers can use the UDL framework to facilitate inclusion by enabling teachers to reduce barriers to learning while maintaining high expectations for all learners. UDL allows teachers to consider

learner differences, preferences, and needs at the onset of planning and instruction rather than after lessons have been developed for typical learners and then modified to address individual students' needs (Edyburn, 2010). Traditional planning and curriculum development assumes that learners can access and engage in learning through a single pathway (e.g., reading the textbook, listening to a teacher explain a concept); however, flexibility is not built into this instruction, and lessons must be altered whenever learners struggle. Subsequently, teachers use the UDL framework to structure their lessons to make them accessible and engaging for all learners. If teachers consider the UDL framework in how they address instructional goals, planning, materials, and progress monitoring, they will meet the needs of a wider range of learners.

There are several methods that teacher educators and professional developers can use to integrate UDL into their programs. One way of introducing learners to the UDL framework is to make use of the tools and resources available online. Some examples are as follows:

☐ The CAST website (<http://cast.org>).

☐ The National Center on Universal Design for Learning (<http://udlcenter.org>).

☐ The IRIS Center UDL module—Universal Design for Learning: Creating a Learning Environment that Challenges and Engages All Students (<http://iris.peabody.vanderbilt.edu/module/udl/>).

These web resources can be assigned for homework, can be used in discussions, and can facilitate conversations about whether pre- and in-service teachers have seen or participated in instruction aligned with the UDL framework. Although these tools provide a general introduction to the UDL framework, including the principles, guidelines, and checkpoints, teacher educators and professional developers must develop purposeful experiences in which the framework is used to manipulate content, revise instruction, and address environmental barriers in the general and special education setting.

## 1.6 Understand how the four curricular pillars of Universal Design for learning implementation (i.e., goals, instruction, materials, and assessment) are applied in different instructional contexts.

The principles of UDL should be considered alongside thoughtful planning related to the four curricular pillars of UDL: (a) instructional goals, (b) instructional delivery methods, (c) instructional materials, and (d) student assessments. Consideration of these four pillars means that instruction is flexible enough to address the needs of diverse learners (Meyer & Rose, 2005; Rose & Meyer, 2002). Classroom instruction is often based on

❑ unclear goals for learning beyond those established by national and state standards, which are not typically explicitly shared with students;

❑ materials that may or may not be accessible (e.g., written materials presented through textbooks alone); and

❑ assessment practices (e.g., paper-and-pencil tests) that assess learners in one way. In contrast, the UDL framework addresses goals, methods, materials, and assessments in a flexible manner, which makes instructional content both physically and intellectually more accessible (Meo, 2008). Rose and Meyer (2002) provided the following guidelines:

❑ Instructional goals address learning outcomes for all learners. For example, teachers have clearly defined goals that maintain high expectations for all learners, but the goals are differentiated to be appropriate for a wide range of learners.

❑ A variety of methods and materials are used in instruction that provides flexibility to address the needs of all learners. For example, teachers make use of multimedia materials, e-text, and other resources that support learning within their instruction.

❑ The assessments used to evaluate student learning are flexible enough to allow students to demonstrate their learning in an accurate manner not hindered by their disabilities. For example, if a student has difficulty with written expression, a paper-and-pencil assessment requiring written expression will not assess subject understanding.

Although these curricular processes may be taught within teacher preparation programs, they are not often taught in a manner that focuses on flexibility and student diversity. Consequently, it is important for teacher educators and professional developers to embed these curricular pillars in their instruction of UDL and provide examples across grade levels and content areas because UDL-based instruction will look different across instructional contexts; this typically occurs because each content area has its own disciplinary mode of thinking and its own text structures and discourse. For example, Curry, Cohen, and Lightbody (2006) explained how the UDL framework was applied to scientific inquiry and described how teachers used tools such as visual content mapping and accessible laboratory and field equipment to ensure that standards-based inquiry learning was planned and implemented in a flexible and accessible manner. In another example, Bouck, Courtad, Heutsche, Okolo, and Englert (2009) described how UDL was integrated into social studies through a web-based curriculum called the Virtual History Museum (VHM) with multiple means of accessing and interacting with historical, geographical, and cultural materials.

Just as Curry and colleagues (2006) and Bouck and colleagues (2009) described how UDL uniquely applies within the context of science inquiry-based and social studies learning, teachers must apply the four curricular pillars of UDL differently in different content areas. Therefore, it is important for teacher educators and professional developers to provide a range of examples of UDL implementation so that teachers can begin to understand general ways of understanding instructional goals, methods, materials, and assessments within a UDL framework and how these are applied in different educational contexts.

### **1.7 Understand the three principles of Universal Design for Learning framework and how they apply to instructional planning, instruction, and environments that support learning.**

Teacher educators and professional developers must be thoughtful and purposeful in their instruction of the three principles of the UDL framework. As previously mentioned, the three principles focus on multiple means of representation, action and expression, and engagement.

Although teachers must be able to identify and define the three principles, teacher educators and professional developers must ensure that this understanding can be applied and generalized to content, planning for instruction, instruction, and the educational environment in which growth and development are expected. While considering the general nature of the three principles, one would expect that these conceptual ideas would be taught in teacher preparation programs (Smith, Robb, West, & Tyler, 2010). However, knowing the definition is one thing; recognizing how it applies to instruction, understanding the steps for implementation, and appreciating why and when to apply the framework requires a deeper understanding. Therefore, teacher educators and professional developers must embed these principles into their instruction, required experiences, activities, and assignments across teacher education course work and PD experiences. By expecting pre- and in-service teachers to consider what these principles mean to content construction and classroom instruction, understanding and implementation of UDL will be enhanced. For example, the three principles can be embedded within content development dependent on pre- and in-service teachers' areas of expertise (e.g., reading instruction, mathematics, behavior, science). Preparation for the elementary, middle, or secondary instructional environment could then be used via the UDL principles to identify potential barriers for struggling learners and those with disabilities. Suggested solutions could also be delivered using these same principles.

To contextualize this information, consider a fourth-grade science classroom. Although the content will differ, it is likely that the foundational knowledge will begin with required reading. Expression of student understanding often includes written science reports. Finally, teacher-directed presentations and experiments within a traditional desk-and-chair environment will be featured.

Nelson (2013) explained how the UDL principles are applied to the planning, content identification, and instructional process so that teachers can identify barriers and then use tools to ensure that instruction is flexible and accessible. Consider the potential challenges in science instruction through the following three principles:

☐ **Representation:** Foundational reading requires skills in reading for vocabulary, reading fluency, and reading comprehension. Students often struggle with print in

identifying critical information and the main idea and structuring the foundational knowledge for subsequent learning. An initial barrier is the printed text and the expectation of a specific reading ability. As a result, subsequent instruction will be negatively affected (Edyburn, 2010).

☐ **Demonstration:** Science reports present challenges in accessibility and flexibility regarding students' abilities to express understanding. Writing (e.g., mechanics, grammar, organization) can quickly become a barrier.

☐ **Engagement:** Lectures and structured group experiments often present barriers in promoting student engagement, self-discovery, and empowering students in the learning process.

It is important that pre- and in-service teachers identify barriers associated with content, planning for and delivery of instruction, and the environmental constraints of the classroom. The UDL principles foster the identification of these barriers as well as the purposeful planning for accessible and flexible content and instruction. Likewise, embedding the three principles into content planning and instruction affords teachers an understanding of the application of the UDL framework. Consider the application of these principals in a science classroom:

☐ **Representation:** A variety of materials and modes of information develop foundational knowledge. Visual scaffolds, audio, embedded supports, video, illustrations, animations, interactive webs, or similar components contextualize the content for the learner.

☐ **Action and Expression:** Opportunities such as illustrations, storyboards, presentations, multimedia, and similar elements demonstrate understanding in an appropriate manner.

☐ **Engagement:** Methods to promote engagement and interaction integrate with the learning experience and the instruction process. Interactive games and active learning allow for learner self-determination and activities that enable students to develop social capital.

A mature understanding of the UDL principles enables teachers to appreciate the complexity of the UDL framework while comprehending the complexity and

significant barriers associated with typical content, instruction, and the environmental constraints of the K-12 classroom. Standards-based content often assumes that there is a typical student who is the primary audience for the content and subsequent instruction. Furthermore, the primary pathway for learning and assessment is often the foundation for most instructional planning. By embedding the UDL principles into teacher education course work and ongoing PD, the fallacy of the single pathway, the barriers that content and instruction often present to struggling learners and those with disabilities, and the critical elements of the derived solutions can be thoroughly understood by teachers.

### **1.8 Understand how the nine Universal Design for Learning guidelines and accompanying checkpoints can be used to create instructional environments that support learning.**

The next step in using the UDL framework to create instructional environments is to understand the UDL guidelines. These guidelines further articulate the UDL framework and offer a path or strategy to reduce barriers and optimize levels of challenges and supports from the beginning (Rose & Meyer, 2002). Teacher educators must infuse the UDL guidelines, the organization of the guidelines, and the connected checkpoints into teacher preparation experiences. As Figure 1 illustrates, the guidelines offer depth to the three principles and a road map to reduce barriers and strategically plan lessons and units of study or curricula for all learners. Each of these guidelines further defines the three principles of UDL, and the corresponding checkpoints clarify and illustrate the guideline and the respective principle. Using these guidelines, teachers can quickly identify barriers common to curricula (i.e., goals, methods, materials, and assessments). Aligning the UDL principles and guidelines to the instructional content (e.g., reading, science, and mathematics) provides teachers with a framework to determine which content-specific standard is required by all students, which parts are applicable to most students, and which areas are relevant for enrichment for some students. If teachers understand and appreciate what all students must know about to a curriculum standard (e.g., CCSS), then they can consider the UDL framework and its application to this content.

It is important to note that if teachers are not able to determine what is primary or critical for all learners within the content, they will likely struggle with various

goals and levels of complexity, thus limiting the flexibility of instruction. Therefore, it is important for teacher educators and professional developers to emphasize that special education teacher must collaborate with general education content experts to identify critical content, and if they are not comfortable with the content, they should, in time, gain some of the content expertise.

While introducing the checkpoints, teacher educators and professional developers should consider two primary tools (see <http://www.udlcenter.org/aboutudl/udlguidelines/>) provided by the National Center on Universal Design for learning (2012). These tools structure the guidelines and corresponding checkpoints under the three respective principles so that teachers can use the guidelines and the basic elements of UDL to improve planning and the subsequent instructional experiences of students. The checkpoints guide teachers through an understanding of the principles and guidelines that extends beyond a definition to support the implementation of UDL. For example, the National Center on Universal Design for Learning defines the checkpoints; explains the potential barriers and how the principles and guidelines address content and instructional limitations; and offers examples and links to resources, giving teachers solutions and tools for subsequent implementation.

### **1.9 Proactively plan instruction using the Universal Design for Learning three principles, nine guidelines, and accompanying checkpoints.**

Before teachers can begin to learn about UDL implementation, they must first understand how to implement the three UDL principles by using the guidelines and checkpoints as flexible implementation options. There are instructional planning frameworks that can be introduced to new implementers of UDL to help them plan instruction consistent with the UDL framework. One such framework Meo (2008) described is called Planning for All Learners (PAL), which is available in the Resources section of the National Center on Universal Design for Learning (2012) website ([http://www.udlcenter.org/resource\\_library/articles/hs\\_reading](http://www.udlcenter.org/resource_library/articles/hs_reading)). The PAL process offers a practical four-step process for collaboratively implementing UDL: (1)



setting goals, (2) analyzing the current status of the curriculum and classroom, (3) applying the UDL framework to lesson and unit development, and (4) teaching these UDL-aligned lessons and units. This process is intended to be collaborative, and members of the instructional team can rely on each other to gain the information and expertise necessary to effectively implement UDL. The Universal Design for Learning-Implementation and Research Network (UDL-IRN, 2011) offers another framework; it provides teachers with a five-step instructional planning framework based on critical elements of UDL instruction and a backwards design instructional process that includes five steps: (1) establish clear goals, (2) anticipate learner variability, (3) establish measurable outcomes and an assessment plan, (4) establish an instructional sequence of events, and (5) reflect on the instructional process. The UDL-IRN website (<https://jamesbasham.squarespace.com/instructional-process/>) describes in detail these five steps.

Pre- and in-service teachers are often overwhelmed when introduced to a UDL planning framework because unlike rigid curricula and benchmarks, the UDL framework is broad and offers many instructional choices. It is important, therefore, to offer concrete strategies for implementation. Examples that teacher educators and professional developers can use are as follows:

- ▣ Evaluate from a UDL perspective the instruction that pre- or in-service teachers see in their field experiences and instructional settings or specific curricula (e.g., social studies, language arts, science unit). Teachers can reflect on
  - components of that instruction that are consistent with the UDL framework,
  - components of that instruction that are inconsistent with the UDL framework, and
  - recommendations for how they may implement that instruction from a UDL perspective.
- ▣ Design instruction in groups so that different teachers focus on different principles, guidelines, and checkpoints. Teachers can then

- share their lesson ideas and evaluate the different instructional choices within these lesson ideas to reinforce the idea that there are multiple ways to deliver instruction using the UDL framework and
- discuss whether the lesson implementation, when examined as a whole, would meet the needs of specific student case examples so that the students can reflect on how the designed lessons would meet the needs of diverse learners.

### **1.10 Create and evaluate learning environments that align with the Universal Design for learning framework.**

Because instruction occurs across many learning environments, it is important that teacher preparation PD related to UDL address the role of the learning environments (e.g., the classrooms and other instructional areas in which learning takes place). These learning environments contain the technologies, resources, and supports with which students and teachers interact during learning. Teachers should receive opportunities to evaluate from a UDL perspective the physical instructional spaces as well as the resources within these spaces. Can students physically access all the resources within the environment? Is the space conducive to the types of instructional delivery planned through the UDL framework (e.g., physical layout, use of specific technologies)? For example, in a mathematics lesson that makes use of multiple means of representing the concept of a number line, does the physical space have room for various manipulative, online materials that students can access through computers or mobile devices, and a space for students to collaboratively solve problems?

Strategies for helping teachers create and assess learning environments from a UDL perspective are as follows:

- ☑ While teachers learn about environmental or ecological inventories, they can simultaneously evaluate environments from a UDL perspective.
- ☑ While creating or evaluating lesson plans, teachers can include a section devoted to the learning environment so that they learn to consider the environment within their lesson planning processes.

### **1.11 Identify and strategically use materials, curricula, and technologies that align instruction with the Universal Design for learning framework.**

It is widely accepted that many students with disabilities have difficulty accessing instructional curriculum for a wide variety of reasons such as text difficulty (e.g., Mastropieri, Scruggs, & Graetz, 2003; Swanson, Edmonds, Hairrell, Vaughn, & Simmons, 2011) and lack of metacognitive strategies (e.g., Faggella-Luby, Graner, Deshler, & Drew, 2012). It is important that teachers have opportunities to identify and use materials, curricula, and technologies that are accessible and meet the needs of diverse learners. See the Culturally Responsive Teaching IC (Aceves & Orosco, 2014).

UDL implementation research related to accessible materials and curricula focuses on how instructional materials can be used in a flexible manner and altered to meet the needs of individual learners (Abell, 2006). Discussions about UDL and technology often concurrently occur because technology can enhance teaching and learning through the UDL framework due to the power of technology to act as an equalizer, empower students, and encourage independence (Edyburn, 2005). Initial research on the use of technology to support teaching and learning through the UDL framework (e.g., Basham, Meyer, & Perry, 2010; Dalton, Proctor, Uccelli, Mo, & Snow, 2011; Marino et al., 2013) has pointed toward the adaptability and individualization afforded to learning by the flexibility inherent within technologies such as gaming, digital text, text-to-speech software, media-rich experiences, and flexible technology-based assessment systems.

Israel and Marino (2014) discussed integrating technology into teaching and learning, including its use within the UDL framework. Several strategies to provide teachers with experiences that enhance their understanding and use of materials, curricula, and technologies that align with the UDL framework are as follows:

- ☐ Compare and contrast technology and AT within the UDL framework and the role of AT and general instructional technologies within the UDL framework. It is important to stress that although UDL proactively addresses the needs of diverse learners, there will always be students who require individualization from

technology (i.e., AT) and instructional planning perspectives. The distinction between AT and technologies used within the UDL framework is that AT meets the individual needs of a learner with disabilities while general instructional technologies are those designed to be used by any learner who may benefit from their use (Basham, Israel, & Maynard, 2010). Thus, AT use by individual students concurrently occurs alongside UDL-based materials and technologies for all learners.

☐ Emphasize that materials and technologies used within the UDL framework should be considered tools (UDL-IRN, 2011) to enhance curricula and make it more engaging and assessable. Teacher educators should be aware that too often, teachers think that by using technology, they are “doing UDL.” For example, just because a teacher is using Clicker software (i.e., a reading-and-writing-based technology tool) does not mean that the teacher has fully considered the UDL framework. Teacher educators should, therefore, emphasize instruction and pedagogy and the way in which technologies support and enhance teaching and learning rather than simply assuming that the use of technology results in increased access, learning, and engagement.

☐ Assess the degree to which materials and technologies enhance learning, meaningful access, and engagement. While considering these materials and technologies through the lens of UDL, teachers can evaluate whether the materials and technologies are appropriate for the desired learning tasks and outcomes. This should occur through discussion related to lesson planning, lesson evaluation, and general discussion of technology integration as well as throughout instruction related to

☐ Extend technology integration beyond access. Too often, access to content or instruction is deemed effective and aligned with the UDL framework. For example, text-to-speech through services like Bookshare (<https://www.bookshare.org/>) or speech-to-text through applications like Dragon Naturally Speaking (<http://www.nuance.com/>) are highlighted as effective UDL-aligned tools and are showcased as UDL in action. Teacher educators should emphasize that although these tools provide access to content, they do not offer the scaffolds and embedded supports needed for subsequent learning. Thus, access afforded by such technologies is a part of UDL but does not represent the entire

framework. An analogy to present to teachers could be to keep in mind the traditional classroom accessibility efforts via automatic doors, automatic classroom lights, and wider entryways to accommodate wheelchairs; these solutions offer entry into the classroom but do not alter the content or instruction once students are there.

### **1.12 Use progress monitoring and data-based decision making to inform instruction and student learning in order to provide timely mastery-oriented feedback.**

The UDL literature base showcases that there is a complex interaction between progress monitoring, understanding the interplay between student performance and UDL-based instruction and environmental factors, and the ways in which teachers provide feedback to their students. Consequently, it is important for teacher educators to consider how to embed experiences related to progress monitoring, data-based decision making, and mastery-oriented feedback within the UDL framework.

The UDL framework relies heavily on general literature related to progress monitoring, and there is a great deal of support for the effectiveness of timely progress monitoring unrelated to UDL (e.g., Ardoin, Witt, Connell, & Keonig, 2005; Fuchs, Fuchs, Hamlett, & Allinder, 1991; Stecker, Fuchs, & Fuchs, 2005; Stecker, Lembke, & Foegen, 2008). All of this literature has pointed to the need to include timely progress monitoring as part of instruction for students with disabilities and struggling learners.

Edyburn (2010) and Basham, Israel, Graden, Poth, and Winston (2010) provided examples of how the UDL literature relies on this research in discussions about the relationship between data-based decision making based on timely progress monitoring and the UDL framework. Edyburn (2010) explained that the need for data-based decision making is a critical aspect of teaching through the UDL framework. Basham, Israel, Graden, and colleagues (2010) described how multi-tiered systems of supports (MTSS) should have UDL embedded throughout the tiers of instruction with all students receiving effective core instruction that is planned and implemented through the UDL framework in Tier 1 and then should

have progressively more individualized and intensive instruction based on timely progress monitoring as students require increased levels of support.

Because teacher educators already address progress monitoring and data-based decision making, doing so within the context of UDL would be a natural fit. This should be done with both student- and environmental-level data as part of evaluating the instructional environment. Although student-level progress monitoring data are typically gathered, students' learning environments are not assessed to the same degree.

To support the implementation of UDL, teacher educators and professional developers should provide experiences that allow teachers to consider which elements of the learning environment support or impede learning. While collecting student-level data, teachers should also consider ways of providing feedback to students in a manner that guides students toward success. In this way, teachers will begin to see the relationship between assessment practices and students' goals, motivation, and performance. This is important because research has revealed that providing students with feedback on their learning and performance helps them persevere, makes them aware of how their effort translates into success, and improves their attitudes about themselves as learners. When teachers focus on providing mastery-oriented feedback, students are more likely to invest in the learning process for the sake of learning, and they see increases in self-efficacy, persistence, and self-regulation (Kaplan & Maehr, 2007; Schunk & Cox, 1986; Zimmerman, 1990).

### **1.13 Strategically integrate evidence-based practices into Universal Design for Learning planning, teaching, and assessment.**

As previously mentioned, UDL is not considered an EBP, but it provides an instructional framework in which EBPs should be embedded. Therefore, as teachers start to understand how the UDL framework meets the needs of diverse learners, it is critical to help them understand how to embed effective instruction within the UDL framework. As they learn about different EBPs, therefore, teachers should have opportunities to see how these practices fit within the UDL framework. Opportunities are as follows:

☐ While teaching about different EBPs, provide examples of how students would be taught within the UDL framework. For example, while teaching about mathematics practices that provide opportunities for students to have concrete examples of mathematical concepts, illustrate how to provide multiple means of representation using manipulatives, virtual manipulatives, and opportunities to access information through online resources. While teaching about instructional strategies in writing or reading that make use of modeling, guided practice, independent practice, and generalization, illustrate how students can integrate different means of expressing their understanding beyond paper-and-pencil assessments, gain access to technologies to support understanding, and monitor their progress.

☐ While teaching about implementing EBPs, discuss the EBPs by filtering them through the UDL framework, using the guidelines and checkpoints to identify additional tools that can maximize the impact of the intervention and potentially extend its usefulness to a larger set of learners.

### **1.14 Summary**

This UDL IC (see Appendix) was created to offer practical recommendations intended to assist and guide general and special education teacher preparation programs as both general and special education teachers instruct students with diverse needs, including students with disabilities. This assistance and guidance will better prepare teachers to effectively instruct the range of learners in their classrooms.

### **1.15 References**

Abell, M. (2006). Individualizing learning using intelligent technology and universally

designed curriculum. *Journal of Technology, Learning, and Assessment*, 5(3). Retrieved from <http://www.jtla.org>

Aceves, T. C., & Orosco, M. J. (2014). *Culturally responsive teaching* (Document No. IC-2). Retrieved from University of Florida, Collaboration for Effective

Educator, Development, Accountability, and Reform Center website:  
<http://cedar.education.ufl.edu/tools/innovation-configurations/>

Ardoin, S. P., Witt, J. C., Connell, J. E., & Koenig, J. L. (2005). Application of a three-tiered

response to intervention model for instructional planning, decision making, and the identification of children in need of services. *Journal of Psychoeducational Assessment*, 23, 362-380. doi:10.1177/073428290502300405

Assistive Technology Act of 1998, 29 U.S.C. § 3002 (2004).

Basham, J. D., Israel, M., Graden, J., Poth, R., & Winston, M. (2010). A comprehensive approach to RtI: Embedding Universal Design for Learning and technology. *Learning Disability Quarterly*, 33(4), 243-255.

Basham, J. D., Israel, M., & Maynard, K. (2010). Developing an ecological model for STEM education: Operationalizing STEM for all. *Journal of Special Education Technology*, 25(3), 9-19.

Basham, J. D., Meyer, H., & Perry, E. (2010). The design and application of the digital backpack. *Journal of Research on Technology in Education*, 42, 339-359. doi:10.1080/15391523.2010.10782555

Bouck, E. C., Courtad, C. A., Heutsche, A., Okolo, C. M., & Englert, C. S. (2009). The virtual history museum: A universally designed approach to social studies instruction. *Teaching Exceptional Children*, 42(2), 14-20.

Center for Applied Special Technology (CAST). (2011). Universal Design for Learning guidelines (Version 2.0). Wakefield, MA: Author. Retrieved from <http://www.udlcenter.org/aboutudl/udlguidelines>

Common Core State Standards. (2012). Application to students with disabilities. Retrieved from <http://www.corestandards.org/assets/application-to-students-with-disabilities.pdf>

Courey, S. J., Tappe, P., Siker, J., & LePage, P. (2012). Improved lesson planning with Universal



Design for Learning (UDL). *Teacher Education and Special Education*, 20, 1-21.  
doi:10.1177/0888406412446178

Curry, C., Cohen, L., & Lightbody, N. (2006). Universal design in science learning. *Science Teacher*, 73(3), 32-37.

Dalton, B., Proctor, C. P., Uccelli, P., Mo, E., & Snow, C. E. (2011). Designing for diversity: The role of reading strategies and interactive vocabulary in a digital reading environment for fifth-grade monolingual English and bilingual students. *Journal of Literacy Research*, 43, 68-100. doi:10.1177/1086296X10397872

Edyburn, D. L. (2005). Assistive technology and students with mild disabilities: From Consideration to outcome measurement. In D. L. Edyburn, K. Higgins, & R. Boone (Eds.), *Handbook of special education technology research and practice*(pp. 239-270). Whitefish Bay, WI: Knowledge by Design.

Edyburn, D. L. (2010). Would you recognize Universal Design for Learning if you saw it? Ten propositions for new directions for the second decade of UDL. *Learning Disability Quarterly*, 33, 33-41.

Edyburn, D. L. (2013). Critical issues in advancing the special education technology evidence base. *Exceptional Children*, 80(1), 7-24.

Faggella-Luby, M. N., Graner, P. S., Deshler, D. D., & Drew, S. V. (2012). Building a house on sand: Why disciplinary literacy is not sufficient to replace general strategies for adolescent learners who struggle. *Topics in Language Disorders*, 32(1), 69-84. doi:10.1097/TLD.0b013e318245618e

Fuchs, L. S., Fuchs, D., Hamlett, C. L., & Allinder, R. M. (1991). Effects of expert system

advice within curriculum-based measurement on teacher planning and student achievement in spelling. *School Psychology Review*, 20, 49-66.

Hall, G. E., & Hord, S. M. (1987). *Change in schools: Facilitating the process*. Albany, NY: State University of New York Press.

- Hall, G. E., & Hord, S. M. (2001). *Implementing change: Patterns, principles, and potholes*. Boston, MA: Allyn & Bacon.
- Hall, G. E., Loucks, S. F., Rutherford, W. L., & Newton, B. W. (1975). Levels of use of the innovation: A framework for analyzing innovation adoption. *Journal of Teacher Education*, 26, 52-56. doi:10.1177/002248717502600114
- Hall, T. E., Meyer, A., & Rose, D. H. (2012). *Universal Design for Learning in the classroom: Practical applications*. New York, NY: Guilford.
- Hehir, T. (2009). Policy foundations of Universal Design for Learning. In D. T. Gordon, J. W. Gravel, & L. A. Schifter (Eds.), *A policy reader in Universal Design for Learning* (pp. 35-45). Cambridge, MA: Harvard Education Press.
- Higher Education Opportunity Act of 2008, 20 U.S.C. § 1022d(b)(1)(K) (2008).
- Hord, S. M., Rutherford, W. L., Huling-Austin, L., & Hall, G. E. (1987). *Taking charge of change*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Individuals With Disabilities Education Act, 20 U.S.C. § 1400 (2004).
- Israel, M., & Marino, M. T. (2014). *Innovation configuration on supporting K-12 students with disabilities in content learning through technology* (Document No. IC-10). Retrieved from University of Florida, Collaboration for Effective Educator Development, Accountability, and Reform Center website: <http://cedar.education.ufl.edu/tools/innovation-configurations/>
- Kaplan, A., & Maehr, M. L. (2007). The contributions and prospects of goal orientation theory. *Educational Psychology Review*, 19, 141-184. doi:10.1007/s10648-006-9012-5
- Marino, M. T., Gotch, C., Israel, M., Vasquez, E. III, Basham, J. D., & Becht, K. (2013). UDL in the middle school science classroom: Can video games and alternative text heighten engagement and learning for students with learning disabilities? *Learning Disability Quarterly*. Advance online publication. doi:10.1177/0731948713503963

Mastropieri, M. A., Scruggs, T. E., & Graetz, J. (2003). Reading comprehension for secondary students. *Learning Disability Quarterly*, 26, 103-116.

Meo, G. (2008). Curriculum planning for all learners: Applying Universal Design for Learning (UDL) to a high school reading comprehension program. *Preventing School Failure: Alternative Education for Children and Youth*, 52(2), 21-30. doi:10.3200/PSFL.52.2.2-30

Meyer, A., & Rose, D. H. (2005). The future is in the margins: The role of technology and disability in educational reform. In D. H. Rose, A. Meyer, & C. Hitchcock (Eds.), *The universally designed classroom: Accessible curriculum and digital technologies*, (pp. 13-35). Cambridge, MA: Harvard Education Press.

National Center on Universal Design for Learning. (2012). UDL in your state.

Retrieved from <http://www.udlcenter.org/advocacy/state>

Nelson, L. L. (2013). *Design and deliver: Planning and teaching using Universal Design for Learning*. Baltimore, MD: Brooks Publishing.

No Child Left Behind Act of 2001, 20 U.S.C. § 6319 (2008).

Rose, D. H., & Gravel, J. W. (2010). Universal Design for Learning. In B. McGaw, P. Peterson, & E. Baker (Eds.), *International encyclopedia of education* (3rd ed., pp. 119-124). Oxford, England: Elsevier Science.

Rose, D. H., & Meyer, A. (2002). *Teaching every student in the digital age: Universal Design for Learning*. Alexandria, VA: Association for Supervision and Curriculum Development.

Roy, P., & Hord, S. M. (2004). Innovation configurations chart a measured course toward change. *Journal of Staff Development*, 25(2), 54-58.

Schunk, D. H., & Cox, P. D. (1986). Strategy training and attributional feedback with learning

disabled students. *Journal of Educational Psychology*, 78(3), 201-209. doi:10.1037//0022-0663.78.3.201

Smith, D. D., Robb, S. M., West, J., & Tyler, N. C. (2010). The changing education landscape: How special education leadership preparation can make a difference for teachers and their students with disabilities. *Teacher Education and Special Education*, 33(1), 25-43. doi:10.1177/0888406409358425

Spooner, F., Baker, J. N., Harris, A. A., Ahlgrim-DeLzell, L., & Browder, D. M. (2007). Effects of training in Universal Design for Learning on lesson plan development. *Remedial and Special Education*, 28, 108-116. doi:10.1177/07419325070280020101

Stecker, P. M., Fuchs, L. S., & Fuchs, D. (2005). Using curriculum-based measurement to

improve student achievement: Review of research. *Psychology in the Schools*, 42(8),

795-819. doi:10.1002/pits.20113

Stecker, P. M., Lembke, E. S., & Foegen, A. (2008). Using progress monitoring data to improve

instructional decision making. *Preventing School Failure*, 52(2), 48-58.

Swanson, E., Edmonds, M. S., Hairrell, A., Vaughn, S., & Simmons, D. C. (2011). Applying a cohesive set of comprehension strategies to content-area instruction. *Intervention in School and Clinic*, 46(5), 266-272. doi:10.1177/1053451210395385

Universal Design for Learning-Implementation and Research Network (UDL-IRN). (2011). *Critical elements of UDL in instruction* (Version 1.2). Lawrence, KS: Author.

U.S. Department of Education, Office of Educational Technology. (2010). *National education technology plan 2010*. Washington, DC: Author. Retrieved from <http://www.ed.gov/sites/default/files/netp2010-execsumm.pdf>

Zimmerman, B. J. (1990). Self-regulated learning and academic achievement: An overview. *Educational Psychologist*, 25(1), 3-17.  
doi:10.1207/s15326985ep2501\_2

## UNIT 2

### **Co-Teaching Methods: One Teach One Assist, Station-Teaching, Parallel Teaching, Alternate Teaching & Team Teaching**

#### Content

- 2.1 Introduction
- 2.2 ONE TEACH, ONE SUPPORT
- 2.3 PARALLEL TEACHING
- 2.4 ALTERNATIVE TEACHING
- 2.5 STATION TEACHING
- 2.6 TEAM TEACHING
- 2.7 Defining Collaborative Team Teaching
- 2.8 Objectives
- 2.9 Agenda
- 2.10 Definition of co-teaching
- 2.11 Louisiana Autism Quality Indicators
- 2.12 Benefits of co-teaching for the students
- 2.13 Benefits of co-teaching for the teachers
- 2.14 Co-teaching approaches
- 2.15 Station Teaching
- 2.16 Parallel Teaching
- 2.17 Alternative Teaching Example
- 2.18 Teaming

2.19 Benefits of Collaborative Team Teaching

2.20 Building Teaching Partnerships to Support Student Learning

2.21 Defining Collaborative Team Teaching

2.22 Benefits of Collaborative Team Teaching

2.23 Co-Teach!

2.24 Building Teaching Partnerships to Support Student Learning

2.25 Collaborative Instructional Planning

2.26 Summary

2.27 References

## **2.1 Introduction**

Marilyn Friend and Lynne Cook (1996a) have presented several approaches to co-teaching that provide ways for two teachers to work together in a classroom. Their videotape (1996b) also explains these approaches, which are briefly discussed below. They include: one teach, one support; parallel teaching; alternative teaching; station teaching; and team teaching.

## **2.2 ONE TEACH, ONE SUPPORT**

With this model one teacher has the primary responsibility for planning and teaching, while the other teacher moves around the classroom helping individuals and observing particular behaviors. For example, one teacher could present the lesson while the other walks around or one teacher presents the lesson while the other distributes materials.

### **Some advantages of this approach are:**

Students receive individual help in a timely manner

It's easier to keep students on task because of the proximity of the teacher.

It saves time when distributing materials.

As a process observer, the supporting teacher can observe behavior not seen by the teacher directing the lesson.

The supporting teacher can walk around and still continue to observe the other teacher model good teaching practices.

### **Some disadvantages of this approach are:**

Through the eyes of the students, one teacher has more control than the other.

Students often relate to one person as the teacher and the other as a teacher's aide.

Having a teacher walk around during the lesson may be distracting to some students.



Students begin to expect immediate one-on-one assistance.

## **2.3 PARALLEL TEACHING**

In parallel teaching, the teacher and student teacher plan jointly but split the classroom in half to teach the same information at the same time. For example, both teachers could be explaining the same math problem-solving lesson in two different parts of the room. If the room had two computers, each teacher could use a computer to model the use of the Internet or a new piece of software to half of the class. Each half of the class could be involved in a literature study group during a novel study.

### **Some advantages of this approach are:**

Preplanning provides better teaching.

It allows teachers to work with smaller groups.

Each teacher has the comfort level of working separately to teach the same lesson.

Splitting the class allows students to be separated who need to be.

### **Some disadvantages of this approach are:**

Both teachers need to be competent in the content so the students will learn equally.

The pace of the lesson must be the same so they finish at the same time.

There must be enough flexible space in the classroom to accommodate two groups.

The noise level must be controlled.

## **2.4 ALTERNATIVE TEACHING**

In alternative teaching, one teacher manages most of the class while the other teacher works with a small group inside or outside of the classroom. The small

group does not have to integrate with the current lesson. For example, a teacher could take an individual student out to catch him/her up on a missed assignment. A teacher could work with an individual or a small group for assessment purposes or to teach social skills. A small group of students could work together for remedial or extended challenge work.

**Some advantages of this approach are:**

Working with small groups or with individuals helps meet the personal needs of students.

Both teachers can remain in the classroom so one teacher can informally observe the other modeling good teaching.

**Some disadvantages of this approach are:**

Groups must vary with purpose and composition or the students in the group will quickly become labeled (e.g., the “smart” group).

The students might view the teacher working with the larger group as the teacher in control.

Noise level must be controlled if both teachers are working in the classroom.

There must be adequate space.

## **2.5 STATION TEACHING**

Both teachers divide the instructional content, and each takes responsibility for planning and teaching part of it. In station teaching, the classroom is divided into various teaching centers. The teacher and student teacher are at particular stations; the other stations are run independently by the students or by a teacher’s aide. For example, three or more science stations, each containing a different experiment, could be organized with the teacher and student teacher working with the two stations that need the most supervision. It is also possible to use an aide or parent volunteer to supervise stations.

**Some advantages of this approach are:**

Each teacher has a clear teaching responsibility.

Students have the benefit of working in small groups.

Teachers can cover more material in a shorter period of time.

Fewer discipline problems occur because students are engaged in active, handson learning.

It is possible to separate students who need to work away from each other.

This approach maximizes the use of volunteers or extra adults in the room.

**Some disadvantages of this approach are:**

To work effectively, this approach requires a lot of preplanning.

All materials must be prepared and organized in advance.

The noise level will be at a maximum.

All stations must be paced so teaching ends at the same time.

One or more groups must work independently of the teacher.

## **2.6 TEAM TEACHING**

Both teachers are responsible for planning, and they share the instruction of all students. The lessons are taught by both teachers who actively engage in conversation, not lecture, to encourage discussion by students. Both teachers are actively involved in the management of the lesson and discipline. This approach can be very effective with the classroom teacher and a student teacher or two student teachers working together.

**Some advantages of this approach are:**

Each teacher has an active role.

Students view both teachers as equals.

Both teachers are actively involved in classroom organization and management.

This approach encourages risk taking. Teachers may try things in pairs that they wouldn't try alone.

“Two heads are better than one.”

**Some disadvantages of this approach are:**

Preplanning takes a considerable amount of time.

Teachers' roles need to be clearly defined for shared responsibility.

Long before the current federal legislative mandates, special educators proposed that students with disabilities could succeed in general education classrooms if their teachers forged partnerships that resulted in both high expectations and individual supports for the students, (Garvar and Papania, 1982). This rationale for co-teaching, an alternative to the separate special education service-delivery models, continues to be relevant.

## **2.7 Defining Collaborative Team Teaching**

The collaborative teaching team, a general educator and a special educator, delivers special education services in the general education classroom. They have the joint responsibility to design, deliver, monitor and evaluate instruction for a diverse group of learners in classes where both are present and engaged simultaneously, (Fister-Mulkey, DeBoer, 1995). Through CTT, students with disabilities have access to the same rigorous curriculum as their nondisabled peers, a fundamental aspect of the Individuals with Disabilities Act(2008). Opportunities for students with disabilities to achieve in CTT classes match those of their non-disabled peers. The high expectations of them also match those set for all of the other students. (See: On the Web, page 4.) A CTT co-teaching team may be defined as two teachers who: coordinate their work to achieve common, agreed upon goals; share a belief system that each member has unique and needed experience; use a cooperative process to plan and monitor instruction; and engage

equally in the dual roles of teacher/learner, expert/novice, giver and recipient of knowledge and skills.

## 2.8 Objectives

Participants will:

- Learn basics of co-teaching, including approaches to use in the classroom
- Recognize administrative support necessary for co-teaching
- Explore available co-teaching resources

## 2.9 Agenda

- Define co-teaching
- Benefits for teachers and students
- Administrative support
- Approaches to co-teaching
- Co-planning
- Utilizing para educators

## 2.10 Definition of co-teaching

- Team of general education teacher and special education teacher.
- Meets the instructional goals for students with and without disabilities in the general education setting.
- Both share responsibility for planning, delivering instruction, assessment, and classroom management.
- Both share responsibility for providing supports and accommodations to meet the needs of ALL students in the classroom.

## 2.11 Louisiana Autism Quality Indicators

- II. Evidence of collaboration between special education and general education teachers is present on lesson plans.
- I3. Assessment of student work and progress reflects input from multiple team members.

- I14. As needed, individualized supports in the general education classroom are delivered by *more than two* faculty/staff/peers.

### **2.12 Benefits of co-teaching for the students**

- Placement in LRE
- Higher expectations
- Enhanced positive social outcomes
- Increased engagement and involvement
- Access to models of adults working cooperatively and adults dealing with disagreements
- More realistic classroom communities for all students.

### **2.13 Benefits of co-teaching for the teachers**

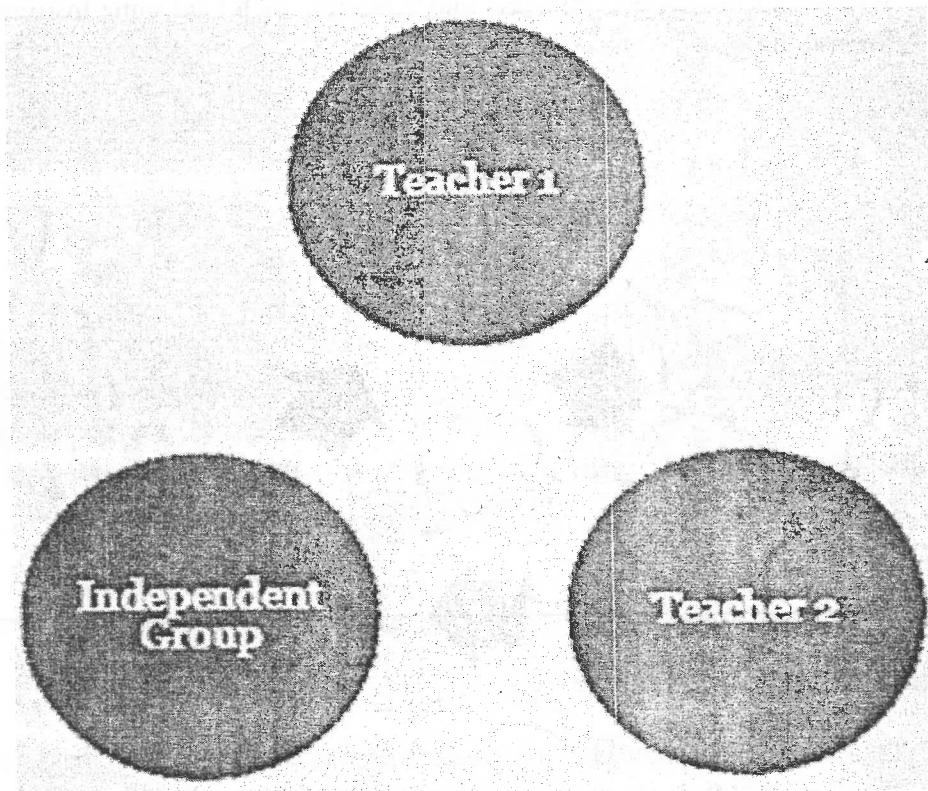
- Increases teacher satisfaction
- Enhanced opportunities for professional growth
- Decreased feelings of isolation
- Mutual appreciation of roles
- More opportunities for creativity
- More time for explicit teaching
- Share responsibilities for workload
- Reduced behavior problems

### **2.14 Co-teaching approaches**

- Station Teaching
- Parallel Teaching
- Alternative Teaching
- Teaming
- One Teach, One Observe
- One Teach, One Assist

## 2.15 Station Teaching

- Use? Frequent
- What? Small group instruction. 3 groups – each teacher with a group and one independent. Students rotate and visit all stations.



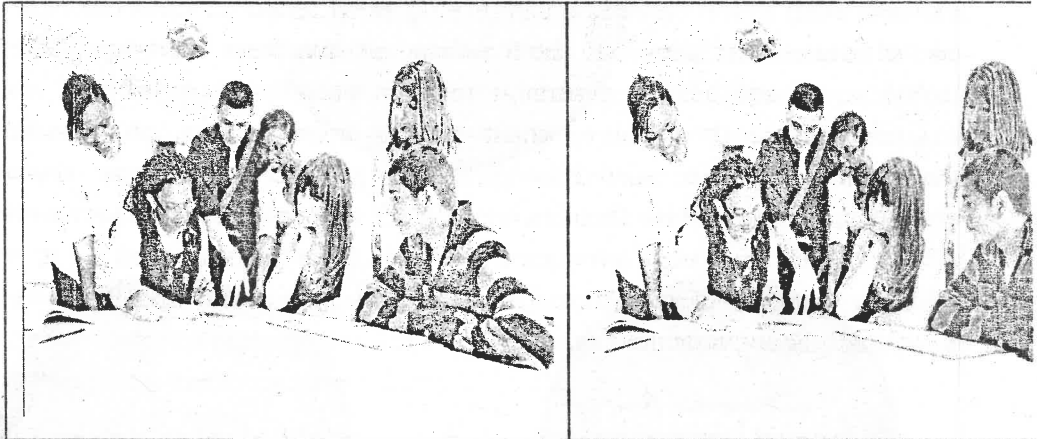
### Station Teaching Example

- During an elementary math class, students are learning about estimating. The students are divided into 3 groups and all students rotate to all 3 stations.
  - Group 1: Estimating distance – how many feet wide is the classroom – **with teacher**
  - Group 2: Estimating repetitions – how many times you can jump in 1 minutes – **with teacher**

- Group 3 – Estimating mass – how many crayons to balance the weight on the scale – **students work with a partner**

## 2.16 Parallel Teaching

- Use? Frequent
- What? Teachers divide the class into 2 groups; each lead same instruction for both groups



### Parallel Teaching Example

- In a 6thgrade Language Arts class, the students have read the first 4 chapters of *Where the Red Fern Grows*. The teachers divide the students into 2 heterogeneous groups, with students in each group that tend to talk frequently in discussions and those who tend to be quiet. Once in the 2 groups, the teachers discuss the same questions to check comprehension and explore the themes of the book.

### Alternative Teaching

- Use? Occasional
- What? One teacher teaches to a large group while other takes a small group for specific instructional purpose.



## 2.17 Alternative Teaching Example

- In a high school geography class, the teachers determine a small group of students would benefit from direct pre-teaching on the vocabulary to be covered. Some of the students in this group have IEPs, and some not. While some students independently complete a worksheet finding the definitions in the book (monitored by the special education teacher), the general education teacher works with the small group to target the vocabulary visually and orally.

## 2.18 Teaming

- Use? Occasional
- What? Both teachers in front of classroom. Both teachers fully engaged in delivery of the core instruction.

### Teaming Example

At the beginning of an algebra class, the special education teacher leads during review of material covered and the general education teacher demonstrates concepts on the smartboard and asks questions. The general education teacher then takes the lead introducing a new concept, and the special education teacher moves to the smartboard to work examples and ask questions.

### One Teach, One Observe

- Use? Occasional
- What? Data gathered on academic, behavior, and/or social skills
- When? Periodically as concerns arise (e.g., disruptive behaviors) or specific types of information need to be gathered (e.g., student sentence use during group discussions).

### One Teaching, One Assisting

- Use: Seldom

- What? One teacher leads instruction while other provides support (e.g., monitors student work, addresses behavior issues, answers student questions)

### **One Teach, One Assist example**

During a science lab, the general education teacher provides instruction and directions regarding an experiment, and the special education teacher moves around the classroom to monitor if each student is completing the experiment correctly.

### **Co-teaching approaches**

- Try a variety of approaches, even in the same day
- Don't rely on "one teach, one assist" too frequently
- Role of support teacher becomes more like a paraprofessional
- Students don't benefit from having 2 credentialed teachers in the classroom

### **Review of co-teaching approaches**

While Ms. Acker reviews yesterday's homework with most of the students, Ms. Vaughan works with a small group of students to review concepts they did not master on an assessment.

- Team Teaching
- Parallel Teaching
- Alternative Teaching
- Station Teaching

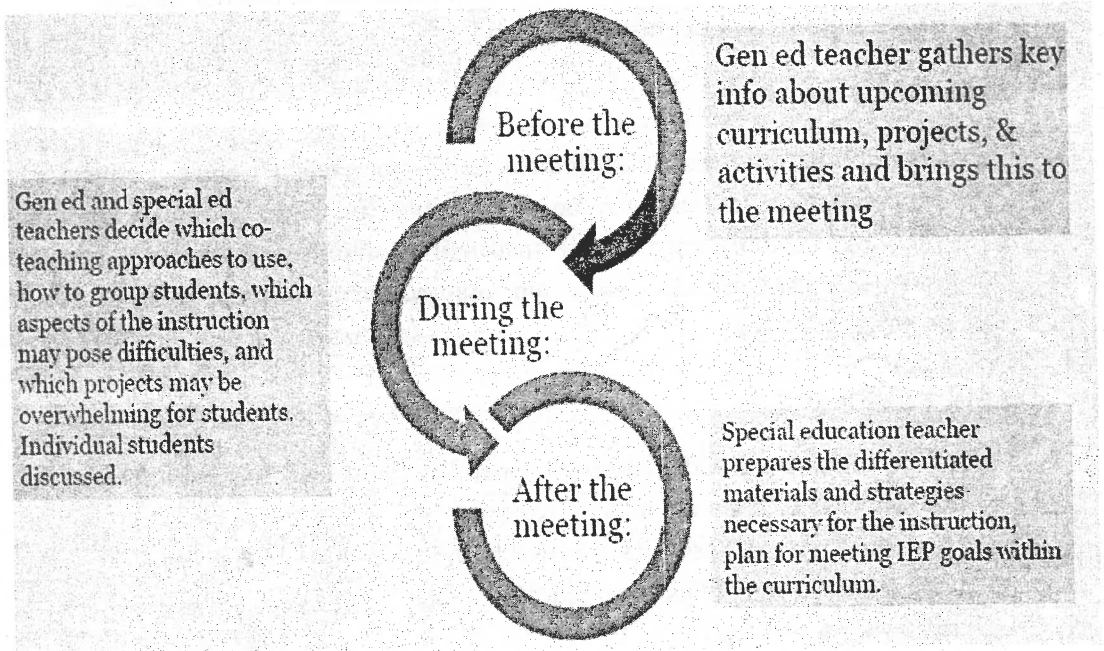
### **Review of co-teaching approaches**

Mr. Johnson leads a small group of students discussing a novel about the industrial revolution. Ms. Boxer leads a small group to review material from the textbook. Another small group independently examines old newspapers and pictures from the early 1900s. The students rotate to all 3 groups.

- Team Teaching

- Parallel Teaching
- Alternative Teaching
- Station Teaching

**Planning Process Example**



**Sample Planning Agenda**

<b>Sample for 1 hour planning period</b>	
Upcoming curriculum topics/units/lessons	8 min
Co-teaching arrangements and assignments	17 min
Challenges and strategies to help students succeed	15 min
Individual student matters	15 min
Housekeeping/Logistics	5 min

### **Utilizing Para educators in General Education Classroom**

- Work with small groups of students
- Review concepts previously taught
- Assist with monitoring students
- Creating worksheets/manipulative/other materials as teacher directs
- Supporting ALL students as directed

### **Utilizing Para educators**

- Co-teaching involves 2 certified teachers – not a teacher and par educator
- Para educators should not be responsible for large group instruction, planning or delivering initial instruction, interpret assessment results, make instructional decisions, nor assume primary responsibility for a group of students

### **Wrapping up...**

- Co-teaching involved shared responsibility between 2 teachers to meet the needs of ALL students in the classroom.
- Administrative support is important to the success of co-teaching.
- There are 6 approaches to co-teaching.
- Co-planning is key!
- Use par educators to support students as directed.

## **2.19 Benefits of Collaborative Team Teaching**

CTT brings many benefits to the school community, providing greater opportunity to capitalize on the unique qualities and the specialized knowledge, skills and instructional approaches of the two teachers in the class. Teachers report they experience greater professional growth, (Fister- Mulkey, DeBoer, 1995). CTT increases flexibility in grouping and scheduling. Students wait less time for teacher.

The UFT Teacher Center promotes teacher excellence and high academic achievement for students through professional development based on current research and best practices. Designed to deepen educators' professional

knowledge, activities include in-classroom and in-school support, borough-wide and citywide networks, conferences, seminars and college and in-service courses. UFT Teacher Center is a collaboration of the United Federation of Teachers, New York State Education Department, New York City Department of Education, participating schools and districts, School Support Organizations and area cultural institutions. Spring 2010

## **2.20 Building Teaching Partnerships to Support Student Learning**

Collaborative Team Teaching (CTT) increases educational opportunities for all students. It can reduce the stigma often associated with being identified as having a disability. It creates a stronger system of support for effective instruction among the adults responsible for educating students, (Friend, 2008).

Long before the current federal legislative mandates, special educators proposed that students with disabilities could succeed in general education classrooms if their teachers forged partnerships that resulted in both high expectations and individual supports for the students, (Garvar and Papania, 1982). This rationale for co-teaching, an alternative to the separate special education service-delivery models, continues to be relevant.

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## **2.23 Co-Teach!**

*Co-Teach!* focuses on the nature of successful collaborative team teaching (CTT) and the essential concepts about co-teaching. It describes helpful, real-life practices and gives examples. A valuable tool for educators across the K–12 continuum, *Co-Teach!* Is used by UFT Teacher Center for professional development and teacher teams.

CTT partnerships are valuable to students, generating new ways to accommodate and meet students' learning requirements. CTT partnerships also benefit the teaching partners, permitting them to develop fresh perspectives in viewing classroom procedures and instructional practices and often, lead to a renewed sense of commitment to teaching. How can CTT be used effectively in delivering special education services? How successful can CTT be? Marilyn Friend's *Co-Teach!* provides clear answers— answers important for all of the CTT school's stakeholders and for the ability of collaborative team teachers to support students in higher achievement. Topics in *Co-Teach!* Include: Overviews of key concepts and co-teaching rationales. Variations of co-teaching approaches. How to select and use co-teaching approaches for instruction. Classroom practices and classroom management of instruction. Planning time and scheduling. Key information and suggestions for administrators.

## **2.24 Building Teaching Partnerships to Support Student Learning**

Attention and spend longer time on tasks. Better teaching and learning conditions mean teachers can more effectively use research-based strategies. (See Professional Books, page 2, for more on co-teaching models.)

The CTT classroom fosters a greater sense of community, allowing students to experience and imitate the cooperative, collaborative skills that teachers model as they co-teach. These skills are often cited as essential ones for students' future success in school and careers. (See The Practitioner's Perspective, page 3, for more about CTT in classrooms.)

## **2.25 Collaborative Instructional Planning**

At MS 226 for grades 6–8, where Ira Faber is the UFT Teacher Center staff member, teachers Vanessa Reed (special education) and Ivy Penn (general education) are in their first year of co teaching a seventh-grade class. Both are committed to ongoing professional development and offering their students the best possible instructional support.

So far, this year has provided new, positive experiences. They have incorporated four of six co-teaching models. Using these and differentiating instruction to match students' levels has been positively affecting students' learning. The teaching models they use are:

**Team-Teaching** (Both teach the same lesson.) This works especially well for their students during mathematics and for work on reading skills. During a practice read-aloud, each takes a turn, which allows students to benefit from hearing both teachers model fluency.

**Alternative Teaching** (One teacher works with a larger group; one teacher works with a smaller group on specific skills.) This allows the teachers to focus their instruction on the specific needs of each group. Ivy and Vanessa find that this approach works well because each teacher focuses on the lesson she has designed for a particular group.

**One Teach/One Assist** (One teacher teaches the lesson and the other assists by moving throughout the room.) Each can support the other's teaching and make

additional explanations to individual students as needed. They alternate teaching and assisting, providing information in varied ways and giving related examples.

**Parallel Teaching** (Teaching the same lesson to two groups of students.) This allows teachers to customize lessons so they meet students' learning modalities and styles, including visual, auditory and kinesthetic learning styles. Two additional models they will now consider incorporating, as needed, are:

**Station Teaching** (Students are placed in two groups and the lesson content, which is potentially difficult or needing particular sequencing, is also divided.) Sometimes, a third station is set up, for students to work independently.

**One Teach/One Observe** (One teacher teaches and the other teacher, using a rubric both have created, observes.) This allows teachers to gain deeper understanding of individual students.

At IS 125 for grades 5–8, where Angela Miuta is the UFT Teacher Center staff member, teachers believe each co-teaching pair is as unique as the students they teach. Students reap the benefit, they say, when co-teachers clearly define their individual and shared instructional focus. Students have the opportunity to learn more, and to have their individual needs met more quickly. Co-teachers also believe they are making what might seem like minor changes and these are resulting in major changes for students. How are they accomplishing this? First, faculty professional development has provided opportunities for teachers to share their specific needs. Second, the school culture emphasizes the importance of the equality of team members—both make instructional decisions. It is important for students to see the partners as equals who make shared decisions about all aspects of the classroom, including discipline, lesson structure and anything that occurs in the classroom.

At IS 125 the special education partners in collaborative teams follow “their” classes, each partnering with several subject-area teachers (science, social studies, math and English language arts). This can be challenging, especially identifying time for shared planning. The administration has designated common planning time for meetings in which reflective questions guide collaborative discussion. Co-teachers decide on co-teaching strategies that they adapt to the instructional needs of students, for example, selecting skill-embedded content-area lessons.



Here one teacher presents content and the other focuses students on a skill they need to use immediately in meeting that lesson's task demands, perhaps note-taking or capturing the lesson's organizing ideas. CTT partners coordinate the planning and delivery of instruction, bringing to bear knowledge and skills across the wide span of general and special education. This includes:

## 2.26 Summary

As educators, we support the principle that students with special needs must have access to the general education curriculum. This principle is the foundation for *The Access Center: Improving Outcomes for All Students K–8*. It was developed by the American Institutes for Research (AIR) with funding from the Office of Special Education Programs of the U.S. Department of Education.

Ensuring that students in K–8 actually do have access to the curriculum in our classrooms demands knowledge. The *Access Center* identifies resource categories and topics for us. The Access Center is maintained by AIR.

General education teachers, special education teachers, co-teachers in the general education classroom and staff developers, all will find resources here. Search and find resources for such issues as: effective interventions for struggling readers; strategies for accessing algebraic concepts K–8; strategies on differentiation of instruction; and inclusive education. Major categories include:

- Co-teaching.
- Content-area resources (reading and language arts, mathematics and science).
- Instructional and learning strategies.
- Foundational information on research, curriculum, standards, assessment and professional issues.
- Professional development modules (with presentations, hand outs and notes).
- Developing knowledge about the students—their strengths, weaknesses and non-verbal behaviors—and the Individualized Education Programs (IEPs) of students with special needs.

- Adapting assessments, tasks, lessons and units to match both the learning needs of students with IEPs and the learning needs of the general education students.
- Knowing the curriculum in the content areas.
- Differentiating instruction to address students' levels, learning styles and individual interests.
- Checking for students' understanding and being prepared to clarify and re-teach.
- Creating contracts and behavior plans when necessary.
- Maintaining close contact with parents.
- Adjusting to each other's personalities, teaching styles, class rules, expectations, grading systems and spontaneous ideas.
- Meeting and communicating as co-teaching partners to plan and organize instruction, assess student work and participate in grading.

## 2.27 References

Friend, M. (2008).Co-Teach! A Handbook for Creating and Sustaining Effective Classroom Partnerships in Inclusive Schools. Greensboro, NC: Marilyn Friend, Inc. Online: [www.NPRinc.com](http://www.NPRinc.com).

Garvar, A., Papania, A. (1982). Team Teaching: It Works for the Student. *Academic Therapy*, 18, 191-196.

Fister-Mulkey, S., DeBoer, A. (1995).Working Together: Tools for Collaborative Teaching. Frederick, CO: Sopris West.Americans with Disabilities Act. Online: <http://www.ada.gov/pubs/adastatute08mark.htm>.

Friend, M. & Cook, L. (1996a).Interactions: Collaboration skills for school professionals. White Plains: Longman.

Friend, M. & Cook, L. (1996b). The Power of 2: Making a difference through co-teaching

[Videotape]. (Available from the Forum on Education, Smith Research Center, Suite 103, Indiana University/On-site, Bloomington, IN 47405-1006)

Walsh, J.J. & Snyder, D. (1993, April). Cooperative teaching: An effective model for all students ED 361 930. Paper presented at the annual convention of the Council for Exceptional Children, San Antonio, TX. (ERIC Document Reproduction Service No. ED 361 930) collaborative Team Teaching (CTT) increases educational opportunities for all students. It can reduce the stigma often associated with being identified as having a disability. It creates a stronger system of support for effective instruction among the adults responsible for educating students, (Friend, 2008).

- Maryland's Co-Teaching Network
  - <http://olms.cte.jhu.edu/20619>
- K8 Access Center Co-teaching Archives
  - <http://www.k8accesscenter.org/index.php/category/co-teaching>
- Co-Teaching Connection
  - <http://coteach.com/>
- Power of 2 resources
  - <http://www.powerof2.org/>

## **Unit 3**

### **Differentiated Instructions: Content, Process & Product**

#### **Content**

##### **3.1 INTRODUCTION**

##### **3.2 Purpose of the Study**

##### **3.3 Background of the Researcher**

##### **3.4 Differentiating for Success in Inclusive Classrooms**

##### **3.5 Philosophy of Differentiation in Inclusive Classrooms**

##### **3.6 Management Strategies**

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##### **3.8 Research Topic/Question**

##### **3.9 Overview**

##### **3.10 The Idealism of Inclusive Education**

##### **3.11 Criticisms of Inclusive Education**

##### **3.12 Methods and Implementation of Differentiated Instruction**

##### **3.13 Universal Design for Learning (UDL) and Teaching to the Emotions**

##### **3.14 Integration of Special Education students within the Mainstream Classroom:**

##### **3.15 Multicultural Education through Differentiated Instruction in the Secondary Classroom:**

##### **3.16 SUMMARY**

##### **3.17 REFERENCES**

### 3.1 INTRODUCTION

As I take on the responsibilities that accompany the role of “teacher”, I am overcome with the understanding that I am to face various challenges and difficulties as I aim to model my classroom around the value of inclusive education and differentiated instruction and assessment.

In aiming to narrow my focus on the key issue of inclusive education as it is directly related to teachers’ work, I direct my observations upon intriguing elements of the issue, namely inclusive education as it pertains to diversities within the classroom, and learning styles and abilities. I aim to instill within my students academic goals geared to their individual learning needs and abilities, and in turn, the social-emotional goals of peer acceptance and equality within the classroom whole. I am utilizing this paper as a basis for learning from the views and strategies of others in the classroom, to strengthen my own. Much of the influence behind my vision for teaching is based upon Mahatma Gandhi’s doctrine, “Be the change you wish to see in the world.” As this quote suggests, I aim to change the way in which young people learn, and in turn, the way in which they view themselves, others, and the world that surrounds them. Inclusive community building ought to begin in the classroom environment, and as the teacher within that environment, it is my responsibility to ensure that all students are given the ability to achieve excellence through differentiated instruction and assessment.

### 3.2 Purpose of the Study

My experiences within the classroom have drawn my attention to the need for a greater presence of inclusive education, as the classroom is comprised of students with diversified learning styles and abilities. This observation has led me to suggest that these students should not be taught unanimously and ambiguously, but rather inclusively, crossing boundaries, and learning as a community. Educational theorists, Chriss Walther-Thomas, Lori Korinek, Virginia L. McLaughlin, and Brenda Toler Williams (2002), behind the *Collaboration for Inclusive Education: Developing Successful Programs* defend that inclusive learning environments are:

Those in which everyone belongs, is accepted, supports, and is supported by his or her peers and other members of the school community in the course of having his or her educational needs met. Students are educated in general education classrooms with their peers to the greatest extent possible (p. 4).

Though the philosophy surrounding the practice of inclusive education and its environment is seemingly idealistic, it is a method that commits teachers and students alike to work together in order to achieve the common goal – unique contributions for greater effectiveness of learning and understanding (Chriss Walther-Thomas *et al.*, 2000, p. 4). Furthermore, inclusive education is based upon the efforts of the community – students, families, educators, administrators, and others, providing a sense of encouragement, support, and belonging (Chriss Walther-Thomas *et al.*, 2000, p. 7). As this communal support is essential to the overall learning process of all students in general education classrooms, it is integral to the learning experiences of students with diversified learning abilities and disabilities, in particular, students within special education programs. It is therefore my intention in this research to investigate methods of teaching based upon the idea and need for inclusive education, especially those which communally educate students within the general education classroom where all have their educational needs met, along with the support of their peers (Chriss Walther-Thomas *et al.*, 2000, p. 4).

### **3.3 Background of the Researcher**

The teaching experience that directed my attention to the issues of inclusive education was working alongside an Associate Teacher in both the Special Education program, and the Junior Literacy Intervention program at St. Bernard Catholic Elementary school. Working with students in these special education programs, I learned styles and methods with which to successfully interact with and educate the students, often one-on-one with those struggling to comprehend the lesson and/or material. Speaking in a moderate pace and utilizing much needed repetition, I found did eventually lead to successful material comprehension; however, I was not satisfied with the lack of enthusiasm and desire to learn that the students presented me with. As this group of students, few in number, had been separated from their classmates for a portion of their day, I found that they seemingly felt withdrawn from the challenges and learning

experiences presented within their general education classroom. In order to avoid the resulting issue of students' feelings of separation and isolated learning, I feel that it is necessary to more strongly implement the practice of inclusive education, utilizing inclusive developmental approaches, which promote higher learning standards for the classroom whole. How would one, as a teacher, go about teaching a lesson to a classroom comprised of students with diversified and varying learning abilities, so that the learning process was communal and inclusive of every student? Of teaching, I am learning that the challenges and obstacles that come with teaching, especially those that come with teaching students of special needs and learning disabilities, are the means by which to develop and improve as a teacher, as it is through the students that the teacher learns and develops communication and understanding of the learning process.

The teacher, in relation to curricular development and individualized education and learning, is the medium through which effective instruction proceeds. Inclusive education, as it has been determined, is a supportive and communal atmosphere where all "students are educated in general education classrooms with their peers to the greatest extent possible" (Chriss Walther-Thomas et al., 2000, p. 4). In Chapter 11: Teaching Academics in Inclusive Classrooms, of *Collaboration for Inclusive Education: Developing Successful Programs*, Chriss Walther-Thomas et al. (2000) present various learning objectives for the inclusive classroom:

Analyzing curricular content and demands; identifying strengths and needs of students in relation to these demands; brainstorming and selecting environmental, curricular, and instructional accommodations; implementing appropriate accommodations; and evaluating student progress. For students with special needs, this process is enhanced through professional collaboration [...] specialists have been prepared to identify individual strengths, weaknesses, and learning preferences as well as alternative instructional strategies to address individual differences (p. 234).

With implementations for practice, it is suggested that teachers new to inclusive education should present to their students appropriately challenging practice activities so as to encourage opportunities for all students to succeed. For example, "using the same task and materials as are used with typical peers, using

the same task but an easier step, using the same task with different materials, using a different task related to the theme of the lesson, and/or using a different objective and a different task” (Chriss Walther-Thomas *et al.*, 2000, p. 235). Inarguably, it is the purpose of inclusive education to integrate all students into the atmosphere of the general education classroom, providing in turn, differentiated instruction for those who struggle, while still maintaining the expectations and standards of the academic classroom – inclusive education is thus teaching to diversity and teaching effectively.

The goals that I have for my students may be understood as ideological; Tim Loreman, Joanne Deppeler, and David Harvey (2005), in *Inclusive Education: a Practical Guide to Supporting Diversity in the Classroom*, write, “[Teachers] must be prepared to provide for the needs of all students in their grades irrespective of any diagnosis of “difference” [...] the underlying belief that all children can learn and be taught [...] the principle does not say that all children can learn at the same rate, nor in the same volumes” (p. 44). Academically, I aim to have my students achieve a level of success that surpasses the expectations that they previously held for themselves. I will challenge my students to practice critical thinking, which the Foundation for Critical Thinking defines as the mode of thinking in which the quality of thinking is improved by skillful analysis, assessment, and reconstruction (Foundation for Critical Thinking, 2009). Critical thinking allows students to direct their learning, and challenges their intellectual skills and abilities, which reflects upon an understanding of themselves as learners and their achievements, as well as themselves as individuals’ part of a classroom whole. Inclusive education should be utilized as a means by which to connect with the students, as a whole group, and as individuals. It is the student that presents to the teacher the most effective ways in which he/she learns, and thus it should be the intention of those implementing the practice of inclusive education to get to know the students and their individual learning needs. It is my belief that all students, diverse in every aspect, especially those with learning disabilities, can be integrated into the general education classroom, and it is my aim to determine and develop the methods and practices to implement in order to educate accordingly.



### **3.4 Differentiating for Success in Inclusive Classrooms**

This *Considerations Packet* provides an overview of differentiation in inclusive classrooms. A general philosophy of differentiation is presented, along with several definitions. Instructional and management strategies for differentiated classrooms are discussed and illustrated with practical examples.

### **3.5 Philosophy of Differentiation in Inclusive Classrooms**

Inclusive service delivery for students with mild to moderate disabilities is designed to provide these students with a successful school experience comparable to that of typically developing peers. Students with mild to moderate disabilities may have average or above average intellectual ability, yet not experience school success due to the nature of their disabilities. In an inclusive delivery model, these students participate in normal classroom activities with additional supports and services as specified by the Individualized Education Program (IEP) team. Inclusive service delivery has proven successful for many students with mild to moderate disabilities in helping them achieve academically and socially.

Differentiation takes the philosophy of inclusion a step further to provide for the individual needs of all students within a general education classroom. Differentiation describes a philosophy that seeks to make education more meaningful for all students, from high achieving gifted students to those who are struggling in school (Tomlinson, 1999).

Ellis (1999) describes differentiation as having three key dimensions: (a) targeting students' Zone of Proximal Development (ZPD), (b) capitalizing on students' intellectual skills and talents, and (c) fostering authentic motivations. The ZPD is the range of instruction within which a student is appropriately challenged but not yet frustrated. In targeting the ZPD, the teacher closely observes student progress and provides support as needed without making the task too easy. To capitalize on student skills and talents, the teacher makes an effort to know the capabilities of each student and plans instruction that supports those areas of strength while developing areas of need. Some information regarding skills and talents may be provided in the Present Level of Performance (PLOP) on the IEP. Other insights

into skills and talents may be gained through student interviews, surveys, informal conversation, and observation. One way to foster authentic motivation is to create assignments and projects that have a true audience. Rather than writing or developing projects that only the teacher will read, students publish on the web or write for an audience of their peers.

Another way of differentiating instruction is to adapt or modify various aspects of the classroom or instruction to meet specific needs of students with disabilities. Some examples of differentiation in various areas include:

<p><b>Environment</b></p> <p>Preferential seating                      Supplemental Lighting                      Background music                      Adapted furniture</p>	<p><b>Presentation</b></p> <p>Lecture notes in advance                      Textbooks on tape                      Advance organizers                      Written and oral presentation</p>
<p><b>Instructional Materials</b></p> <p>Large print materials                      Highlighted materials                      High interest/low vocabulary books                      Applicable software</p>	<p><b>Evaluation</b></p> <p>Choice of oral or written tests                      Evaluation based on progress                      Student self-evaluation                      Project-based evaluation</p>

Tomlinson (1999) presents a broader view of differentiation. She presents a differentiated classroom as one guided by the following principles:

- The teacher focuses on the essentials (those skills that are most important).
- The teacher attends to student differences.
- Assessment and instruction are inseparable.
- The teacher modifies content, process, and product.
- All students participate in respectful work (all tasks are equally engaging and interesting to students).
- The teacher and students collaborate in learning.

- The teacher balances group and individual work.
- The teacher and students work together flexibly.

Tomlinson further suggests that content, process, and product may be differentiated based on student needs and interests. *Content* refers to the knowledge or information that students will learn. *Process* refers to the activities and experiences that will bring students to the desired learning outcomes. Not only can students learn concepts and skills in different ways, they can also demonstrate that learning through different *products*. Each of these may be differentiated to meet student interest, readiness, or learning profile. Each student has something in which they are interested. For a high school senior it might be auto mechanics or popular music; for an elementary student it might be dinosaurs or the current popular cartoon. These areas of interest can be used to engage the student, develop skills, and make connections to content. Often strong student interest in a topic can help overcome a skill deficit, since students are more willing to persevere when the task is difficult.

Differences in readiness are very real in today's classrooms. Even homogeneously grouped classrooms have students at varying levels of proficiency in reading, writing, attending, and other academic skills. Developing lessons that engage all students at their appropriate levels is a challenging but necessary task for the teacher.

Students also differ in their learning profiles. Adults and students have preferences for how and where to learn. Some people work most effectively in a quiet environment; others prefer background noise. Some works best under a tight schedule; while others find time pressure inhibiting and need to plan ahead to allow plenty of time. A teacher can make an effort to understand and support the learning preferences of students with disabilities, while providing support to help students broaden their skills.

These views of differentiated instruction are supportive of inclusive education for students with disabilities in that they seek to provide meaningful instruction to students at an appropriate level of challenge. In a classroom that truly reflects the intention and spirit of differentiation it is not difficult to see how students with disabilities might be included. However, the nature of student's disabilities must

be considered when making instructional decisions regarding differentiation. Teacher knowledge and expertise in disabilities can make the process less frustrating and more rewarding for both teachers and students. General education teachers who have not had experience working with students with disabilities may wish to consult with specialists within the school including special education teachers, school psychologists, and related service providers. In addition, a wealth of information representing a variety of perspectives is available on the Internet. Disability specific organizations, advocacy groups, and government organizations host informative and useful sites. (Visit the T/TAC web page <http://education.wm.edu/centers/ttac/resources/links/index.php> for a current list of links to disability related sites.) Talking with students and parents about their particular needs related to the disability also yields helpful information for differentiation.

A curriculum that is rich in meaning and powerful for student learning is the key to effective instruction in any setting. In a differentiated classroom that curriculum is made available to all students. In an inclusive classroom student Individualized Education Programs (IEP) guide and support the work of classroom teachers and specialists in meeting the particular needs of students with disabilities. The IEP can provide a wealth of information regarding student interest, readiness, and learning profile. The IEP can also spell out the responsibilities of various professionals in developing, implementing, and evaluating the program for students with disabilities.

### **3.6 Management Strategies**

To create a successful differentiated classroom requires a high level of student independence. In planning and managing a differentiated classroom, the teacher will informally assess levels of student independence and develop management strategies. In general, it may be beneficial to view the student habits and skills necessary for independent work as important content and develop lesson plans and assessment tools accordingly. For example, a teacher may want the students to transition to a new activity within a given period of time. In addition to telling the students to do this, she would model the behavior for them, have them practice, reinforce appropriate performance, and provide corrective feedback as necessary. However students with disabilities may have extra difficulty in this area. Based on

the nature of their disabilities and past school experiences, students may be passive or unmotivated learners. These student deficits may be addressed in the student IEP, providing valuable baseline information and a framework for enhancing these areas of student functioning. If a student has particular difficulty making the transition to new activities, the teacher can provide additional support to help that student. That support may take the form of an early signal to that student that transition time is approaching or a checklist that serves as a reminder of the steps for transitioning.

### **3.7 Instructional Strategies**

Any instructional strategy that attends to student differences and maintains the richness of the curriculum can be used in a differentiated classroom. One strategy that allows teachers to differentiate instruction based on readiness is that of tiered lessons. In developing a tiered lesson, the teacher selects meaningful curriculum goals and specifies clearly what each student should know, understand, and be able to do as a result of the lesson. After appropriate introductory experiences, students complete activities at varying levels of complexity and abstraction. For example, in a third grade lesson on fractions, all students would be working with the concept of fractions as parts of a whole. Some students would work with concrete examples of fractional parts of groups; how many students in our class are girls and how many are boys? To answer that question students count the students present in the room and sort them by gender. Another group of students would complete a project at a more abstract level; based on the birthday chart how many students were born in January? In this example students read data from a chart to answer the question regarding fractional parts.

Lessons can also be differentiated based on interest. One way of doing this is through the use of student contracts. A contract is an agreement between the teacher and student about what is to be learned and how that learning is demonstrated. Contracts allow for student choice based on interest within teacher-specified parameters. In a unit on plants, one student might choose to interview a gardener, while another student might do research on the Internet to answer the same questions. Consider these general guidelines in developing contracts for students with disabilities.

- Contracts should support attainment of IEP goals.
- Contracts should include accommodations and modifications specified on the IEP, as appropriate.
- Contracts need not be specified on an IEP to be utilized in an inclusive or differentiated classroom.
- Contracts should provide tasks with appropriate level of academic challenge for students with disabilities.
- Contracts may be used to support attainment of behavior, organization, and social skills as specified on the IEP.
- Contracts should provide tasks that move students with disabilities towards self-regulation and autonomy.
- Contracts for students with disabilities should be as much like contracts for typical students as possible.

In a differentiated classroom, students are grouped and regrouped based on interest, readiness, and learning profile. In these groups they work with appropriate content, through various processes, to result in products that demonstrate the desired outcomes. In creating and managing groups, it is important to attend to the respectful nature of the various tasks. All the tasks and assignments should be equally appealing to students. If, as sometimes happens, the students who are struggling complete worksheets, while high achieving students work with science equipment or in the computer lab, the struggling students may become even more discouraged. On the other hand, the high achieving students should not be asked to do more of the same thing that everyone else is doing. The following scenario shows one way to group and regroup students based on learning profiles.

It is not realistic to expect that every activity of every lesson will be differentiated all the time. Nor is that level of differentiation appropriate if the goal is to help prepare students with disabilities to transition successfully from school to post-secondary environments. Instead, teachers who differentiate make wise and careful choices about what can and should be modified in any given unit to help

ensure success and prepare students for post-secondary education, jobs, and life as citizens.

Differentiated instruction also supports the benefits of professional collaboration. The role of the teacher in a differentiated classroom may be less obvious than in a traditional classroom. In a differentiated classroom, teacher-directed whole group instruction is only one strategy. Students also work individually and in small groups based on interests and skill levels. To manage this variety of activities the teacher must be aware of the interest, readiness, and learning profiles of all students and be prepared to differentiate based on that knowledge. A collaborative partnership among professionals supports the implementation of differentiation. General and special education teachers and related service providers can combine their areas of expertise to create the most effective classroom for students. By planning together and sharing responsibility for instruction, teachers are better able to manage the multiple aspects of a differentiated classroom.

This paper provided a brief overview of differentiation and how it relates to inclusive service delivery for students with disabilities. In seeking to differentiate instruction, it is tempting to look for a menu, checklist, or recipe to guide our efforts. However, differentiation done well is a complex process, based on the skillful management of multiple variables. What works well one year will need to be revised another year or with a new group of students. Teachers are encouraged to continue reading and talking about the philosophy and principles of differentiation as they seek to enhance their practice and improve outcomes for all students, including those with disabilities.

### **3.8 Research Topic/Question**

How does the implementation and practice of differentiation and inclusive education in Secondary English and history classrooms mean teaching “differently” to a classroom comprised of students with diversified and varying learning abilities?

Rooted in the belief that all students can learn within the mainstream classroom, this question asks educators to uncover the ways in which to do so, so as to be able to teach effectively. Effective teaching would then imply that all students are

able to learn the same subject material, through different instructional strategies; working towards the betterment of the quality of students' learning.

### 3.9 Overview

Chapter 1 includes the introduction and purpose of the study, the research questions, as well as how I came to be involved in this topic and study. Chapter 2 contains a review of the literature, looking particularly at the idealism of inclusive education, criticisms of inclusive education, the methods of implementation of differentiated instruction, integration of special education students in mainstream classrooms, multicultural education, and holistic education. Chapter 3 provides the methodology and procedure used in this study including information about the sample participants and data collection instruments. Chapter 4 identifies the participants in the study and describes the data as it addresses the research question. Chapter 5 includes limitations of the study, conclusions, recommendations for practice, and further reading and study. References and a list of appendixes follow at the end.

### 3.10 The Idealism of Inclusive Education

Presented within the work entitled *Fostering Multiliteracies Pedagogy through Preservice Teacher Education* (Jennifer Roswell, Clare Kosnik, and Clive Beck, 2008), is the need to recognize the diversity of language forms, in order to teach effectively and appeal to the diverse learning abilities of the students within the classroom. It is suggested that there are many types of literacy variations, including "school literacy versus local literacy, formal language versus informal/conversational language, written communication versus graphic, projected, spoken, or enacted communication, [etc]" (Jennifer Roswell, Clare Kosnik, and Clive Beck, 2008, p. 152). As each of these modes of communication exist, so too should they be acknowledged and equally presented within the classroom and the learning process. Inclusive education integrates diverse learning styles into modified lessons, communicable unto all, as "the essence of what education does needs to change" (Jennifer Roswell *et al.*, 2008, p. 152). Inclusive education should be utilized as a means by which to connect with the students, as a whole group, and as individual selves. It is the student that presents to the teacher the most effective ways in which he/she learns, and thus it should be



the intention of those implementing the practice of inclusive education to get to know the students and their individual learning needs – the Constructivist pedagogy (Jennifer Roswell *et al.*, 2008, p. 159). It is here that I pose the following question: What challenges do you foresee in implementing multiliteracies pedagogy, and how would you ensure the creation of a balanced literacy program and in turn, effective teacher instruction?

In continuing with the vision of the integration of diverse learning styles into modified lessons, author Jenny Corbett (2001) of *Supporting Inclusive Education: a Connective Pedagogy*, argues that the inclusive pedagogy is directly linked to effective learning in that it is about connecting to the individual's learning style and recognizing how they can learn most effectively, as well as linking the individual's learning to the curriculum and learning tasks in such a way that they can gain maximum benefit (Corbett, 2001, p.35). Corbett (2001) suggests that education exists beyond the learning classroom and is a key aspect of inclusion (p.36). She states, "Education means responding to the curiosity and interest of the learner, letting them take initiative [...] making education distinctive and meaningful" (Corbett, 2001, p.36). The inclusive school is about supporting learners who require additional resources – the movement beyond formal boundaries into "holistic flexibility in an open approach which focuses upon education within many contexts rather than mere schooling" (Corbett, 2001, p.38).

Of the traditional model of differentiated instruction, Corbett (2001) states that it is the adaptation of teaching and learning materials to account for individual differences in learning style (p. 47). It is suggested that if attention is drawn towards variation in learning styles, value is in turn placed upon the individual learner; education becomes individualized, and rather than becoming segregated from one's peers, one becomes part of a unified whole, where the differentiation of instruction and assessment benefits all students. If supported and nurtured, inclusive learning has the potential to manifest as empowerment and lifelong growth (Corbett, 2001, p. 48); effective learning is determined entirely by the high quality of teaching provided, instilling within the students personal engagement. It is through inclusive education that students with various learning abilities and multiple intelligences are allowed to exercise their right to be a part of the mainstream classroom whole. Corbett (2001) also alludes to the significant effect

that inclusive education has upon students' social development; "The expectations in school are that all children can learn about social behaviour and respect for others [...children with various learning abilities] are encouraged to become aware of their social context and the influence they have on others" (p. 53).

Authors Margo A. Mastropieri and Thomas E. Scruggs (2000) of *the Inclusive Classroom: Strategies for Effective Inclusion* present several arguments for the implementation of full inclusion, focusing on students with disabilities, varying in severity, as well as students with diverse learning styles and abilities. The primary argument is that full inclusion within the mainstream classroom is a civil right (p. 22),

As students with disabilities have the right to be educated in the same classes alongside their non-disabled peers. [It is] maintained that separate classes or schools are not equal to mainstream environments [...] Furthermore, full inclusion promotes the belief that students with disabilities learn more in integrated settings than in segregated settings. [It is] maintained that students, including those with and without disabilities develop better working relationships, communication skills, interaction skills, and friendships when they are in fully inclusive environments [...] Students becomes embracing of individual differences in full-inclusion environments (Mastropieri *et al.*, 2000, p. 23).

In accordance with the argument presented by Mastropieri and Scruggs, authors Chriss Walther-Thomas, Lori Korinek, Virginia L. McLaughlin, and Brenda Toler Williams (2000) of *Collaboration for Inclusive Education: Developing Successful Programs* argue that the "clustering" of students with various disabilities may be beneficial for some, depending on severity and necessity; however, it is through separation from the mainstream classroom that students' social lives are affected, as "they [are] segregated and isolated from families, peers, and classmates" (p.7). Furthermore, they note:

Inclusive communities are designed to surround all participants – students, families, educators, administrators, staff, and others – with support and encouragement to nurture a strong sense of belonging [...] 'When inclusive education is fully embraced, we abandon the idea that children have to become

“normal” to contribute to the world. Instead, we search for and nourish the gifts that are inherent in all people” (Chriss Walther-Thomas *et al.*, 2000, p.7).

The second argument made for inclusion is that inclusion reduces stigma, as “students with disabilities are stigmatized when they are forced to be educated in a separate special school, with special education class, when they have to leave the general education classroom” (Mastropieri *et al.*, 2000, p.23). Mastropieri *et al.* (2000) suggest that stigmatization resulting from the separation of students with disabilities from the mainstream classroom negatively affects students’ self-esteem, as their individual differences are unappreciated by what has been labeled as the “norm” in education and learning ability (Mastropieri *et al.*, 2000, p.23). Inclusion allows all students to foster within themselves an appreciation for their own abilities, while maintaining unity with the classroom whole. It is integral that we as teachers educate students, not only for the academic classroom, but for the world and lifelong journey that awaits them, and it may be argued that it is through inclusive education that all students become better prepared for the diversities and challenges that will inevitably present themselves.

Furthermore, inclusive education promotes equality. Mastropieri and Scruggs (2000) state:

The most important reason to include all students in the mainstream classroom is that it is the fair, ethical, and equitable thing to do [...] it is discriminatory that some students, such as those “labeled” as disabled, must earn the right to be in the regular education mainstream or have to wait for educational researchers to prove that they can profit from the mainstream, while other students are allowed unrestricted access simply because they have no label. No one should have to pass anyone’s test or prove anything in a research study to live and learn in the mainstream of school and community life. This is a basic right, not something one has to earn (Mastropieri *et al.*, 2000, p.23).

It is an inherent belief of mine that it is the responsibility of the teacher to teach and teach effectively, to all students, both regardless and acknowledging of difference, ability, and variation. The practice and implementation of inclusive education and differentiated instruction nourishes the minds of those students who have often been made to feel external of academic “normalcy”, and encourages

equality in the realms of academia, social interactions, emotional growth, and esteem in one's own abilities; to quote poet William Butler Yeats, "Education is not the filling of a pail, but the lighting of a fire." A specific personal goal within the classroom is to help students realize their important role in their communities, and to encourage students' participation in and outside of the classroom. I believe that all students can learn and ought to be given equal opportunity to succeed, though, as individuals, they may not necessarily learn in the same ways.

### **3.11 Criticisms of Inclusive Education**

There are several arguments made against the implementation of inclusive education within the mainstream curriculum. Mastropieri and Scruggs (2000), through research and extensive survey, outline five. The first is that a continuum of services option is necessary. "Opponents of full inclusion maintain that a more cautious approach should be undertaken with respect to the full-time placement of students with disabilities in general education classes [...] the "appropriate education" component than the "least-restrictive environment"" (Mastropieri et al., 2000, p.23). Secondly, the general education classroom may also be stigmatizing in that the issue of self-consciousness arises when learning becomes individual and specialized in front of all other peers. The example given by Mastropieri and Scruggs (2000) is that of a student with a reading disability; "Many students with reading disabilities have expressed a preference for receiving reading instruction in resource classrooms, finding it a safer environment" (Mastropieri et al., 2000, p.24). Student preference ought to be taken into consideration as the feeling of discomfort and unease in the mainstream classroom may hinder learning, promote further stigmatization, and destruct one's self-esteem.

A third concern against the implementation and practice of inclusive education is that general education teachers are not prepared for full inclusion; "Many general education teachers frequently report having inadequate training, time, and personnel resources for including students with disabilities in general education classes [...] this is likely to affect the quality of education teachers can provide to students [as] planning and collaboration time appear critical to the successful implementation of the full-inclusion model" (Mastropieri *et al.*, 2000, p.24). In accordance with this is the concern for the lack of sufficient resources in order to

educate students with special needs and disabilities within the learning classroom. It is here that accommodation becomes challenging and difficult to implement successfully. Moreover, Although some have argued that the same or similar instruction occurs in special or general education classrooms, others have identified clearly distinctive educational practices between general and special education classes. Special education classes are smaller and feature more cognitive-behavioural approaches toward instruction, different curriculum materials, strategy instruction, and more review and practice activities (Mastropieri *et al.*, 2000, p.24).

The final concern and argument against the implementation of inclusive education is that there is no research to suggest and support the superiority of full inclusion; “It is argued that no data exist to support the elimination of the continuum of services [...] No data exist to demonstrate that students with disabilities who are fully included outperform students who receive special services in other settings. In fact some evidence suggests that many students with disabilities perform better in resource room models or other special education settings” (Mastropieri *et al.*, 2000, p.25).

### **3.12 Methods and Implementation of Differentiated Instruction**

Glenda Beamon Crawford (2008), author of *Differentiation for the Adolescent Learner: Accommodating Brain Development, Language, Literacy, and Special Needs* writes of differentiation that it is a commonsense approach to learning when dealing with the complexities of the adolescent mind (p.5). She writes:

Adolescent learners differ in cognitive ability, social and economic status, literacy and language proficiency, race, ethnicity and culture, background, prior knowledge, quality of family support and degree of opportunity; motivation, learning preferences, and interests. Who adolescents are, the complex composite of biology and experience, determines the learning strengths and academic challenges they bring to the classroom [...] distinct variations in the way adolescents’ brains receive, strategically process, and emotionally relate to content, instructional delivery, and assessment (Crawford, 2008, p. 5-6).

In seeking to improve my ability to differentiate instruction, and in turn, become a stronger and more effective teacher, I look to Barrie Bennett's work entitled *Beyond Monet: the Artful Science of Instructional Integration*. Bennett draws attention to the sentiment that I hold of the practice of teaching – that it is both an art and a science. To quote Northrop Frye, Bennett (2008) writes:

That although art and science meet somewhere in the middle, they start from different ends of a continuum. Art starts with the world we want to have; science starts with the world as we see it. Science learns more about the world as it goes on; it evolves and improves [...] Art is about identifying the human and natural world or identifying connections between them (p. 10).

With this, it is understood that teaching is about identifying the individual needs of the student, according to their strengths, weaknesses, and learning abilities, and making modifications and improvements in order to further their understanding and overall learning. Bennett (2008) recommends both discovering and creating patterns of instruction, specifically looking at the ways in which students learn, and working with their multiple intelligences. It is through modification that teaching becomes a science, evolving in order to increase the potential for success. Bennett (2008) further suggests that the ability to differentiate instruction results in the designing of student learning and environments, providing enthusiasm and motivation. He offers several instructional ideas with which to modify student learning and create a powerful learning environment, i.e. Bloom's Taxonomy, Think-Pair-Share, Concept Mapping, Role Playing, Humor, etc. The phrase that Bennett (2008) includes in his book to summarize chapter 2, states: "The language or symbols employed in the teaching/learning process are extensive. The 'well worn image of classrooms where teachers talk and students listen, memorize, practice, and display knowledge has begun to fade as educators recognize that there is more to teaching and learning than words'" (Bennett, 2008, p.45). Seemingly indisputable, it is difficult to turn away from the lecturing method of teaching that many teachers have become so accustomed to. Tim Loreman's (2005) work entitled *Inclusive Education: a Practical Guide to Supporting Diversity in the Classroom*, and Sheryn Spencer Northey's (2005) work entitled *Handbook on Differentiated Instruction for Middle and High Schools*, communicate a similar message for teachers entering a classroom of

diverse student learning and need. Both works recommend that differentiation and inclusion of students with learning disabilities into the mainstream classroom can only successfully occur when teachers take the time to modify the lessons, assessment strategies, and styles in which the students are expected to learn. Though this is seemingly obvious, it is a series of challenging tasks and implementations. Northey's (2005) Handbook on Differentiated Instruction for Middle and High Schools recommends getting to know your students in order to understand the ways in which they learn (i.e. what kind of fruit are you?/ what type of learner are you? – Gardener's theory of Multiple Intelligences, distribute interest inventory, etc) and provides methods with which to differentiate the content being taught (i.e. concept development, anticipation/prediction guides, engaging the emotions, mind maps, making the book come alive, etc.). It is important to remember that students' learning abilities vary as greatly as their cultures and ethnicities, and as teachers, we ought to encourage student learning, regardless of how greatly the style differs from mainstream instruction. It is through modification and acknowledgement of multiple intelligences that we as teachers remain lifelong learners, and become relatable and approachable to our students.

### **3.13 Universal Design for Learning (UDL) and Teaching to the Emotions**

Of the program entitled Universal Design for Learning, Crawford (2008) writes that it is a "differentiation approach to curriculum design and instruction that responds to the learning brain. UDL interjects variety and flexibility into the way information is represented, the skills and strategies students employ to learn and demonstrate competence, and the emotional engagement and enjoyment in the process" (p.8). Crawford (2008) addresses the language of differentiation within the classroom environment, and draws attention to various learning needs of students through explanation of Howard Gardner's Theory of Multiple Intelligences; Linguistic, Logical/Mathematical, Musical, Spatial, Bodily/Kinesthetic, Naturalistic, Interpersonal, Intrapersonal, and Existential (Crawford, 2008, p.13). Teaching to emotional/intrapersonal intelligence is integral when aiming to implement the practice of inclusive education upon secondary students as all students can become emotionally engaged within subject

material and in turn, become more greatly aware of themselves and the world that surrounds them.

Daniel Goleman (2005), as cited in *Teaching With Emotional Intelligence*, defined emotional intelligence as “the capacity for recognizing our own feelings and those of others, for motivating ourselves, and for managing emotions well in ourselves and in our relationships” (Mortiboys, 2005, p.1). In teaching with emotional intelligence, one will encourage their students to be more engaged in subject material, resulting in greater motivation, and a greater readiness to take risks, as well as a readiness to collaborate and stronger creativity and tenacity (Mortiboys, 2005, p.1). In order to teach with emotional intelligence, one must be able to recognize and respond to one’s own feelings as well as those of the students and learners, as well as be able to encourage an emotional state in students which is conducive to effective learning (Mortiboys, 2005, p.1).

In acknowledging that all students learn differently from one another, as per Gardner’s Theory of Multiple Intelligences, Crawford (2008) states that “the key to effective differentiation is to adjust the curricular components of content, instructional strategy (process), and assessment (product) continuously in response to adolescents’ interests, readiness levels, and learning profiles” (p.14), so as to encourage the development of a classroom of full inclusion. Crawford (2008) suggests that effective teachers do the following for successful differentiation in the adolescent classroom:

- Inquire about students’ personal strengths, preferences, and interests and incorporate these into planning.
- Learn about students’ families and cultural backgrounds and honour these within the curriculum.
- Find out what students know or remember and help them relate to new learning by building connections.
- Look for broad themes in the content to include a wider range of students’ ideas.
- Help students make a bridge between content and real life.



- Vary tasks to accommodate individual learning strengths and preferences.
- Structure groups that are flexible to validate interests and a range of learning abilities.
- Give assignments that differentiate for students' varying learning abilities.
- Allow students to discuss, explore, wonder, and question.
- Listen, guide, encourage, expect, push, facilitate, and challenge.
- Celebrate students' individuality by letting their thoughts be heard and their creativity flourish.
- Allow students to work, talk, and question collaboratively.
- Permit all students to delve into and better understand content through direct, meaningful, and relevant involvement.
- Challenge students to use knowledge in ways that make sense and a difference in their lives and others.
- Trust and guide students as they take ownership of their own learning.
- Respect and value students' differences and build on them so that they become more competent and confident in personal learning management.
- Enable students to expand their horizons of learning by interacting with resources in the local and global community (Crawford, 2008, p.21-22).

Each of these of these suggestions allows for a greater quality of learning for both the student and the teacher, as both are able to discover several methods of understanding external to various traditional methods of instruction. As educators, it is integral that we take the time and initiative to get to know our students and understand who they are as individuals. It is crucial that we invite them to be active participants in their learning process, where they challenge not only themselves, but their peers, and their teachers as well, to be more open minded to the embracing of difference, of change, and of the ways in which we are all able to learn from one another. I believe that the task of an exceptional

teacher extends beyond the classroom through the development of curiosity and intellect of all students, as well as by promotion of a students' self worth. Therefore, my classroom will be an inclusive and constructivist setting where my students will feel safe to be their authentic and genuine selves, as well as not being afraid to make mistakes and learn from them. Learning in the classroom structures the ways in which students learn outside of the classroom, and the ways in which they enable themselves to become active and influential members of society. Through questioning, discussion, exploration, and development of trust within themselves, students become engaged with materials that had once been separate from them, and are able to connect their academic learning to their lifelong learning needs. As teachers, it is our responsibility to prepare them for the world that awaits them, for the challenges that face them, and for the successes that they will inevitably achieve, and it is through inclusive education and differentiated instruction that my students will be able to take ownership of their learning, and undoubtedly, their lives.

### **3.14 Integration of Special Education students within the Mainstream Classroom:**

In an effort to discuss the process through which the integration of students with learning disabilities and special needs into the mainstream academic English and history classroom, focus is shifted upon the findings of researchers Stephanie D. van Hover, and Elizabeth A. Yeager (2003), authors of the work entitled *Secondary History Teachers and the Inclusion of Students with Disabilities: An Exploratory Study*. When discussing the topic of Special Education and the students who are placed within these classrooms, it is necessary to identify what van Hover and Yeager (2003), name the "identifiers" of these students integrated within the general education classroom. The authors note that students could be identified "as having learning disabilities, attention deficit hyperactivity disorders, emotional or behavior disorders, communication disorders, hearing impairments, visual impairments, and/or physical disabilities" (van Hover and Yeager, 2003, p.37). Van Hover and Yeager (2003) argue that students that have been identified as having a disability within the general education setting, have a written individualized education program (IEP), developed by administration, parents, educators, and contributions made by the student. The IEP includes "levels of

functioning, long- and short- term goals, extent to which -the student will not participate in the general education classroom and curriculum, services to be provided, plans for initiating and evaluating the services, and needed transition services" (van Hover and Yeager, 2003, p.38). Further, van Hover and Yeager (2003) note, that "Although impossible to generalize across disabilities, students included in the general education classroom typically require meaningful curricular and instructional accommodations and adaptations in order to succeed academically" (van Hover and Yeager, 2003, p.37). In quoting author E.J. Nowacek (2001), of *Suggestions for Teaching Students with Disabilities in General Education Classrooms*, it is explained that an accommodation is "a modification to the delivery of instruction or method of student performance that does not significantly change the content or conceptual difficulty of the curriculum; adaptations extend beyond accommodations and involve changing the content or conceptual difficulty of the curriculum" (p 37). Van Hover and Yeager (2003) continue to state:

The success of students with disabilities requires teachers to differentiate curriculum, provide a framework for learning, intensively model learning processes and strategies, present information in multiple ways, allow students to demonstrate learning in multiple ways, teach students to use memory strategies, teach self-regulation and self-monitoring, provide opportunities for extended practice and application, and adjust work load and time requirements [...] Special educators argue that "differentiating curriculum" involves planning for the success of all students in the class and explicitly establishing goals for the range of student ability by considering what some students will learn, what most but not all students will learn, and what all students will learn (p. 37).

Though the integration of special education students within the mainstream academic classroom requires educators to challengingly implement and practice exceptional inclusive education, it is imperative to understand that not only do the identified students benefit from the differentiation instruction and learning, but so too do most other students within the class. All students can learn; it is merely a matter of changing the method, changing the routine.

Introduced by van Hover and Yeager (2003) is the statement that "Teachers viewed history instruction, curriculum, and assessment as standard for all

children, regardless of ability level. Teachers made very superficial changes to assignments rather than truly “adapting” assignments or instructional approaches” (Abstract, p.36). Through the perspective of an educational researcher, the opportunity to confront and discuss necessary aspects lacking from the academic classroom is made possible. Van Hover and Yeager (2003) state:

Certain factors contribute to successful inclusion, including: meaningful adaptations to instruction and curriculum that differentiate and individualize instruction for students with disabilities, positive teacher beliefs and attitudes towards inclusion and students with disabilities, and contextual support for general education teachers (p.36).

Though undoubtedly possible, van Hover and Yeager (2003) have found that research continues to suggest that several special education teachers and educators of the mainstream academic classrooms consider themselves to be ill-prepared and constrained by the prevalent standardized view of instruction and curriculum (p.36), therefore offering diverse student ability and level of comprehension minimally significant changes to the curriculum and instructional approaches.

Necessary and therefore needing to be effectively implemented within the mainstream academic classroom, van Hover and Yeager (2003) implicitly state that there exists little or no research on the issue of inclusion and differentiation, and methods of implementation thereof, in a classroom comprised of students with varying learning abilities and disabilities. As is such, it may be argued that the lack of information pertaining to issues and instructional strategies surrounding inclusive education and differentiated instruction is undoubtedly detrimental to the quality of student learning, and the individual educational experience had – “It becomes imperative that [history] educators possess the ability to create interesting, engaging, and educationally responsive environments for all students” (van Hover & Yeager, 2003, p.37).

As has been previously mentioned, the practice and implementation of inclusive education and differentiated instruction in the secondary English and history classrooms can be considered idealistic as there remains a critical reality that time places great restraint on the ability of the teacher to differentiate and be consciously inclusive of all student diversities and variations. It is a necessary

challenge to be able to reach every student through learning and education, and though idealistic, inclusivity and differentiation present the opportunity through which to do so.

### **3.15 Multicultural Education through Differentiated Instruction in the Secondary Classroom:**

Entering into secondary English and history classrooms, teachers are confronted with the reality of multiculturalism, and the representation of cultural practices, expectations, and understandings through their students. Delinda van Garderen and Catherine Whittaker (2006), authors of the article entitled *Planning Differentiated, Multicultural Instruction for Secondary Inclusive Classrooms* claim that "The No Child Left Behind Act requirements for standards-based curricula and standardized assessment for all students have changed the focus of educational reform [...] a promising practice for meeting the demands of standards-based education [and improving achievement] is differentiated instruction" (p.12). As an extension of the practice of differentiation is the method of multicultural education, as a result of the growing diversity amongst student populations, and the need to teach to the individual; it is argued that it is the purpose of multicultural education to be culturally responsive, so as to promote student achievement in a culturally relevant manner (van Garderen and Whittaker, 2006, p.12).

As differentiated instruction, Universal Design for Learning, and multicultural education are often discussed in an integrated manner, van Garderen and Whittaker (2006) suggest that they provide various converging concepts, theories and ideas applicable within the inclusive secondary classroom, comprised of students with various academic abilities, racial and ethnic identification, sexual, religious, economic, and gender identifications. Drawn upon are the hallmarks of special education that have been identified as methods proven successful in increasing student achievement. Van Garderen and Whittaker (2006) state:

For decades, one of the hallmarks of special education and gifted education has been individualized instruction and flexible grouping. With the more recent emphasis on educating an increasing number of secondary students with exceptional needs in inclusive environments and including all students in state

assessments, both general and special educators are asking important questions about the feasibility of and responsibility for providing individualized instruction in the general education classroom. Differentiated instruction provides a platform for accomplishing this (p.12).

Arguing for the practice and implementation of differentiated instruction and the acknowledgment of the diversities found within the general education/mainstream classroom, van Garderen and Whittaker (2006) present current educators with the means by which to implement the practice and achieve the sought after standards-based results. Differentiated instruction is introduced as “curriculum and instruction that meets the needs of academically diverse learners by honoring each student’s learning needs and maximizing each student’s learning capacity [...] [through] content, process, product, affect, and learning environment” (van Garderen and Whittaker, 2006, p.12-13). Directly linked to this sought after approach to teaching and instruction is the concern over the academic underachievement of students with disabilities and African American, Latino, Native American, and some Asian American students (van Garderen and Whittaker, 2006, p.13). The concern arises as there has long been the assumption that the fault lays with the culture and family, rather than with the curriculum and curricular expectations. Van Garderen and Whittaker (2006) offer explanation and approach to diverge from this prior assumption in a movement towards the practice of multicultural education. It is stated that:

Multicultural education is an approach that encompasses curriculum and instruction but extends beyond them to consider the restructuring of all aspects of schooling. Its major goal is to allow students to acquire the knowledge, attitudes, and skills they need to succeed in an ethnically and racially diverse nation and world [through] [...] content integration, knowledge construction process, equity pedagogy, prejudice reduction, and an empowering school culture and social structure (p.13).

It may be argued that from the perspective of a secondary English and/or history classroom, the multicultural education approach is one that would result in increased standards-based achievement as its use and implementation encouraged student engagement, participation, and interaction with course materials and texts. It is in the understanding that our students have of themselves and others,

diversity and variation alike, that the classroom community and environment becomes all the more accepting and “safe”. This is not to say that the implementation of multicultural education would generate the need for multiple methods of instruction, but rather one integrated method, applicable and engaging for all students, regardless of academic, intellectual ability and diversity. In furthering this argument, van Garderen and Whittaker (2006) defend that “regardless of the degree of heterogeneity of a district or classroom, all students should learn about the history and experiences of diverse groups so they can function in a global society” (p.13), so as to minimize seclusion and isolation.

The concept, culturally responsive teaching, taken from Gloria Ladson Billings and incorporated into the work of van Garderen and Whittaker (2006), claims that “culturally responsive teaching celebrates individual and collective accomplishments, provides academic and personal mentoring in survival skills and self-advocacy, promotes critical thinking, and uses cooperative learning groups or peer tutoring situations” (p.14). In accordance with the inclusive practice of multicultural education and differentiated instruction, culturally responsive teaching is purposefully designed to eliminate prejudice and increase students’ opportunities to work and interact with one another, so as to develop positive attitudes toward human diversity; it is not teaching differently, but rather, teaching inclusively, and consciously so. Van Garderen and Whittaker (2006) offer examples for differentiated instruction through the five classroom elements of content, process, product, affect, and learning environment (p.14):

Elements	Examples
<p>☑Content: what is taught and how access to the information and ideas that matter is given.</p>	<ul style="list-style-type: none"> <li>- texts at varied reading levels</li> <li>- provision of organizers to guide note-taking</li> <li>- use of examples and illustrations based on student interest</li> <li>- present in visual, auditory, and kinesthetic modes</li> <li>- providing materials in the primary language of second language learners.</li> </ul>

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<p>☑Process: How students come to understand and “own” the knowledge, skills, and understanding.</p>	<ul style="list-style-type: none"> <li>- vary the pacing of student work</li> <li>- use cooperative grouping strategies</li> <li>- develop activities that seek multiple perspectives on topics and issues.</li> </ul>
<p>☑Product: Student demonstration of what he or she has come to know, understand, and be able to do.</p>	<ul style="list-style-type: none"> <li>- provide bookmarked internet sites at different levels of complexity for research sources</li> <li>- develop rubrics for success based on grade-level expectations and individual learning needs</li> </ul>
<p>☑Affect: Student linking of thought and feeling in the classroom.</p>	<ul style="list-style-type: none"> <li>- modeling respect</li> <li>- help students examine multiple perspectives on important issues</li> <li>- ensure consistently equitable participation of every student.</li> </ul>
<p>☑Learning Environment: Classroom function and feeling.</p>	<ul style="list-style-type: none"> <li>- rearranging furniture to allow for individual, small-group and whole-group work</li> <li>- Availability of supplies and materials.</li> </ul>

### 3.16 SUMMARY

The concepts and understanding of inclusive education and differentiated instruction, as discussed within the literature review, are similar to the ways in



which intermediate and secondary English and history teachers in this research study have come to understand them. These teachers viewed inclusivity and differentiation as a means by which to strengthen and develop communication among students, peers, and educators, as well as a means by which to ensure student success, academically, socially, and emotionally. Both teachers viewed multicultural education as an extension of inclusive education, promoting students' awareness of the diversities within the learning environment and the global community, as well as encouraging acceptance and celebration of one another's valuable differences. English and history teachers understood inclusivity to mean a classroom where no one is excluded, a classroom where all are appreciated, and fittingly, both teachers acknowledged the various challenges and struggles tied to the practice and implementation of inclusive education and differentiated instruction.

I began this Master of Teaching Research Project asking the question of what it meant to teach "differently" to a classroom comprised of students with diversified and varying learning abilities, and after having gathered the research data and analyzing it in relation to the literature, I have discovered that teaching "differently" implies teaching in the most effective way possible, being conscious of students' ethnic, cultural, intellectual and individual diversities, and incorporating those valuable characteristics into the learning material, as well as the instructional strategies presented. Teaching "differently" means teaching to the individual student, and not the textbook, as the most effective way to teach to a classroom comprised of students with diversified learning abilities, is to teach to them all, so as to benefit all learners within that classroom. I have also understood that teaching through inclusive education and differentiated instruction is a seemingly idealistic practice and that the challenges that educators face are those surrounding issues of relevant material, censorship, sensitivity issues, and the reality that the time spent in the classroom is not enough to cover all of the material and subject matter desired.

Intermediate and secondary school English and history teachers in this research study described a number of practical ways to integrate inclusive education and differentiated instruction into the mainstream classroom. Other strategies for teaching through inclusivity and differentiation were also explored in the literature

review, through the works of Van Garderen and Whittaker (2006). As was previously discussed in Chapter 4 of the research study, one of the challenges that teachers face when implementing inclusion and differentiating material is the fact that most teachers are not adequately trained to teach to a classroom comprised of diverse learning abilities, and are therefore unable to effectively integrate students in special education classrooms into mainstream classrooms. Though the literature and the research participants present countless instructional suggestions to be implemented within the classroom, it may be suggested that there ought to be further resources developed to better train teachers on how to effectively integrate all students into the mainstream classroom, while remaining inclusive of diversity and varying learning ability. As such, it is important to consider which teaching strategies are currently being implemented within the secondary school classroom, the level of effectiveness of each strategy proven through student success, and the areas of instruction that require greater reflection and development of resources. Collaboration amongst colleagues and administration, to develop strategies for best practice, may prove to be beneficial.

As has been described previously, one of the most pressing reasons behind my decision to further study the issues of inclusive education and differentiated instruction as they arose within intermediate and secondary school classrooms is that which is based in my desire to reach every student through the power of education, including those who have otherwise been left unheard. I feel that it is both my privilege and responsibility to provide for my students, an educational experience that will reside within them indefinitely, and that will not only provide an opportunity to become more knowledgeable, but an opportunity to ignite a flame within them, a passion for that which is greater than any one of us, a yearning to know. I chose to study inclusivity and methods of differentiation out of concern for those students whose marvelous exceptionalities had been labeled as disabilities, and for those reasons, had been segregated from their peers, their learning classroom, and the mainstream educational experience. Though students with special education needs were of particular interest to me and my research, I chose to broaden my spectrum to include all students, including those who could potentially be reached by inclusive education, multicultural education, holistic education, and differentiation of course material and textual context. I chose to study instructional strategies that would promote student success, student

engagement, and provide the betterment for the quality of education that students ought to receive.

The implications for practitioners in the intermediate and secondary school classrooms, about the subject of inclusivity and differentiation is that although the methods of implementation and practice are possible, they present themselves as a challenge unto all educators; each and every student learns differently, presenting unto the educator diversified and varying learning abilities, therefore making the effective practice and implementation of inclusive education and differentiated instruction idealist. With this I have learned that all effective and meaningful teaching is a result of patience, perseverance, and passion for the teaching profession. Regardless of the challenge that awaits, inclusive education and differentiated instruction, are educational means to reach every student, and to ensure that all students feel safe, welcome, and as though they are undoubtedly members and participants of the classroom community. The task of an exceptional teacher extends beyond the classroom through the development of curiosity and intellect of all students, as well as by promotion of a students' self worth.

### **3.17 REFERENCES**

Bennett, B., and Rolheiser, C. (2008). *Beyond Monet: the Artful Science of Instructional Integration*. Toronto: Bookation Inc.

Corbett, J. (2001). *Supporting Inclusive Education: a Connective Pedagogy*. New York: Routledge.

Crawford, G. (2008). *Differentiation for the Adolescent Learner: Accommodating Brain*

*Development, Language, Literacy, and Special Needs*. London: Corwin Press.

Loreman, T., Deppeler, J., and Harvey, D. (2005). *Inclusive Education: a Practical Guide to Supporting Diversity in the Classroom*. New York: RoutledgeFalmer.

Mastropieri, M. A., & Scruggs T.E. (2000). *The Inclusive Classroom: Strategies for Effective Instruction*. New Jersey: Prentice-Hall, Inc.

Miller, J. P. (2006). *Educating for wisdom and compassion: Creating conditions for timeless learning*. Thousand Oaks, CA: Corwin Press.

- Miller, R. (1992). *What are schools for: Holistic education in American culture* (2nd ed.), Brandon, VT: Holistic Education Press.
- Mortiboys, A. (2005). *Teaching with Emotional Intelligence* (pp. 1-2). New York, AL: Routledge.
- Northey, S.S. (2005). *Handbook on Differentiated Instruction for Middle and High Schools*. New York: Eye On Education Inc.
- Roswell, J., Kosnik, C., & Beck, C. (2008). *Fostering Multiliteracies Pedagogy through Preservice Teacher Education: Teaching Education*. Toronto, ON: Routledge, Taylor and Francis Group.
- Van Garderen, D. & Whittaker, C. (2006) *Planning Differentiated, Multicultural Instruction for Secondary Inclusive Classrooms*. *TEACHING, Exceptional Children*, Vol. 38, 12-20.
- Van Hover, S. D. & Yeager, E.A. (2003) *Secondary Teachers and Inclusion of Students with Disabilities: An Exploratory Study*, Vol. 27, 36-42.
- Walther-Thomas, C., Korinek, L., McLaughlin, V.L., & Williams, B.T. (2000) *Collaboration for Inclusive Education: Developing Successful Programs*. Toronto, ON: Allyn and Bacon.

## Unit 4

### **Peer Mediated Instructions: Class Wide Peer Tutoring, Peer Assisted Learning Strategies**

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## 4.1 Introduction

Peer-mediated support strategies involve one or more peers providing assistance to their classmates. For students with disabilities, this intervention can be an effective alternative to the use of one-to-one paraprofessionals in classrooms, clubs, and other school activities. Peer-mediated support strategies involve teaching peers to promote academic, social, and/or communication outcomes for students with disabilities by supporting skill acquisition or increasing school participation. Peers participate in orientation sessions where they learn social and academic support strategies for use within both teacher-directed and student-initiated activities. As students with and without disabilities gain familiarity with working together, school staff fades back their direct support gradually to promote student independence.<sup>1</sup>

Peer-mediated support strategies can be used in almost any instructional setting (e.g., general education classrooms, cafeterias, related arts activities) at the elementary and secondary levels. These strategies have been effective at teaching students with disabilities a range of skills and behaviors including academic engagement, responding to others, understanding others, interacting with others in larger groups, and reciprocity.<sup>2</sup>

Peer-mediated support strategies should be tailored to meet the individual needs of a student within the classroom context in which he or she is receiving support. Although the steps laid out in this guide are important to consider, each should be personalized based on the needs of participating students

## 4.2 EFFECTIVENESS OF PEER-MEDIATED SUPPORT STRATEGIES

When designed and implemented well, peer-mediated support strategies can serve as a compelling method for providing academic and social support to students with disabilities. These interventions have been shown to have positive effects on academic, interpersonal, and social development and may have the strongest research support among available social interventions.<sup>3</sup> Peer-mediated support strategies appear to provide students with disabilities enhanced opportunities to learn from their peers and broaden their peer networks.<sup>4</sup>

Students with a variety of disabilities have benefited from peer-mediated support interventions, including students with intellectual disability, autism spectrum disorder, and ADHD.<sup>5</sup>

General education peers also benefit from these interventions through opportunities to change attitudes toward and raise expectations for their classmates with disabilities. Participating in peer-mediated support strategies can also promote academic gains for students without

disabilities. Academic engagement, assignment completion, and classroom participation may improve for students without disabilities who serve as peer supports in general education classrooms.<sup>6</sup>

For more information about the technical assistance project funded to support schools in your region, please see page 6 of this guide.

### 4.3 TYPES OF PEER-MEDIATED SUPPORT STRATEGIES

Peer-mediated support strategies refer to a wide variety of intervention approaches. This guide highlights three such approaches: (a) classroom-wide peer tutoring, (b) peer support arrangements, and (c) lunch bunches.

**Classroom-Wide Tutoring:** Classroom-wide tutoring involves dividing the classroom into small, heterogeneous learning groups. Teams should consist of at least one high-performing student, one average-performing student, and one low-performing student or student with a disability. Thus, while there is heterogeneity within groups, groups are similar across the class, allowing the educator to capitalize on the groups' complementary knowledge and achieve higher-level, collaborative objectives.<sup>7</sup> The educator explains to students that each team as a whole is responsible for helping all teammates learn the content from previous instruction. Team members should be given opportunities to work together to solve problems or understand material, with each having the chance to be the designated "tutor" of the group. While classroom-wide tutoring primarily provides increased academic engagement and academic skill acquisition, students also have the opportunity to interact socially and develop team-building skills with peers.

**Peer Support Arrangements:** Peer support arrangements involve equipping one or more general education students in an inclusive classroom to provide both academic and social support to students with disabilities.<sup>8</sup> General descriptions of individualized academic goals (e.g., collaborating, reviewing course content), participation goals (e.g., contributing to discussion, self-management), and social interaction goals (e.g., talking about shared interest, making introductions to classmates) for the student with a disability are shared with the peers. Special education educators or paraprofessionals provide the peers with the guidance to support their classmate with disabilities as that student moves toward those goals. Unlike some other peer-mediated support strategies, peer support arrangements are individually tailored to reflect the strengths and needs of the student with disabilities and his or her peers, and are not implemented class wide. Primarily,

this approach is used for students with severe disabilities, such as an intellectual disability or autism.

**Lunch Bunches:** The “lunch bunch” strategy connects a student with a disability to a group of students without similar disabilities or students without disabilities to join him or her for lunch, with an emphasis on social conversation during that lunch time. Prior to participating in the group, general education students receive social skills training consisting of explicit teaching of the social skills the strategy will target (e.g., compromising, turn taking), modeling those skills, and role playing. Students can take turns talking about different topics of interest to the group, in addition to asking and answering questions with one another. A lunch bunch can occur multiple times during the week, with the special education educator or another staff member facilitating interactions at first and then fading back into an observatory role as students get to know one another. Similar to peer support arrangements, this strategy is typically used for students with severe disabilities.

### **STEP 1: PLANNING SUPPORTS IN CONTEXT**

Meaningful planning is an essential element of adapting peer-mediated support strategies to meet the needs of students and match the context of support. The chosen strategy should be aligned with the specific learning or social goal for the focal student (the student with disabilities receiving the intervention) and the opportunities for meaningful peer interaction within those settings. When implementing peer-mediated strategies in a classroom, the planning process should address (a) the specific standards informing curricula, instruction, and assessment, (b) the expectations general educators hold for all students in their classrooms, (c) the IEP goals a student will work toward in a specific class, and (d) the avenues through which the student will be supported to participate in the array of learning and social opportunities existing within that classroom. When the strategies are implemented elsewhere, the planning process should address (a) the targeted social or behavioral skills for the intervention, (b) the setting where the intervention will occur (e.g., lunchroom, after school), and (c) how interactions will be initiated.



**Variation Based on Context:** The number of peers involved in each approach should be carefully considered to facilitate the most effective intervention outcomes. While peer support arrangements may only involve two peers who sit next to the student with disabilities in the classroom setting, the lunch bunch is typically most effective at promoting social interactions when there is a group of four to six students.

## **STEP 2: SELECTING PEERS**

The specific peers chosen to participate and provide support as part of any peer-mediated intervention should be carefully selected based on their relevant skills and their previous contact with the focal student. When peers are being asked to provide social and academic support for students with disabilities, it may be helpful to consider the extent to which the peers demonstrate (a) good social and interpersonal skills, (b) shared interests with the focal student, (c) consistent attendance, and (d) a history of being reliable and responsible. The number of peers selected should be determined by the individual needs of the student with a disability, the type of peer-mediated support strategy used, and the setting in which it will be implemented.

**Variation Based on Context:** Different strategies may be used depending on the nature of the student's educational goals, whether academic or social. Classroom-wide tutoring may be an appropriate strategy for students who struggle to stay engaged academically or for students needing more opportunities to develop teamwork and collaboration skills. On the other hand, a lunch bunch might be more suited for a student with disabilities who has limited social interactions with peers.

## **STEPS TO IMPLEMENTATION**

### **STEP 3: PREPARING PEERS**

Educators or paraprofessionals should provide peers with some targeted training prior to beginning their support role with a student with disabilities. An orientation helps explain the overall goals of the peer-mediated support strategy to the peers and provides an opportunity to learn the best way to support the focal student in specific school settings. The educator should begin by explaining how

students learn from one another in a classroom or other school setting so peers are oriented toward a goal for the focal student and the intervention group as a whole. Then, the educator should introduce strategies the peers will use to support the focal student and provide an opportunity for the peers to practice with the educator or one another. This part of the training process may require multiple sessions before the peers reliably learn the various strategies. Regardless of the age group, the educator should provide direct instruction to the chosen peers about the primary needs for the focal student and what a meaningful interaction may look like.

**Variation Based on Context:** Peer training takes different forms depending on the type of approach used and the school level. A social intervention at the elementary school level will have a different training process than an academic intervention at the middle school or high school level. For young children in a peer support arrangement, training might emphasize basic cooperative behaviors such as sharing, helping the focal student stay on task, providing praise through high fives or encouraging words, or suggesting play activities. For a middle school or high school student participating in classroom-wide tutoring, emphasis might be on goal setting with the focal student providing positive feedback and brainstorming how peers can provide the best assistance.

#### **STEP 4: MONITORING AND PROVIDING FEEDBACK TO PEERS**

After the initial orientation process, peers begin working with the student with disabilities on a regular basis. As peers become more comfortable interacting with and supporting the focal student, they often take on a more independent role in assisting the student with a disability in a variety of instructional formats and in interacting socially during appropriate times. At the same time, the educator or paraprofessional carefully decreases their direct support for the student with disabilities and transitions into a broader support role. Peers should also receive feedback from the educator on how to best carry out their roles in ways that are most effective.

**Variation Based on Context:** Although regular feedback should be provided to peers regardless of the approach, the type and extent of prompts may differ based on the needs of the peers and the specific intervention. An educator may provide

only subtle reinforcement (e.g., thumbs up, pat on the back) in an academic setting so as not to disrupt the flow of student learning. However, the educator may provide more explicit reinforcement (e.g., saying, "I like the way you asked Robert a follow-up question about his favorite sport to continue the conversation topic.") during a lunch bunch to model providing praise.

## SUMMARY

Peer-mediated support strategies can be helpful in equipping students with disabilities with social and academic skills to be successful in an inclusive classroom setting. Additionally, this strategy can positively impact students without disabilities, both academically and socially, in terms of appreciation of diversity and personal growth. When considering this type of intervention, it is important to remember that the intervention should be specifically tailored to the needs and goals of the student with disabilities.

### **4.4 Students with Learning Disabilities June 2012 Program Description**

Program in which student pairs perform a structured set of activities in reading or math (*PALS Reading* and *PALS Math*, respectively). During the 30-35 minute peer-tutoring sessions, students take turns acting as the tutor, coaching and correcting one another as they work through problems. Pairs work together three or four times per week for reading sessions and two times per week for math sessions. The designation of tutoring pairs and skill assignment is based on teacher judgment of student needs and abilities, and teachers reassign tutoring pairs regularly.

Although *PALS* is for students with diverse academic needs, this intervention report focuses on the use of *PALS* to improve the reading and mathematics skills of students with learning disabilities.

### **4.5 Research**

Two studies of *PALS* that fall within the scope of the Students with Learning Disabilities review protocol meet What Works Clearinghouse (WWC) evidence standards without reservations, and one study meets WWC evidence standards

with reservations. The three studies included 100 students with disabilities from grades 2–6 in three states, with one of the study samples composed entirely of English language learners with learning disabilities. Based on these three studies, the WWC considers the extent of evidence for *PALS* on students with learning disabilities to be small for the reading fluency, reading comprehension, and mathematics domains. Six other domains are not reported in this intervention report. (See the Effectiveness Summary for further description of all domains.)

#### **4.6 Effectiveness**

*PALS* was found to have potentially positive effects on reading fluency and reading comprehension and no discernible effects on mathematics for students with learning disabilities.

#### **4.7 Program Information**

##### **Background**

Developed by Lynn Fuchs and Doug Fuchs in 1997, *PALS* is distributed by the Vanderbilt Kennedy Center for Research on Human Development. Address: Vanderbilt University, Attn: Flora Murray/*PALS* Orders, Peabody Box 228, Nashville, TN 37203-5701. Email: [flora.murray@vanderbilt.edu](mailto:flora.murray@vanderbilt.edu). Web: <http://kc.vanderbilt.edu/pals/>. Telephone: (615) 343-4782.

##### **Program details**

*PALS* was designed to be used with all students in grades 2–6 as a supplement to the general education curriculum. Recently, *PALS Reading* has been extended to other grade levels, including *K-PALS* (kindergarten), *First Grade PALS*, and *High School PALS*. *PALS Math* also is available. *PALS* has been implemented by hundreds of teachers in Arizona, Iowa, Minnesota, Ohio, Oregon, Tennessee, Texas, and other states. The program has been used with English-proficient students with learning disabilities and English language learners with and without learning disabilities.

*PALS* is a supplemental peer-tutoring program in which student pairs use a structured set of activities. Teachers first train their students in *PALS* procedures

using training lessons from the teacher's manual. Then, student pairs are formed by teachers, and students alternate their roles as tutor and tutee. *PALS* activities vary for reading and math classes.

In *PALS Reading*, the designation of tutoring pairs and the skill assignment to each pair are based on teacher judgment of student needs and abilities. For grades 2–6, *PALS Reading* activities include Partner Reading/Retelling, Paragraph Shrinking, and Prediction Relay. In Partner Reading/Retelling, the stronger reader reads for five minutes, while the weaker reader serves as the coach by identifying errors, initiating correction procedures, and awarding points for each sentence read correctly. After the first student is finished reading, the coach asks the reader what he or she has learned. Students switch roles for the second five minutes and follow the same procedure. During Paragraph Shrinking, students generate main idea statements. The stronger reader reads one paragraph at a time. After reading each paragraph, the reader then determines the main idea. The tutor uses a correction procedure to help the reader correct main idea statements. After five minutes, the students switch roles with the second reader reading new material. During Prediction Relay, the stronger reader has two minutes to predict what he or she might learn or what might happen in each upcoming half-page segment. After reading the segment, the reader has two minutes to evaluate the prediction. After five minutes, the students switch roles and follow the same procedure with new reading material for another five minutes.

In *PALS Math*, the designation of tutoring pairs and the skill assignment to each pair are based on teacher judgment or ongoing curriculum-based measurement data. For the second through sixth grades, *PALS Math* includes two activities in each session. In the first activity, Coaching, the stronger student (the coach) models a series of questions to encourage the weaker student (the player) to internalize a self-talk method for solving computation or concepts/applications problems. As the coach models this series of questions, the player answers questions and writes answers. The coach uses a set of helping and explaining strategies to promote the player's understanding and to correct errors. The materials prompt the students when to switch coach and player roles. The second activity, Practice, is a 5- to 10-minute activity that addresses the skill just practiced during coaching, as well as easier skills at that grade level.

The reading and mathematics activities are modified for kindergarten, first grade, and high school. Grade-appropriate materials and activities are used.

#### **4.8 Summary**

Forty-six studies reviewed by the WWC investigated the effects of *PALS* on students with learning disabilities. Two studies (Fuchs, Fuchs, Phillips, & Hamlett, 1995; Saenz, Fuchs, & Fuchs, 2005) are randomized controlled trials that meet WWC evidence standards without reservations. One study (Fuchs, Fuchs, Mathes, & Simmons, 1997) is a randomized controlled trial that meets WWC evidence standards with reservations. The remaining 43 studies do not meet either WWC eligibility screens or evidence standards. (See references beginning on p. 7 for citations for all 46 studies.)

##### **Summary of studies meeting WWC evidence standards without reservations**

Fuchs et al. (1995) examined the effects of *PALS* on the mathematics achievement of second- to fourth-grade students in nine schools in an urban school district in Tennessee. Teachers who had one or more students with learning disabilities in their math class were recruited to participate in the study. This yielded a sample of 40 teachers who were each asked to identify three students to participate in the study: one low-performing student with a learning disability (identified in accordance with state regulations), one low-performing student who did not have a learning disability, and one average-performing student. Teachers then were randomly assigned to either *PALS* or comparison conditions (20 teachers per group). This WWC review is based on an analysis of a subset of 40 students with learning disabilities (20 *PALS* students and 20 comparison students). Comparison group teachers used their normal approach (business-as-usual). Outcome measures were administered immediately before and after the intervention.

Saenz et al. (2005) examined the effects of *PALS* on the reading fluency and reading comprehension of third- to sixth-grade students in 12 English language learner (ELL) classrooms in one south Texas school district. To participate in the study, a classroom had to have an all-ELL student population with at least two students with a learning disability. The study design was a randomized controlled trial in which 12 classrooms were stratified on grade level and school. Each of the

12 teachers was then asked to identify 11 students to participate in the study: two low-achieving students with a learning disability (identified in accordance with state regulations), three low-achieving students who did not have a learning disability, three average-achieving students, and three high-achieving students. After students were identified, the classrooms were randomly assigned to either *PALS* or comparison conditions (six per group). This WWC review is based on an analysis of a subset of 20 students with learning disabilities (10 *PALS* students and 10 comparison students). Comparison group teachers conducted reading instruction using their normal approach (business-as-usual). Outcome measures were administered before and after the intervention.

### **Summary of study meeting WWC evidence standards with reservations**

Fuchs et al. (1997) examined the effects of *PALS* on reading fluency and reading comprehension of second- to sixth-grade students whose average age was ten. An initial sample of 22 schools from a southern state was stratified on reading scores and the percentage of students who qualified for free or reduced-price meals, and then randomly assigned (within strata) to either *PALS* or comparison conditions. After randomization of schools, teachers who had one or more students with learning disabilities in their reading class were recruited to participate in the study. The recruitment efforts yielded a sample of 40 teachers (20 *PALS* and 20 comparison) from 12 of the 22 schools. Each of the 40 teachers then was asked to identify three students to participate in the study: one low-performing student with a learning disability (identified in accordance with state regulations), one low-performing student who did not have a learning disability, and one average-performing student. This resulted in a total study sample of 120 students. While schools were randomly assigned to *PALS* and comparison groups, this study was reviewed as a quasi-experimental design because teachers knew their treatment condition when they selected student participants. In addition, teachers were only recruited after random assignment (although teachers were not told their condition during recruitment), and 10 of the schools that were randomized had no eligible teachers. The remaining 12 schools participated throughout the study and included 40 teachers and 40 students with learning disabilities.

The *PALS* and comparison schools in the analysis differed on some measures of school environment (such as the percentage of rural schools). However, based on

other measures such as poverty and achievement, the principal investigator concluded that the environments were similar.

This WWC review is based on an analysis from a subset of 40 students with learning disabilities (20 *PALS* students and 20 comparison students). Comparison group teachers conducted reading instruction using their normal approach (business-as-usual). Outcome measures were administered immediately before and after the intervention.

### **Effectiveness Summary**

The WWC review of interventions for students with learning disabilities addresses student outcomes in nine domains: alphabets, reading fluency, reading comprehension, general reading achievement, mathematics, writing, science, social studies, and progressing in school. The three studies that contribute to the effectiveness rating in this report cover three domains: reading fluency, reading comprehension, and mathematics. The findings below present the authors' estimates and WWC-calculated estimates of the size and statistical significance of the effects of *PALS* on students with learning disabilities. For a more detailed description of the rating of effectiveness and extent of evidence criteria.

### **Summary of effectiveness for the reading fluency domain .**

Fuchs et al. (1997) did not report findings of *PALS*'s impact on the subset of 40 students with learning disabilities. WWC calculations for this sample of students show no statistically significant effects on two measures of reading fluency: the Words Correct and Maze Choices subscales of the Comprehensive Reading Assessment Battery (CRAB). However, the WWC-calculated average effect size across these two measures was 0.31—large enough to be considered substantively important according to WWC criteria (i.e., an effect of at least 0.25). The WWC characterizes these study findings as a substantively important positive effect.

Similarly, Saenz et al. (2005) did not report findings on the subset of 20 students with learning disabilities. WWC calculations for this sample of students show no statistically significant effects on the CRAB Words Correct and Maze Choices subscales. However, the WWC-calculated average effect size across these two measures was 0.41—large enough to be considered substantively important by the



WWC. The WWC characterizes these study findings as a substantively important positive effect.

Thus, for the reading fluency domain, the WWC found no statistically significant effects in either study, but WWC-calculated average effect sizes for both studies were large enough to be considered substantively important. This results in a rating of potentially positive effects on reading fluency for students with learning disabilities, with a small extent of evidence.

### **Summary of effectiveness for the reading comprehension domain**

Two studies reported findings in the reading comprehension domain. Fuchs et al. (1997) did not report findings of *PALS*'s impact on the subset of 40 students with learning disabilities. WWC calculations show no statistically significant effect on one measure of reading comprehension: the Questions Correct subscale of the CRAB. However, the WWC-calculated effect size for this measure was 0.60—large enough to be considered substantively important according to WWC criteria. The WWC characterizes these study findings as a substantively important positive effect.

Similarly, Saenz et al. (2005) did not report findings of *PALS*'s impact on the subset of 20 students with learning disabilities. WWC calculations show no statistically significant effect on the CRAB Questions Correct subscale. However, the WWC-calculated effect size for this measure was 0.91—large enough to be considered substantively important by the WWC. The WWC characterizes these study findings as a substantively important positive effect.

Thus, for the reading comprehension domain, the WWC found no statistically significant effects in either study, but the WWC-calculated average effect sizes for both studies were enough to be considered substantively important. This results in a rating of potentially positive effects, with a small extent of evidence.

## **4.9 References**

### **Studies that meet WWC evidence standards without reservations**

Fuchs, L. S., Fuchs, D., Phillips, N. B., & Hamlett, C. L. (1995). Acquisition and transfer effects of classwide Peer-Assisted Learning Strategies in mathematics for

students with varying learning histories. *School Psychology Review*, 24(4), 604–620.

Saenz, L., Fuchs, L. S., & Fuchs, D. (2005). Peer-Assisted Learning Strategies for English language learners with learning disabilities. *Exceptional Children*, 71(3), 231–247.

**Additional source:** Saenz, L. (2002). Peer-Assisted Learning Strategies for limited English proficient students with learning disabilities. *Dissertation Abstracts International*, 63(07A), 163-2505.

### **Study that meets WWC evidence standards with reservations**

Fuchs, D., Fuchs, L. S., Mathes, P. G., & Simmons, D. C. (1997). Peer-Assisted Learning Strategies: Making classrooms more responsive to diversity. *American Educational Research Journal*, 34(1), 174–206.

### **Studies that do not meet WWC evidence standards**

Calhoon, M. B. (2005). Effects of a peer-mediated phonological skill and reading comprehension program on reading skill acquisition for middle school students with reading disabilities. *Journal of Learning Disabilities*, 38(5), 424–433. The study does not meet WWC evidence standards because the measures of effectiveness cannot be attributed solely to the intervention—there was only one unit assigned to one or both conditions.

Calhoon, M. B., & Fuchs, L. S. (2003). The effects of Peer-Assisted Learning Strategies and curriculum-based measurement on the mathematics performance of secondary students with disabilities. *Remedial and Special Education*, 24(4), 235. The study does not meet WWC evidence standards because it is a randomized controlled trial in which the combination of overall and differential attrition rates exceeds WWC standards for this area, and the subsequent analytic intervention and comparison groups are not shown to be equivalent.

Fuchs, L. S., Fuchs, D., & Kazdan, S. (1999). Effects of Peer-Assisted Learning Strategies on high school students with serious reading problems. *Remedial and Special Education*, 20(5), 309–318. The study does not meet WWC evidence standards because it uses a quasi-experimental design in which the analytic intervention and comparison groups are not shown to be equivalent.

Mastropieri, M. A. (2001). Can middle school students with serious reading difficulties help each other and learn anything? *Learning Disabilities Research & Practice, 16*(1), 18. The study does not meet WWC evidence standards because the measures of effectiveness cannot be attributed solely to the intervention—there was only one unit assigned to one or both conditions.

**Studies that are ineligible for review using the Students with Learning Disabilities Evidence Review Protocol**

Al Otaiba, S., Schatschneider, C., & Silverman, E. (2005). Tutor-assisted intensive learning strategies in kindergarten: How much is enough? *Exceptionality, 13*(4), 195–208. The study is ineligible for review because it does not use a sample aligned with the protocol—the sample includes less than 50% students with learning disabilities.

Anderson, S., Yilmaz, O., & Wasburn-Moses, L. (2004). Middle and high school students with learning disabilities. *American Secondary Education, 32*(2), 19–38. The study is ineligible for review because it is not a primary analysis of the effectiveness of an intervention, such as a meta-analysis or research literature review.

Apthorp, H., & Clark, T. (2007). *Using strategy instruction to help struggling high schoolers understand what they read* (Issues & Answers Report, REL 2007–No. 038). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Central. The study is ineligible for review because it is a secondary analysis of the effectiveness of an intervention, such as a meta-analysis or research literature review.

Baker, S., Gersten, R., Dimino, J. A., & Griffiths, R. (2004). The sustained use of research-based instructional practice. *Remedial and Special Education, 25*(1), 5–24. The study is ineligible for review because it does not include a student outcome.

Barley, Z., Lauer, P. A., Arens, S. A., Apthorp, H. S., Englert, K. S., Snow, D., & Akiba, M. (2002). *Helping at-risk students meet standards: A synthesis of evidence-based classroom practices*. Aurora, CO: Mid-continent Research for

Education and Learning. The study is ineligible for review because it is a secondary analysis of the effectiveness of an intervention, such as a meta-analysis or research literature review.

Bond, R., & Castagnera, E. (2006). Peer supports and inclusive education: An underutilized resource. *Theory Into Practice*, 45(3), 224–229. The study is ineligible for review because it is a secondary analysis of the effectiveness of an intervention, such as a meta-analysis or research literature review.

Cavanaugh, C. L., Kim, A-H., Wanzek, J., & Vaughn, S. (2004). Kindergarten reading interventions for at-risk students: Twenty years of research. *Learning Disabilities: A Contemporary Journal*, 2(1), 9–21. The study is ineligible for review because it is a secondary analysis of the effectiveness of an intervention, such as a meta-analysis or research literature review.

Dion, E., Morgan, P. L., Fuchs, D., & Fuchs, L. S. (2004). The promise and limitations of reading instruction in the mainstream: The need for a multilevel approach. *Exceptionality*, 12(3), 163–173. The study is ineligible for review because it is a secondary analysis of the effectiveness of an intervention, such as a meta-analysis or research literature review.

Fuchs, D., & Fuchs, L. S. (2005). Peer-Assisted Learning Strategies: Promoting word recognition, fluency, and reading comprehension in young children. *Journal of Special Education*, 39(1), 34–44. The study is ineligible for review because it does not use a sample aligned with the protocol—the sample includes less than 50% students with learning disabilities.

Fuchs, D., & Fuchs, L. S. (2007). Increasing strategic reading comprehension with Peer-Assisted Learning activities. In D. McNamara (Ed.), *Reading comprehension strategies: Theories, interventions, and technologies* (pp. 175–199). New York: Psychology Press. The study is ineligible for review because it is a secondary analysis of the effectiveness of an intervention, such as a meta-analysis or research literature review.

Fuchs, D., Fuchs, L. S., & Burish, P. (2000). Peer-assisted learning strategies: An evidence-based practice to promote reading achievement. *Learning Disabilities Research & Practice*, 15(2), 85–91. The study is ineligible for review because it

does not use a sample aligned with the protocol—the sample includes less than 50% students with learning disabilities.

Fuchs, D., Fuchs, L. S., Mathes, P. G., & Martinez, E. A. (2002). Preliminary evidence on the social standing of students with learning disabilities in PALS and no-PALS classrooms. *Learning Disabilities Research & Practice, 17*(4), 205–215. The study is ineligible for review because it does not include an outcome within a domain specified in the protocol.

Fuchs, L. S., & Fuchs, D. (2001). Principles for the prevention and intervention of mathematics difficulties. *Learning Disabilities Research & Practice, 16*(2), 85–95. The study is ineligible for review because it is a secondary analysis of the effectiveness of an intervention, such as a meta-analysis or research literature review.

Fuchs, L. S., Fuchs, D., & Karns, K. (2001). Enhancing kindergartners' mathematical development: Effects of Peer-Assisted Learning Strategies. *The Elementary School Journal, 101*(5), 495–510. The study is ineligible for review because the authors could not confirm that at least 50% of the sample was classified as learning disabled.

**Additional source:** Fuchs, L. S., Fuchs, D., Karns, K., Yazdian, L., & Powell, S. (2001). Creating a strong foundation for mathematics learning with kindergarten Peer-Assisted Learning Strategies. *Teaching Exceptional Children, 33*(3), 84.

Gersten, R., Fuchs, L. S., Williams, J. P., & Baker, S. (2001). Teaching reading comprehension strategies to students with learning disabilities: A review of research. *Review of Educational Research, 71*(2), 279. The study is ineligible for review because it is a secondary analysis of the effectiveness of an intervention, such as a meta-analysis or research literature review.

Ginsburg-Block, M., Rohrbeck, C., Fantuzzo, J., & Lavigne, N. C. (2006). Peer-Assisted Learning Strategies. In G. G. Bear & K. M. Minke (Eds.), *Children's needs III: Development, prevention, and intervention* (pp. 631–645). Washington, DC: National Association of School Psychologists. The study is ineligible for review because it is a secondary analysis of the effectiveness of an intervention, such as a meta-analysis or research literature review.

Greenwood, C. R., Kamps, D., Terry, B. J., & Linebarger, D. L. (2007). Primary intervention: A means of preventing special education? In D. Haager, J. Klingner, & S. Vaughn (Eds.), *Evidence-based reading practices for response to intervention* (pp. 73–103). Baltimore, MD: Paul H. Brookes. The study is ineligible for review because it is a secondary analysis of the effectiveness of an intervention, such as a meta-analysis or research literature review.

Greenwood, C. R., Tapia, Y., Abbott, M., & Walton, C. (2003). A building-based case study of evidence-based literacy practices: Implementation, reading behavior, and growth in reading fluency, K–4. *Journal of Special Education, 37*(2), 95. The study is ineligible for review because it does not use a sample aligned with the protocol—the sample includes less than 50% students with learning disabilities.

Harris, A. A. (2009). Comparing effects of two grouping conditions to teach algebraic problem-solving to students with mild disabilities in inclusive settings. *Dissertation Abstracts International Section A: Humanities and Social Sciences, 70*(5-A), 1618. The study is ineligible for review because the WWC could not confirm that at least 50% of the sample was classified as learning disabled.

Kunsch, C. A., Jitendra, A. K., & Sood, S. (2007). The effects of peer-mediated instruction in mathematics for students with learning problems: A research synthesis. *Learning Disabilities Research & Practice, 22*(1), 1–12. The study is ineligible for review because it is a secondary analysis of the effectiveness of an intervention, such as a meta-analysis or research literature review.

Lorah, K. S. (2003). Effects of peer tutoring on the reading performance and classroom behavior of students with attention deficit hyperactivity disorder. *Dissertation Abstracts International, 64*(04A), 198-1208. The study is ineligible for review because it does not use a sample aligned with the protocol—the sample includes less than 50% students with learning disabilities.

Maccini, P., Mulcahy, C. A., & Wilson, M. G. (2007). A follow-up of mathematics interventions for secondary students with learning disabilities. *Learning Disabilities Research & Practice, 22*(1), 58–74. The study is ineligible for review because it is a secondary analysis of the effectiveness of an intervention, such as a meta-analysis or research literature review.

Maheady, L., Mallette, B., & Harper, G. F. (2006). Four classwide peer tutoring models: Similarities, differences, and implications for research and practice. *Reading & Writing Quarterly*, 22(1), 65–89. The study is ineligible for review because it is a secondary analysis of the effectiveness of an intervention, such as a meta-analysis or research literature review.

Mallette, B., Maheady, L., & Harper, G. F. (1999). The effects of reciprocal peer coaching on preservice general educators' instruction of students with special learning needs. *Teacher Education and Special Education*, 22(4), 201. The study is ineligible for review because it does not use a comparison group design or a single-case design.

Mastropieri, M. A., Scruggs, T. E., & Graetz, J. E. (2003). Reading comprehension instruction for secondary students: Challenges for struggling students and teachers. *Learning Disability Quarterly*, 26(2), 103. The study is ineligible for review because it is a secondary analysis of the effectiveness of an intervention, such as a meta-analysis or research literature review.

Mathes, P. G., Howard, J. K., Allen, S. H., & Fuchs, D. (1998). Peer-Assisted Learning Strategies for first-grade readers: Responding to the needs of diverse learners. *Reading Research Quarterly*, 33(1), 62–94. The study is ineligible for review because it does not use a sample aligned with the protocol—the sample includes less than 50% students with learning disabilities.

Mathes, P. G., Torgesen, J. K., Clancy-Menchetti, J., Santi, K., Nicholas, K., Robinson, C., & Grek, M. (2003). A comparison of teacher-directed versus peer-assisted instruction to struggling first-grade readers. *Elementary School Journal*, 103(5), 459. The study is ineligible for review because it does not use a sample aligned with the protocol—the sample includes less than 50% students with learning disabilities.

McMaster, K. L., Fuchs, D., & Fuchs, L. S. (2006). Research on Peer-Assisted Learning Strategies: The promise and limitations of peer-mediated instruction. *Reading & Writing Quarterly*, 22(1), 5–25. The study is ineligible for review because it is a secondary analysis of the effectiveness of an intervention, such as a meta-analysis or research literature review.

McMaster, K. L., Fuchs, D., & Fuchs, L. S. (2007). Promises and limitations of Peer-Assisted Learning Strategies in reading. *Learning Disabilities: A Contemporary Journal*, 5(2), 97–112. The study is ineligible for review because it is a secondary analysis of the effectiveness of an intervention, such as a meta-analysis or research literature review.

McMaster, K. L., Fuchs, D., Fuchs, L. S., & Compton, D. L. (2005). Responding to nonresponders: An experimental field trial of identification and intervention methods. *Exceptional Children*, 71(4), 19. The study is ineligible for review because the authors could not confirm that at least 50% of the sample was classified as learning disabled.

Morgan, P. L., Young, C., & Fuchs, D. (2006). Peer-Assisted Learning Strategies: An effective intervention for young readers. *Insights on Learning Disabilities*, 3(1), 23–42. The study is ineligible for review because it is a secondary analysis of the effectiveness of an intervention, such as a meta-analysis or research literature review.

Mulcahy, C. A., & Krezmien, M. P. (2009). Effects of a contextualized instructional package on the mathematics performance of secondary students with EBD. *Behavioral Disorders*, 34(3), 136–150. The study is ineligible for review because it does not use a sample aligned with the protocol—the sample includes less than 50% students with learning disabilities.

National Center for Learning Disabilities. (1999). *Two decades of research in learning disabilities: Reading comprehension, expressive writing, problem solving, self-concept. Keys to successful learning: A national summit on research in learning disabilities*. New York: Author. The study is ineligible for review because it is a secondary analysis of the effectiveness of an intervention, such as a meta-analysis or research literature review.

Saddler, B., Asaro, K., & Behforouz, B. (2008). The effects of peer-assisted sentence-combining practice on four young writers with learning disabilities. *Learning Disabilities: A Contemporary Journal*, 6(1), 17–31. The study is ineligible for review because it does not examine an intervention implemented in a way that falls within the scope of the review—the intervention is bundled with other components.



Saenz, L., McMaster, K., Fuchs, D., & Fuchs, L. (2007). Peer-Assisted Learning Strategies in reading for students with different learning needs. *Journal of Cognitive Education and Psychology*, 6(3), 395–410. The study is ineligible for review because it is a secondary analysis of the effectiveness of an intervention, such as a meta-analysis or research literature review.

Slavin, R. E., Cheung, A., Groff, C., & Lake, C. (2008). *Effective reading programs for middle and high schools: A best evidence synthesis*. Educator's summary. Retrieved from [http://www.bestevidence.org/word/mhs\\_read\\_Sep\\_16\\_2008\\_sum.pdf](http://www.bestevidence.org/word/mhs_read_Sep_16_2008_sum.pdf). The study is ineligible for review because it is a secondary analysis of the effectiveness of an intervention, such as a meta-analysis or research literature review.

Slavin, R. E., Cheung, A., Groff, C., & Lake, C. (2008). Effective reading programs for middle and high schools: A best-evidence synthesis. *Reading Research Quarterly*, 43(3), 290–322. The study is ineligible for review because it is a secondary analysis of the effectiveness of an intervention, such as a meta-analysis or research literature review.

Snow, D. (2003). *Noteworthy perspectives: Classroom strategies for helping at-risk students*. Aurora, CO: Mid-continent Research for Education and Learning. The study is ineligible for review because it is a secondary analysis of the effectiveness of an intervention, such as a meta-analysis or research literature review.

Vaughn, S., & Gersten, R. (2000). The underlying message in LD intervention research: Findings from research syntheses. *Exceptional Children*, 67(1), 99. The study is ineligible for review because it is a secondary analysis of the effectiveness of an intervention, such as a meta-analysis or research literature review.

Vaughn, S., Hughes, M. T., Moody, S. W., & Elbaum, B. (2001). Instructional grouping for reading for students with LD: Implications for practice. *Intervention in School and Clinic*, 36(3), 131–137. The study is ineligible for review because it is a secondary analysis of the effectiveness of an intervention, such as a meta-analysis or research literature review.

Vermette, P., Harper, L., & DiMillo, S. (2004). Cooperative & collaborative learning ... with 4–8 year olds: How does research support teachers' practice? *Journal of Instructional Psychology*, 31(2), 130–134. The study is ineligible for review because it is a secondary analysis of the effectiveness of an intervention, such as a meta-analysis or research literature review.

Wexler, J., Vaughn, S., Edmonds, M., & Reutebuch, C. (2008). A synthesis of fluency interventions for secondary struggling readers. *Reading & Writing*, 21(4), 317–347. The study is ineligible for review because it is a secondary analysis of the effectiveness of an intervention, such as a meta-analysis or research literature review.

## UNIT 5

### ICT for Instructions

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## 5.1 Introduction

To organize a school that can accommodate all children is a challenge for all schools today. The inclusion movement became internationally recognized in 1994 with the Salamanca Statement (UNESCO, 1994), which was adopted by 89 countries worldwide and state that inclusive education requires that schools accommodate all children. The fundamental principle of the inclusive school is that all children should learn together, where possible, and that ordinary schools must recognize and respond to the diverse needs of their students, while also having a continuum of support and services to match these needs. Sweden preceded Salamanca with the curriculum of 1980 and the slogan "A school for all". Inclusion has been on school agenda for the last three decades in Sweden, and continues to do so in national curriculum, where Swedish School Law (SFS 2010:800) states that special education should be given to students within their classes.

National curriculum promotes inclusion, however, under special circumstances special education can be given individually or in separate groups. Despite the wave of inclusion that has swept over the world, Swedish law still allows students to be removed from their original classroom settings and there seem to be a tendency towards increased exclusion of students in Swedish schools (Brodin 2010; Giota & Emanuelsson 2011; Haug 1998; Westling-Allodi 2005).

Information- and communication technology, ICT, in its various forms, are said to bridge the gap and allow inclusion for students with special educational needs (Brodin, 2010; Gillette, 2006; Skoldatateket, 2012; SPSM, 2011). Development in the area of information- and communication technology is fast and new technological devices and programs are introduced every day. Schools make big investments in modern information and communication technology. ICT could allow students with special educational needs to be included in classrooms with their classmates, and assistive technology might help students to a greater extent reach the goals of their education (Brodin, 2010; Gillette, 2006). Several studies point to that ICT could help students with special educational needs, especially students with reading- and/or writing disabilities through word processors, word prediction programs, spell and grammar checks, voice recognition, text-to-speech programs, planning and organizing tools etc (Anderson, Anderson & Cherup,

2009; Maor, Curie & Drewry, 2011; Peterson-Karlan, 2011). ICT seems to have advantages for students with special educational needs and assistive technology devices might be used by students within their classes and in that way can promote inclusion.

In Sweden, “Skoldatatek” were introduced in the beginning of 2000. The intention was to inspire school staff to use ICT with students with special educational needs in order for students with neuropsychiatric disorders and reading- and writing disabilities to access computer technology as help in their school work and as a contribution to inclusion in the classrooms. Today there are 200 “Skoldatatek” in Sweden (Skoldatateket, 2012).

Articles in teacher’s magazines tell about the vast ICT investments that are made on computers for all students are made in numerous Swedish cities. During the last three or four years the development has increased significantly. Still, research has yet to assure the benefits with these investments. Expectations on these investments are that the schools will be digitalized at the same pace as the rest of society. With better access to ICT, teachers are expected to increase their knowledge as they become more familiar with new technology (Brozin Bohman, 2012; Lindström, 2012).

The use of ICT for students with special educational needs is interesting from a special educational perspective since a goal for the special education teacher is to identify, analyze and participate in prevention and in efforts to eliminate barriers and difficulties in different learning environments (SFS 2007:638). The role of the special education teacher the area of ICT for students with special educational needs varies. However, in order to complete the goal from the degree objectives above, it is of interest to look into teachers’ perceptions on ICT for students with special educational needs and the issue of inclusion in order to support the teachers who meet and work with the students in school on a daily basis. This fast changing world, with new curriculums and rapidly growing ICT market, places heavy responsibility on the teachers’ shoulders. Adapting teaching for all students is a complex task, and teaching students who use assistive technology make new demands on teachers. An inclusive school requires teachers not only to follow the curriculum and modify teaching to meet the needs of all students, but also to be up to date with new technology and integrate technology with content and pedagogy.

There is a wide range of research on the area of ICT for students with special educational needs in general educational settings is extensive, especially with focus on ICT for students with reading or writing disabilities. However, when it comes to teachers' perceptions on working with SEN students in general educational settings that use ICT only a few articles could be found, and no Swedish doctors' theses or scientific papers that fully matched the area were found. This, together with the increasing investments that are being made on new technology in Swedish schools, calls for research in the area.

## **5.2 Aim**

The aim of this study is to describe and analyze teachers' experiences of and perceptions on how ICT is used for students with special educational needs in relation to the issue of inclusion and to make a comparison of teachers in different grades. The research questions are:

- What are the different perceptions that teachers have of ICT use for students with special educational needs?
- What are teachers perceptions of the relationship between ICT use and inclusion of students with special educational needs?
- What kinds of conditions and strategies can be identified in order to make the use of ICT more inclusive for students with special educational needs?

## **5.3 Background**

### **5.3.1 Definitions**

Definitions will be given for terms related to ICT for students with special educational needs that are used throughout the essay.

### **5.3.2 Information and communication technology (ICT)**

ICT is an abbreviation for information- and communication technology. ICT is an extended form of IT and it came into use in recognition of the growing significance of communications technology (Miles, 2001).

### **5.3.3 Assistive technology (AT)**

Any equipment that is used to improve functional capabilities of individuals with disabilities is considered assistive technology (AT) according to the American IDEA (2004). Assistive technology services and devices allow access to the general education curriculum (Dyal, Carpenter & Wright, 2009). The focus of this study will be on assistive technology used by SEN students in general educational settings. Examples of assistive technology are computers, iPads, smart phones etc. equipped with text-to-speech programs, spelling programs for dyslexics, different kinds of word processors, talking keyboards, pedagogic applications, e-books, daisy books etc. (Engberg, 2011).

### **5.3.4 Assistive technology device (ATD)**

The term assistive technology device (ATD) means any item piece of equipment of product system, whether acquired commercially, off the shelf, modified or customized that is used to increase, maintain or improve functional capabilities of individuals with disabilities (Dyal et al., 2009; IDEA, 2004). In Sweden assistive technology devices used to be referred to as compensatory tools used for compensating individuals for their lack of abilities. According to SPSM (2012) the term alternative tools are used today in order to emphasize the school's responsibility to organize a learning environment for all students.

### **5.3.5 Students with special educational needs (SEN)**

The term students with special educational needs (SEN) is internationally recognized but the definition varies from country to country (European Agency, 2010). However, according to the British Education Act (1996), the term refers to children that have learning difficulties that makes learning more difficult for them than the majority of children the same age and children that have disabilities that prevent them from learning or accessing education. These children are entitled to special educational provision.

In Sweden the term "students in needs of special support" is used, which emphasizes that the difficulties are not related to the individual but occurs in the meeting between the individual and the surroundings (Skolverket, 2012a).



There is no exact definition of the phrase “need of special support”. A student can be in need of special support for many different reasons. Many students come across difficulties some time during their school years and can be in need of special support for a shorter period of time. Other students can be in need of special support during all their school years due to illness, social condition, disability or that they have learning difficulties for other reasons. However, students are usually defined as being in need of special support when they do not reach the goals of education or have other difficulties in their school situation (a.a.).

#### **5.4 Inclusion**

A lexical definition for the term inclusion is “the act or practice of including students with disabilities in regular school classes” (Merriam-Webster, 2012). The term inclusion has been given a prominent place when speaking about special needs education. Traditionally the term integration was used earlier which refers to children being abnormal and should be fitted into set structures. Inclusion emphasizes that education should be based on students’ differences (Carlsson & Nilholm, 2004). According to the Salamanca Statement (UNESCO, 1994), inclusion is about providing education for all children, young people and adults within the regular education system. An international definition of inclusion according to UNESCO (2005) is:

Inclusion is seen as a process of addressing and responding to the diversity of needs of all learners through increasing participation in learning, cultures and communities, and reducing exclusion within and from education. It involves changes and modifications in content, approaches, structures and strategies, with a common vision which covers all children of the appropriate age range and a conviction that it is the responsibility of the regular system to educate all children.

#### **5.5 National policy documents on ICT, SEN-students and inclusion**

This section outlines the framework of ICT, students with special educational needs and the issue of inclusion set by Swedish national curriculum (Skolverket, 2011a; Skolverket, 2011b) and Swedish school law (SFS 2010:800).

### **Information and communication technology (ICT)**

New technology makes new demands on people's knowledge and ways of working. The school is responsible for ensuring that each pupil can use modern technology as a tool in the search for knowledge, communication, creativity and learning according to the national curriculum (Skolverket, 2011a; Skolverket 2011b). Students should, without cost, have access to books and other tools for learning for a modern education (SFS 2010:800).

### **Students with special educational needs (SEN-students)**

Schools have a special responsibility for students who, for different reasons, have difficulties with reaching the goals of their education. Teaching should be adapted to each pupil's circumstances and needs. Account should be taken of the varying circumstances and needs of pupils (Skolverket, 2011a; Skolverket, 2011b). If a student is in need of special support, he or she shall be given such support (SFS 2010:800). All teachers should stimulate, supervise and provide special support for students in need of it (Skolverket, 2011a; Skolverket, 2011b).

## **5.6 Previous Research**

In this section research in different areas of ICT use in schools for SEN students and inclusion will be presented. Firstly, research about the use of ICT in school will be presented and after that ICT for SEN students in relation to inclusion. Finally research about making ICT use more inclusive will be presented.

### **5.6.1 The search for previous research**

The search for previous research has followed the guidelines of Patel & Davidson (2011). The first step of the search was to scan the area of ICT for SEN students in order to see what can be of interest and what to focus on. Literature that does and does not have to do with the area of interest was read, and throughout the process central concepts emerged which eventually resulted in key words. A number of key words were generated in three key areas; ICT, students with special educational needs and inclusion. The key words were thereafter entered in different combinations in the EBSCO database which finally resulted in a selection of contemporary articles about ICT and inclusion and special educational needs published between 2005 and 2012.

Key words: ICT, IT, assistive technology, AT, ATD, technology, SEN, special needs, special education, inclusion and inclusion in general educational settings.

At first, articles that could be of interest were gathered and read. Articles of interest lead to reading more articles from the same authors. Articles containing facts of interest in the background lead to the search for the primary source of that information. The search resulted in various articles on ICT for students with special educational needs, and in order to narrow it down, mainly articles about students in general educational settings were used.

Doctor's theses from Swedish universities were searched for at [avhandlingar.se](http://avhandlingar.se) and [skolporten.se](http://skolporten.se). No theses were found that matched all three key areas; ICT, SEN and inclusion. However, regarding SEN and inclusion a number of theses were found.

### **5.6.2 The use of ICT**

This part includes research found concerning the use of ICT for students with special educational needs. Firstly research about benefits and effectiveness will be presented, then the perceived importance of adapting the assistive technology to the students' individual needs and teachers' knowledge of how to use ICT for SEN students. Finally there will be research on the various uses of ICT in school.

### **5.6.3 ICT for students with special educational needs**

ICT could be beneficial for students with special educational needs, especially students with reading- and/or writing disabilities through assistive technology such as word processors, word prediction programs, spell and grammar checks, voice recognition, text-to-speech programs, planning and organizing tools etc (Maor, Currie & Drewry, 2011; Peterson-Karlan, 2011; Williams, Jamali & Nicholas, 2006).

In a British literature review by Williams et al. (2006) information on the perceived benefits of ICT in SEN was gathered from literature, government reports and academic journals in the fields of education, information science and social science. The study support that dyslexics are the group with special educational needs who potentially could obtain many benefits from ICT through

reading and writing computer programs. However, by assisting access to learning, ICT can also bring benefits to students with emotional and behavioral difficulties (a.a.).

Evidence based research supports the effectiveness of ICT for students' writing. In an American review over 80 studies Peterson-Karlan (2011) accounts for whether ICT as a tool for writing has any scientifically documented effects for students with learning difficulties. The study point to that research supports that word processing programs have good effects for students' writing production and that use of spell checkers together with text-to-speech programs increases accuracy when writing. Furthermore the results indicate that programs for word prediction, speech-to-text, voice recognition and grammar checkers have effects on students' writing, though there is not enough research in the area to confirm these results. Effects of assistive technology for planning and organizing cannot be confirmed by the research studied.

#### **5.6.4 Adapting technology for each student**

ICT could be an effective tool for students with special educational needs, but it is important to discern students' individual needs and adapt technology for each student according to a research review over the effectiveness of ICT for students with special educational needs have been made by Australian researchers Maor et al. (2011). Scientific studies from the last six years about assistive technology for reading, writing, spelling and speech have been selected and analyzed. Most of the studies were from the US, but studies from Scandinavia, UK and Israel were also included. No general conclusions could be drawn about which program is the most effective because too many different programs were included in the review. The majority of the results show that the students writing, reading or spelling improve by using assistive technology. Though, there were exceptions, where ICT had no effect or students' results even deteriorated when using ICT. A conclusion the researchers draw is that students have individual differences and the assistive technology devices need to be adapted to each student's individual needs. The needs of the student and the student's family should not be neglected, and the family should be consulted before assistive technology is introduced. Complicated design, unexpected cost and lack of technical support can lead to IT abandonment (a.a.).

Successful computer integration in education may require an individual plan for each student that focuses on the student's need and if the computer should be used as an educational tool, an alternative tool for learning and/or a compensatory tool (ATD) in order for students to be included in education and to ensure that the students' digital skills are fully utilized (Lidström, Granlund & Hemmings son, 2012). An American case study by Gillette (2006) emphasizes the need for an individual plan for SEN students who use ICT in school work. Gillette describes grade 7 student with learning difficulties and the team work between student, school and home that eventually generates an individual reading and writing assistive technology plan.

What assistive technology and how it is to be used is to be assessed from the student's needs, ability and requests and this method demands expertise in the area of assistive technology. Team work between student, parents and school personnel can result in positive effects of ICT use for students. There is a risk of IT abandonment if parents do not know how to use it (Gillette 2006).

### **5.7 Teachers' knowledge of ICT for SEN students**

Teachers should be familiar with how to use ICT for students with special educational needs according to an American review of research about technical support in the classroom for students with mild disabilities (Anderson, Anderson & Cherup, 2009). Studies included in the review focus on special education technology for reading and written language, such as text-to-speech synthesis, word processor, word prediction and spelling and grammar checkers and their impact on inclusive classrooms. Students with mild disabilities may be found in every classroom and therefore every teacher should be aware that the integration of technology for these students can facilitate their learning.

#### **5.7.1 Various uses of ICT in school**

Lidström et al. (2012) compare the ICT use between students with physical disabilities with students who do not in a Swedish study. A conclusion that can be drawn is that students with physical disabilities have restricted participation compared to students from the general population in activities where the computer is used as an educational tool. The study is part of a larger project that aims at researching ICT use and participation in computer based activities in and outside

school. A questionnaire about computers as assistive technology devices has been made with students 10-18 years old with and without physical disabilities.

Lidström et al. (2012) divides students' use of information and communication technology (ICT) as an educational tool, an alternative tool for learning and a compensatory tool, i.e. as a computer-based assistive technology device (ATD), see figure 1. The computer is used as an educational tool i.e. by looking for information on the internet, making presentations and word processing. As an educational tool the computer is also used as an alternative tool for learning, with online textbooks, programs that practice certain skills etc. The use as an educational tool dominates the use of computers for students without disabilities. For students with special educational needs the computer is also used as an educational tool, yet, the computer is also used as a compensatory tool to help the students compensate for abilities they lack. The computer-based ATD could provide students with special educational needs opportunities to participate independently in the same educational activities as their peers by compensating for activity limitations and promote the use as an educational tool and/or an alternative tool for learning (a.a.).

### **5.8 Adapting teaching**

Adapting teaching for SEN-students in general educational settings are considered important and necessary, but in practice few adaptations are made. A Turkish study about inclusion of SEN-students in general education classes by Kargin, Güldenogly & Sahin (2010) indicates that the success of inclusion mostly depends on the teacher's ability to adapt teaching to the students' needs. Opinions of 126 general educational teachers have been surveyed through a data collection tool that aims to determine teachers' opinions with regard to the adaptations that need to be made for inclusion. Teachers consider adaptations necessary for students with special educational needs, but the results indicate that teachers consider physical adaptations in the classrooms, like seating arrangement and noise level, more important than educational adaptations. As an attempt to explain this fact, the writers suggest that physical adaptations are the easiest to observe and implement and that teachers have limited knowledge with regard to the instructional adaptations that need to be provided to the students with special needs in inclusive settings. Teaching SEN-students requires using different

strategies rather than traditional teaching methods, but in practice most teachers make few adaptations (a.a.).

Students with disabilities are educated alongside their peers and therefore mainstream schools are required to adapt to accommodate a diverse group of students with a variety of needs. Teachers need to become aware of the e-learning environments and their potentials for accommodating SEN-students in inclusive classrooms according to a study by Starcic (2010). Educational technology has an important role in facilitating digital literacy of students and teachers. Starcic has followed the implementation of a digital learning environment for students with special educational needs in Slovenian schools through a case study of student teachers' experiences of implementing educational technology in inclusive classroom and special needs education. Implications of the study are that improved access to computers and the Internet in the context of school work can enhance digital literacy and e-participation of students with special educational needs and that ICT assisted learning environments could enhance student centered teaching and individualization with tools for learning.

It is important for all teachers to have knowledge of how to use ICT for students with special educational needs since students that benefit from ICT exist in practically every class according to Anderson et al. (2009). The special education teacher is used as a consultant and this role demands knowledge of ICT for students with special educational needs (Brodin & Lindstrand, 2003). Brodin & Lindstrand (2003) has evaluated a government investment on educating special education teachers in ICT. The study has been carried with a questionnaire and interviews with special education teachers and school leaders. The focus of the study is special education teachers' thoughts and knowledge of ICT for students with disabilities and in need of special support. The results show that the role of the special education teacher demands both supervision and consulting and knowledge of the ICT area, and the majority of the special education teachers perceived that they didn't have enough knowledge of ICT in order to supervise and consult within the area. SEN teachers had a difficult time with developing new ways of working and new strategies in the area of ICT and didn't feel confident about technology either. The authors conclude that technology gets more focus than pedagogy and for students with special educational needs this can

become a problem since they often need both technology and adapted teaching to make it in school.

### **5.8.1 Separation and segregation of students**

ICT could contribute to inclusion, yet, it is common for students to be separated from classroom teaching to use their compensatory tools. Results from a doctor's thesis about individual education plans (Isaksson, 2009) point to that the most common special support measure in Swedish schools is special training individually or in small groups outside the ordinary classroom. This work was mainly executed by special education teachers, but can also be done by teachers or parents instructed by special education teachers. The students' experience from being excluded from their classes was that although such support offered a peaceful and quiet learning environment, it also gave rise to feelings of non-participation in relation to their classmates and them being portrayed as deviant. Furthermore, there seemed to be a lack of coordination between the special support measures and the regular teaching. Pedagogical levels that are inadequate and ill-adjusted to students' needs were also problematic aspects according to Isaksson (2009).

There seem to be development towards increasing segregation of students in need of special education support rather than of inclusive education within the mainstream education system, according to a Swedish study about how head teachers handle special education issues (Giota & Emanuelsson, 2011). To teach certain students outside the regular class seems rather commonly to be accepted and is also legitimized when it concerns students with various school-related difficulties. The results from a questionnaire survey with head teachers showed that streaming or organizational differentiation is common in all schools, but more frequent in grade 7-9 schools where this way of working is common in half of the schools than in grade 1-3 schools, where this is practiced in a third of the schools.

### **5.8.2 Possibilities with ICT for inclusion**

The computer could be a versatile tool in school but is often used as a typewriter and all possibilities are not fully utilized, according to parents to students with physical disabilities in a Swedish study (Brodin, 2010). The aim of the study was to see whether ICT is used to support inclusion and equal rights for students with



physical disabilities and the result indicates that the need of both technical and social support is immense for ICT to bridge inclusion of all students. The method of the study was a parental questionnaire and the results show that parents are disappointed at the lack of programs and teachers' lack of knowledge. According to parents in the study, teachers do not have enough time to update their ICT competence and they call for improvement considering access in school environment.

### **5.8.3 Need for technical and social support**

There is a need for technical as well as social support for teachers who teach SEN students that use ICT in school. Teachers should be familiar with how to use ICT for students with special educational needs (Anderson et al., 2009). Using different teaching strategies than the traditional ones in order to adapt teaching for SEN-students in general educational settings is seen as important (Kargin et al., 2010). According to parents in Brodin's (2010) study, ICT was used only to a limited extent and they complained about teacher's lack of knowledge about ICT. Teachers need to be updated on new technology in order to use it in a creative way and in-service training of teachers is needed (a.a.).

### **5.8.4 One-to-one initiatives**

Investments on one-to-one computing are becoming more common across the world according to Penuel (2006). A goal with one-to-one initiatives is to improve access to technology for all students, and that includes providing laptop computers loaded with contemporary productivity software, enabling Internet access through schools' wireless networks and using laptops to complete school work. Penuel has synthesized 30 different articles analyzing implementation and effects of one-to-one initiatives from a range of countries. The goals of one-to-one initiatives often are to improve academic achievement, reduce the digital divide and to transform teaching and make instruction more student-centered. The reviewed research point to that compared to 1-2 or 1-4 classrooms, students in 1-1 classrooms use computers more across the curriculum, use computers at home for academic purposes and use the computers for writing tasks. Teachers' instruction also differed. Coordinating instruction with laptops when not all students have computers was seen a challenge for teachers which often lead to including two

sets of instruction, one instruction for students with computers and one for students without (a.a).

Penuel also concluded that it appeared to be important for teachers to be able to count on the reliability of the Internet network and the computers. Teachers did not want to plan instruction for computer based activities when the computers or network failed. Another significant factor for successful ICT use was the teachers' attitudes towards technology. Teachers who viewed technology as a tool with a wide variety of potential applications were more likely to use laptops with their students, whereas teachers who were concerned that students would use laptops for unauthorized purposes were less likely to use laptops with students in class. Professional development support and technical support were critical for one-to-one initiatives, and other teachers seemed to be particularly important in helping teachers learn how to integrate technology into the classroom.

## **5.9 Theoretical Framework**

In this section different aspects of inclusion will be presented as a theoretical framework for analyzing the results. Inclusion can be seen from many perspectives. Haug (1998) does not use the term inclusion but speak in terms of inclusive and segregated integration. Vislie (2003) deals with the shift in terminology from integration to inclusion where inclusion and exclusion are seen as connected processes. Asp-Onsjö (2006) has identified three different aspects of inclusion, physical, social and didactic inclusion.

### **5.9.1 Haug's segregated integration and inclusive integration**

Haug (1998) divides the term integration into inclusive integration and segregated integration. Segregating integration is when the school closest to the student's home is perceived to be the natural place for most children. Individual children need other arrangements, and have access to other alternatives for organization of teaching as well as content. The alternatives when it comes to organization vary. The students with special educational needs can be taught in the classroom together with his or her class, or outside the classroom individually or in small groups or somewhere in between. The central point is to find the optimal environment for each individual student. This involves having to consult experts

whose diagnoses of the students' needs decide what organization is the best for each student. The main issue is a wish for maximal subject-oriented learning and performance. School is primarily a place to learn. Interpretation of the term in need of special support is individual oriented, difficulties are identified as individual. The challenge is to give individual compensatory treatment so that the student can adapt to school and society. If the child is taken out from school or class the goal is often that the student should go back there and function at the same level as the other students. There is an apparent difference between teaching and special education provision and this view lays the foundation for professionalization of the area of special education. When it comes to defining social justice there is a close connection between segregating integration and the compensatory perspective.

Inclusive integration is about all children having access to individually adapted teaching in the ordinary class in their home school. There has been a continuous work to replace the traditional and segregating view on special education. All students have an equal right to participation according to collective democratic values. Everyone participates in the society on equal conditions independent of individual needs, interests and performance.

This lays a positive foundation for these children to be able to function in the regular society as adults. Social training is of great importance as well as developing solidarity. Individual differences between children are accepted and part of everyday life at school. These students are to be handled with individual adaptation of teaching for all children in the same school and the same classroom. Within that frame, the students should receive the education that enables them to develop as far as possible without being stigmatized or outcast. All students are considered as equal in school and school is equal to all students. This dissolves the difference between special education provision and regular teaching. Basically all teachers should have sufficient knowledge in order to teach all children. Teachers should have general or universal competence. Special needs are to be understood as a social construction. The idea is that the need of segregating special needs provision has been formed by the fact that schools are not made for all students. Not all students are assumed to succeed in school. Some are even expected not to make it. The challenge is to build up a school that includes all

children and can educate all children. When it comes to the definitions of social justice there is a close connection between inclusive integration and the perspective of participation (a.a.).

### **5.9.2 The shift from integration to inclusion**

Vislie (2003) addresses the new terminology that came into use after the Salamanca Statement (UNESCO, 1994) where the shift from integration to inclusion also proposed a new educational policy agenda. Compared to integration, inclusion is said to have a broader vision because it covers more issues. Inclusion was introduced as a more accurate way of describing the quality of the integrated provision. Inclusion is about how mainstream schools should cater for all their pupils and for inclusive schools for all.

Inclusion is a process by which a school attempts to see all pupils as individuals. Inclusion regards inclusion and exclusion as connected processes; schools developing more inclusive practices may need to consider both. Inclusion emphasizes the reconstructing of curricular provision in order to reach out to all pupils as individuals. Inclusion emphasizes overall school effectiveness. Inclusion is of relevance to all phases and types of schools, possibly including special schools, since within any educational provision teachers face groups of students with diverse needs and are required to respond to this diversity (Vislie, 2003)

### **5.10 Target of Investigation**

Grade K-12 teachers were targeted for the questionnaire. The sample consisted of approximately 190 respondents from schools in three different cities. In order to choose a representative sample of the population for my survey controlled random collections have been conducted according to Hartman (1998). Teachers' e-mail addresses at eleven different schools were accessed through contacts or through the schools' websites. The goal was to get teachers evenly divided across the different grades. The sample consisted of male and female teachers aged 24-65 from both public and independent schools in three neighboring cities in northern Sweden.

## 5.11 Responses and non-responses

The questionnaire was distributed to approximately 190 teachers and a total number of 96 respondents answered the questionnaire which means that the response rate equals 51 per cent. Three of the respondents were not teachers so they were removed from the results. The response rate was lower for teachers teaching the youngest children and increased in higher grades.

### 5.11.1 Material

The questionnaire (see Appendix A) was designed with an on-line program. It was highly standardized and structured (Hartman, 1998). When constructing the questions for the questionnaire, simplicity in language, unambiguous questions, one question at a time were strived for while leading questions, questions about sensitive matters and negations were avoided as recommended by Ejlertsson (2005), Patel and Davidson (2011) and Trost (2001). The questionnaire contained no open-ended questions, only questions with predetermined answers. Open-ended questions were included after each question to allow participants the opportunity to add comments regarding their answers.

The questions were designed on basis of the first two research questions about different perceptions teachers have of ICT use for students with special educational needs and the relationship between ICT use and inclusion. Previous research and theoretical framework presented in the background of this study were also inspirational for the questions in the questionnaire. The questionnaire consisted of ten questions where the first four considered the respondent's sex, age, what grades they teach and what their subject of teaching is. Then there were questions considering the use of ICT, like whether the teachers teach students with special educational needs that use ICT in school, what ATD:s that are used and for what different activities. Considering inclusion the teachers were asked where and how often the ATD:s are used and how the teachers percept ICT use affects students socially. Finally the teachers are asked about the classroom situation and whether they perceive their teaching to be adapted for SEN students who use ATD.

In the end of the questionnaire the teachers were asked to submit their phone number if they agreed to being interviewed.

### 5.11.2 Procedure

E-mails were sent to respondents where the addresses were entered in the "blank" field, which allowed all respondents to be anonymous. The e-mails contained a brief description of the study and questionnaire and a link to the on-line questionnaire (see Appendix B). The responses were saved automatically by the program used. The respondents had three weeks to answer the questionnaires.

The questionnaire survey includes both external and internal non-responses. External non-responses refer to respondents that for some reason did not have the opportunity to participate or who for various reasons did not want to participate in the study. Internal responses on the other hand refer to non-responses on individual questions of the questionnaire. The internal non-responses will be reported adjacent to the presentation of the result of the actual question as recommended by Ejlertsson (2005).

The external response rate for this questionnaire survey was approximately 51 per cent. Low response rates can generally be expected from e-questionnaires (Näsström, 2011). In order to increase the response rate the questionnaire was made in a respondent-friendly matter where no open-ended questions were included so it was easy for the respondents to quickly fill in their answers. According to Trost (2001), the response rates for questionnaires can be expected to be 50-75 per cent. An analysis of non responses can be made through comparing the material of the study with the population, and if there is a big difference between the sample and the population, carefulness should be obtained when drawing conclusions from the results (Trost, 2001). The bigger the non response rate is the bigger risk for making wrong assumptions about the target population (Ejlertsson, 2005). In order to see if the sample consists of misallocation or lies close to the population the sample has been compared to the population. The table below (figure 2.2) shows that the population and the sample are quite similar considering gender and age which indicates that the sample is close to the population

## 5.12 Analysis of questionnaire

### 5.12.1 Analysis and presentation of data

Data from the results were automatically generated through the web based program that was used for the questionnaire. The web based program used for the questionnaire provided frequency tables for each question which gave a quick overview of the results. The questionnaires should be categorized after the aim of the study (Johansson & Svedner, 1996) which was to describe and analyze teachers' experiences of and perceptions on how ICT is used for students with special educational needs in relation to inclusion. The raw data was copied into a calculation program where the answers were coded with numbers as suggested in Trost (2001) and Ejlertsson (2005).

The initial part of the questionnaire considering facts about the respondents have been summed up and presented in a frequency table. After that, there were questions considering ICT for students with special educational needs, ICT use in school and inclusion of students with special educational needs that use ICT. When analyzing the data of these questions, the respondents' different ways of perceiving different aspects of the world have been discerned, inspired by phenomenography (Marton, 1981). For example if the teacher answered that he or she has experience of students with special educational needs in every class that use ICT, the conclusion that they perceive it to be common with SEN students that use ICT has been drawn. The answers have been compiled into different categories of teachers' perceptions. Within phenomenography focus is also given to the commonness of different perspectives according to Marton, and that has been applied on the categorized perceptions in the results of this study.

Open ended questions have a weakness according to Ejlertsson (2005) and that is that only a few respondents actually answer them. In this study, only 11 teachers used the open ended fields, and the answers from the open-ended questions have been used to provide additional information (Ejlertsson, 2005).

Data has also been analyzed in a separate section of the result through the theoretical framework about inclusion presented in the background.

### 5.12.2 Qualitative interviews

An interview is considered to be a qualitative method and it is characterized by a lesser amount of formalization than the questionnaire. Its primary purpose is to understand. A qualitative interview can lead to a deeper understanding of the problem. Qualitative interviews give information about attitudes, views, approach and experiences. Interviews are characterized by trying to understand the world the interviewee lives in, how they see themselves and their relationship to the environment (Backman, 1998; Kvale & Brinkmann, 2009; Patel & Davidson, 2011).

Interviews are used for gathering more in-depth insights on participants' attitudes, thoughts and actions. The qualitative interview is used when trying to understand the respondents' reality as they perceive it. It is about everyday experiences, how people interpret and understand their surroundings (Kvale & Brinkmann 2009; Stukat, 2005). According to Patel and Davidson (2011) interviews are suitable when the aim of the study is to find out about people's actions, attitudes and experiences. Since the aim of this study was to describe and analyze teachers' perceptions the qualitative interview was found suitable.

### 5.13 Ethics in research

The rules of research ethics by Vetenskapsrådet (2002) contains four principles intended to provide standards for the relationship between researcher and participant to promote a good balance between the research requirement and protection of the integrity of the individual. Research should be conducted in such a way that the integrity of the research object is maintained. Ethical issues such as informed consent, confidentiality and consequences for the interviewee should be taken into account with any qualitative interview according to Kvale and Brinkmann (2009). Research subjects should be informed about the purpose of the investigation and the main features of the design.

The first principle (Vetenskapsrådet, 2002) is about informing the participants about the study, its purpose and that participation is voluntarily. In this study, this principle has been met by the missive letter (Appendix A) where the aim of the



study, is revealed. It also states that participation is voluntarily and that the informants at any time can terminate the survey.

The second principle, the consent principle, refers to that a participant in a study has the right to decide over his or her participation (Vetenskapsrådet, 2002). When using a web questionnaire, respondents consent by answering. During the interviews made, the interviewees were informed once again of the aim of the study and also that they were free to terminate their involvement at any time.

The participants in a study should be given confidentiality which is the third principle (Vetenskapsrådet, 2002), which is expressed in the questionnaire. Individuals are not to be identified by other people than the researcher. In the study conducted no personal information has been used. The e-mail with the link to the questionnaire has been sent to blankly so none of the respondents can see who the e-mail has been sent to. It was not even possible to identify non-respondents in order to remind them since the e-mail addresses used were not marked in any way. At the last question of the questionnaire the respondents have given out their names and phone numbers. These personal data has been handled with the utmost care and has been separated from the questionnaires when processing them. During the transcriptions of the interviews no names have been used, instead they have been called Interview 1, 2 etc. In order to safeguard the identities of the participants of the interviews, little information about the respondents' backgrounds have been provided when presenting the results of the study. The names of the respondents of the interviews used in the presentation of the results have been made up.

The last requirement is about how the results of the study will be used. In this context, the collected information is to be used only for the purpose stated and not in any other context (Vetenskapsrådet, 2002). The results of the questionnaire survey and the interviews will not be used for any other purpose than this study.

### **5.14 Reliability and validity**

Reliability considers if the situation has been the same for all respondents and if the questions have been perceived in the same way by everybody. High reliability would in this case mean that another study would give the same results (Trost,

2001; Ejlertsson, 2005). Considering the questionnaire survey, the respondents all got exactly the same instructions through e-mail. However, it is impossible to guarantee that the questions have been perceived in the same way by everybody. When it comes to the interviews, the questions have been perceived differently by the respondents, but then an advantage with interviews is that it is possible to directly ask question to unravel the different conceptions people have.

Kvale and Brinkmann (2009) point out that the issue of reliability often is treated in relation to the question whether a result can be reproduced in another time by other researchers, i.e if the respondents would have given different answers to different interviewers or if the interviewer has asked leading questions that unintentionally have affected the results. In the case of the study, personal or professional relationships existed between researcher and respondent in some cases which could have effect on the results of the interviews. The risk with having a connection with the respondent is that some results can be overlooked while others can be emphasized which can be detrimental to the impartiality (Kvale & Brinkmann, 2009). During the interviews, a professional role has been maintained focusing on the area of the study. When transcribing the interviews the reliability could have been higher if another person had transcribed since there in some cases is a matter of interpretation of what has been said (a.a.). But the text has been transcribed word by word and afterwards listened to in order to adjust any errors.

Validity is about measuring what is intended to be measured (Kvale & Brinkmann, 2009; Trost, 2001). Ejlertsson (2005) suggests validating the questions in relation to the aim of the study by conducting a pilot study. In order to prevent misconceptions two different pilot studies have been made before finally distributing the questionnaire. The first pilot questionnaire was sent to a control group where the target was to see if the respondents interpret the questions as intended or if they add another meaning to them. After revising the questionnaire another pilot was made with participants who could have been included in the sample of the survey. The questionnaire has been altered into its final form according to the response from the participants in the second pilot study to support the validity of its questions.

According to Kvale and Brinkmann (2009), the validity should be checked continuously during the whole process of an interview study. The results should constantly be controlled, questioned and theoretically interpreted by the researcher. Validity does not only refer to the final product but to the way planning, interviewing, transcription, analysis and reporting has been conducted. In this study, the questions in the interview guide have been controlled by conducting a pilot interview. During the interviews, the questioning of the interviewees has been thorough order to clarify, control and validate the information given. When transcribing, attempts to preserve the style of the language have been made. The analysis of the results has been conducted in order to do justice to the respondents' actual perceptions.

### **5.15 Increased inclusion with ICT**

Teachers were asked if they could think of anything that could make teaching for students with special educational needs that use ICT in school more inclusive. On this question, the teachers' perceptions have been divided into two categories, measures for teachers and measures for students (figure 3.14).

**Measures for teachers** Support and advice Education about ICT for SEN Fewer students per teacher More time Access to better e-learning resources **Measures for students** More special needs provision One-to-one E-learning resources

On the question whether teaching students with special educational needs that use ICT in school can be made more inclusive, Maria feels that her students already are very included. She cannot come up with anything that would make the situation more inclusive for the SEN students. "Maybe if there were more computers, then there would be more computers for the rest of the students" she finally adds.

Erik believes that school could be made more inclusive if the proper digital e-learning resources were available and if all teachers adapted teaching to the students needs.

Anna thinks that it is important that the school can identify the students' difficulties as early as possible in order to provide the right support from the start. She also believes that the personal resource is number one; it is the most important factor. Therefore fewer students per teacher or more personal support for students would be desirable. The lack of time is the worst thing and that there are so many students in

each class, there are up to 32 students in the classes Anna teaches. In order for school to become more inclusive she suggests that the number of tasks that are imposed on teachers should be reduced in order to get more time in the classroom with the students. "We have so many things to do so that we do not have the time to care about our students" she says.

In order for school to become more inclusive for SEN students that use ICT in school she thinks it is a good idea for all students to have computers, because then no one would feel different because he or she is the only one who has a computer.

Lars also believes that it is important for the teachers to be familiar with the different programs the students use. "The problem is that the computer is installed with a lot of programs and stuff but the teachers never get any education in how to use them" he says. There might not even be anyone at school that fully knows how to handle these programs, he continues. Other than that he requests more help from the special education teacher when it comes to adapting teaching for his students with special educational needs. Access to better e-learning resources would also be a way to make education more inclusive for students with special educational needs that use computers in school.

### **5.16 Theoretical framework analysis**

The results of this study point to that the prevalent conception among teachers is segregated inclusion and the compensatory perspective as defined by Haug (1990). Students with special educational needs go to regular classes but they are often taught outside the classroom separated from their classmates. Nevertheless, the interviews revealed features from Haug's inclusive integration, where the grade 11-12 vocational teacher who adapts teaching to include all students and the 6th grade teacher Maria's school where there seem to be a wide acceptance of differences in the school environment.

For one third of the teachers in this study, teaching is adapted to students' needs, which can be seen as a confirmation on that there has been a shift from integration to inclusion and the emphasis on reconstruction of curricular provision and adapted teaching (Vislie, 2003), at least for some teachers. Still many teachers adapt teaching only to some extent and a few do not adapt teaching at all.

When it comes to inclusion, teachers seem to emphasize inclusion in terms of knowledge which is equivalent to Asp-Onsjö's (2006) didactic inclusion and Haug's segregated integration where the main issue is a wish for maximal subject-oriented learning and performance and where school primarily is a place to learn. Inclusion is mainly seen as students keeping up with the curricular goals that are to be learned. Social inclusion is seen as important when it comes to students not being bullied or subject to comments. Excluding students from their classrooms and classmates is perceived to be beneficial to students' learning and is not considered to contribute to social exclusion.

### 5.17 Discussions

In this section the method and the results from the questionnaire survey and the interviews will be discussed. The results will be analyzed and discussed in relation to previous research and theories provided in the background. Finally there will be a summary and conclusion of the main findings followed by suggestions for further research.

Although the phenomenography is an approach for qualitative methods, it was used on a quantitative method in this study. Pros and cons were weighed against each other, and the questionnaire was chosen for its ability to reach many respondents provide a result of many teachers' perceptions. In order to make the results of the questionnaire better suited for phenomenography, only open-ended questions could have been used. However, according to Ejlertsson (2005), open-ended questions are only answered by a small number of respondents which can affect the results. Therefore, the questionnaire only contained questions with predetermined answers. Nevertheless, the respondents had the opportunity to add comments through optional open-ended fields after each question. The danger with questions with fixed alternatives is that it is difficult to foresee all possible alternatives of answers to a question. However, two pilot studies have been conducted before the real questionnaire was distributed which should ensure the validity of the questionnaire.

There was a great number of non-responses to the questionnaire survey. The result may have been different if more teachers would have answered. It is impossible to say who did not answer, but the comparison with the gender and age of the entire

teacher population of Sweden showed great similarity which indicates that no specific age group or gender did not answer.

The result could have shown a greater variety of perceptions if more respondents had been interviewed. However, there was a great diversity between the interviewed teachers' answers where practically no teachers had the exact same view of anything. The conducted interviews gave many different standpoints which enriched the study.

### **5.18 Summary**

The results of this study have implications on the work of both teachers and special needs teachers in school. National curriculum still aim for inclusion and the special education teacher should work for inclusion of students in their regular classes. When doing this, taking students out from their classroom setting should be avoided in order to promote social and physical inclusion. Classroom teaching needs to be adapted to students' needs to allow didactic inclusion. A dilemma is that special education teachers are seen as experts on using assistive technology with students which leads to excluding students from their regular classes. Instead special education teachers should focus on investigating the student's individual needs and the consultant role as supervising the teachers in how teaching could be adapted in a successful way for the student in class. Teachers are to be assisted with how to adapt teaching for SEN students that use ICT in the classroom to utilize all benefits with ICT, so that ICT can become the bridge to inclusion of all students anticipated by Brodin (2010).

Only educating special education teachers in ICT for SEN is not enough, and will accentuate the SEN teacher's role as giving individual special support. Instead it is important for all teachers to focus on ICT in teaching while it is the SEN teacher's role to identify the needs of the students and the help teachers adapt teaching for student's individual needs. Regular teacher education should educate teachers on not only how to use ICT for all students but also how to use ICT for SEN students. In conclusion, ICT could have many benefits for students with special needs but ICT cannot replace the teacher.

## 5.19 References

- American Individuals with Disability Educational Act (IDEA). (2006).  
Downloaded November 20, 2012 from:  
<http://idea.ed.gov/explore/view/p/%2Croot%2Cstatute%2CI%2CA%2C602%2C1%2C>
- Anderson, Cindy L., Anderson, Kevin M. & Cherup, Susan (2009). **Investment vs. return: Outcomes of special education technology research in literacy for students with mild disabilities.** *Contemporary Issues in Technology & Teacher Education*, 9, (3), 337-355.
- Asp-Onsjö, Lisa (2006). *Åtgärdsprogram - dokument eller verktyg. En fallstudie i en kommun.* Doktorsavhandling. Göteborg: Acta Universitatis Gothoburgensis.
- Backman, Jarl (2008). *Rapporter och uppsatser.* Lund: Studentlitteratur.
- British Education Act (1996). *Meaning of "special educational needs" and "special educational provision" etc.* Chapter 1, section 312. Downloaded January 2, 2013 from <http://www.legislation.gov.uk/ukpga/1996/56/section/312>
- Brodin, Jane & Lindstrand, Peg (2003). What about ICT in special education? Special educators evaluate Information and Communication Technology as a learning tool. *European Journal of Special Needs Education*, 18 (1), 71-87.
- Brodin, Jane (2010). Can ICT give children with disabilities equal opportunities in school? *Improving Schools*, 13, (1), 99-112.
- Brozin Bohman, Viveca (2012). I rummet mellan digitalt lärande och analoga mål. *Pedagogiska magasinet*, 3. Downloaded December 4, 2012 from: <http://www.lararnasnyheter.se/pedagogiska-magasinet/2012/09/18/rummet-mellan-digitalt-larande-analoga-mal>
- Carlsson, Reidun & Nilholm, Claes (2004). Demokrati och inkludering – en begreppsdiskussion. *Utbildning & Demokrati*, 13, (2), 77-95.
- Dimenäs (2007). *Lära till lärare: Att utveckla läraryrket, vetenskapligt förhållningssätt och vetenskaplig metodik.* Stockholm: Liber.

Dyal, Allen, Carpenter, Laura Bowden, Wright, James V (2009). Assistive Technology: What Every School Leader Should Know. *Education*, 129, (3), 556-560.

Ejlertsson, Göran (2005). *Enkäten i praktiken. En handbok i enkätmetodik. 2:a uppl.* Lund: Studentlitteratur.

Engberg, Berit (2011). *IT i lärandet för att nå målen.* SPSM: Edita. Downloaded November 9, 2012 from: [http://www.butiken.spsm.se/produkt/katalog\\_filer/Nr%2000368.pdf](http://www.butiken.spsm.se/produkt/katalog_filer/Nr%2000368.pdf)

European Agency for Development in Special Needs Education (2011). *Special Needs Education Country Data 2010.* Downloaded December 30, 2012 from: <http://www.european-agency.org/publications/ereports/special-needs-education-country-data-2010/SNE-Country-Data-2010.pdf>

Gillette, Yvonne (2006). Assistive Technology and Literacy Partnerships. *Top Lang Disorders*, 26, (1), 70–84.

Giota, Joanna & Emanuelsson, Ingemar (2011). Policies in special education support

issues in Swedish compulsory school: a nationally representative study of head teachers' judgments. *London Review of Education*, 9, (1), 95-108.

Groth, Dennis (2007) *Uppfattningar om specialpedagogiska insatser: aspekter ur elevers och speciallärares perspektiv.* Doktorsavhandling. Institutionen för Utbildningsvetenskap. Luleå Tekniska Universitet.

Hartman, Jan (1998). *Vetenskapligt tänkande. Från kunskapsteori till metodteori.* Lund: Studentlitteratur.

Haug, Peder (1998) *Pedagogiskt dilemma. Specialundervisning.* Downloaded October 29, 2012 from: <http://www.skolverket.se/publikationer?id=471>

Holme, Idar Magne & Solvang, Bernt Krohn (1991). *Forskningsmetodik. Om kvalitativa och kvantitativa metoder.* Lund: Studentlitteratur.



- Hägg, Kerstin & Kuoppa, Svea Maria (1997). *Professionell vägledning – med samtal som redskap*. Lund: Studentlitteratur.
- Isaksson, Joakim (2009). *Spänningen mellan normalitet och avvikelser : om skolans insatser för elever i behov av särskilt stöd*. Doktorsavhandling. Institutionen för socialt arbete. Umeå Universitet.
- Johansson, Bo och Svedner, P O (1996). *Examensarbetet i lärarutbildningen. Undersökningsmetoder och språklig utformning*. Uppsala: Kunskapsföretaget.
- Krokmark, Tomas (2007). Fenomenografisk didaktik – en didaktisk möjlighet. *Didaktisk tidskrift*, 17, (2-3), 1-50.
- Kvale, Steinar och Brinkmann, Svend (2009). *Den kvalitativa forskningsintervjun*. Lund: Studentlitteratur.
- Lidström, Helene, Granlund, Mats & Hemmingsson, Helena (2012). Use of ICT in school: a comparison between students with and without physical disabilities. *European Journal of Special Needs Education*, 27, (1), 21-34.
- Lindström, Berner (2012). Kunskap i en digitaliserad värld. *Pedagogiska magasinet*, 3. Downloaded December 4, 2012 from: <http://www.lararnasnyheter.se/pedagogiska-magasinet/2012/09/18/kunskap-digitaliserad-varld>
- Lund, Arne (2012). *Satsningarna på IT används inte i skolornas undervisning*. Skolinspektionen: Analys- och statistikenheten. Dnr: 40-2011:2928.
- Maor, Dorit, Currie, Jan & Drewry, Rachel (2011). The effectiveness of assistive technologies for children with special needs: a review of research-based studies. *European Journal of Special Needs Education*, 26, (3), 283-298.
- Marton, Ference (1981). *Phenomenography – describing conceptions of the world around us*. *Instructional Science*, 10, 177-200.
- Merriam-Webster (2012). Downloaded December 3 from: <http://www.merriam-webster.com/dictionary/inclusion>.

Miles, Peter (2001). *ICT in English*. Cambridge: Pearson Publishing. Downloaded November 9, 2012 from: [http://www.pearsonpublishing.co.uk/education/samples/S\\_496132.pdf](http://www.pearsonpublishing.co.uk/education/samples/S_496132.pdf)

Nilholm, Claes (2006) *Inkludering av elever i behov av särskilt stöd – Vad betyder det och vad vet vi?* Myndigheten för skolutveckling.

Näsström, Gunilla (2011). Personal communication. October 11, 2011.

Patel, Runa & Davidson, Bo (2011). *Forskningsmetodikens grunder. Att planera, genomföra och rapportera en undersökning*. Lund: Studentlitteratur.

Petersen-Karlan, George. R. (2011). Technology to Support Writing by Students with Learning and Academic Disabilities: Recent Research Trends and findings. *Assistive Technology Outcomes and Benefits*, 7, (1), 39-62.

Penuel, William R. (2006). Implementation and effects of one-to-one computing initiatives: A research synthesis. *Journal of Research on Technology in Education*, 38, 329-348.

SFS 2007:638 Examensordning yrkesexamina (2007). Downloaded January 2, 2013 from <http://www.lagboken.se/files/SFS/2007/070638.PDF>

SFS 2010:800 Skollagen (2010). Downloaded September 10, 2012 from: [http://www.riksdagen.se/sv/Dokument-Lagar/Lagar/Svenskforfattningssamling/Skollag-2010800\\_sfs-2010-800/](http://www.riksdagen.se/sv/Dokument-Lagar/Lagar/Svenskforfattningssamling/Skollag-2010800_sfs-2010-800/)

Skoldatateket (2012). *Skoldatateken vill*. Downloaded October 29, 2012 from: <http://www.skoldatatek.se/skoldatatek/vill>

Skolverket (2001). *Att arbeta med särskilt stöd med hjälp av åtgärdsprogram*. Downloaded November 21, 2012 from <http://www.skolverket.se/publikationer?id=888>

Skolverket (2011a). *Curriculum for the compulsory school, preschool class and the leisure-time centre 2011*. Stockholm: Fritzes. Downloaded September 10 from: [www.skolverket.se/publikationer](http://www.skolverket.se/publikationer)

Skolverket (2011b). *Curriculum for the non-compulsory school system 2011*. Stockholm: Fritzes. Downloaded September 10 from: [www.skolverket.se/publikationer](http://www.skolverket.se/publikationer)

Skolverket (2012a). *Juridisk vägledning om elevers rätt till kunskap och särskilt stöd*. Downloaded November 20, 2012 from: [http://www.skolverket.se/polopoly\\_fs/1.159813!/Menu/article/attachment/R%C3%A4tt%20till%20kunskap%20och%20s%C3%A4rskilt%20st%C3%B6d%2020120612.pdf](http://www.skolverket.se/polopoly_fs/1.159813!/Menu/article/attachment/R%C3%A4tt%20till%20kunskap%20och%20s%C3%A4rskilt%20st%C3%B6d%2020120612.pdf)

Skolverket (2012b). *Lärarstatistik 2011/12*. Downloaded November 12, 2012 from: <http://siris.skolverket.se/apex/f?p=SIRIS:7:0::NO::>

Starcic, Andrea Istenic (2010). Educational Technology for the Inclusive Classroom. *Turkish Online Journal of Educational Technology – TOJET*, 9, (3), 26-37.

Trost, Jan (2001). *Enkätboken*. 2:a uppl. Lund: Studentlitteratur.

UNESCO (1994). *The Salamanca Statement and Framework for action on special needs education*. Downloaded October 1, 2012 from: <http://unesdoc.unesco.org/images/0009/000984/098427eo.pdf>

UNESCO (2005). *Guidelines for Inclusion: Ensuring Access to Education for All*. United Nations Educational, Scientific and Cultural Organization. Downloaded November 21, 2012 from: <http://unesdoc.unesco.org/images/0014/001402/140224e.pdf>

Vetenskapsrådet (2002). *Forskningsetiska principer inom humanistisk-samhällsvetenskaplig forskning*. Downloaded January 2, 2013 from <http://www.codex.vr.se/texts/HSFR.pdf>

Westling Allodi, Mara (2005). *Specialpedagogik i en skola för alla. Granskning av specialpedagogiska verksamheter i en svensk kommun*. Individ, omvärld och lärande /Forskning, 27. Lärarhögskolan i Stockholm.

Williams, Peter, Jamali, Hamid R, Nicholas, David (2006). Using ICT with people with special education needs: what the literature tells us. *Aslib Proceedings*, 58, (4), 330 – 345.

Åsberg, Rodney (2001). Det finns inga kvalitativa metoder – och inga kvantitativa heller för den delen. Det kvalitativa-kvantitativa argumentets missvisande retorik. *Pedagogisk forskning i Sverige*, 6, (4), 270-292.

**Block 5: Supports and Collaborations for Inclusive Education**

**Unit 1: Stakeholders of Inclusive Education & Their Responsibilities**

**Unit 2: Advocacy & Leadership for Inclusion in Education**

**Unit 3: Family Support & Involvement for Inclusion**

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**UNIT 1**

**Stakeholders of Inclusive Education & Their Responsibilities**

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## 1.1. Introduction

Globally we need more well-trained and motivated teachers.<sup>1</sup> Good teachers can help ensure that every child learns to their full potential from an early age and enters adult life well-equipped to be active citizens and support the development of their community and country. Many countries do not have enough teachers, let alone enough teachers who have received sufficiently high quality pre- and in-service training and access to continuing professional development.<sup>2</sup> The lack of well-prepared and motivated teachers impacts on the enrolment, participation and achievement of all children – but can be particularly detrimental to the education of children from marginalised groups, who may need some extra encouragement or assistance to reach their educational potential.

Teachers are often simply not trained or supported to teach children with disabilities, which makes these children among the most marginalised in terms of educational opportunity and attainment. An estimated 15% of the world's population has a disability.<sup>3</sup> Globally, 93 million children are estimated to have moderate and severe disabilities<sup>4</sup> – and many of these children are out of school. That means they are not being given the chance to become empowered as individuals and support their communities. The exclusion of children with disabilities from education and from fair life chances requires urgent and sustained attention. In particular, attention needs to be paid to preparing teachers who are capable of including children with disabilities in the education process.<sup>5</sup>

This paper first provides more detail about the context and scale of the challenge. It then outlines five broad issues that need addressing if we are to prepare, recruit and support enough teachers, with appropriate skills, to educate *every* child – including those with disabilities.

## 1.2 Who are the stakeholders for disability inclusion?

The Project Cycle Management Guidelines (among other development methodologies) promote the participation and ownership of stakeholders in the development process; participation and ownership are keys to success; ensuring relevance, effectiveness and sustainability.



In order to include the perspectives of persons with disabilities throughout the project cycle it is crucial to understand and involve the stakeholders concerned. From national to local government, and from private to public spheres, stakeholders for disability inclusion include the following:

### **1.3 Government: At national and local level**

#### **1.3.1 Government Departments and Ministries**

Disability issues should concern all government departments and ministries. Till now in many countries the leading ministry is often the Ministry of Health and/or the Ministry of Social Affairs. Technically, the Ministry of Health focuses more generally on staff involved in healthcare and rehabilitation services (physiotherapists, doctors, surgeons), while rehabilitation and social services (like rehabilitation centres and community based rehabilitation services) are under the responsibility of the Ministry of Social Affairs. However, when we consider promoting the inclusion of persons with disabilities in society it is clear that other Ministries are also concerned, such as education, employment, woman's affairs, transport, finance, planning, etc. Local governments and municipalities They may have specific responsibilities for local development initiatives and services.

#### **Key roles and functions of governments:**

- Set standards for rights and entitlements and monitor implementation (the judiciary is responsible for defining rights and entitlements through legislative and policy framework)
  - Provide resources as much as economic development permits
  - Ensure that all public services are accessible to persons with disabilities
- Examples of varying government division of labor in terms of disability:

In Burkina Faso, the Ministry of Health is responsible for developing and structuring rehabilitation services. In Mali, this responsibility is under the Ministry of Social Affairs. In South Africa, The Office of the Status of Disabled Persons was established after 1996 and there is one office in each of the nine Premier's office provinces. A process of establishing Disability Desks and Units in local municipality offices is on-going. The responsibility of the office, from national to municipal level, is to coordinate, facilitate and monitor the

Mainstreaming/Inclusion of Disability issues into all sectors within the Government.

### **1.3.2 National Disability Councils (NDCs)**

Some countries have councils or committees focusing on disability issues. These mixed commissions are usually composed of NGOs, Disabled People Organizations and governmental bodies.

#### **Key roles and functions of NDCs:**

- Coordinating and promoting effective cross sectoral/ cross ministerial action on disability in the country
- Developing capacities amongst all disability stakeholders Examples: In Cambodia, the 'Disability Action Council' includes government, national and international organizations and DPOs. [www.dac.org.kh](http://www.dac.org.kh) In certain countries in Africa- 'African Decade Steering Committees'

### **1.3.3 Disabled Peoples Organizations (DPOs)**

The main characteristic of DPOs is that the leadership are persons with disabilities who set up an organization representing the interests and demands of its members. DPOs have a mandate to represent the perspectives of persons with disabilities.

#### **Key roles and functions of DPOs:**

- Represent the interests of persons with disabilities
- Advocate and lobby for the rights of persons with disabilities
- Ensure that the government and service providers are responsive to rights of persons with disabilities
- Some DPOs also provide information and other services to their Members However, the disability community is also quite diverse; there are different types of disability representatives in most countries:
- DPO representatives: should be involved in their official capacity as representatives of persons with disability.
- Disability activists: generally persons with disabilities who are not representing a group as such, but are involved for their individual

perspectives, commitment and involvement in wider disability debates and policy processes

- Persons with disabilities from the target population of any area can give a grassroots perspective and act as any other population sample.

Source: VSO (2006) There are many different types of DPO, ranging from 'impairment specific' (with members who are concerned by or who have one particular impairment/ disability) to cross-disability (with members with all types of impairment/ disability), from grass roots to global. There are also DPOs focused on gender, or groups who speak up for others- such as, for example, parents groups. Here are some examples, to demonstrate the diversity of the DPO community: Impairment specific national To search for specific DPOs see the tool 'How to find a DPO on the web'.

#### **1.3.4 Disability service providers**

They are agencies such development NGOs, faith based organizations, DPOs or private companies which provide services for persons with disability. They can provide specialized services (e.g.: rehabilitation services and fitting of prosthetics) or inclusive services (e.g., livelihood or health services which are accessible to people with disabilities).

#### **Key roles and functions of Disability service providers:**

- Reduce the impact of impairments (through support to provision of healthcare, rehabilitation, habilitation, educational or livelihood services, improving environmental accessibility, research and development, advocacy)
- Enable persons with disabilities to access their rights Examples: DeafSA in South Africa or the Blind Persons Association in Gujarat India; both are DPOs but provide services to its members. Handicap International and CBM are development NGOs focusing on focusing on disability but are not created by and led by persons with disabilities, so are classified as service providers or disability and development organizations.

## **1.4 At International level**

International organizations, multilateral and bilateral donors These bodies often play multiple roles. They often provide data and general guidance (ex: WHO, UNFPA, World Bank, DfID), they may also A special note on women with disabilities:

Women with disabilities are doubly discriminated against and often their voices are not heard in either the disability sector or the gender movement. Pay particular attention that women with disabilities and their representative organisations are included in the stakeholder analysis of the disability sector. grant funds and promote disability –inclusive- development (World Bank, DfiD, Finnish Cooperation, etc.) Certain UN agencies also have very specific mandates in the field of disability. UN DESA and the OHCHR together comprise the UN Convention Secretariat, and are an excellent source of information on the UNCRPD. UNICEF has recently developed its own policy paper on promoting the rights of children with disabilities. The WHO Disability and Rehabilitation Unit is mandated to implement the World Health Assembly Resolution on Disability including prevention, management and rehabilitation.

## **1.5 Types of Stakeholders Disability inclusive**

### **Examples**

Stakeholders Persons with disabilities and their families Self-help groups (community based organisations) Disabled peoples organizations Disability Services providers Beneficiaries Target groups Persons with disabilities and their family Self-help groups (community based organisations) Disabled people organizations Service providers

## **1.6 Final beneficiariesPersons with disabilities and their family**

Self-help groups (community based organisations) Disabled peoples organizations Disability Service providers National governmental bodies involved in disability Project partners Disabled people organizations Disability Service providers and disability and development NGOs National governmental bodies involved in disability UN agencies All principles that apply in terms of stakeholder

participation also should be applied to the stakeholders for disability inclusion. Thus, these stakeholders should participate at each phase of the project cycle.

## 1.7 Context

### 1.7.1 The education of children with disabilities is an urgent issue

The number of children of primary school age who are out of school fell from 108 million in 1999 to 61 million in 2010, but progress has stalled in recent years.<sup>6</sup> Although there are 25% more children in secondary school today than in 1999, 71 million adolescents of lower secondary school age were out of school in 2010; as with primary education, progress has stagnated.<sup>7</sup>

Children with disabilities are disproportionately represented among those who are missing out on education. Research indicates that having a disability more than doubles the chance of never enrolling in school in some countries. Disability is often a more significant factor in relation to exclusion from education than gender or geographical location.<sup>8</sup> Coming from a poor family and having a parent with a disability also increases the likelihood of a child being out of school, by 25% in the Philippines and 13% in Uganda.<sup>9</sup>

We also know that the quality of education for those attending school is unsatisfactory. For example, 'approximately 200 million children are currently in school but are learning very little because of inefficient and inadequate education; between 25% and 75% of children in poor countries cannot read a single word even after several years in school'.<sup>10</sup> As a consequence of these quality issues, children with disabilities who do access education often do not participate on equal terms with their non-disabled peers, or achieve to their full potential. This has enormous implications for their chances of finding decent work and playing an active role in their country's social, political and economic life.<sup>11</sup>

The international community has committed itself to achieving universal basic education through the Millennium Development Goals and Education for All goals. Yet these frameworks pay insufficient attention to marginalised groups such as children with disabilities – which is a major reason why they continue to miss out on quality education. Education goals, targets and indicators in the post-2015 development framework must be based on human rights principles and

focused on eliminating inequalities faced by persons with disabilities (this in turn requires gathering of disaggregated data). Moreover, the education aspects of the new framework need to incentivise states to build and strengthen inclusive systems of education. One vital step that can be taken to this end is to pay greater attention to recruiting, training and supporting teachers to respond to the diverse needs of learners.

### **1.7.2 Preparing teachers to teach children with disabilities is essential**

A fundamental reason for poor quality education is the severe lack of well-trained teachers who are adequately supported and managed throughout their careers. In Niger, for instance, ‘... there are just 1,059 trained teachers at lower secondary level for 1.4 million children’<sup>12</sup> – that’s 1,322 children for every trained teacher. Compare this with a pupil to (trained) teacher ratio in the UK of approximately 16:1 in secondary education, and the massive shortage of trained teachers in developing countries like Niger becomes very obvious.<sup>13</sup>

The Global Campaign for Education argues: ‘... high quality education requires sufficient recruitment of teachers who are trained, supported, paid and managed as professionals’.<sup>14</sup> An estimated 1.7 million more primary teaching positions need to be created in the period 2010–2015.<sup>15</sup> Policy-makers also need to better understand teacher attrition (the number of teachers leaving the profession) and work to reduce it. However, improving recruitment levels and reducing attrition must not lead to countries employing less qualified teachers or lowering national standards. Of 100 countries with data on primary education, 33 have less than 75% of teachers trained to the national standard.<sup>16</sup>

National standards for teacher training can vary considerably between countries, and are often inadequate. Teacher training for regular teachers also rarely prepares teachers for working in diverse classrooms, and in particular does not equip them with the confidence, knowledge and skills to effectively support learners with disabilities. This is a key reason why so many children with disabilities remain out of school, or excluded from the learning process within school. If we are to reignite progress towards quality basic education (early childhood, primary and lower-secondary schooling) *for all*, then regular teachers need to be prepared to meet the learning and participation needs of children with disabilities. To do this

they need to be given appropriate initial training, ongoing training and professional development, and ongoing access to adequate high quality support and advice from specialist personnel, as the following case study highlights.

### **1.7.3 The importance of donor support for fundamental improvements to teacher training**

Bilateral and multilateral donors must work with developing countries in order to ensure the right to education for all children, particularly the most marginalised, such as children with disabilities. Donors need to:

- research the most effective approaches to training, supporting and managing teachers to include all children in different contexts. This will include piloting innovative projects, rigorously monitoring and evaluating all initiatives, and supporting efforts to scale-up, adapt and transfer successful pilots;
- develop the capacities of those responsible for organising and providing training and ongoing support to teachers;
- Document and share good practice in relation to training quality teachers who deliver effective learning and participation for diverse students in inclusive ways.<sup>18</sup>

All of this must link to other 'building blocks' of the education system (i.e. policy and governance; financing; curriculum and assessment; equipment and materials; infrastructure; and management information systems) and ensure co-ordination with other sectors such as health and nutrition.

Donors can support the necessary improvements to teacher education by encouraging and developing inclusive education policies and targets for including the most marginalised. But this must be matched with more ambitious approaches to education financing, such as increasing aid<sup>19</sup> and reducing debt in developing countries, and supporting governments to build fair and robust tax systems and to trade at regional and global levels. Donors further need to ensure that the International Monetary Fund does not undermine global education goals through enforcing cutbacks in education budgets, such as restricting increases to teachers'

wages<sup>20</sup> – because good quality, motivated teachers need fair and improving remuneration.

## 1.8 Key actions

### 1.8.1 Policy-makers and teacher trainers need to understand inclusive education Why do policy-makers and teacher trainers need to understand inclusive education?

Those who are developing and implementing policies around education and teacher training (e.g. Ministry of Education personnel and directors and trainers in teacher training institutions) need to have a sound understanding of inclusive education, because they need to be able to promote inclusion across all areas of work for which they are responsible, and not simply allocate responsibility for inclusion to a small number of isolated experts. A ‘sound understanding of inclusive education’ means:

- **understanding that inclusive education is an issue that cuts across all aspects of education, at all levels** – it is not just a separate or one-off project, but an approach and philosophy that underpins educational improvement. This means it is not just an issue for staff who have been given a specific remit to educate students with disabilities. Rather, it is an issue that *all staff* working in education policy and teacher training need to engage with, even if they do not become ‘experts’ in it. Further, it is an issue that needs attention among those responsible for curriculum and material development, examinations, school infrastructure, education data and information management, etc., to ensure that all these areas of work focus on the most marginalized, are accessible and promote accessibility, and seek to reduce inequality.
- **recognising the crucial ‘win-track’ approach to inclusive education.** In other words, teachers (and those who train and employ them) need to embrace inclusive beliefs and practices that *generally support all learners* and make education a welcoming and positive experience for all; and they need to be sufficiently confident and skilled to *meet the specific learning needs of students with disabilities*. Many of the learning needs of students with disabilities can be met by generally making the education system more flexible, welcoming and



responsive ('track' one) – but they will also have needs that require more specialist attention, so this second 'track' has to be part of an inclusive education approach.

• **understanding that inclusive education does not just happen in isolation within the education sector.** Successful inclusive education efforts are connected to work happening in other sectors. For instance, ensuring that all children are included in and benefitting from a quality education often requires effective links with the health sector (because poor health or nutrition impact on participation and learning); with the water and sanitation sector (because children cannot participate in learning if they are thirsty or if they lack access to toilet facilities); or with the public transport and judicial sectors (because children cannot access education if the journey to school is impossible or if it puts them at risk of violence or abuse). Inter-sectoral links can play a particularly important role in ensuring the inclusion of children in early years education, and the early identification of specific learning or support needs.

### **1.8.2 How can policy-makers and teacher trainers be supported to understand inclusive education?**

To achieve the level of understanding needed among policy-makers and teacher trainers, advocacy and awareness-raising efforts aimed at these audiences need to present clear messages about inclusive education, stressing its relevance across all aspects of education and explaining the twin-track approach.

Beyond initial advocacy and awareness raising, there should be follow-up training and support for policy-makers and teacher training staff, to help them keep developing their understanding of inclusive education so they can provide increasingly more informed and relevant training, advice and support to pre-service and in-service teachers. A key part of this might be ensuring that policy-makers and teacher trainers actually have regular exposure to schools and to children from diverse backgrounds (because too often individuals in positions of authority spend insufficient time in schools observing, consulting or teaching). This might include both local exposure and also study visits to other districts or even countries.

## **1.9 Inclusive education should be integrated into *all* teacher training**

### **Why does every teacher need to know about inclusive education?**

We highlighted above that inclusive education is a philosophy that cuts across all aspects of education – it is not just a separate project for the attention of a few specialists. For this reason it is vital that every teacher, working at any level of the education system, should learn how to make education more inclusive: this means learning how to improve the presence, participation and achievement of all learners, and learning how to support the inclusion of students with disabilities in particular. The development of a human rights culture and the nurturing of critical thinking skills are vital if inclusion is to become a reality.<sup>21</sup>

Teaching is considered more effective if it is differentiated – that is, if the teacher adapts lessons and activities to suit different students in their class. A good inclusive teacher therefore learns how to: identify students' specific learning needs and any wider (cross-sectoral) issues that may be impacting on presence, participation and achievement; develop innovative ways to help students participate and learn; and seek appropriate extra help from colleagues or other professionals when their own knowledge/skills are not sufficient to fully address a particular problem (for instance if they need support with planning and delivering education for children with particular learning difficulties). Such a flexible and responsive approach to teaching may appear to be particularly challenging in under-resourced or other difficult circumstances, but nevertheless needs to be the standard that all education systems strive for.

### **What sort of teacher training is needed?**

It is vital for trainee teachers to learn about inclusive education from day one of their training, so that focusing on quality and inclusive teaching and learning is seen as a natural part of every teacher's job. It is equally important for existing teachers to participate in ongoing professional development that helps them to constantly reflect on their attitudes and practices and strive to improve the inclusiveness of their schools. Such professional development can include formal in-service training courses and ongoing learning opportunities, such as having

access to relevant reading materials and being given the time for individual study, participating in action research initiatives and engaging in teacher discussion groups.

It is not sufficient for teachers/trainee teachers only to be offered one-off or stand-alone courses on inclusive education. Such courses are often not compulsory and/or might not contribute to the trainee teacher's final grade, offering the trainee little incentive to take the course. Stand-alone courses also potentially send out messages that inclusive education is a special topic for a handful of specialist teachers, not an issue that is important for every teacher. Finally, stand-alone courses often perpetuate misunderstandings that inclusive education is a separate initiative/project as opposed to an approach for whole-school improvement. These last two points can be significant barriers to encouraging all teachers to take responsibility for all learners.

To ensure that every child has a teacher who is trained on inclusive education and acknowledges their responsibility to be inclusive, there needs to be:

- **Attention given to addressing inclusive education in pre-service and in-service teacher training and through continuing professional development activities.** While NGOs have often intervened to provide in-service training programmes, these may reach only a small percentage of serving teachers. Countries need their governments to support the scale-up of such in-service training and development for teachers and to develop inclusive pre-service training.
- a mixture of (i) **specific courses** that focus on inclusive education, and (ii) a concerted effort to **'embed' inclusive education** principles into all teacher training courses and activities.
- **a review and revision of teacher training courses, curricula and materials;** with the review process involving training institutions and ministry of education personnel, as well as trainers, teachers and other education stakeholders from diverse sections of the community.
- **advocacy to encourage teacher training institutions and ministries to undertake such changes;** and to build the capacity of teachers and other

education stakeholders to demand comprehensive improvements in teacher training and continuing professional development opportunities at all levels.

### **1.10 Teacher training must bring together theory and practice, especially around inclusive education**

#### **An effective balance of theory and practice**

Teacher training around inclusion (but also in general) needs to offer a balance of theoretical and practice-based learning. In relation to inclusive education this means that trainee teachers and experienced teachers need to learn about the concept of inclusive education, but then also need plenty of opportunities to both observe and implement the theories in practice, ideally with support from experienced colleagues or mentors. They need to be facilitated to reflect on how their practices relate to educational theory, and how they can turn theoretically good ideas into sound practice. Practice-based teacher training needs to be relevant to the local context and culture, and needs to be a well-managed process so that teachers/trainee teachers are not overwhelmed.

The split between theory and practice needs to be well-balanced. Too much theoretical and too little practice-based learning can leave teachers ill-prepared for the real-life challenges they will face in class. Equally, however, if there is very little theory-based learning, teachers can miss out on vital opportunities to learn from wider sources of information, and to learn how to be more reflective and analytical practitioners.

There are various options for supplementing teacher training with disability-specific hands-on experiences. For instance, disabled people's organisations (DPOs), people with disabilities and parents of children with disabilities can be directly involved in designing and delivering the training (discussed in more detail in the following section). Also, where special schools exist, they can often provide practical and technical advice and support to teachers and trainee teachers – and increasingly special schools are evolving into this resource role in support of regular schools who are including children with disabilities. However, while special school staff often have expertise in specific areas of disability, they may

also need training on inclusive education and how to support mainstream schools to be inclusive.

### **Cascade training needs more effective follow-up**

The popularity of cascade training mechanisms – among NGOs and ministries of education – needs careful review. Cascade training may seem like an efficient way of passing factual messages from one group of teachers to another, thus reaching relatively large numbers from a fairly small initial investment. However, the approach often fails to offer trainees the depth of learning – especially practical learning and experience exchanges – that is needed, and can even result in inaccurate or incomplete information being cascaded down the line.

One of the main weaknesses of cascade training is that it is often not accompanied by effective follow-up. Teachers who have received information via a cascade mechanism still need a lot of support after the training – particularly considering they have potentially received information from colleagues who themselves are not experienced enough to answer all the teachers' questions or explain how a particular real-life situation could be handled.

Cascade approaches to in-service teacher training therefore need to be accompanied by at least some of the following:

- School-based (or cluster school/resource centre-based) support and advice made available to all teachers who have queries about how to turn the training messages into practice in class.
- mentoring of inexperienced teachers by other teachers (or even other professionals or community stakeholders) who have hands-on experience of developing inclusive education and working with people with disabilities.
- Peer-to-peer support, such as opportunities for teachers to share their experiences of implementing what they learned on the training course.
- Regular follow-up training events.

Cascade training needs to be seen as one tool in a much more comprehensive box of tools for preparing inclusive teachers, and clear messages are needed that

cascade training is not an inexpensive, quick-fix for developing a new generation of inclusive teachers.

### **1.11 People with disabilities should be involved in teacher training and other aspects of education planning and management**

#### **Why do people with disabilities need to be involved in teacher training?**

A key reason why teacher training often fails to address inclusive education – and in particular the inclusion of students with disabilities – is because those involved in planning and running teacher training do not have disabilities, and often have no direct experience of working with people with disabilities.

There is a growing movement towards community involvement in and management of schools. If this is to be successful it must include representation from diverse groups in the community, including people with disabilities. This needs to be further extended to ensure that teacher education, and the ongoing support and professional development of teachers, is done with the involvement of people with disabilities (and people from other marginalised groups too).

As we saw above, teachers/trainee teachers need their training to be practical and contextually relevant. This means training needs to be designed with input from a range of stakeholders living, working and studying in the communities in which the teachers will work – and this must include inputs from people with disabilities.

#### **How can such involvement be facilitated?**

Teachers often say that including learners with disabilities is the aspect of inclusive education that they find most challenging.<sup>22</sup> Stakeholders with disabilities (individuals or representatives of DPOs) can play an active role in preparing teachers for this challenge in the following ways:

- Ministries of Education should seek the contribution of people with disabilities during policy discussions (at all levels) about teacher training structures, curricula, etc. (as well as during discussions about other education issues).

- Positive action should be taken to train, deploy and support teacher trainers who have disabilities, who can act as positive role models and provide 'first-hand' information about disability, inclusion and exclusion to the trainee teachers.
- Pre-service and in-service training programmes should be designed with the flexibility to feature guest trainers and speakers from among different stakeholder groups, including people with disabilities (e.g. academics and researchers with disabilities, local role models with disabilities, parents of children with disabilities).
- Pre-service and in-service training and continuing professional development programmes should find ways to give teachers/trainee teachers 'exposure' to working with children and adults with disabilities and with their parents/carers (e.g. by having teachers work some voluntary hours with a sports club or other facility/event for children with disabilities).
- Local education authorities and schools should be enabling people with disabilities to be actively involved in school life, management committees and parent-teacher associations, so that serving teachers (and trainee teachers doing practicum) are meeting and working with (and can ask questions to) people with disabilities regularly and for different purposes.

### **1.12 The teaching workforce needs to be diverse and representative**

#### **Why is diversity among teachers important?**

Ensuring that every child has a teacher who can offer them a quality, inclusive education means we also need to look carefully at who becomes a teacher. Children who feel that their teachers have nothing in common with them, or do not understand them, may be less likely to engage in learning and more likely to drop out. Striving for a diverse teaching staff that represents male and female sections of the community, with and without disabilities, and from the ethnic, linguistic and religious groups found in the community, is therefore important.

Inclusive education is often explained as being a key step in developing an inclusive society. Having a diverse teaching workforce is part of this. For instance, enabling children to learn with a teacher with disabilities should help the

children to grow up with a more positive attitude towards disability and the role that people with disabilities can and should play in their community.

### **How can more people with disabilities be brought into teaching?**

There needs to be particular attention paid to training, employing and supporting teachers with disabilities.

People with disabilities are likely to face the greatest barriers when it comes to achieving the level of education needed to train as a teacher. Flexible policies for enrolment qualifications for teacher training, and/or creating and funding 'catch-up' courses for potential trainees who missed out on education earlier in their lives, are two possible ways to help overcome this barrier.

Teacher training itself is often inaccessible – courses run in physically inaccessible buildings; lack of materials in alternative formats such as large print and Braille; lack of sign language interpretation; lack of access to assistive devices; and of course a lack of teacher trainers or training managers who know about accessibility, or who can read Braille, and so on. Ministries of Education and those working with them need to invest in teacher training facilities (whether these are large training institutions or local facilities for teacher professional development such as at district teacher resource centres) so that they become as accessible as possible to teachers and trainees with disabilities.

Accessing and completing training is not the end of the challenge for teachers with disabilities, however. They may face discrimination in finding a job (e.g. negative attitudes among head teachers or local education officials who interview them; limited choice of schools that are sufficiently accessible; or in some places even outright bans on people with disabilities becoming teachers because of very strict health and fitness assessments). Teachers with disabilities are also likely to face discrimination within the workplace (e.g. unfair or abusive behaviour from colleagues, managers or parents; employment, remuneration or healthcare/retirement policies that are inherently biased against people with disabilities; and lack of access to professional development opportunities).

Employment regulations for teachers need to be reviewed and overhauled where necessary, so that there are no legal barriers to people with disabilities becoming



teachers, and no unfair conditions of employment that make it difficult or impossible for them to remain teachers.

### **1.13 Summary**

By explaining the principles of collaboration, introducing a range of tools, and reporting on a number of case studies from around the world, this resource book aims to help practitioners and stakeholders develop a wider appreciation of how to approach and structure a collaboration process. Stakeholders are encouraged to use the ideas and information provided here to develop new and innovative relationships with those individuals and institutions who can help make collaboration a reality.

Stakeholder collaboration is a process that will go through much iteration. Full collaboration or partnership is not always going to be the outcome. Instead, the process that stakeholders go through may reveal that other forms of action—campaigns, education, policy development, or advocacy—are more appropriate given the conservation goals and objectives identified, and the roles, positions, and interests of the various parties involved. Remember that facilitators, conveners, education and communication specialists, capacity building and conflict resolution experts, policy advisors, or lobbyists all can offer important advice and support to the collaboration process.

Whatever the outcome, the stakeholder collaboration process can help a range of stakeholders— allies and opponents, public and private sector, communities and individuals— to develop a better understanding of the issues and challenges involved in achieving conservation goals and objectives at a variety of scales. We encourage you to use this publication as a “working document.” Test it and report back to us on the utility of the processes and tools that this resource introduces. Where new ideas, approaches, and opportunities emerge, we hope you will supplement what is presented here and share your learning with us. At the end of the day, conservation is about managing human activity and its impact on the environment. Stakeholder collaboration is one of the processes that can help you achieve that goal. We hope that you find this introduction to stakeholder issues and options helpful to your daily work. For further information, please do not

hesitate to contact us. International donors should work with national governments to:

- Support policy-makers and teacher educators to develop a more in-depth and hands-on understanding of inclusive education, and a better sense of how to embed inclusive education principles throughout all pre- and in-service teacher training, and all continuing professional development.
- Support education authorities and teacher educators to review their existing teacher training systems and facilitate the mapping of opportunities for embedding inclusive education principles into a revised training system.
- Support the development of improved teacher training systems that deliver a more effective balance of theory-based learning and hands-on practice, with a particular focus on teachers learning how to be child-centred and inclusive, and in particular how to teach children and adults with disabilities.
- Support education authorities and teacher educators to develop mechanisms through which people with disabilities (including DPOs) are consulted about teacher training, and are enabled to take an active role in designing and delivering teacher training.
- Support education authorities to critically review their existing human resource legislation, policies and procedures, and to develop improved laws/policies/procedures that actively encourage and support people with disabilities to train and work as teachers at all levels across the education system.
- Advocate for post-2015 goals, targets and indicators to explicitly focus on the need to include people with disabilities in education, which requires disaggregated data to monitor educational access, transition, completion and quality.
- Develop progressive and holistic approaches to education financing, ensuring that no donor economic policies are allowed to undermine international human rights law or undermine the growth of an inclusive, highly-skilled and well-remunerated teaching workforce.

## 1.14 References

Biodiversity Support Program. 2000. In good company: effective alliances for conservation.

Washington, D.C.: BSP, Analysis and Adaptive Management Program.

Borrini-Feyerabend, G. 1996. Participation in protected area management—a continuum.

Gland, Switzerland: IUCN-The World Conservation Union.

Brown, Michael. 1996. Non-governmental organizations and natural resource management:

synthesis assessment of capacity building issues in Africa. Washington, D.C.:

PVO-NGO/NRMS Project.

Brown, Michael I., and Barbara Wyckoff-Baird. 1992. Designing integrated conservation and

development projects. Washington, D.C.: Biodiversity Support Program.

Carpenter, Susan L. 1990. Solving community problems by consensus. Washington, D.C.:

Program for Community Problem Solving.

Chapin, Norman M., and Bill Threlkeld (forthcoming). Indigenous landscapes: a study in

ethnocartography. Arlington, Va.: The Center for the Support of Native Lands.

Gray, Barbara. 1989. Collaborating: finding common ground for multiparty problems.

San Francisco, Calif.: Jossey-Bass.

Holmen, Hans, and Magnus Jirstrom. 1997. Strengthening NGO networking for sustainable

development. Sweden: Lund University.

Jacobsohn, Margaret. 1993. Conservation and a Himba community in Western Kaokoland,

Namibia. In Lewis, Dale ed. *Voices from Africa*. Washington, D.C.: WWF-US.

Kelly, Robert, and Donald Alper. 1996. Transforming British Columbia's war in the woods.

Wellington, New Zealand: University of Victoria Institute for Dispute Resolution.

Larson, Patty, Mark Freudenberger, and Barbara Wyckoff-Baird. 1997. Lessons from the

field: a review of WWF's experience with integrated conservation and development

projects. Washington, D.C.: WWF-US.

Meyer, Bernie, Susan Wildau, and Rumen Valchev. 1995. Promoting multi-cultural consensus

building in Bulgaria. *Cultural Survival Quarterly* (Cambridge, Mass.) Fall 1995.

Razanatahina, Anita N. 1999. Institutional frameworks and their influence on ecoregion-based

conservation. Washington, D.C.: ERBC Unit, WWF-US.

Rothman, J. 1995. Pre-negotiation in water disputes where culture is core. *Cultural Survival*

*Quarterly* (Cambridge, Mass.) Fall 1995.

### *Bibliography 8.3*

Russell, Diane, and Camilla Harshbarger. 1999. Studying the social dimensions of community

based conservation: a practitioner's political ecology. Washington, D.C.: Biodiversity

Conservation Network, WWF-US.

Stern, Alissa J., with Tim Hicks. 2000. The process of business/environmental collaborations:

partnering for sustainability. Westport, Conn.: Quorum Books.

Strasser, Alan. Oct./Nov. 1998. The Pine Barge Canal NPL site: community-based consensus

group reaches settlement on remedy and additional projects. *HB Siteworks* Vol.1, No. 5.

Vanhasse Hangen Brustin, Inc. (Contact astrasser@hazmed.com)

Whose Eden? an overview of community approaches to wildlife management. London, UK:

International Institute for Environment and Development, 1994.

Women and natural resource management: a manual for the Asia Pacific region. London,

UK: The Commonwealth Secretariat, 1996.

World Bank/Environment Department. 1995. *Levels of Participation*.

World Bank Participation Sourcebook. 1996.

See <http://www.worldbank.org/wbi/sourcebook/sbhome.htm>

## UNIT 2

### Advocacy & Leadership for Inclusion in Education

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2.17.3 Who should be included in the Training led by disabled people?

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## **2.1 Introduction**

This toolkit focuses on supporting disabled people to lead on advocacy. Not all of the information will be useful to everyone. We hope the toolkit will be a starting-point. You will need to adapt it to the aims of your chosen advocacy and training work, and the people you hope to reach through the work.

To create opportunities for disabled learners, families and education professionals to have a better understanding of the practices of inclusive education in different countries; what the barriers are and solutions to making inclusive education a reality for ALL. Greater understanding and broader experience about what is possible will increase inclusive education practice across all partner countries and beyond. There are some specific aims for disabled people involved with the project. They are: To support young disabled adults to speak up about their experiences of education. A greater understanding amongst young disabled adults that they are the experts in their own lives and should have genuine choice and control about their education. To support young disabled adults to play a lead role in promoting inclusive education. A key outcome for the project was to develop an Advocacy and Training toolkit to increase the confidence of disabled people to lead the transition from segregated education to inclusive education. The toolkit will include information and good practice from each partner country about the current barriers to inclusive education and solutions for overcoming these barriers which will be used to increase understanding of the benefits of inclusive education across all areas of society.

## **2.2 What do we mean by Inclusive Education?**

It is the accepted view in countries around the world that the right to education is a fundamental right for everyone. However there is still a wide gap between this understanding and reality. This is particularly the case for the 77 million disabled children and young people around the world 90% of whom don't attend school. This is despite the UN Convention on the Rights of the Child Article 28, the EU Charter of Fundamental Rights' Article 14, the 1994 Salamanca Statement and more recently Article 24 of the UN Convention on the Rights of Persons with



Disabilities. The United Nations Convention on the Rights of Persons with Disabilities, Article 24 states:-

1. States Parties recognize the right of persons with disabilities to education. With a view to realizing this right without discrimination and on the basis of equal opportunity, States Parties shall ensure an inclusive education system at all levels and lifelong learning directed to:

- a. The full development of human potential and sense of dignity and self-worth, and the strengthening of respect for human rights, fundamental freedoms and human diversity;
- b. The development by persons with disabilities of their personality, talents and creativity, as well as their mental and physical abilities, to their fullest potential;
- c. Enabling persons with disabilities to participate effectively in a free society.

For some time now it has been the aim of the Inclusive Education movement across Europe to shift the debate away from 'inclusion vs. segregation' because all evidence shows that education that is inclusive benefits not only disabled learners but the whole of society. This project will assist in moving the debate on by focusing on current good practice in inclusive education across each of the partners involved and will enable us to disseminate that good practice widely across Europe. Project partners have all signed up to the following:

### **2.3 Principles for Inclusive Education**

The Project partners believe Inclusive Education is a Human Rights issue and can only be achieved by a fundamental change to existing education systems. Every learner has additional learning needs, and inclusive education is for all. This belief embodies all the principles of Inclusive Education, which are:

Diversity enriches and strengthens all communities All learner's different learning styles and achievements are equally valued, respected and celebrated by society All learners to be enabled to fulfill their potential by taking into account individual requirements and needs Support to be guaranteed and fully resourced across the whole learning experience All learners should have the opportunity to develop friendship and support from people of their own age All children and

young people to be educated together as equals in their local communities Inclusive Education is incompatible with segregated provision both within and outside mainstream education

- **Who are disabled People: What is Disability?**

Over the last 30 years and since the 1981 International Year of the Disabled and the formation of the international movement for change led by disabled people, the understanding and awareness of disability has changed from a traditional model to a model that is about empowerment and liberation.

- **The Medical Model: Disability as Personal Tragedy**

This is the traditional explanation of disability and is based on the understanding that impairment or health condition is to blame for the low status of disabled people and that it is the responsibility of individuals with impairments and health conditions to fit in with society - to be 'normal'. In other words, we are disabled as a result of our individual physical, intellectual or sensory limitations. This explanation is known as the individual or medical model of disability, because it has mostly been the view of the "experts". This model of disability has been rejected by disabled people and is now generally recognized by academics and professionals as well to be an inadequate basis for understanding disability.

## **2.4 The Social Model: Disability as Social Oppression**

The disabled people's movement believes that there are economic and social barriers which prevent people with impairments and health conditions from participating fully in society. This explanation is known as the social model of disability because it shifts the focus away from individuals with impairments and health conditions towards society's disabling environments and barriers of attitude. The social model was developed by members of the global disability movement.

## 2.5 LEADERSHIP FOR INCLUSIVE EDUCATION:SETTING THE CONTEXT

The purpose of this book is to examine the constituent elements that contribute to the construct of inclusive education and to explore the implications for school leadership practice. In order to achieve this, different aspects of the discourse framing inclusion will be examined by the contributors to this collection. A key feature of the rationale underpinning this work is the recognition that inclusion is tightly bound to context; the culture and history of the different countries whose perspectives are included strongly mediate the manner in which inclusion is defined, implemented and achieved within the different systems. While there are some similarities within and between countries in terms of how inclusion is conceptualised and practiced in school systems, there are also many differences. When different perspectives and experiences of inclusion are included in the book the variegated nature of inclusive practices becomes visible. The degree of variation that delimits the practice of inclusive schools has very clear implications for school leadership and the school systems within which leadership happens. This book is not about answers or recipes – it will not add to the already substantial body of scholarship that offers a transferrable solution approach to the complexity of school leadership in pursuit of inclusive models of schooling. In short, it will not provide simple answers to complex issues. The purpose of this contribution to the field of leadership for inclusive education is to explore inclusion from the perspective of a number of academics who work in a range of national contexts, namely Spain, Poland, England, Norway and Ireland. The book reflects their individual and collective experiences of working in the field of school leadership and inclusion in the different national contexts and also the collaborative work that arose from participation in an Erasmus Intensive Programme that focused on leadership development for inclusive education. The perspectives articulated within this book have also benefitted from engagement with Masters students from the 6 participating countries (Turkish students also participated) on the Erasmus Programme. 10 students and 2 staff from each of the countries came together for a 2 week residential programme each year in first England, then Norway and then Ireland. In the programme leadership and inclusion were put under the microscope for interrogation through reading, writing, discussion, group and plenary activities. This book is a result of this

intellectual mixing, and seeks to provide a rich and stimulating contribution to the vitally important and highly complex issue of leadership and inclusion.

In addition to the authors' diversity in terms of their different national and cultural experiences of inclusion, an additional strength of the book is the range of epistemological perspectives represented in the different chapters. Bringing difference of this nature together within the covers of one book is a challenge. However, it is also an asset because the diversity of perspectives will help readers see their own thinking and practices in new ways. Inclusion is a highly contested construct both in terms of what constitutes the term "inclusion" and comprises the variety of attempts in various contexts to deliver an inclusive education system. It is clear from the literature that as a construct, inclusion has experienced significant difficulty in its realisation in many countries (see Allan, 2008).

Just as inclusion is a slippery term so too is leadership. Perspectives on leadership are becoming so abundant that as a concept it is in danger of losing its power to frame the work of schools. This book seeks to shape some of the discourse on leadership by exploring perspectives which are likely to enhance our understanding of leadership as applied to inclusion. Inevitably as the contributors come from different cultures and contexts there are different views on leadership as it relates to inclusion. We see these differences as a positive and indeed the process of writing the book across nations challenged our own practice of inclusion. Tolerance, respect, listening, clarifying language, being comfortable with differences and ambiguity and articulating and challenging the rationale behind "the way we do things around here" are all of prerequisites for creating this book and indeed are a key aspects of inclusive leadership. We acknowledge that leadership is important in terms of the child's (and adult's) experience of school, but relationships are complex rather than simplistic. But throughout the book we also address the current political dogmas in many countries that take a purely rational, managerial approach to leadership, arguing that this is not contributing to inclusion in schools. High stakes accountability has given birth to formulaic approaches to leadership that rests on a belief in "one best way" to run a school and this way is often more autocratic than democratic. In this book we take a holistic view of people and recognise that a slow pace of sustainable change will have a lasting effect on improving education. The market place demands quick

fixes often driven by the governing politicians' priority to drive policy reform for a variety of reasons. Inclusion and leadership are both slippery as eels. In this book we seek to wrestle them to the ground (at least intellectually) and hold them still for a while in order to encourage and enable those who run schools to do so as well. The volume will be useful for educational leaders in primary and second level schools as well as academics, leadership consultants and those who want to engage with the task of promoting inclusion in the education sector. The international perspectives on the issue of inclusion informing this book ensure that it will be essential for those engaged in a comparative analysis of leadership practice in different contexts or those concerned with working towards ensuring inclusive models of education in practice.

## 2.6 SOCIO-CULTRUAL CONTEXT

The notion of an inclusive model of schooling has evolved over time and in order to understand current perspectives and discourses certain features of that evolutionary process require explication. In the first instance, inclusion draws on a range of ideas and concepts developed in other domains and in other cognate disciplines i.e. it draws on discourses within fields such social justice, diversity, equality, democracy, citizenship and identity. Consequently, it could be accused of exhibiting high levels of conceptual borrowing which contributes to a degree of eclecticism creating some difficulty when offered as a rationale or framework upon which to base and shape a system of schooling. Secondly, what inclusion means in different school systems is very varied, the different system interpretation of inclusion included in this book will attest to that. This diversity is derived from how inclusion is filtered through different national cultural and socio-historical context on the pathway to practice. The manner in which many of the discourses that serve to construct the idea of inclusion are contested within their own fields also contribute to the variation in interpretation. It is not surprising therefore that the sum of the parts at times becomes overwhelming resulting at times in confusion and contradiction. In essence the discourses that frame what inclusive schooling looks like are formed of many different contested concepts mediated by very specific and deeply rooted sedimented (Layder, 1997) models of schooling.

It is beyond the scope of this book to offer a comprehensive trawl of the different cognate fields referred to above. However, it is essential to bear in mind that a fundamental principle underpinning this collection is the centrality of leadership development programmes that include significant engagement with the constituents of the socio-cultural context. By focusing on the socio-cultural context within which inclusion is framed and delimited this book takes as a key principle the need for leaders as inclusion workers to take full account of this socio-cultural context. The development of 'inclusion leaders' therefore could be described as a process of developing or fine-tuning a mindset – a deliberative and critical way of looking at the world thereby impacting very decisively the way one acts in the world. Essentially this process is ideological 'based upon alternative views of the world and the nature and form of schooling that will build that world' (Slee, 2011 p. 25). Striving for inclusion and inclusive schooling explicitly requires a particular value base and a very clear sense of vision for a particular type of education system that assumed that this value base is a naturally occurring attribute of all leaders and consequently all dimensions of the socio-cultural field as they relate to inclusion need to be problematical. This section seeks to do this provide some key areas for reflection into the broad context for inclusive schooling. Chapter 2 explores some of the broad issues that relate to inclusion. Chapter 3 focuses very explicitly on special education context to which inclusion has been very tightly coupled from the outset. Exploring how special education and inclusion fit together to enrich student learning and student experience of schooling is vital. In this way it is possible to critique current models of practice and the misinterpretations of inclusion that prevail in many school systems. Both these chapters argue for a more overt and proactive critical engagement with the field at the level of professional practice. Chapter four turns its attention to links between leadership, identity, and inclusion while the final chapter in this section takes context to a more localized level i.e. the school as an organization. The manner in which inclusion is mediated by the culture of the school is a key element in the drive towards inclusion. It is important to recognize and explicate particular practices, processes and images of culture that facilitate and nurture this type of school.

## 2. 7 INCLUDING WHO? DECONSTRUCTING THE DISCOURSE

The idea of inclusion is 'generally understood around the world as part of the human rights agenda that demands access to, and equity in, education' (Florian, 2008, p. 202). As a concept it was originally aligned to the developments within special education when thinking shifted from the idea of integration to the more challenging idea of inclusion and mainstreaming of special education provision (Warnock, 1978). From the outset the idea was tightly coupled to the notion that inclusion of children with SEN should replace integration because integration had produced a reductive mechanism of measuring students disability with a view to calculating the resource required to make the student fit into the mainstream system. The extent of the reductionism inherent in this policy is articulated clearly in the formulae of practice outlined by Slee where Equity [E] is achieved when you add additional resources [AR] to the disabled student [D] with the result that  $E = AR + D$  (Slee, 2001). Despite the time span between Warnock's call for the inclusion, it is interesting to note how much of the present day discourse continues to draw on this type of mathematical calculation (see chapter 3 on the review of national policy trends and directions). The move towards inclusion, as yet framed within the field of SEN, as a bedrock of policy was given added impetus by a range of international developments which strongly supported this model of schooling (see for example the World Declaration on Education for All (UNESCO, 1990), the Salamanca Statement and Framework for Action on Special Needs Education (UNESCO, 1994) and the Dakar Framework for Action (UNESCO, 2000). The Salamanca statement presented inclusion as a two dimensional process of increasing participation and removing barriers. Despite this broad support, an examination of current practice and much of the scholarship in the field reveals that inclusion has not been achieved for students with SEN with many agreeing that what happened was a recalibration of inclusion so that in effect what emerged in policy and practice was at best a model of integration (Dyson, 2001). From 2005 onwards, the concept of inclusive education was broadened to include the diversity of learners (Operti, 2010). UNESCO's defined inclusion as ' a process of addressing and responding to the diversity of needs of all learners through increasing participation in learning, cultures and communities, and reducing exclusion within and from education. It involves changes and

modifications in content, approaches, structures and strategies, with a common vision which covers all children of the system to educate all children.' (UNESCO, 2005 p.13). Developments in the field of social justice and equality contributed to the nature of the discourse surrounding inclusion. Legislative changes in some countries added a legal imperative to the drive towards inclusion. In the Republic of Ireland for example The Equal Status Acts (Government of Ireland, 2000–2004) named 9 grounds where discrimination was prohibited in the provision of goods; accommodation and education (see Lodge and Lynch, 2003). In this framework disability was included alongside others including race and ethnicity, religious belief, sexual orientation, gender etc. UNESCO's 48th International Conference on Education in 2008 (ICE) strongly reaffirmed 'a broadened concept of inclusive education can be viewed as a general guiding principle to strengthen education for sustainable development, lifelong learning for all and equal access of all levels of society to learning opportunities' (ICE,2008 cited in Operti 2011 pp. 21–22). All of these have implications for schools and in all cases schooling is mentioned explicitly in documentation.

## **INCLUSION IN SCHOOLS**

Inclusion as a construct is a highly contested area in education both in terms of what is encompassed in the term inclusion and in the variety of attempts in various contexts to deliver an inclusive education system. It is clear from the literature that as a construct inclusive education (IE) has experienced significant operational/ implementation difficulties in many countries and most notably in those who have a long track record in pursuing the inclusion agendas (see Allan, 2008). Within the context of Special Educational Needs (SEN) inclusion has been challenged from a number of scholars cited in this collection – see for example the works of Allan, Florian, Graham and Slee. Teacher unions cite 'strain on teachers and the damage done to children and young people by inclusion' (Allan, 2008, p. 9) questioning 'teachers capacity to keep up with the demands of inclusion' (Allan, 2008, p. 1) It has also been critiqued within the special education field with some dismissing it as 'an ideological and unproven bandwagon' (ibid). Julie Allan in her seminal review of the idea of IE begins her analysis by mapping out what she calls territories of failure with respect to inclusion; 'there is little doubt that inclusion has a troubled existence and that it is being written off, at least in



some quarters, as an abject failure (Allan, 2008, p. 9). The exclusion of certain children from mainstream schools has become legitimate especially if it can be argued that they would have a potentially negative effect on the majority of children within the mainstream (Slee, 2011; Allan, 2008) Originally the instigator of the drive towards inclusion, Baroness Warnock has changed her views on the notion pointing to the traumatic nature of school experience for many children with SEN (Warnock, 2005).

## **2.8 Advocacy**

### **2.8.1 What is Advocacy and why is it important?**

Advocacy means any one or more individuals or groups speaking up and out with the aim of influencing others to make any form of change (e.g. social and political change)

### **2.8.2 What is needed to run a successful Inclusive Educationadvocacy campaign?**

A significant clear thing that needs to be changed A straightforward goal Right range of issues A realistic chance of success or chance of raising awareness of an issue Something that inspires people and offers them clear action in different ways Follow up Understanding the barriers and solutions to progressing inclusive education for ALL disabled students is the central issue of your advocacy work. Focusing on barriers and solutions will ensure that activities take a Social Model of Disability approach to your work. This will also help to determine the strategies, timescale, resources and target audiences needed.

## **2.9 Barriers**

The "Disabled People Partnerships for Inclusive Education" project has identified a number of barriers to progressing inclusive education. The barriers are categorized into five themes, however many of the barriers are relevant to more than one theme. The following barriers are shared across the four partner countries - France, Iceland, Italy, and the UK

## 2.10 Attitudes and Relationships

To segregate disabled children at a young age produces an ideology that encourages exclusion and devalues the skills and talent of disabled people. Pressure for disabled students to access social environments, but with no support and a lack of opportunity to build social relationships. The length of time to socialize and establish friendships in classrooms can be limited. Lack of understanding on the philosophy of Inclusive Education and what it means in practice. Traditional fear that Inclusive Education might negatively affect other students. Unhelpful focus on the Medical Model of Disability which highlights impairment and how it hinders disabled people to perform their activities in daily life.

## 2.11 Physical Accessibility

Many Schools remain physically inaccessible to disabled Students. Inaccessible public transport makes it difficult for disabled students to travel to school with their peers.

- **Lack of Information**

A general lack of understanding on disability equality issues and disability equality training. Insufficient knowledge on inclusion and disability amongst those who are in control of schools and education facilities. People have little understanding of the Social Model of Disability.

- **Problems within Education Systems**

Disabled students' achievements are not recognized as being equal to their non disabled peers - in Italy – disabled students could only access certificates, never diplomas, which led to the assumption that disabled students could never achieve academic diplomas. The existence of special schools creates a drain on education resources and funding. Disabled students and families must have the real choice of a local mainstream school with a guarantee of all necessary support. Professionals and teachers working in special schools oppose any changes for the fear of losing their role and status. Educational policies are based on academic results where students are measured by fixed/rigid achievement standards. The presence of

'Special' tutors can discourage friendships between disabled and non students as they can act as a barrier

- **Lack of Disabled Peoples Voice**

Disabled children and young people have limited opportunities to meet empowered disabled adults Lack of opportunities for disabled children and young people to learn about their identity, culture and history in school. No voice from students when constructing their Individual Education Plan. Professionals assume that parents will always speak on behalf of the student

- **Solutions**

The "Disabled People Partnerships for Inclusive Education" project has identified a number of solutions to progressing inclusive education. The solutions are categorized into four themes, however many of the solutions are applicable to more than one theme. The following solutions are shared across the four partner countries - France, Iceland, Italy and the UK

- **Resources within the Education System**

The presence of qualified teaching assistants to support disabled students The capacity within the education system to allow all children to grow up together, whatever their differences The presence of alternative communication as a standard format to communicate Good mix of vocational courses Practical resources for teaching staff to support inclusive teaching methods Mutual learning between colleagues - networking and exchanging ideas Teachers trained to recognize individual skills of each child Shape the curriculum to meet the needs of the individual Allocating friendship time, which allows time for students to talk Collaborative learning, whereby teachers can pair students to learn together Parents to be part of the process Support for student empowerment Access to external professionals to help teachers to understand Inclusive Education and additional learning needs. Using Support Assistants to facilitate relationship building between disabled and non disabled Students School creates different areas for learning, quiet time and friendship building Peer-to-peer support encouraged

- **Society Attitudes**

General equality focused activities will encourage a positive attitude to disability across the wider community. A culture which embraces diversity and acknowledges the skills and talents of disabled people will create a more equal and inclusive society. Ultimately, disabled people become valued members of their communities. Schools are legally obliged to implement a Disability Equality Action plan to raise awareness of disability equality. Identify and encourage positive role models. Model inclusion in our own communities, not just in education. Knowledge of inclusive teaching methods in all job descriptions. Head teachers in schools to take leadership role for Inclusion. Supportive ethos for all staff in schools.

## **2.12 Voice of Disabled Students**

Communication between teachers and students. Encouraging peer-to-peer support. Networking and exchanging ideas. A feeling of welcome and involvement for all children and their families in schools. Support for students to challenge disadvantages.

### **What are the key messages for an Inclusive Education Advocacy Campaign?**

The Principles for Inclusive Education already mentioned in this toolkit are a good place to start. Use examples of good practice to demonstrate the benefits of Inclusive Education within society. All messages should be positive, and provide solutions for achieving Inclusive Education for ALL learners. Explain how there are laws which promote the inclusion and equality of disabled people; this means disabled people should always be educated in mainstream environments. Remember, Inclusive Education is a Human Right, it cannot be denied.

## **2.13 Find Allies and Work with Them?**

Finding allies - people who share the same vision and can support the work turning that vision into a reality are very important. The experience of other people - such as women's groups, the environmental movement, and local community groups - can be useful and encouraging. As disabled people, we can look to these groups for guidance and support in the building our campaigns.

### **2.13.1 What are the advocacy and campaigning activities you want to do and why?**

Agreeing on the problem sounds quite easy. There are many barriers that prevent the full inclusion of disabled students in mainstream education and so many examples of changes that could be made to make inclusive education a reality for all. We think there are two areas to focus on:

#### **2.13.2 Public Awareness - Advocacy work with a Time Focus**

One type of advocacy activity is that of raising awareness of the benefits of inclusive education among the general public - disabled and non-disabled people - with the aim of changing negative attitudes about disabled people and our right to be part of society. It's important, though, to realize that this sort of change doesn't happen overnight.

#### **2.13.3 Changing Laws, Policies, Services - Long-Term Advocacy work**

Advocacy campaigns for new or changed policies or legislation, such as a law that would create a right to inclusive education for all disabled students, need to be long-term. They involve very careful planning of strategies and resources. They need committed and motivated people at the core of the campaign who are going to follow through with the work over a long period. These people will need plenty of time to spare. You also need people who know how to get other people to do things.

### **2.14 Who is in a position to influence / make these changes?**

Involve those who are in powerful positions which affect the lives of disabled people. This is a list of people you could involve in your advocacy work; you could ask them to publicly support you by agreeing with the Inclusive Education principles. Or, the campaign could challenge these peoples' views and attitudes.& Training Toolkit.

- **Policy Makers**

Their decisions affect how schools and other education facilities operate.

- **Disabled People**

Uniting with other disabled people will give you a powerful voice. Seek out Disabled People's' Organizations to help with your advocacy work, they may already have experience of successful advocacy work.

- **Young People**

Having a diverse range of students campaigning together shows those who make the decisions that all your peers want an Inclusive society.

## **2.15 Education and Health Professionals**

(Teachers, assistants, doctors, occupational therapists) – their attitude towards Inclusive Education has an effect on teachers and parent's decision to support disabled students in mainstream environments.

### **Families**

Parents and family members make decisions on behalf of their child, they need to understand the importance of Inclusive Education.

### **Employers**

By gaining their support for all students to have mainstream education, society will have more skilled and confident members to gain meaningful employment.

## **2.16 Working with the Media**

The media can be a fantastic opportunity to promote your messages of Inclusive Education. They can raise awareness, argue on your behalf and challenge people in powerful positions. This, however, comes with problems if the media do not appreciate the importance of Inclusive Education. They may report it inaccurately, by emphasizing the wrong messages or the opposite of what you are trying to achieve. Always ask for control of how the media report your campaign, ask to see final versions of news articles for example. The Internet, with facilities like YouTube and Facebook give you an opportunity to reach large audiences while still having control over the way you publicize messages. It would also be

worthwhile writing articles and printing them in professional magazines, where teachers and professionals will read it. You can also target conventional media outlets, such as local and national newspapers and television. There is no reason why you cannot produce flyers, stickers to distribute round communal areas. You want to raise awareness and cause debates!

## **2.17 Training**

### **2.17.1 What is Training and why is it important?**

Think of training as a direct way of informing a small group of people. Training can mean different things; it can refer to a professional teaching a group of people, or it can be empowered people informing and raising awareness. Disabled people are experts about the barriers and solutions to achieving equality and inclusion; therefore you are in the position to give accurate information. Think of advocacy as a way of raising public awareness across society, whereas training is informing and possibly changing the 'mind-set' of individuals. Informing a smaller group of people allows you to focus on specific issues which you want to make others aware of, and highlight the solutions needed to make Inclusive Education a & Training Toolkit reality. Training, by informing people, gives you an opportunity to use direct and personal information to change attitudes.

### **2.17.2 What do the key Training messages need to be?**

The purpose of training in this context is to inform what inclusive education is and why it's important; with the purpose of information sharing and changing attitudes. You should outline what you hope to achieve during your session with information, guidance and suggestions. You should acknowledge the barriers which prevent Inclusive Education, but provide solutions for every problem raised. Explain to the audience that you are here to help and support them to make inclusion happen! If Inclusive Education is to become a reality then disabled people need to advise and inform others; you must be involved and always remember the slogan of the Disabled Peoples Movement: 'Nothing About Us, Without Us'.

### **2.17.3 Who should be included in the Training led by disabled people?**

Disabled people are the experts, and you should always be in control of the advice and guidance given to other people. Depending on who you are talking to, it may be worthwhile to involve professionals or qualified trainers, but they must believe in the Inclusive Education principles. Working with others is known as co-production, and is perceived as an effective way for changing attitudes. Having a range of people involved will keep your session refreshing for the audience, as they hear different people talking about the benefits of and ways to achieve Inclusive Education.

#### **2.17.4 Who do you need to work with on the Training?**

Informing as many people as possible within the education sector or those involved in a disabled person's life will help promote the importance of Inclusive Education. Nevertheless, your methods to inform others will differ depending on who you are speaking to; therefore here is a list of suggestions for different training ideas:

- **Policy Makers**

Policy makers and local and national Government representatives may not give you much time, therefore keep information clear, short and structured. You could have a table discussion on the principles of Inclusive Education. Show examples of schools which are working well to include disabled students. Gather a list of supporters of Inclusive Education and present it. Use the existing laws to help your cause and suggest new laws and policies which solve existing barriers.

#### **2.18 Health Professionals**

Explain the different models of disability, especially the social model of disability - giving practical examples will help with understanding. Get disabled people to tell their personal stories – this reminds professionals that disabled people are human and have important experiences to share. Bring together different professionals within the health, education and social care services; this encourages networking which would not happen normally.

- **Disabled People**



Explain the different models of disability, especially the social model of disability - giving practical examples will help with understanding. Focus on activities that support people to think about their identity as a disabled person. Activities that encourage disabled people to take leadership in advocacy work - writing and promoting a Manifesto for Change

- **Families**

Use visual methods to demonstrate benefits of Inclusive Education, i.e. documentaries, personal stories. Organize workshops which can bring families and young people together, and can involve an aspect of teaching about the Principles, i.e. cookery class with discussion on Inclusive Education. Opportunities for families of disabled and non-disabled young people to work together, and discuss benefits of inclusion through team-work. Support families to think about how they can be an ally to their disabled child.

- **School Children, Young People and Peer Groups**

Use fun activities which ensure diverse groups of young people are able to interact with one another. The games must emphasize the need for socializing, communication and friendship building. Explain the importance of Inclusive Education in plain simple words and images, avoid formal group discussions. Focus on activities that promote inclusion for all minority groups to make sure there are opportunities to allow children the time to socialize and have fun.

## **2.19 Educational Professionals**

You could explain the language and impact of the different Models of Disability. Encourage their support for a Campaign to have specific disability equality training as a mandatory part of teacher training. School staff to think about ways students, families and community members could be involved in monitoring Equality Action Plans.

- **Employers**

Highlight the benefits of including disabled students in mainstream education as a means of increasing confidence and self esteem Highlight team building exercises

which promote inclusion in the workplace. Gain support from large employers to support your campaign for Inclusive Education as a route into employment.

- **Measuring Success**

Checking the progress of your advocacy and training work is important so you can see if you have successfully reached your goals. This will help you to plan future activities and events. There is always something to learn. Nobody gets it right all the time (and especially not the first time!). Looking back can be very useful. You could do this by asking people who have been involved in the advocacy and training work about their experience.

Questions like:

What were your expectations of the work/ training /event? Do you feel they were met? If not, why? What is your opinion of the practical arrangements (venue, interpretation, etc.)? Any other comments (what you liked; what might have made the day better for you)? Please return this form to: [your address] To examine the impact of your advocacy and training work. To help development by identifying barriers and contributing to the planning of future work.

## **2.20 Summary**

Disabled people play an important role in achieving inclusive education. The barriers faced by disabled people cannot not be explained or excused by their impairment; it is the environmental, social attitudes and the lack of adequate support services which disable people. With this definition of 'disability', we have to acknowledge and believe that disabled people are the experts on disability issues - they understand the barriers and the route to inclusion better than anyone else. By empowering and capacity-building all disabled people, they can act as leaders, role models and champions to promote the messages of inclusion. Those who want to make a difference to society, and improve the quality of life for disabled people, will need to work with professionals, disabled people's organizations and families with disabled individuals. In order to achieve inclusive education, empowered disabled people must work with officials working in education policy development at local and national level, as well as the media to ensure the principles of inclusive education is heard by all those with power to

create change. We hope this guide assists all disabled people working towards achieving inclusive education. We need to promote and support all those involved in the development of inclusive practice, and challenge the views of those who oppose the inclusion of disabled people in our communities and wider society. Disabled people want choice, control and independence, and the only way to achieve this is through change. Action leads to change!

## 2.21 References

Chann, Sieng Sok. (2010). Women, Disability & Poverty Double the Challenges[End the Cycle Fact Sheet]. Retrieved from [http://www.endthecycle.org.au/documents/resources/CBM-ETC-004\\_Women-Factsheet\\_v05\\_0303201151022266.pdf](http://www.endthecycle.org.au/documents/resources/CBM-ETC-004_Women-Factsheet_v05_0303201151022266.pdf)

United Nations Enable. (2012). *Ratifications and Signatories of the UNCRPD*. Retrieved from [www.un.org/disabilities](http://www.un.org/disabilities)

WHO & World Bank. (2011). World Report on Disability. Retrieved from [http://www.who.int/disabilities/world\\_report/2011/en/index.html](http://www.who.int/disabilities/world_report/2011/en/index.html)

WHO & World Bank. (2011). World Report on Disability. Retrieved from [http://www.who.int/disabilities/world\\_report/2011/en/index.html](http://www.who.int/disabilities/world_report/2011/en/index.html)

WHO & World Bank. (2011). World Report on Disability. Retrieved from [http://www.who.int/disabilities/world\\_report/2011/en/index.html](http://www.who.int/disabilities/world_report/2011/en/index.html)

Mao, Buon. (2010). Stories: Buon *Mao* [End the Cycle Fact Sheet]. Retrieved from <http://www.endthecycle.org.au/content/our-stories/Boun%20Mao>

Charter of Fundamental Human Rights of the European Union 2000 - [http://www.europarl.europa.eu/charter/pdf/text\\_en.pdf](http://www.europarl.europa.eu/charter/pdf/text_en.pdf)

EU Thematic Key Words for Inclusive and Special needs Education - Glossary of Terms (Revised 2009) - <http://european-agency.org/publications/ereports/thematic-keywords-for-inclusive-and-special-needs-education/THEMATICKEY-WORDS.pdf>

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Index for Inclusion (Centre for Studies on Inclusive Education) -  
<http://www.csie.org.uk/publications/inclusion-indexexplained.shtml>

Manifesto for Inclusive Education - Campaigns - Alliance for Inclusive Education

Salamanca Statement and Framework for Action on Special Needs Education 1994 - [http://www.unesco.org/education/pdf/SALAMA\\_E.PDF](http://www.unesco.org/education/pdf/SALAMA_E.PDF)

United Nations Convention on the Rights of the Child 1989 -  
<http://www.unicef.org/crc/>

United Nations Convention on the Rights of Persons with Disabilities 2007 -  
<http://www.un.org/disabilities/>

## UNIT 3

### Family Support & Involvement for Inclusion

#### Content

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### **3.1 Introduction**

This guide has been written primarily for family members who may feel isolated and want to form a support group or advocacy organization. It draws on the inspirational stories of seven advocacy organizations in southern Africa, South Asia, Europe and Australia in their various stages of development. It aims to recognize and celebrate the contribution made by parents, family and community members who have campaigned for the inclusion of disabled children in education. In many countries this has led to the transformation of individual schools and education systems. We hope that by reading this guide you will feel less alone and more confident about what is possible. Our intention is to inspire you, not to give instructions or provide a blueprint.

### **3.2 Family involvement in education**

Inclusion starts in the family home. Although this guide mostly refers to the role parents have played in promoting inclusion, we acknowledge that the role of the extended family is extremely important and should be recognized. Greater family and community involvement in formal education is essential to the inclusion process.

### 3.3 The experience of discrimination

Poverty, gender, ethnicity and disability are some of the major issues of difference, which often lead to discrimination and cause large numbers of children to be excluded from formal education. This is particularly true of countries in the South, where education is not compulsory, and school fees usually have to be paid. Initially we set out to find stories of a range of parent groups representing all aspects of difference and discrimination. However, we were only able to find examples of parents campaigning for their disabled children. The advocacy role played by the (non-disabled) parents of disabled children seems to be unique. It is quite different from the role that parents of children experiencing other forms of discrimination may play. Disabled children tend to be born to non-disabled parents. Living with a disability is therefore not an experience which the parents share with their children. Parents who are poor, or members of a minority ethnic group, however, experience the same sort of discrimination as their children. Similarly, girls and their mothers are both likely to experience gender discrimination. Many of the stories we gathered describe experiences of multiple forms of discrimination, where disabled girls and boys are also poor and belong to a low social caste or an ethnic group.

### 3.4 Using the guide

This guide is divided into five main sections:

First there is a section of background information. This includes information about EENET and its definition of inclusive education; a history of this project; some notes on terminology; and profiles of the organizations that have contributed to the project.

*Part 1 – Building an organization* looks at the way organizations have been started, and how the members have been empowered, despite the struggle, in some cases, for day-to-day survival.

*Part 2 – Reaching out* shows how it is possible to involve members of the community in promoting inclusive education, and how some groups have become involved in raising awareness of wider issues of marginalization.

*Part 3 – Looking to the future* provides ideas and inspiration for further developing the work of support groups and organizations.

*Part 4 – Resource materials* contains information from relevant sections of international instruments and documentation, such as the UN Convention on the Rights of the Child (UNCRC). It also contains a list of useful publications and videos, and contact details for some key organizations.

Part 1, Part 2 and Part 3 are divided into shorter sections, at the end of which you will find some suggested **discussion questions** to help you and your organization think through some of the issues raised and consider how they apply in your specific context. We have also provided spaces in which you can make notes or write in your own questions for discussion. Throughout the booklet there are **quotations from the advocacy group stories**. These quotations provide the reader with valuable insights into the activities, thoughts and feelings of parents involved in fighting for the inclusion of their disabled children. They have been drawn from a variety of sources: written material, interviews, e-mails, conversations. In some cases, the quotations are credited to a particular individual, in other cases they appear in a section of text devoted to a named organization. This publication is **copyright free**. You are welcome to use it in whatever way is most helpful. This includes making photocopies. All we ask is that you inform EENET of the way in which you have used the publication.

### **3.5 The Enabling Education Network**

EENET's office is based at The University of Manchester, in the School of Education, but is independently funded by European NGOs and has an international steering group.

EENET was established in April 1997 in response to the information needs of inclusive education practitioners, particularly in Africa and Asia. EENET promotes easy-to-read and relevant discussion documents and training materials. *Enabling Education*, EENET's newsletter, helps to promote South-South and South-North networking by stimulating discussions and sharing stories. Here is a summary of the philosophy behind the establishment of EENET.



### 3.6 EENET

- believes in the equal rights and dignity of all children
- prioritizes the needs of countries which have limited access to basic information and financial resources
- recognizes that education is much broader than schooling
- Acknowledges diversity across cultures and believes that inclusive education should respond to this diversity EENET is an information-sharing network which supports the inclusion of marginalized groups worldwide.
- Seeks to develop partnerships in all parts of the world.
- **In conducting its work, EENET**
  - adheres to the principles of the Salamanca Statement (see p.99)
  - believes that access to education is a fundamental right
  - Recognizes the intrinsic value of indigenous forms of education.
- **EENET is committed to**
  - encouraging the effective participation of key stakeholders in education
  - engaging with the difficulties caused by the global imbalance of power
  - Encouraging a critical and discerning response to all information and materials circulated.

### 3.7 Definition of inclusive education

#### **Inclusive education**

- acknowledges that all children can learn
- acknowledges and respects differences in children: age, gender, ethnicity, language, disability, health status, etc
- enables education structures, systems and methodologies to meet the needs of all children
- is part of a wider strategy to promote an inclusive society
- is a dynamic process which is constantly evolving
- need not be restricted by large class sizes or a shortage of material resources.
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### **3.8 Background to the Family Involvement**

As we see in this guide, practitioners can learn so much from sharing stories of their own experiences – stories of what works, and what does not work. This is central to EENET's philosophy. The flow of information has too often been from North to South and it is EENET's mission to promote South–South and South–North information flows. The collection, publication and celebration of stories is central to the redressing of this imbalance.

### **3.9 How the stories were collected**

A set of key questions was drawn up with a series of prompts under each question. It was suggested that a facilitator could carry out an interview with the parent group, and with young disabled people where possible. Guidance notes for facilitators were prepared and circulated. The pro forma of questions was meant as a guide for an interview, but it was made clear that it could be changed to suit the situation. Parent groups were asked to tape-record the interview, where possible, and to send a transcript and accompanying notes if the tape recording was not very clear. The pro forma was piloted early in 1999 in Lesotho and South Africa, and adaptations were made based on this experience. The second stage was the selection of groups and the collection of stories. Introductory letters were sent to parent groups and to practitioners who work closely with parents, primarily in Africa, Asia and South and Central America, but also in Europe and Australia. The selection process took the following issues into account:

- representation from each major region in the world
- a balance of local and national examples
- experience of campaigning for inclusive education
- active participation in the education process
- a variety of educational responses – not only school-based experience
- most of the stories should come from the countries of the South.

In early 2000 the transcribed stories were sent to the parent groups for checking. In May 2000 a meeting was held in Manchester of critical friends who had read the stories and were prepared to provide us with feedback. They included parents, disabled people and university students. The group was supportive of the project,

but critical of the academic style and the lack of authentic voices in the stories. The stories were re-edited to address this criticism. In July 2000 EENET's steering group decided that it would be more appropriate to use the information contained in the stories to produce a user-friendly and practical handbook for practitioners. The stories were made available on EENET's website, and EENET's co-ordinator began to develop the current publication with support from EENET's steering group. This piece of research was funded by Save the Children Sweden and carried out by a consultant who worked closely with EENET.

### **3.10 Story guide**

#### **Summary of key questions**

- Please tell us about your group or organization.
- Can you tell us about the national or local situation of education?
- What is your parent group or organization's role in relation to education?
- What difficulties do you face?
- What are your group's strengths?
- What strategies have you used to overcome difficulties?
- What are your group's future plans?
- What advice does your group have for other parent groups?

### **3.11 Terminology**

When compiling a publication like this it is always difficult to find words and phrases that will mean the same to all readers and which will not have negative connotations. Many different words are used to describe disabled children and adults, particularly those who have learning difficulties. It is important that we continually reflect upon the words we use. We should raise questions about all terminology that labels people as being different from others; we should question the meaning, and the effect on the people we are describing. The first set of words listed below are no longer considered acceptable by people with learning difficulties in many English-speaking Northern countries: Mental disability Mentally disabled handicap handicapped retardation retarded Many of the parent groups who have contributed to the stories reflected in this publication continue to use the above words. In consultation with these groups, however, we decided to edit the stories in order to be consistent about the language we use in this

publication. We have therefore adopted the use of the term 'learning difficulties'. The following terms are also commonly used: Learning disability Intellectual impairment intellectually disabled disabled' disability impaired Direct quotes have not been changed, however, nor have the names of organizations such as the Lesotho Society of Mentally Handicapped Persons.

### **3.12 Profiles of contributing organizations Community Based Rehabilitation Service (CBRS), Nepal**

CBRS, a community-based organization, has been working for, and with, disabled children and their families since 1995. CBRS clients have physical disabilities and/or learning difficulties, and CBRS networks with, and refer to and from, other local organizations working with other types of impairment. CBRS works closely with the families of disabled children in all activities, such as community awareness, home visits, and parent groups for self-help and advocacy. The overall aim of CBRS is to improve the quality of life of disabled people, both now and in the future Talking Coming together and meeting other parents of disabled children has given us courage! We used to hide our disabled children away, but now we have the confidence to bring them outside our homes.

The greatest need in the early stages of the formation of an advocacy organisation, or a family support group, is to talk. Talking and listening will continue to be important as new members join. Joining a mature group, where parents have gained lots of confidence and experience, is very different from starting a group for the first time. Here we have two examples of parents meeting for the first time in very different circumstances: in Bangladesh in 1999; and in Queensland, Australia in 1980. Despite the contrast in material circumstances between the two countries, the emotions expressed are very similar.

### **3.13 Survival**

The primary concern of all parents is to ensure the survival and development of their children. In countries where many babies die before their first birthday this concern is even greater. Bringing up children in poor communities involves a day-to-day struggle for survival. Basic needs for clean water, food, shelter and healthcare have to be met and education is often considered a luxury.

Article 6 of the UN Convention on the Rights of the Child (UNCRC) states that every child has the inherent right to life, and the state has an obligation to ensure the child's survival and development.1

Poverty is closely linked to disability. Marginalised groups are more likely to be excluded from basic healthcare facilities. This, in turn, threatens their survival. Disabled people often face multiple forms of discrimination: they may also be economically poor, refugees, or belong to a minority ethnic group.

The parents of disabled children are often so preoccupied with the day-today struggle for survival that they simply do not have time to organize themselves and campaign for their children's rights. Some parent groups prefer to focus on meeting their immediate needs and do not see it as their role to lobby for change.

We experience an ongoing tension between our dual approaches of advocacy and development... a continuous struggle against sliding into service provision because of the pressure of needs at grass-roots level.

This tension between meeting the basic needs of disabled children and their families, and campaigning for the provision of, and access to, health, education and welfare services by the government is present in most parent organizations. The danger of providing services is that the impact will be limited to a small number of children and government policy is unlikely to be challenged. However, it is very hard to overlook the immediate need for food, care and basic education in poor communities. The following examples from South Africa and Romania illustrate ways in which parents have supported each other by developing services to meet their needs.

### **3.14 Empowerment**

The UN Convention on the Rights of the Child (UNCRC) recognizes the role of parents, family and community in supporting the growth and development of all children. Article 5 talks about "parental guidance and the child's evolving capacities": the state must respect the rights and responsibilities of parents and the extended family to provide guidance which is appropriate to the child's evolving capacities. Article 18 talks about "parental responsibilities": parents have joint

primary responsibility for raising the child, and the state shall support them in this. The state shall provide appropriate assistance to parents in child-raising.

Parents of disabled children, and those with difficulties in learning, tend to lack confidence about their rights and responsibilities. Professionals can sometimes disempower families and communities with their apparently superior knowledge. Strong leadership is crucial if advocacy organizations are to bring about changes in the lives of their children. The support of regional and international networks can also play a crucial role (see 'Networking' p67). This section describes the process of parent empowerment which has enabled parents in Lesotho to fulfill their responsibilities to their children.

Our main focus is on the empowerment of parents and families and disabled people themselves to cope better with daily living and to advocate for inclusive services.

In the late 1980s a strong disability rights movement emerged in southern Africa, which campaigned for the rights of disabled people. The people of Lesotho were familiar with the language of human rights and social justice because of living so close to South Africa, with its long struggle for liberation. The disabled people likened their own experience of exclusion to that of apartheid, where people were discriminated against on the grounds of ethnicity.

Lesotho is a mountainous kingdom surrounded by South Africa. It suffers from extremes of temperature, is recognized as being one of the world's least developed countries, and has a large migrant workforce. Recently the country has experienced periods of political instability.

A national parent organization was established in Lesotho in 1992, in close association with the Lesotho National Federation of Organizations of Disabled People. The Lesotho Society for Mentally Handicapped Persons (LSMHP) learned to speak the language of rights and empowerment, and has become an important partner of the Ministry of Education in promoting more inclusive practices in schools and society. This organization is an example of the empowerment model, where the parents see their role as lobbyists. They have lobbied for their children's right to access services provided by the government. The empowerment of parents and families is the main focus of the organization.

Empowered parents are more able to demand services for their children. They are less likely to become caught up in service provision themselves. Instead, they are working in partnership with the Ministry of Education's Inclusive Education Programme. They have realized that they have valuable skills to offer.

The Ministry of Education has been responsible for introducing inclusive practices into 60 primary schools, out of a total of 1,000. It is the ministry's policy to expand this programme to all schools, but they have a limited capacity. Only a small number of education officers are responsible for promoting inclusive education at central level. By contrast, LSMHP members are able to reach schools in areas of the country where they have members and active local branches. In this way LSMHP is helping to promote the expansion of this inclusive policy beyond the 60 schools already involved in the programme. The Parent Mobilization Resource Group (see p70) has defined parent empowerment as follows: "Empowerment is a positive change of attitude and approach that has taken place within a parent who feels that he or she has the knowledge, power and will to bring up his or her disabled child with the same dignity as other children, even though it might take a lot of patience and hard work."

### **3.15 Parents as trainers**

The parents in Lesotho have become empowered through meeting regularly to discuss the issues that face them. Since most of the parents have children who have severe learning difficulties, they have had to learn to be advocates for their children. Articles 12 and 13 of the UNCRC refer to the child's right to express his or her opinion and to have freedom of expression. However, in the majority of cases, the parents have been the main channel through which their children have expressed themselves, at least initially.

The parents felt that they needed training in order to be able to speak confidently on behalf of their children to medical and educational professionals. With the support of the Norwegian organization, NFU (see 'Resource organizations' p.112 for more details), they identified their needs for training and set up the Parents as Trainers initiative. A group of key parents, known as 'resource parents', were trained to become trainers and to pass on their knowledge and skills to other branch members of LSMHP. The aim of the one-week training course was to help

parents gain confidence to enable them to communicate effectively with teachers and other professionals and with other parents, and to pass on their knowledge. The workshop was led by three outside consultants in partnership with local personnel. The emphasis was on learning by doing.

can contribute equally to the resolution of her/his child's problems and would not just take instruction from professionals

understands that getting rid of barriers to the inclusion of disabled children does not depend only on an individual, but on the community. Palesa Mphohle, 1995

A group of professionals from the Ministries of Health and Education, and a group of new parent members of LSMHP, were invited to a presentation on the last day as part of the training workshop. The feedback from the professionals was very positive. They now realized the value of what the parents had to say. This experience was captured on video. The resource parents therefore had a real experience of organizing, preparing and delivering a training event. They were also invited to draw up an action plan of activities which they intended to set up in their local areas in the following six months. They were offered ongoing support in carrying out these plans by local tutors and one of the consultants. They practiced the suggestions made in the workshops with their own children, and also offered training to 20 other parents.

### **3.16 Community involvement**

Advocacy organizations tend to be based in capital cities and have branches in small towns and rural areas. Families of disabled and other marginalized children may also be part of a community-based organization, such as a community-based rehabilitation (CBR) programme. CBR programmes usually involve parents in the running of activities and often help to form parent groups. Child-to-Child methods can be used to encourage children to become involved in promoting inclusion in their schools and communities (see 'Voices of young people' p.61).

Children are extremely valuable human resources, yet they are often overlooked and few people ask their opinion. Where there are too few teachers, and class sizes are very big, it is particularly important that children play a greater role.



### 3.17 Family involvement in education – Pokhara, Nepal

Nepal is one of the poorest countries in the world and the disparity between its rich and poor inhabitants is increasing. The population of Nepal is about 23 million. About 90 per cent of the population lives in villages, with agriculture as the main livelihood. The mountainous terrain and poor transport and infrastructure further exacerbate the situation for poor people.

Child-to-Child was launched in 1978 in preparation for the International Year of the Child in 1979. It is an approach to health education and primary healthcare spread by a worldwide network of health and education workers in over 60 countries, co-ordinated by the Child-to-Child Trust. The Trust is an independent charity, based in the University of London, which designs and distributes health education materials and advises on the implementation of Child-to-Child projects.

The education system in Nepal is under-resourced, hierarchical and examination-focused. A child who fails the end of year exams is held back, and may remain in the same class with much younger students for several years. Primary education is only free in 15 of Nepal's 75 districts which have been designated compulsory education districts. For many children school is neither accessible nor relevant. In rural areas the literacy rate is still only 33 per cent (10 per cent for girls). There is a very high dropout rate, with only 37 per cent of primary school children completing education up to the age of 13. One of the reasons for this is that children are needed to do manual work, especially in the villages. There is also a general belief that it is not necessary to educate girls, members of lower castes or disabled children.

Community Based Rehabilitation Service (CBRS), a community-based organization, has been working for, and with, disabled children and their families since 1995. CBRS clients have physical disabilities and/or learning difficulties, and CBRS networks with, and refer to and from, other local organisations working with other types of impairment. CBRS works closely with the families of disabled children in all activities, such as community awareness, home visits, and parent groups for self-help and advocacy. An advisory group gives parents and disabled people a direct 'voice' in the running and management of CBRS. The members, both men and women, represent different castes, disabilities and parent

groups. This forum meets every two months to consider disability-related topics and project activities, and to plan and make joint decisions.

During the last two years CBRS project staff have worked together with parent groups and local education officials to enable disabled children to attend their local schools. Support to students, teachers and families is offered through a variety of activities, including teacher training and awareness programmes in the schools attended by disabled students. This informal teacher-training programme has had good results in motivating and supporting teachers. Previously they had no additional support or training to teach disabled students. An important focus of the training has been to develop the role of the teacher as a resource person for the whole community and to work much more closely with the child's family. Gradually, more disabled children are starting to study in mainstream schools with the co-ordinated support of both families and CBRS project staff. It was in 1997 that discussions were first held with parent groups and a special education adviser from the Ministry of Education. Parents shared their ideas and considered some different models of education. In October 1999, teachers, children and family members were invited to voice their opinions during a training course. To include all these groups together was a new idea and could have proved difficult within the very hierarchical structure of the education system. For some families and teachers, this was the first time they had met, despite living in the same communities and being involved with the same children! This is what the children and their families had to say:

### **3.18 Challenging exclusion from education**

**Article 2** of the UNCRC is one of the most important for marginalized children as it deals with non-discrimination. It states that all rights apply to all children without exception. It also states that it is the state's obligation to protect children from any form of discrimination and to take positive action to promote their rights. **Articles 28 and 29** deal with education and its aims: the child has a right to education, and the state's duty is to ensure that primary education is free and compulsory. The state shall engage in international co-operation to implement this right (Article 28). Education shall aim at developing the child's personality, talents and mental and physical abilities to the fullest extent (Article 29).

Education is usually a key issue for advocacy groups. It is a fundamental human right that every child has access to education. In countries where many children do not attend school at all, parents often find themselves challenging the system to accept disabled children, those with difficulties in learning, and other marginalized groups. Some advocacy groups have preferred to set up their own schools, believing that this is the only way to guarantee that their children get an education today. Campaigning for change tomorrow may not benefit their children. Where education is compulsory, parents still campaign on educational issues. The organization Parents for Inclusion in London, UK, for example, supports parents who want their children to attend their local school rather than a special school. Parents are also given support when their children are being excluded within a so-called inclusive situation. Although some advocacy organizations have been specifically set up to address educational issues, most groups are concerned about a range of issues, not just education. Education is only one part of a child's life, and should be seen in the context of other needs, such as the need for love, security and a family life.

In South Africa, Lesotho and Queensland, Australia, parents have lobbied government education departments to become more inclusive. All three advocacy groups prioritise educational issues. They have been successful in influencing and supporting change in the education systems and schools where they work. But it has not been easy.

- **Enabling learners**

In 1996 a new Education Act was passed to begin to redress injustices resulting from apartheid. Previously there had been two forms of discrimination faced by disabled children:

- racial segregation through apartheid

- segregation based on the medical model of disability

- – disability as a medical condition requiring treatment. School attendance is compulsory between the ages of 7 and 15. All public or state schools are required to admit *all* learners and to meet their educational needs. The Education Act and the South African constitution safeguard the right of *all* children to education.

However, many groups of children are still poorly served by the current education system. Estimates suggest that only ten per cent of children under six have access to early childhood development programmes, and, in one particular province, less than one per cent of disabled children, according to a recent survey. Parents in the Disabled Children's Action Group (DICAG) have high expectations:

We expect our children to have access to appropriate education and all teachers to be adequately trained to meet the diverse needs of all the children in their classrooms. We expect transport to be made available, as the difficulty of getting to and from school remain a major barrier to education.

Education has been a priority from the outset. The aim is to ensure that all children have access to a range of educational opportunities that can best help them fulfill their learning potential. In order to achieve this, DICAG tries to ensure that all children with disabilities are given the opportunity of an early start to education through early childhood development programmes and facilities that can offer early intervention and stimulation. DICAG's concept of education is broad. The parents emphasize the importance of stimulation for children with the most severe physical and learning disabilities: to enable them to respond and communicate their needs; to communicate in a wide variety of ways; to be as independent as possible; and to develop their potential. These are all vital educational goals.

### **3.19 DICAG's story of helping to establish a barrier-free primaryschool**

We experienced serious problems in trying to enrol our disabled children in public schools in Kamagugu, a suburb of Nelspruit, the capital of Mpumalanga Province. Even when we succeeded in finding a school to accept our children, there was the problem of getting there as none of the schools was within walking distance of Kamagugu and we had no transport. So when the Kamagugu Residents' Committee was set up, education was high on our agenda. The whole community, and those of us who are parents in particular, have been very much involved in promoting a culture of learning, teaching and service within Kamagugu. Estimates suggested that as many as 80–85 per cent of disabled school-age children were excluded from school and formal education. Deaf and blind learners faced

virtually total exclusion. The province had no facilities, such as Braille or independence training, for learners with visual disabilities, and no sign language for deaf learners. Four major disabled people's and parent organizations came together to form the Mpumalanga Special Education Initiative Voluntary Association to develop strategies to gain access to education for disabled learners, as well as to try to set up pilot projects to demonstrate good inclusive practice. A grant from the Independent Development Trust for the building of classrooms provided funds to support this initiative. We decided to use the funds to educate deaf and visually impaired learners within inclusive learning environments. Many parents of non-disabled children were against the idea of inclusion. Kamagugu Primary School is the first multilingual school in the country, with South African sign language as a medium for teaching and learning. The school tries to be inclusive, with both disabled and non-disabled pupils. This initiative has already led to further plans for the establishment of other schools in the province, which will be resourced to include disabled learners. DICAG supports local groups by informing parents of their children's rights to education and by providing training as well as advice on how to mobilize other parents of disabled children to be active in relation to issues that affect their children's development.

### **3.20 Partnership with the Ministry of Education**

Education has been a priority from the very beginning. A key article in our constitution states that society exists to support our children's inclusion in schools, in employment and in the community as a whole.

They feared that disabled children would "spoil" their children. Now all parents are very willing to take all their children to that school. We set up a steering committee, consisting of representatives of residents, parents and special education professionals, to take responsibility for the development of a new local school. The committee has adopted the principles of non-discrimination, inclusion, and community involvement, excellence through partnerships, and participation and social integration. We planned barrier-free school buildings and tried to get additional funds and donations. We organized meetings with the local community to explain our aims and ideas for the school and all this activity mobilized support. The soil-turning ceremony at the start of building the school received considerable media coverage in the province. Further donations have

enabled us to buy essential equipment. The Ministry of Education started an inclusive education pilot project in 1991 in ten schools – one school in each of the ten districts in Lesotho. All the teachers and head teachers in each of the ten schools were trained to promote the inclusion of disabled pupils and those with difficulties in learning in their classes (see *Preparing Teachers for Inclusion*, a video training package listed in ‘Useful publications’ p.101).

In 1993 a Ministry of Education survey found that 17 per cent of children attending primary schools had impairment, or some difficulty in learning. It was not necessary to go out looking for children who had difficulties in learning – they were already in the schools – but no one had noticed that they were experiencing difficulties. In Lesotho only 25 per cent of children enrol in secondary school, yet nearly 75 per cent of children enrol in primary school. Dropout rates are very high in many countries, but Lesotho is unusual as more boys drop out of school than girls, since the boys are needed to work as goat and cattle herders in remote mountain areas. We decided not to wait for the results of the Ministry of Education’s pilot programme on inclusive education, but to take action ourselves to promote the development of more inclusive practices.

In preparation for inclusion, LSMHP established an early intervention programme where children are brought by their parents for training in activities of daily living (ADL). This programme is run in Maseru, the capital. In some local branches, parents have formed playgroups where they get together to encourage their children to play together and to prepare them for mainstream education. Recently the emphasis has changed from holding regular meetings to enabling parents to stimulate their own children and address their developmental needs. Members of LSMHP support each other by visiting local preschool facilities, primary schools and vocational institutions to seek placement for children with disabilities. After admission, regular follow-up visits are made to monitor their children’s progress.

The most heartening experience for parents is when teachers include their children in the classroom and encourage other children to work with them as classmates. At first, teachers were reluctant to accept children with learning difficulties, but now they even teach their pupils how to help children with disabilities. Gradually things are improving. Government policy on more inclusive education is being put into practice.

Our children are now accepted in schools and there is increasing support in the community. Before, our children were made to repeat the same class over and over. Now they are able to move within the school and can earn promotion from one class to another like any other child! The inclusive education project has been helpful in reducing the high dropout rate, by raising educational standards. Teachers feel that they are better qualified to teach all children now that they are more aware of the individual differences between children. When a teacher claims that he or she isn't trained to work with disabled children, we say that we also weren't trained to raise a disabled child!

Not all children are able to attend school. The most severely disabled children are still excluded from any kind of education in Lesotho and remain at home. Other disadvantaged groups are herd-boys and children with HIV/AIDS. Many children do not attend school because their parents cannot afford the school fees. However, school fees were abolished in 2001 for all children starting school in that year. By 2006 all primary school education will be free.

My child is not in any school. The teachers told me that they felt unable to help because the disabilities my child has are too complex and severe and they have insufficient training to understand and cope with them.

Inclusion means being together. They learn something from us and we learn something from them. The word for 'inclusion' in Sesotho, the language of Lesotho, is very long. Its meaning is broad and includes non-discrimination and being accepted by everyone with whom we interact. It includes mutual learning with, and from others, and equal rights.

- **A mother's story**

A mother visited the local school. The teachers were friendly and welcomed her until she mentioned that her child was disabled. They said, "Do you think we will teach a child with disabilities? If the head teacher hears you he will chase you away!". So she went away from the school and returned to her home. What could she do? She sought out a teacher in the community and asked her to talk with the school about integration and the teacher agreed. The teacher was also rejected and sent away.

She tried a third strategy. This time she went to the local chief and told him that of the three schools in the area, one school was refusing to accept children with disabilities. The chief went to see the head teacher and threatened to report him to the Minister of Education! The head teacher was not dismayed. He did not care. He said, *"I don't want my school to teach stupid children!"*. A few months later the chief contacted the mother and advised her to return to the school. A new head teacher had been appointed! She went to the school and when she arrived she was overjoyed to find that four children with disabilities were already included as pupils of the school!

### • **Voices of young people**

We have begun to actively seek the views of disabled learners themselves. At a recent workshop many children with cerebral palsy and other disabilities expressed their dreams and ambitions. Most children wanted to enter higher education and expected education to give them the opportunity to obtain employment. Deaf children expressed dissatisfaction with the low level of signing among their teachers! We are committed to self-advocacy, but recognize that parents are required to speak on behalf of their children. While it is important that parents speak on behalf of their children, and empower them, it is also essential that children and young people speak for themselves. Parents are often accused of being overprotective of their children, and of not having sufficient understanding of disability and marginalization. However, parents are increasingly becoming more aware of their children's rights and are playing an empowering, rather than an overpowering, role. In this chapter we feature the 'voices' of Zambian children who have participated in the inclusion of a child with learning difficulties using Child-to-Child principles; and the story of a physically disabled girl in Lesotho who had a very positive experience at her local primary school, but who experienced hardship at secondary school, where she was a boarder.

### **3.21 Child-to-Child in action**

**Working in groups:**In my class I introduced group evaluation in the form of a graph. Each child is given an individual mark and then an average is calculated for the group's performance. The groups are then compared. This caused concern for faster learners, as they did not want their groups to be associated with failure.



They became motivated to help the slower learners in their own time and in their own homes in order to improve the performance of their groups.

**Inclusion:** After including the children labeled as having learning difficulties in my class full-time, they refused to go back to the unit which had been created especially for them. I designed curriculum materials which helped to introduce the concept of inclusion. For example, the children carried out a survey of children with learning difficulties who were excluded from school. This became a math's lesson, and a study in geography and in social studies. I developed English comprehension exercises about the inclusion of children with particular learning difficulties. Here are some of the responses written by children in my class to the question: "How can you help to include Bwalya in our learning so that all children benefit?"

**Play:** Football; running; drawing; singing songs; playing chess; reading; riding a bicycle; handwriting; counting numbers; covering the books; showing him how to make toys from soil.

**Home visits:** Visit him at home on Saturdays.

**Making him busy:** So that he likes school; we want him to be happy; we want him to know more things.

**Being friendly:** By showing him good behavior; by giving him gifts; by showing him happiness; by coming closer to him; by helping him with things he doesn't know; by reading him some stories. Awareness of difference, the atmosphere is unwelcoming, and children are beaten. Mamello died in August 2000 aged 21, just a few months after she wrote this story. I was taught how to read and write by my best friend - we used to play together all the time. We played with dolls and I taught my friends how to sew clothes and knit jerseys. We started a choir and were joined by many children. Teachers from Tanka Primary School visited us and gave me some work to do. They told me to attend school in 1994, at the age of 15. I started in Standard 5.

At primary school I was cared for by teachers and other children. At that time I liked school very much. I was able to help my teacher in teaching others and it helped me to know more things and remember them all the time. I was able to

pass Standards 5 and 6 in position 1, and first class in Standard 7 (the last year of primary school).

When I completed primary school in 1997, I went to a boarding school at Motsekuoa. At first I did not apply to this school because I heard that there was bad treatment of Form A (first year) students. When I heard that I had a place at Motsekuoa, I felt that it was better not to attend school, but my friend told me that she would take care of me. LSMHP paid my school fees for the first three years. I was not treated badly, but we had to wake up very early every day. Some teachers didn't beat me when I failed to answer their questions or failed their subjects, but others did beat me. When they entered the class I was not thinking about their subjects, instead I would be thinking about how they would beat me when I failed to answer their questions. Some children became my friends, while others would be calling me names. I told the teachers, and they beat these children and told them not to do it again. Sometimes other children, who were not my friends, took me to the toilet and helped me onto my wheelchair. In 1998 I had a problem with my friend who was taking care of me. She became pregnant and left school. But I had another friend, who was also disabled, and she did the same things that my first helper did. I also had a problem with her. She could not finish her schooling because she did not have enough money to pay the boarding fees. I passed Form C (the third year of secondary school) in second class, but I was out of school this year because my mother could not pay the school fees for me and my brothers and sisters. My intention is to finish high school and do social work and help other children with disabilities. We can learn a great deal from her story about the importance of listening to children's perspectives of inclusion and exclusion; about children's relationships with each other; and about making schools more welcoming places for the benefit of all children. "Some teachers didn't beat me... but others did"

If we are not shocked by Mamello's statement, we should be! It highlights the way children are abused by adults globally, and that this is taken for granted. Being disabled makes children more vulnerable to physical and sexual abuse. This is why advocacy organisations, run by disabled people and parents of disabled children, need to link with child rights groups to campaign against violence and abuse (see 'Beyond disability' p.75).

### **3.22 Networking**

Following the fall of communism in Romania, parent groups began to reach out to other countries for support. They developed supportive networks. These networks have helped them to bring about major changes in the lives of their children, who were marginalised by society because of their impairments. The following quotes from members of Speranta, in Timisoara, Romania, demonstrate the value of making contact with others.

#### **To learn about new concepts**

When we started I had no idea about inclusive education or mainstreaming. I knew nothing about other groups of parents – anything about the whole philosophy of inclusion. The word ‘Inclusion’ did not exist for us; very few people spoke about mainstreaming – it was a completely new concept for us.

#### **To identify sources of funds**

This strategy of finding resources from outside has been crucially important to us from the start.

#### **To influence change**

We developed a deliberate strategy of using our foreign partners to put pressure on the government here. Romania wanted to join the European Union and wanted to meet the European standard, so we told them that if they wanted to meet the standard they also had to do something for citizens with learning disabilities.

#### **To access information and knowledge**

We needed support of all kinds, not only funding and materials, but also access to wider information and knowledge than was available here in Romania.

The Enabling Education Network (EENET) was established precisely because of the need to share information about marginalization in education. By sharing stories of success and failure in promoting inclusion, practitioners feel more confident about their own practice. They are also able to show government representatives examples of inclusive practices in other countries. Family

members often feel very isolated. Hearing about advocacy groups in a variety of countries in the world can help to lessen feelings of isolation.

We are presently affiliated to local organizations working in both the disability and children sectors, both nationally and at local branch level. We are networking with other parent organizations, regionally and internationally. However, networking requires a lot of effort. Since it began in 1992, LSMHP has relied on networking opportunities for advice, direction and information. Often these networks have provided skills training in areas that have been important for the organization. However, the parents have realized that networking requires a lot of planning and preparation. It is not enough to attend meetings and conferences. Effort has to be made to make the most of these occasions, if the opportunities are not to be wasted. Not everyone has networking skills, but these skills can be developed with practice.

In the box below, you will find a sample networking exercise, which is designed to help you get the most out of your time at a seminar or meeting. It is important to remember that everyone carries with them years of experience and knowledge. Others can only learn from your experience if you share it. In the same way, if there is something specific you want to learn at a meeting, you need to find out which participants have the valuable knowledge that you need. If structured networking is not possible it is still a good idea to prepare mentally for the informal networking which takes place at meetings and conferences.

### **Networking challenge**

You have three yellow cards and three pink ones. You may have more, of course, if you need them! Please write down what you can share with others on the yellow cards, eg experience of community-based work in West Africa. On the pink cards please write what you would like to learn, or find out, from others, eg talk to someone with knowledge of Vietnam. Then stick your cards on the wall under the relevant headings:

I can offer.... I need....

I can share.... I would like....

*(yellow cards) (pink cards)*

Remember to write your name clearly at the bottom of each card, so that other participants who read them can ask you about your unique experience, or perhaps give you the information you are seeking. Some advocacy organizations may not always provide the support and networking that some family members need. There could be a conflict of values and goals between members of the organization. The following communication from an EENET reader in Latin America illustrates that she has felt the need to network and gain support and information elsewhere, as the national parent organization does not believe in inclusion or rights, only in service provision.

### **3.23 Beyond disability**

On reflection it would have been better if we had trained the teachers to respond to all children in difficult circumstances, and not only those with impairments and difficulties in learning.

When EENET embarked upon its Family Involvement in Inclusive Education Project in early 1999, the intention was to collect a range of stories addressing different aspects of marginalization, not only disability and difficulties in learning. We were unsuccessful, however, in identifying family and parent initiatives which focused on other issues, although gender, ethnicity and poverty issues are addressed in many of the parents' stories. In Nepal, for example, discrimination by caste is a big issue which makes life even more difficult for disabled children and their families. In South Africa, the legacy of apartheid means that ethnicity is still a major cause of discrimination. In this short chapter our aim is simply to highlight these other issues, and draw attention to some of the advantages for advocacy groups of collaborating with other campaigning groups. This is especially true in countries which have limited access to information and material resources, and where large numbers of children do not attend school.

- **Young people (adults)**

Our Youth Development Programme centres around the need to empower young adults with skills so that they may realise their full potential and achieve full rights in society. They need opportunities to be engaged in meaningful activities;

to build confidence; to reduce their dependency on families; to be involved in decision-making; and to be provided with opportunities to advocate for their rights. The present situation is that a small group of people meet weekly in Maseru. They have been involved in a number of activities over the last two years, including a drama project. Some time has been allocated to discussing issues that affect the young people and recently visits to places of work have taken place in an effort to raise awareness.

### **Challenges we face**

We recognize that often young people have not been involved in activities and many have not been provided with opportunities for formal education. Those who enter formal education tend not to receive the attention and care they require. These young people have often been taken advantage of by being employed without pay. As LSMHP developed, priority was placed on working with young children and parents. These young children have now grown up and need attention. Parents are also beginning to realise that these young adults need as much care and attention as young children. As our work with young people develops, we are often finding that we need to take on their parents' role. Parents do not appear to want to develop their children in the way they did when they were young. The young people are not mixing with other youth of the same age. If they did, it would be an ideal opportunity for awareness-raising. The existing Maseru group is an ageing group and the age range is expanding rapidly. It may soon be appropriate to divide it into two smaller age-related groups. The programme itself suffers from a lack of skilled and appropriately trained staff; a shortage of volunteer help; problems of ownership; and a lack of long-term funding. The programme has expanded to two of the existing LSMHP branches, where there is a need for more development and training to take place.

Attempts have been made to integrate some of the young people into vocational training establishments, but often these are not meeting their needs. There is a lack of initial assessment skills and overall support for this establishments programme.

- **Parents and young children**

Working with parents and young children was the basis for forming the organization. Our work centers around the need to empower parents with skills, so

that they may realize the need to advocate for their children's rights (Parent Empowerment Programme). This includes identifying services, assisting with skills' provision to enable them to provide a better quality of life for their children, and initiating parent-to-parent support. Presently our work in this area involves the strengthening of our branches by the provision of more direct support and training. We train parents in disability issues and advocacy; make suggestions for improving the quality of life; focus on branch leadership; and work with a network of 13 branches. Branches are encouraged to form sub-branches. Within this work there is an emphasis on the ownership of activities by parents. Opportunities to network with other organizations are encouraged and, where possible, support is offered from the secretariat. A large part of the work undertaken at grass-roots level involves raising awareness with the community at large.

### **Challenges we face**

There are ongoing problems with the scale of poverty within the country and the lack of service provision. Recently there has been some misunderstanding among parents about the role of the organization. Equally there is confusion and misunderstanding over the importance of advocacy, and in many cases a lack of parental commitment to activities. Yet we have seen that where groups of parents come together they can achieve a great deal.

#### **• Our organization**

The organization has a secretariat with staff trained in fieldwork and administration. We also have personnel from volunteer development agencies and a number of skilled volunteers within the organization. These people are working with parents, families and children. They are also working to strengthen the management of the organization.

### **Challenges we face**

LSMHP was formed by parents with limited skills. As our advocacy and parent-training work developed, our 'parent group' became a 'parent organization'. The organization needs to be restructured to meet these changing needs. It has the capacity to develop, but is often held back by ineffective policies and procedures

and a lack of management skills. At times there appears to be a low level of commitment from members and a lack of ownership by members. The geography of the country and the logistics of communication are also major problems.

### 3.24 Summary

Creating inclusive educational programs for diverse groups of young children is a complex and often daunting task. Traditionally, educational practices have reflected a “one size fits all” approach to both curriculum and strategy that ignores fundamental individual differences. Educational programs for young children often reflect practices that homogenize settings to produce an unrealistic uniformity among students that is not reflected in the pluralistic societies in which they live. We now recognize the value that is added to the preschool education experience by diversity and have, in the last few years, attempted to identify critical aspects of successful inclusive programs. Key among them has been parent and family involvement and support for inclusion.

We believe, from both our reading of the available literature and our extensive clinical experience, that the enablement and empowerment of families should be a goal of all educational programs. To reach this goal we need a dynamic, systematic, and comprehensive approach that reflects an awareness and appreciation for the complex ways in which systems act and interact to influence outcomes. The developmental ecological systems model is one of the approaches trying to address this complex set of variables. This model has been supported with well-established research and evidence-based practices. When educational practices that support inclusion focus upon all systems with active family involvement as the focus of concern, we will be able to achieve the more important goal of education: to prepare our youth for a life that reflects an appreciation of the value and fundamental worth of each individual.

### 3.25 References

Anderson, K. J., & Minke, K. M. (2007). Parent involvement in education: Toward an understanding of parents' decision making. *The Journal of Educational Research, 100*(5), 311-323.



- Berger, E. H. (1995). *Parents as partners in education: Families and schools working together*. Englewood Cliffs, NJ: Prentice Hall.
- Bronfenbrenner, U. (1988). Interacting systems in human development. Research paradigms: Present and future. In N. Bolger, A. Caspi, G. Downey, & M. Moorehouse (Eds.), *Persons in context: Developmental processes* (pp. 25-49). Cambridge, MA: Cambridge University Press.
- Bronfenbrenner, U. (1989). Ecological system theory. In R. Vasta (Ed.), *Annals of child development: Six theories of child development: Revised formulations and current issues* (pp. 187-250). Greenwich, CT: JAI Press.
- Bronfenbrenner, U., & Morris, P. (1998). The ecology of developmental processes. In W. Damon (Series Ed.) & R. Lerner (Vol. Ed.), *Handbook of child psychology: Vol. 1. Theoretical models of human development* (5<sup>th</sup> ed., pp. 993-1028). New York: Wiley.
- Brown, K. E., & Medway, F. J. (2007). School climate and teacher beliefs in a school effectively serving poor South Carolina (USA) African-American students: A case study. *Teaching and Teacher Education*, 23, 529-540.
- Bruder, M. B. (2000). Family-centered early intervention: Clarifying our values for the new millennium. *Topics in Early Childhood Special Education*, 20(2), 105-115.
- Calabrese Barton, A., Drake, C., Perez, J. G., St. Louis, K., & George, M. (2004). Ecologies of parental engagement in urban elementary schools. *Educational Researcher*, 33(4), 3-12.
- Christenson, S. L., Hurley, C. M., Sheridan, S. M., & Fenstermacher, K. (1997). Parents' and school psychologists' perspectives on parent involvement activities. *School Psychology Review*, 26(1), 111-130.
- Cooper, C. W., & Christie, C. A. (2005). Evaluating parent empowerment: A look at the potential of social justice evaluation in education. *Teacher College Record*, 107(10), 2248-2274.

- DeRosier, M., & Kupersmidt, J. B. (1991). Costa Rican children's perceptions of their social networks. *Developmental Psychology*, 27(4), 656-662.
- Dodd, L. W. (2004). Supporting the siblings of young children with disabilities. *British Journal of Special Education*, 31(1), 41-49.
- Dunst, C. J., Trivette, C. M., Davis, M., & Cornwell, J. (1988). Enabling and empowering families of children with health impairments. *Children's Health Care*, 17(2), 71-81.
- Dyson, L. (2005). Kindergarten children's understanding of and attitudes toward people with disabilities. *Topics in Early Childhood Special Education*, 25(2), 95-105.
- Erhard, R., & Umanksy, T. (2005). School counselors' involvement in the process of inclusion in Israel. *International Journal of Disability, Development, & Education*, 52(3), 175-194.
- Farver, J. A. (1993). Cultural differences in scaffolding pretend play: A comparison of American and Mexican mother-child and sibling-child pairs. In K. MacDonald (Ed.), *Parent-child play: Descriptions and implications* (pp. 349-366). Albany: State University of New York Press.
- Filler, J., & Xu, Y. (2006). Including children with disabilities in early childhood education programs: Individualizing developmentally appropriate practices. *Childhood Education*, 83 (2), 92-98.
- Fine, M. (1993). Apparent involvement: Reflections on parents, power, and urban public schools. *Teachers College Record*, 94, 683-710.
- Fox, T. J., & Williams, W. (1991). *Implementing best practices for all students in their local school*. Burlington, VT: Center for Developmental Disabilities, University of Vermont.
- Gaad, E. (2004). Cross-cultural perspectives on the effect of cultural attitudes towards inclusion for children with intellectual disabilities. *International Journal of Inclusive Education*, 8(3), 311-328.

- Guralnick, M. J. (Ed.) (2001). *Early childhood inclusion: Focus on change*. Baltimore: Brookes.
- Guralnick, M. J. (1994). Social competence with peers: Outcome and process in early childhood special education. In P. Safford (Ed.), *Early childhood special education* (pp. 45-72). New York: Teachers College Press.
- Hoover-Dempsey, K., & Sandler, H. (1997). Parental involvement in children's education: Why does it make a difference? *Teachers College Record*, 97, 310-332.
- Hunt, P., Soto, G., Maier, J., Liboiron, N., & Bae, S. (2004). Collaborative teaming to support preschoolers with severe disabilities who are placed in general education early childhood programs. *Topics in Early Childhood Special Education*, 24(3), 123-142.
- Kaczmarek, L. A., Goldstein, H., Florey, J. D., Carter, A., & Cannon, S. (2004). Supporting families: A preschool model. *Topics in Early Childhood Special Education*, 24(4), 213-226.
- Lareau, A., & Horvat, E. M. (1999). Moments of social inclusion and exclusion: Race, class, and cultural capital in family relationships. *Sociology of Education*, 72, 37-53.
- Levy, S., Kim, A., & Olive, M. L. (2006). Interventions for young children with autism: A synthesis of the literature. *Focus on Autism and Other Developmental Disabilities*, 21(1), 55-62.
- Lindsey, R., Robins, K., & Terrell, R. (2003). *Cultural proficiency: A manual for school leaders* (2<sup>nd</sup> ed.). Thousand Oaks, CA: Corwin Press.
- McCormick, L. (2006). Planning and evaluation/monitoring. In M. J. Noonan & L. McCormick (Eds.), *Young children with disabilities in natural environments: Methods and procedures* (pp. 99-108). Baltimore: Brookes.
- McDonald, L., Billingham, S., Conrad, T., Morgan, A. O. N., & Payton, E. (1997). Families and schools together (FAST): Integrating community development with clinical strategy. *Families in Society*, 78, 140-155.

McDonald, L., Coe-Braddish, D., Billingham, S., Dibble, N., & Rice, C. (1991). Families and schools together: An innovative substance abuse prevention program. *Social Work in Education, 13*, 118-128.

McDonald, L., Moberg, D. P., Brown, R., Rodriguez-Espiricueta, I., Flores, N. I., Burke, M. P., et al. (2006). A randomized controlled trial involving low-income, urban, Latino children. *Children & Schools, 28*(1), 25-34.

Noonan, M. J., & McCormick, L. (2006). *Young children with disabilities in natural environments: Methods and procedures*. Baltimore: Brookes.

Odom, S., Peck, C. A., Hanson, M. J., Beckman, P. J., Kaiser, A. P., Lieber, J., et al. (1996). Inclusion at the preschool level: An ecological analysis. *Social Policy Report, 10*(2-3), 18-30.

Palmer, D. S., Fuller, K., Arora, T., & Nelson, M. (2001). Taking sides: Parent views on inclusion for their children with severe disabilities. *Exceptional Children, 67*, 467-486.

Pérez Carreón, G., Drake, C., & Calabrese Barton, A. (2005). The importance of presence: Immigrant parent's school engagement experiences. *American Educational Research Journal, 42*(3), 465-498.

Pit-Ten Cate, I., & Loots, G. (2000). Experiences of siblings of children with physical disabilities: An empirical investigation. *Disability and Rehabilitation, 22*(9), 399-408.

Ryan, A. K., Kay, P. J., Fitzgerald, M., Paquette, S., & Smith, S. (2001). A case study in parent-teacher action research. *Teaching Exceptional Education, 33*(3), 56-61.

Salend, S. J. (2006). Explaining your inclusion program to families. *Teaching Exceptional Children, 38*(4), 6-11.

Sandall, S., & Schwartz, I. S. (2002). *Building blocks for teaching preschoolers with special needs*. Baltimore: Brookes.

- Santiago-Rivera, I., Arredondo, P., & Gallardo-Cooper, M. (2002). *Counseling Latinos and la familia: A practical guide*. Thousand Oaks, CA: Sage.
- Sharpe, D., & Rossiter, L. (2002). Siblings of children with a chronic illness: A meta-analysis. *Journal of Pediatric Psychology, 27*, 699-710.
- Siegel, B. (1996). Is the emperor wearing clothes? Social policy and the empirical support for full inclusion of children with disabilities in the preschool and early elementary grades. *Social Policy Report, 10*(2-3), 2-17.
- Stainback, S., & Stainback, W. (1990). Inclusive schooling. In S. Stainback & W. Stainback (Eds.), *Support networks for inclusive schooling: Interdependent integrated education* (pp. 3- 23). Baltimore: Brookes.
- Stoneman, Z., & Berman, P. W. (Eds.). (1993). *The effects of mental retardation, disability, and illness on sibling relationships: Research issues and challenges*. Baltimore: Brookes.
- Vandercook, T., York, J., & Forest, M. (1989). The McGill Action Planning System (MAPS): A strategy for building the vision. *Journal of the Association for Persons with Severe Handicaps, 14*(3), 205-215.
- Weisner, T. S. (1993). Ethnographic and ecocultural perspectives on sibling relationships. In Z. Stoneman & P. W. Berman (Eds.), *The effects of mental retardation, disability, and illness on sibling relationships: Research issues and challenges* (pp. 51-83). Baltimore: Brookes.
- Weisner, T. S. (2002). Ecocultural understanding of children's developmental pathways. *Human Development, 45*(4), 275-281.
- Weiss, H. M., & Edwards, M. E. (1992). The family-school collaboration project: Systemic intervention for school improvement. In S. L. Christenson & J. L. Connolly (Eds.), *Home-school collaboration: Enhancing children's academic and social competence*. Silver Spring, MD: National Association of School Psychologists.

Williams, D. L., & Stallworth, J. T. (1984). *Parent involvement in education: What a survey reveals*. Austin, TX: Southwest Regional Educational Development Laboratory.

Xu, Y., Gelfer, J. I., & Filler, J. (2003). An alternative undergraduate teacher preparation program in early childhood education. *Early Child Development and Care*, 173(5), 489-497.

## UNIT 4

### Community Involvement for Inclusion

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## **4.1 Introduction**

How child-friendly schools are linked to their communities is critical. Schools are communities unto themselves and child-friendly schools in particular promote a strong sense of community. But schools do not exist in isolation. They reside within the communities they serve and must cultivate relationships with them. In addition to the immediate community, usually a geographical catchment area, schools also can have links with a more diffuse community, such as former students and alumni associations, youth groups such as the Boy Scouts and Girl Guides, faith-based organizations or language groups associated with the school. The links between schools and their communities can vary in pattern and intensity. At one extreme are schools that simply have a physical presence. They are not linked with, dependent on or accountable to their communities in any serious sense. Other schools, especially child-friendly schools, are organically linked in multiple ways. It is essential to understand the basis of this rich linkage. In emergency situations where schools have been destroyed, community links can be major factors in restoring normalcy and rebuilding education. These relationships are bridges that can help communities create safe, child-friendly learning spaces during emergencies, and the creation of such spaces helps communities recover more quickly from catastrophe. What follows is an analysis of the interactive nature of the school as a community and its linkage to the larger community around it. The analysis highlights ways in which schools can reach out to their communities and draw them into their world. Learning does not begin



when children walk through the school doors nor does it end when they exit for the day. It takes place all the time and everywhere, throughout life. There is a pedagogic dimension to the links between schools and homes and localities. Children bring to school their family and community beliefs, practices, knowledge, expectations and behaviours. Similarly, when they return from school they bring back to their homes and communities new forms of knowledge, practices, behaviours, attitudes and skills. Children are engaged in a continuous, dynamic process of bridging the world of school and the world of home and community. They learn from both worlds, facilitated by teachers, family members, neighbors and others. Linking schools and communities is widely recognized as good pedagogic practice.

There is an economic dimension to these links as well. A wide range of costs is involved in the provision and uptake of education, and these costs are borne by various parties. Unit cost (per pupil) is based on the amortized cost of facilities, furniture and equipment, teachers' salaries, operational overheads, learning and teaching supplies, transport, school fees, uniforms and other services, such as school meals. There are also opportunity costs to families, because children are not available to perform household chores or engage in income-generating activities. Viable school financing depends on the links between schools and homes and communities to determine how these costs are shared. At one extreme, as is the case with self-help schools, all costs may be borne by homes and communities. (See Box, page 3.) Sometimes governments support community efforts by financing teachers' salaries. At still other times, governments, central or local, bear all the costs, with opportunity costs borne by homes. School officials tap into these different funding sources in order to operate viable, sustainable education programmes, and in the course of operations, they may seek supplementary funding from governments or levy additional charges on pupils' families or communities to meet additional costs. In all cases, viable, sustainable school financing depends on a healthy link between schools and the communities that they serve. A third sense in which schools are linked to homes and communities is the sociopolitical or developmental dimension. In highly centralized political systems, government control of schools is usually strong, with minimum community involvement beyond contributing local resources. Schools serve primarily to achieve national development goals, such as cultivating human resources for economic growth, modernizing society or instituting cultural

change. Teachers and school authorities are accountable to a central ministry rather than to their communities.

**Decentralized political systems** call for reduced school oversight by the central government and for strong local control and active community involvement. Teachers and school authorities are likely to be accountable to their local communities, and while there may be some emphasis on contributing to broad national goals, the school's focus will have more to do with local realities and aspirations. School-community links generally are based on a combination of pedagogic, economic and socioeconomic dimensions. Many good schools have a strong link to the communities they serve, influenced by one or more of these factors. For child-friendly schools, these are also important factors. But there is a more fundamental sense in which child-friendly schools are linked with communities – the child's right to quality basic education. Therefore, school and community links are not optional. They are a defining imperative of the child-friendly school.

## 4.2 HARAMBEE SCHOOLS

Community financing has been a prominent aspect of Kenya's educational system, dating back to the *harambee* schools. *Harambee* means 'let us pull together'. During the colonial era, local communities established these independent schools. Their independence stemmed from local community support in contrast to the support of the colonial government or local missionaries, the two groups then most responsible for educational development. In the early post-independence period faithbased organizations, eager to quench the thirst for education and put their imprint on the *harambee* movement, encouraged local communities to continue to raise funds for schools. With support from local dignitaries, the *harambee* movement developed a distinct political character, as local politicians curried favour with their constituents by funding new schools and sustaining existing ones. As a result, failure or success of the *harambee* schools depended not on religious groups' sponsorship but instead on local politicians' skills in attracting local and international funding.

A rights-based approach to education means that governments are the ultimate duty bearers, with a responsibility to ensure access to quality basic education for all children. However, parents and communities are 'first-line' duty bearers,

responsible for accessing available opportunities for their children and for supporting quality education in their community. Parents and communities have a duty to lobby their government for schools that can provide quality education for their children. In the absence of such government provision, parents and communities still have a duty to their children and need to establish schools that can provide quality education. This is the essence of community schools. Even where the government provides schools, communities that feel alienated or judge these schools to not be in the best interest of their children may decide to establish more appropriate schools. This is why ethnic, religious or language minorities sometimes set up schools they believe are more suitable. Instead of creating separate schools, however, they can try to change existing schools to better address their children's needs.

When a rights-based approach to education is taken seriously, as with child-friendly schools, parents and communities must be closely involved in all aspects of the school and must be prepared to support it by shouldering the fair and reasonable costs required to promote quality education. Parents should have a vested interest in what schools offer and in the outcomes of the education process for their children and communities. In turn, schools have an obligation to be sensitive to the communities they serve, to care for and protect the children entrusted to them, and to be accountable to the local community in their governance and management. School boards and parent-teacher committees are the governance and management mechanisms through which this linkage and accountability are manifested.

### **4.3 BASIC CHARACTERISTICS OF THE SCHOOL AS A LEARNING COMMUNITY**

#### **Location specific**

There is a specifically prescribed place or location (school) in which the learning/teaching process is designated to occur.

#### **Time bound**

Learners and teachers assemble at the location at designated times and stay for prescribed time periods (day/term/year) for learning to take place.

### **Time structured**

School day is structured into periods in which different subjects or curriculum areas are covered. School year is structured into terms, with a prescribed number of weeks.

### **Learner structured**

Learners are usually grouped by age (cohorts) and channeled into levels, classes or grades that correspond to age and the prescribed learning for that age group.

### **Programme structured**

Prescribed learning is structured into subjects or disciplines that are taught separately and that together constitute a programme for a given grade, level or education cycle.

### **Prescribed learning**

Curriculum reflects national goals and priorities, possibly open to regional/local/community variations, and involve set standards evaluated through tests and examinations.

### **Sequenced learning**

Curriculum is sequenced so that objectives are achieved at one level before learners progress to the next level.

### **Specialist staffing**

Staffing consists of qualified, trained professionals (teachers) with knowledge of the subject matter, pedagogic skills, etc.

### **Specialist Resources**

Standard furniture and equipment are unique to schools and part of defining characteristics (desks, blackboard, etc.).

While learning takes place all the time and everywhere, schools are specially designated institutions dedicated to the purpose of learning. They represent

societies' efforts to concentrate resources and skills for quality education within a prescribed curriculum that includes effective, efficient teaching and learning modalities. Some basic characteristics of schools as learning communities are highlighted in Table 4.1 below. These characteristics provide an operational framework for understanding schools as learning communities and are the skeleton on which other aspects of community life are built. The extent to which schools become true learning communities depends on the richness of additional elements. The school community includes children of different age groups (cohorts), teachers, the school head and non-teaching staff. Roles, responsibilities, rules and procedures govern how a school functions. These relate not only to learning, but also to the safety, security and wellbeing of the learners, the status and authority of the teachers and school head, the relationship between learners and teachers, and the scope of the links with outside parties such as the community or government ministry. Over time, schools generate norms, values and standards that become part of the school culture and contribute to its traditions and institutional ethos, giving it a unique character as a community. A first layer of institutional character is a school's reputation for promoting learning as its core function. This reputation may come from a track record of excellent examination results or a history of success in preparing students for the next level of education. Some schools may choose to focus on a niche academic area, such as mathematics or social studies. Other schools may build a reputation on consistently taking in children from the most disadvantaged backgrounds and helping them become successful learners.

Additionally, many schools develop a reputation for a second layer of institutional character by cultivating such attributes as being a safe, reliable place for children to learn, a champion of sports, a place for building young people's morals and character, a beautiful, well-kept institution with modern facilities, or a place where children are treated fairly and properly cared for. Child friendly schools usually develop a reputation for being inclusive. They admit children from different backgrounds and treat them all fairly, regardless of their status, social class, ethnicity, religion, gender or disability.

Aside from a school's reputation, there are basic forms of behavior that define the school as a community, such as the rituals and routines children and teachers

engage in (prayers in the morning, flag-raising, singing the school song or serving a midday meal) and the common rules and values to which everyone subscribes. Over time, schools cultivate an ethos or 'organizational ambience' that gives further depth to the sense of community. A school with a good ethos is usually characterized by student and teacher cohesion, high expectations of students, positive teacher attitudes toward students, a stress on rewards and consistent, shared values, norms and standards. Such schools are more likely to develop students who perform well academically, have self discipline and high attendance records than schools with a poor ethos, which tend to create opposite student behaviors. In a sense, all these characteristics and attributes are 'fenced' within the school as a community and help determine a way of life within the school boundaries. For instance, children may behave negatively outside of school, but clearly understand that such behavior will not be tolerated in school. The child friendly school fences in positive attributes and fences out negative qualities, much the same way it fences in safety and protection and fences out risks and dangers.

However, since the child-friendly school exists in and serves the wider community, the attributes cultivated within the school will also influence that wider community. For instance, children who bring to school disrespectful or violent behavior learned at home will hopefully replace that behavior with the more positive conduct promoted within the school, adopting such values as non-confrontation and peaceful negotiation. In the process, they will help change the negative behaviors in their homes. Transmitting school attributes into the larger community is not always simple for child-friendly schools. In some areas, issues of discipline may be conditioned by community values and practices that regard corporal punishment as desirable for building character and self-discipline. In contrast, child-friendly schools believe that discipline is necessary to help children learn correct behaviors and to maintain classroom order, but their key attributes are nonviolent discipline and protecting the rights of children. Within child-friendly schools, teachers learn appropriate, respectful approaches to discipline through in-service training and mentoring by the school head, and they implement effective discipline that respects children's rights and contributes to a positive learning environment. (See Chapter 6 on classroom discipline.) As children learn

and succeed in school in the absence of corporal punishment, parents will come to accept the school's approach and may gradually shift their thinking.

#### **4.4 Role of the school head**

A sense of community within child friendly schools is cultivated by the school head, whose leadership determines whether a school takes a child-friendly path or not. The school head's decisions and style are excellent barometers of a school's child-friendliness. Adherence to admissions rules that are fair and transparent can help ensure the inclusion of children from diverse backgrounds. Similarly, mentoring and support by the school head for the appropriate training and continuous professional development of teachers raise classroom standards and foster improvement in teaching methods. Adequate planning by the school head, with appropriate involvement of teachers, learners, parents and the community, can raise curriculum standards and help the school meet learning achievement goals and successfully implement other important policy directives or targets.

The school head must respond to increasing student diversity, including issues of gender, disability and cultural background, must manage partnerships and networks with other schools and the wider community, and must work closely with government agencies and other organizations that serve children. In addition, the school head must be able to adjust the internal workings of the school to cope with rapid changes and developments in technology, school financing, school size and teachers' conditions of service. The school head serves as a custodian of child-friendly school values and is a mentor, supporting the staff's professional development and helping to cultivate the most appropriate behaviors and teaching practices. As a leader and team builder, the school head guides the school as an institution and plays a pivotal role in creating and maintaining its ethos. The school ethos and character are considered so important that many institutions recruit alumni or teachers who previously taught there to become the school head.

In a child-friendly school, the school head is a friendly, accessible person who encourages students' participation in school life and promotes links between the school community, parents and the wider community. Under the school head's direction, the school also provides a protective environment where children are free of corporal punishment, violence, gender stereotypes, bullying and stigma.

The head of a child-friendly school will also ensure that the school is managed in a fair, equitable and transparent manner. School rules and regulations will be just, clear, available to all and applied in an open manner in all cases. Student participation will be encouraged, as appropriate, in various aspects of school life, including the application of fair rules and regulations. Evidence suggests that school heads who become successful leaders concentrate their efforts on four broad goals:

**4.4.1 Promote powerful learning-teaching processes that facilitate educational achievement for all children.**

This occurs when school leadership sets realistic, but high expectations for both children and teachers, in the classroom and throughout the school, and provides various ways for them to pursue learning through the active participation of the learner and the reflective guidance of the teacher. The school leadership can make or break this type of transformative pedagogy by the goals that are set and the resources that are made available. More importantly, the school head needs to encourage teachers and learners to confront obstacles that affect progress seek out available guidance and make the most creative use of limited resources.

**4.4.2 Cultivate a strong sense of community that embraces all who are part of the school.**

The school head is the driving force that shapes the character of the institution and its ethos. He or she is the prime gatekeeper of the school's traditions and reputation. Maintaining the school culture requires a management style that encourages the entire school community to share the common values and rules that support good practices within the school. In a child-friendly school, the ethos is rooted in the rights of children and staff to fair and equal opportunities and treatment within the school community. The school head must address threats to this sense of fair and equal treatment, because failure to do so will undermine the school's community spirit. The school head's style must reinforce the tradition and culture of the school through such actions as giving daily or weekly talks to the whole school, emphasizing care and respect for the school grounds and surrounding environment, encouraging extracurricular activities and strengthening rituals by, for instance, selecting a school song or holding a founder's day or a thanksgiving parade.



#### **4.5 Value and expand the proportion of children's social capital.**

Children are not empty vessels to be filled with information, but young people with personalities, names and knowledge to share. The new knowledge they acquire in school builds on their learning from home and the community.

Children's participation in the classroom and school is facilitated by school leaders who invest in children's capabilities. (See box, page 11.)

#### **4.6 Cherish and encourage the development of families' educational cultures.**

A culture of learning is important throughout the life cycle of a child, from early childhood through all levels of education. In poor, rural communities, many parents are illiterate and the school leadership has to reach out to them to help them benefit from and encourage their children's schooling.

#### **4.7 Role of the teacher**

Teachers are pivotal to effective and efficient learning. They are vital, along with the school head, to promoting a sense of community within the school and to building links to the wider community. A school and its pupils benefit most when teachers are committed to cultivating a learning community with a strong sense of belonging and caring among all children and adults.

Unlike the school head, who manages the entire school, teachers facilitate learning, handle the classroom and help their students transfer what they have learned in the classroom to non-school settings. They also work with the school head in laying a solid foundation and providing a model of a better future for all. Successful teachers in child-friendly schools strive to improve their performance, take advantage of learning opportunities, create new connections and promote collaboration among teachers. There are many ways in which the community can be drawn into the school, beginning with community involvement in the initial decision making on the design, building (or renovating) and maintenance of school buildings and grounds, to ongoing transparency, accountability and participation in management and decision-making. Additionally, parent-teacher associations (PTAs), by allowing the participation of and communication with parents, create openness that encourages parents to track their children's progress.

School heads and teachers assume the critical role in building school community links by reaching out to the community and drawing it in. But parents, other community members and children themselves have crucial parts to play as well.

#### **4.7.1 Role of school heads and teachers together**

School heads provide school leadership and must initiate the support and involvement of family and community. The more willing they are to recruit parents and community members for school tasks, to listen to their views and share decision making, the more likely school family partnerships are to take hold. Management and administrative support can be provided to carry out school programmes through district or local authorities' budgets, materials, space, equipment or staff. School managers are instrumental in making sure that teachers receive the professional development they need to be engaged in family and community involvement. Ensuring that all school staff acquires the necessary skills for working with parents and families is critical to effective partnerships. The school district, cluster or education system should offer professional development for teachers on:

- Collaborating with parents, families and communities;
- Family dynamics and nontraditional family structures;
- Communication between the school, family and the community;
- Reducing barriers to family and community involvement in school;
- Environmental education for sustainable development, including access to water for drinking and washing, clean household energy, food security;
- Appreciating and working with diverse cultures.

The school governing bodies or PTAs should help identify volunteers who can help teachers and other school staff develop sensitivity to students' families and the community. This can be accomplished, for instance, by having volunteers take teachers on community walks that introduce them to the neighborhood and their pupils' lives outside school.

#### **4.7.2 CHILD-SEEKING AND PARTICIPATORY SCHOOLS**

Even with Kenya's declaration of free primary education in 2003, some 1.7 million children and adolescents are still out of school. Building on the principles of child participation, a 'child-to-child' census was designed to seek out children not in school, determine why they were out of school and bring them back in. Schoolchildren and their teachers were trained to go into their neighborhoods to ask children why they were out of school. The most frequent answers to these surveys were poverty, lack of school uniforms, domestic work and distance from school. Solutions were discussed and, through community dialogue and support, some 7,000 of the 9,000 out-of-school children in one of the three pilot districts – half of them girls – were brought back into school. This approach highlighted the power and potential of children's participation to such an extent that it has been included within the national education sector plan.

Another possible approach is to involve school staff and pupils in participatory action research. This may include small teams of teachers and students, who meet monthly to study school-family-community relationships, discuss the challenges and opportunities that arise in involving families and the community in the school and devise interventions to build active community participation. Kenya and Uganda have conducted child-to-child surveys using this approach. Once the groundwork has been laid and there is two-way communication between the school and the family and community, schools can establish partnerships by creating an action team committed to developing a comprehensive family-community involvement programme. Members of the team bring their own perspective, experience and skills to the initiative. The action team is responsible for a baseline study – developing goal statements, identifying strategies to meet the goals, establishing implementation plans and using evaluation tools. Strengthening teacher capacity in the area of family-community collaboration can be supported by providing teachers with incentives to engage in these relationships.

#### **4.7.3 Role of families and caregivers**

A child-friendly school is a family friendly school. It builds relationships with parents and caregivers who have primary responsibility for the well-being of

children at all stages of their development. An informed, caring family can be the most stable, reliable and unconditionally supportive agent for learning, so the engagement of families in the promotion and strengthening of children's learning can be among the most effective and lasting of interventions. This is particularly critical in the case of families made vulnerable by poverty, disease, conflict, lack of water, fuel or other resources, or by domestic violence; in families in isolated communities not reached by limited government services; and in ethnically marginalized or excluded families (EAPRO, 2005).

Parents who feel positive about school and are involved in its life are likely to be the best advocates for the school's values, policies and practices at home, whether by encouraging homework, promoting anti-harassment or supporting cooperation with others. Where there is no contact between home and school, problems in the child's life may go unrecognized by the school and will not be properly addressed. Even in underprivileged families, high levels of parental

#### **4.8 COMMUNITY-BASED CHILD REGISTRATION**

In rural Uganda, investing in a community-based birth registration (CBR) system provided effective tools for monitoring various children's rights, including enrolment in early childhood care activities and primary schools. The system places emphasis on registering children from poor and marginalized households and children living in child headed and female-headed households. These children are then issued birth registration cards that ensure their enrolment in primary school at the appropriate time. With this low-cost intervention, more than 500,000 children were registered in just two years. support and a positive school climate foster self-confidence and self-esteem. Families and caregivers have particular roles to play in preparing their children for a child-friendly school and supporting and providing guidance to the school. In a child-friendly school:

- Parents and households have regular, meaningful two-way communication with the school;
- Parents have an integral role in assisting school learning;
- Parents are full partners in decision making about education outcomes for their children;
- Parents are welcome in the school and their support for children's learning is sought.

Often families and households do not feel empowered to take on these roles, nor are schools prepared to support them. Therefore, it is important to involve families in their children's education and establish community school links at the earliest stages. Families are children's first teachers and have a critical role to play in preparing them for school. Early childhood is a time of developmental leaps; it provides the greatest opportunity for change, but too often it is the time when services are fewest. Parenting styles and the number of resources available for children will either help young children develop the skills, attitudes and behaviors required to flourish in a school community or thwart their abilities to actively participate.

An effective way to prepare parents and caregivers to nurture school-family connections is for communities to develop and organize early childhood centres. Through their involvement, parents begin to understand how to manage a centre and participate in the centres decision-making. In such community-based centres, families learn essential skills and their attitudes change as they see firsthand how their participation can make a difference. The early childhood centers are not only important in readying young children for school, but also in preparing families, particularly women, for their role with schools. (See Box, page 14.)

Model Primary School in New Owerri, Nigeria, is a bold testimony that initiatives to make schools child friendly can succeed. Before 2000, it was a neglected primary school with buildings in various states of dilapidation and a population not very different from those of schools in similar conditions. The school's turnaround began in 2002, when it was classified by UNICEF as child friendly. Since then, a vigorous partnership between UNICEF, the Imo State Primary Education Board and the school's PTA has blossomed, making all aspects of the school welcoming to children. A large compound provides ample playing space for the school's 1,136 pupils. Girls outnumber boys, with girls' enrolment at 53 per cent and boys' at 47 per cent. The students are spread over 52 classes, each with one assigned teacher. Twelve other staff members perform various roles in the school. Demands for admission continue unabated, as the school is the first choice of many in the community. But only 16 classrooms are currently available, and the large student population has stretched the school's facilities.

#### **4.9 School and community work hand in hand**

The key strength of the school is its active PTA, which is involved in many of the ongoing projects, including construction of 10 new classrooms. It also helped beef up security in the school by installing burglar-proofing on doors. The PTA takes its role seriously. According to P. M. Okoro, the association's vice-chairman, the group meets three times each term and other times as needed. Sir Sam Iheakama, second vice chairman of the PTA, points out that the World Bank Estate where the school is located is a community unto its own, where residents share common, strong sentiments about their children's education. He reports that PTA meetings are always well attended, with over 80 parents at each meeting. According to Iheakama, the community has a positive view of the Model Primary School and "parents all wish their children should pass through this school."

#### **4.10 Improving water and sanitation**

The PTA has improved personal hygiene among the pupils by providing washbasins and stands for each of the school's 16 classrooms, as well as soap and toilet paper rolls for the latrines.

Model Primary School has a full complement of ventilated improved pit latrines for both boys and girls. The water supply is adequate; the State Primary Education Board provided two water drums that are constantly refilled. During break time, excited pupils, their plastic cups and bowls in hand; run to fetch drinking water from the hand pump-equipped borehole provided by UNICEF in collaboration with the State Rural Water Supply Agency. The borehole, a key component of making the school child-friendly, benefits more than the pupils and teachers in the school. Since it is the most regular source of water in the vicinity, the World Bank Estate also depends on the borehole for its water supply. Community members have praised its usefulness and have expressed their appreciation to the school staff, especially the headmistress. Some 1,360 titles are housed in the school's well-stocked library, many of them provided by UNICEF. A full-time librarian trained in library management for primary schools oversees the collection.

"UNICEF's presence is manifesting in our school," says Eugenia Chima, the school's current headmistress. She noted that in efforts to make it child-friendly,

the school had received desks, chairs, books, library equipment, sanitation materials, a borehole, early childhood care, first-aid kits and other items. She said that running the school has changed her life: "The whole community calls me 'blessed mummy' because of the school. Even if I retire now, I feel fulfilled."

#### **4.11 A good start through reading and play**

Some 120 children are enrolled in the school's early childcare section. Here, the emphasis is on psychosocial stimulation of the youngsters, who play and learn in an environment filled with pictures and toys. Emelia Onyekwere is the section's head teacher. Along with four other teachers, she leads her charges in classes that include singing, dancing, body movement and observation, especially of the age appropriate objects located indoors and outside the classroom. Three out of five school days, the PTA provides midday meals for pupils in the early childcare section. For some of these children, this is a rare opportunity to eat a nutritious meal, and with their teachers' help, they also learn how to eat properly.

#### **Strengthening links:**

- The school has a PTA that meets and communicates regularly, and involves parents from all backgrounds (not just the elite);
- The PTA has a plan of action coordinated with school authorities to develop, implement and monitor annual school plans;
- The school promotes parents' participation in discussions and decision-making on school policies and activities;
- The school utilizes various communication tools to reach out to parents;
- The school provides information to parents on its reforms, policies, goals;
- The school invites parents to discuss concerns about their children and provides regular opportunities for them to inform school authorities about events at home or in the community;

- In case of illiterate parents or those who are not speakers of the majority language, the school provides oral messages or translates communications into parents' language;
- The school hosts events that involve children and families, such as inviting parents for an evening of music, drama or poetry reading that demonstrates the lessons their children are learning;
- The school provides the space for environmental and community gardens where PTA members can support food security;
- The school head may present awards to children or teachers – such as best attendance, most improved, special helper, star of the month, sports awards – at an event involving the community.

#### **4.12 CELEBRATING CHILDREN'S ACHIEVEMENTS WITH PARENTS**

At Zangum School in the northern region of Ghana, the head teacher realized that the parents of his students had little understanding of what their children were learning in school. To help them understand their children's education process, he organized an afternoon each semester to celebrate the students' achievements. The activities at these afternoons varied from the younger children's reciting the alphabet, singing songs or acting out a drama to teach malaria prevention, to older students' reading poems or stories that they had written while other children translated them into their parents' language. The head teacher used these events not only to recognize achievement, but also to highlight important messages regarding the school, and the events were highly anticipated by the community, the students and the teachers. Through these activities, parents, many of whom had never been to school themselves, discovered what their children were learning, the value of their children's education and how they could support it. Discipline in the school improved, and attendance and participation in the PTA grew.



## **4.13 THE ROLE OF WOMEN IN PTAS**

Kparigu, a remote rural village in Ghana, had regular PTA meetings that were well attended by fathers but rarely by mothers. The headmaster was concerned about the lack of women's involvement and especially wanted to ensure that girls' issues were well represented. Therefore, he made a point of talking with the mothers on his walks around town, at the market and at church, always subtly bringing up the subject of involvement in the PTA. In the course of these discussions, he learned that most women had not been to school, so they thought they would not be able to contribute. They also thought the PTA was 'men's businesses.

Talking about these concerns on a one-to-one basis and later at a PTA meeting, he found out the biggest stumbling block for women was the timing of the meetings. The headmaster generally held the meetings in late afternoon, when the sun was not too hot but it was not yet dark, but this, he learned, was the women's busiest time of day, when they return from market and prepare evening meals. The headmaster changed to a suggested time: "Fridays right after prayers because both Muslims and Christians don't go to farm on those days and it is before cooking begins." Engaging the community women and changing to a more suitable time for them allowed the women gradually to become a much stronger presence in the PTA. They enriched the dialogue not only on gender issues but also on a range of topics affecting all children.

### **4.13.1 Role of education bodies and other local authorities**

Child-friendly schools promote broad-based alliances among communities, local governments, civil society and the private sector. With the need for a cross-sectoral perspective, different actors must be fully appreciated and accommodated to ensure that the child-friendly school concept is implemented. Local school authorities have obligations and responsibilities towards schools in their municipalities. It is their duty to provide resources and funding for teachers and administrators, to provide quality learning materials and to monitor school planning and progress. Both local and national education authorities monitor the performance of specific schools. The local education authorities are responsible for supervision of teachers, school managers and headmasters/headmistresses and

for the allocation of learning spaces, tools and instruments. They are accountable to the community for resource allocation. In decentralized government systems, community members, parents and children have greater opportunities to participate in planning, implementing, monitoring and evaluating child friendly education activities and governance.

A child-friendly school is an integral part of the community and proactively reaches out to it, both seeking its support in improving child-friendliness and in turn supporting community development. Such inter linkage is especially important in areas mired in poverty. Learning takes place in a variety of circumstances in the child's wider environment – at home, after school, in religious institutions and in interactions with other community members. (See Box, this page.) Child-friendly schools are sensitive to the knowledge, values and traditions students bring from the larger community; at the same time, children acquire new knowledge and skills that they take back into the community. The school can extend its outreach by sending children home with take-home messages that convey information on the importance of hygiene, HIV and AIDS prevention, environmental sustainability and other topics. In this way, the school contributes to community development. Establishing such a dialogue gives the community a sense of school ownership, so that the school is not seen as something outside the community. This dialogue across boundaries is what distinguishes child-friendly schools from other schools. They often become oases for the wider community, sometimes providing the only space for town or village meetings and festivities. These links anchor the school as a supportive, attentive and relevant community institution. Child-friendly schools reach out beyond their confines, seeking partnerships with other actors who contribute to the school's effective implementation of all aspects of child-friendliness. These include health care and social welfare professionals and institutions that contribute to child health and nutrition. Child-friendly schools need

#### **4.14 REACHING OUT TO THE COMMUNITY AND BEYOND NEIGHBOURHOOD AS SCHOOL PROJECTS**

A new concept of education has been developed in Vila Madalena, a small district in Brazil's largest city, São Paulo. Known as 'Neighbourhood as School', it is conducted by a nongovernmental organization, Cidade Escola Aprendiz, which

since 1997 has been turning squares, alleys, cinemas, ateliers, cultural centres and theatres into classrooms.

The Neighbourhood as School, an extension of formal school education, aims to expand learning spaces in the community, creating a pedagogic laboratory in which learning is knowing oneself and socially intervening in the community through communication, art and sports.

The success of the Neighbourhood as School concept is driven by a partnership among schools, families, public authorities, entrepreneurs, associations, craftspeople, nongovernmental organizations and volunteers – indispensable powers in community education. Everybody educates; everybody learns at qualification centres, so the experience helps educators and social leaders nourish the learning systems.

### **STUDENTS TEACHING COMMUNITIES TO PREVENT MALARIA**

In Kparigu, in the northern region of Ghana, children in the senior primary classes completed a module on malaria prevention. As part of their lesson, they were encouraged to inform their families and the community about their project as it progressed. This project combined skills from their science, art, music, woodworking and life skills classes. The children developed and enacted a play for younger children and family members about the life cycle of a mosquito and transmission of malaria. They went into the community and identified sources of standing water. Using techniques learned at school, they created proper drainage and minimized sources of standing water. The community was extremely interested. When the adults saw the children out in the community, they asked about the project and how it would reduce the incidence of malaria. Enthusiasm was high, and community members joined in the efforts and continued to implement the strategies long after the event. As a result, standing water sources in the community have been significantly reduced, contributing to the control of malaria. The community learned in a concrete, relevant way how children's education contributes to the well-being of all. These partnerships, as they often lack the resources necessary to provide all the elements to be fully child-friendly. The child-friendly school's outreach can go beyond the geographical community. Many schools accommodate different communities (various religions, races or political affiliations). The sense of solidarity and shared identity created by building ethos and teaching peaceful

coexistence, negotiation, nonviolence and care for the environment can influence larger-scale nation-building.

**Strengthening school outreach:**

- School sets up a specific plan for school-community collaboration;
- School sends messages regularly to parents and school committee members on school activities and children's progress;
- School and community establish parent-teacher-community associations that meet regularly;
- School encourages students to participate in community activities;
- Parents and community participate in school improvement projects;
- School invites other local agencies (ministries), the private sector, community leaders and parents to participate in planning and school management;
- School networks with community to increase school access for excluded children, especially girls, domestic workers, children with disabilities and minority children;
- School engages community in volunteer programmes (facility and environment maintenance) and recruits people with special knowledge and skills as classroom resources;
- Teacher assigns homework (take home messages) that requires children to interact with their parents;
- School partners with local private sector, non-governmental and community-based organizations to assist schools and families;
- School health and nutrition programmes are planned and implemented jointly with health and social welfare workers, teachers, parents and others;
- Students are taught songs and poems with health and safety messages and are encouraged to share them with their younger siblings and family members.

## **CHILD-FRIENDLY SCHOOLS SUPPORTED BY THE GIRLS' EDUCATION MOVEMENT**

Girls' Education Movement (GEM) members are active in child-to-child methods for reaching out to non-enrolled children. Using proceeds from their income generating activities, GEM members purchase learning materials for needy pupils, a pragmatic approach to addressing retention. GEM clubs also promote girl friendly practices and develop ways to bring out-of-school girls back to class, such as purchasing sanitary towels for them. GEM members also engage community members, strengthening school-community partnerships and interaction.

## **INCLUSION OF INDIGENOUS CHILDREN**

Child-friendly schools have been promoted since 2000, in Chiapas and Yucatan, Mexican states characterized by large indigenous populations and high rates of marginalization. Child-friendly schools are critical in generating participation among children, teachers and parents and in achieving sustainable development in the context of indigenous culture. Child-friendly schools improve learning through intercultural and bilingual teaching, active involvement by students, families and community, and civic education based on democratic values, respect for diversity and promotion of equity, cooperation and participation. They also work towards a healthy, clean and friendly school environment. A parallel initiative, Community Participative Learning, promotes civic education and activities where families and communities learn about children's rights in a culturally sensitive and respectful manner and are encouraged to participate in the organization of community life around the school. Similar efforts under the All Children in School initiative seek to ensure basic quality education for all boys and girls. As a result, schools have higher student achievement, better trained and more motivated teachers, an improved school environment that includes toilets and water facilities, increased community participation in education and a heightened sense of cultural identity, which contributes to higher self-esteem.

Child-friendly learning spaces are often, but not always, established in situations of emergency and crisis to compensate for the lack of adequate, safe and supportive learning environments. In chronic emergency and rehabilitation

situations, they can play an important role in providing basic social services, representing points of continuity and stability.

Besides functioning as learning spaces, child-friendly areas may also serve as a place for play and stimulation, recreation and life skills activities, and for cultural and sports events. During a crisis, children need psychosocial support, counseling and safe places where they can participate in learning and recreation to regain stability in their lives. The child-friendly spaces seek to provide children with this normalcy through regular activities necessary for their development. In all circumstances, child-friendly spaces call for the increased participation of children, parents and communities in decision-making about children's education, recreation and play. These spaces also can serve as community centers that strengthen adults' coping skills and provide a venue for feeding, health care and distribution of relief and rehabilitation items.

#### **4.15 Organizing learning Opportunities**

Child-friendly learning spaces are essential during emergencies and other situations where children fall outside formal school settings. Although governments and education authorities are obligated to provide learning opportunities for all children, parents, families and communities often take a greater role in developing learning spaces during emergencies.

Local authorities are usually responsible for identifying such spaces; however their establishment and operation are more likely to fall to parents and the local community. Although their focus is on learning, child-friendly spaces may include integrated social services, such as health, nutrition and social welfare. Learning may also take place in local houses where children come together for complementary or after-school activities that are school-related but more voluntary in purpose, content and application.

Local community participation, often through civil society organizations, is key to the success of learning in child friendly spaces, because it is usually parents and community volunteers who take the initiative to operate the learning activities offered in these spaces. Also, because these are alternative learning spaces, for children who fall outside formal, mainstream institutions, it is often necessary to mobilize children to participate. To effectively integrate marginalized children,

learning spaces need to be trusted by the community, and those in charge have to have the know-how to engage in effective social mobilization and communication with young people. Community contributions to child friendly spaces, such as tools, equipment, land and direct teaching or administration, are essential to foster a sense of belonging and ownership by children and their families. Like the formal school system, child- friendly spaces must be safe, healthy, protective and inclusive. The education system must oversee these informal spaces to ensure that they meet all requirements.

Alternative spaces for learning can be set up just about anywhere, in churches, mosques, temples, community halls, rooms within the community chief's office, libraries, a compound, allocated land, an unused room in a private house, even a boat. In the Maldives, for instance, madrasas were used for learning activities other than reading the Koran when it was agreed that children also need to read other literature and learn about the world outside their communities. In Nicaragua and Iran, mobile libraries represent not only opportunities for children to learn but for their families and the larger community as well. In Curitiba, Brazil, lighthouse-shaped educational centers combining libraries and Internet access, part of the city's Lighthouses of Knowledge project, are located next to schools to bridge learning between the formal school system, the local community and families.

#### **Strategic steps:**

- Identify spaces within the community where learning can take place;
- Involve the school management and PTA in the selection process;
- Create and implement alternative learning programmes for all children, including those out of school, through outreach and collaboration with nongovernmental and faith-based organizations;
- Develop and introduce life skills, HIV and AIDS prevention programmes and ways to adapt to changing environments through formal and complementary education activities for children in and out of school;
- Identify meeting places where out of- school children can be mobilized for inclusion in both formal and non-formal learning activities;

- Utilize existing resources and identify new resources inside and outside the community;
- Collaborate with the private sector to equip alternative and complementary learning spaces;
- Join forces with sports, leisure and cultural organizations;
- Identify community members and volunteers with the skill and time to support learning activities in child friendly spaces.

The changes recommended making learning environments child friendly imply a substantial change in accountabilities, monitoring systems, training, curriculum, school admission practices, the structure and content of schools and early child centers, and the role of families and civil societies. Unless these changes are backed by strong policy commitments and specific

c means of accountability, they will not occur and children's rights will not be realized. Therefore, political support at the highest level is required for this standard of schooling. To ensure viability, child-friendly schools must be evidence-based, supported by a system of continual monitoring, evaluation, feedback and advocacy. (See Chapter 8.)

Many developing countries implement child-friendly schools through an accelerated process of school reform. The entire school community works collaboratively towards a shared purpose by meeting, talking and learning from each other's experiences. Approaching education and learning from a CFS perspective requires a different form of supervision and management of schools and learning activities. Few education systems, especially in developing countries, have effective supervision and performance appraisal systems for teachers and administrators, and implementation of such systems is almost always under constraints. The introduction of the child-friendly education and learning framework therefore provides an opportunity to review and change the way teachers and administrators are supervised and managed. It also provides an opportunity to establish and strengthen the monitoring and oversight systems and mechanisms to improve accountability for resource allocation and utilization.



## **VILLAGE EDUCATION COMMITTEES: ACCOUNTABILITY TO THE COMMUNITY**

In many communities, oversight for education and teacher quality falls to the Village Education Committee, which may have different functions and different levels of responsibility depending on the community. Important roles include monitoring children within the community, assessing the quality of education, identifying rights abuses and locating children who are not in school. However, the power vested in the group and who is represented on it make a major difference in its functioning. The committees monitor schools and serve as a forum for parents' and children's decision-making.

### **4.16 THE COMMUNITY SCHOOL MODEL**

In the rural hamlets of Upper Egypt, where primary schools were previously non-existent and girls were particularly deprived, community schools have been established as a means of providing children with a quality education. Modelled after the BRAC experience in Bangladesh, the schools are located in the communities and are free, with no hidden costs. Local ownership is a key feature, with communities donating space, ensuring that children come to class and managing the schools through a local education committee in each hamlet. Young women with intermediate degrees are recruited locally and trained as facilitators to provide quality education through interactive techniques and locally relevant educational content, including health, the environment, agriculture and local history. Graduates of community schools are eligible to take the government schools' standardized exams at the end of grades 3 and 6. The project serves as a catalyst for development and, given the emphasis on girls and the involvement of women facilitators, for change in gender roles and expectations. Lessons learned from the quality components of the community school model are being mainstreamed through the Girls' Education Initiative and the model itself is being extended through the establishment of additional girl friendly schools.

Family and community involvement in the monitoring of learning activities is crucial in a child-friendly learning model and must be integrated into the model from its inception. Governing bodies at all levels must be invited to discuss how the child-friendly school will be regulated. Children's voices must be included via open forums throughout the process to strengthen their influence and

participation. Hotlines and other forms of reporting systems should to be formulated and agreed upon.

### **Strategic steps:**

- Review education management systems to determine how education is perceived and managed;
- Establish a code of conduct for teachers and child-friendly education managers and a community monitoring system for appraisal and reporting;
- Develop a child-centered management system that builds on the principles of child-friendly education and children's rights;
- Establish an effective, transparent feedback system on resource allocation and utilization with opportunities for community input through the PTA;
- Develop a hotline or other method for reporting abuse and exploitation of students with a clear message:

the whole community has an essential role to play in the growth and development of its young people. In addition to the vital role that parents and family members play in a child's education, the broader community too has a responsibility to assure high-quality education for all students. In the past, parent involvement was characterized by volunteers, mostly mothers, assisting in the classroom, chaperoning students, and fundraising. Today, the old model has been replaced with a much more inclusive approach: school-family-community partnerships now include mothers and fathers, stepparents, grandparents, foster parents, other relatives and caregivers, business leaders and community groups—all participating in goal-oriented activities, at all grade levels, linked to student achievement and school success.

- **The research is clear, consistent, and convincing**

Parent, family, and community involvement in education correlates with higher academic performance and school improvement. When schools, parents, families, and communities work together to support learning, students tend to earn higher grades, attend school more regularly, stay in school longer, and enroll in higher

level programs. Researchers cite parent-family community involvement as a key to addressing the school dropout crisis, and note that strong school-family-community partnerships foster higher educational aspirations and more motivated students.<sup>2</sup> The evidence holds true for students at both the elementary and secondary level, regardless of the parent's education, family income, or background—and the research shows parent involvement affects minority students' academic achievement across all races.<sup>3</sup>

Supporting teaching and learning requires addressing students' social service needs, as well as their academic ones, and this broad-based support is essential to closing achievement gaps. The positive impact of connecting community resources with student needs is well documented.<sup>4</sup> In fact, community support of the educational process is considered one of the characteristics common to high-performing schools.<sup>5</sup>

- **How do parents, families, and communities get involved?**

Parent, family, and community involvement means different things to different people. A research-based framework,<sup>6</sup> developed by Joyce Epstein of Johns Hopkins University, describes six types of involvement—parenting, communicating, volunteering, learning at home, decision making, and collaborating with the community—that offer a broad range of school, family, and community activities that can engage all parties and help meet student needs. Successful school-parent community partnerships are not stand-alone projects or add-on programs but are well integrated with the school's overall mission and goals. Research and fieldwork show that parent-school-partnerships improve schools, strengthen families, and build community support, and increase student achievement and success.

- **States press for more partnerships**

Data compiled in 2005<sup>7</sup> show that 17 states have directed all districts or schools to implement parental involvement policies. Seven states—Alaska, California, Indiana, Minnesota, Nevada, South Carolina, and Texas—have obligated schools or districts to develop policies linking parent-community partnerships to school improvement plans, and in Delaware, schools applying for school improvement

grants must include parental involvement strategies in grant applications. In addition, many states promote parental involvement in early literacy, school safety, and dropout prevention

- **Parent, Family, Community Involvement in Education**

Programs, as well as in initiatives addressing the needs of at-risk youth and English Language Learners. Some state policies echo the provisions of Section 1118 of the Elementary and Secondary Education Act (ESEA) that direct schools and districts receiving Title I funds to use a portion of those funds to involve parents, educators, and the community in the shared responsibility of improving their students' academic achievement. Although the research unequivocally affirms the positive and long-lasting effects of parent, family, and community involvement on student learning, this data is often overlooked in local, state, and national discussions about raising student achievement and closing achievement gaps. Education reform efforts that focus solely on classrooms and schools are leaving out critical factors essential for long-term success. What happens before and after school can be as important as what happens during the school day. Even the most promising reforms can be "reversed by family, negated by neighborhoods, and might well be subverted or minimized by what happens to children outside of school."<sup>8</sup>

While education is clearly an asset to the individual, it also benefits families and serves the common good. Education is a core value of our democratic society, and it is in everyone's self-interest to insure that all children receive a quality education. Our democracy, as well as our economy, depends on an educated citizenry and skilled workforce. Too many policymakers, community leaders, and even parents still view schools and student learning as the sole responsibility of educators. While educators take their professional responsibilities seriously, they also recognize that they cannot do it alone. They need and depend on the support from parents and community members.

One dynamic too often observed is that parent involvement in education tends to decline as their children go up in grade, with a dramatic drop once students reach middle school.<sup>9</sup> In fact, the lack of parental involvement is viewed by teachers, administrators, the public, and even parents of school-age children, as the single biggest problem facing our nation's schools.<sup>10</sup> To promote student growth and

school success at every grade and age, well thought out parent-community school partnerships, linked to school improvement goals, are needed in every community.

#### **4.17 What hinders involvement?**

Parents see lots of roadblocks to getting involved in their child's education. Some point to their own demanding schedules and say they don't have extra time to volunteer or even attend school activities, much less get involved in bigger ways. Others reveal how uncomfortable they feel when trying to communicate with school officials, whether that's due to language or cultural differences or their own past experiences with school. Some say they lack the know-how and resources to help their child, or they express frustration with school bureaucracies or policies they find impossible to understand or change. Some parents complain that they rarely hear from the school unless there is a problem with their child's behavior or performance. Others say the information provided by the school is not comprehensible either because of educational jargon or because the parent or family member does not read or understand English. Some families criticize school personnel for not understanding the plight of single parents, grandparents, foster parents, or other caregivers. Others say they lack transport.

#### **4.18 Epstein's Framework on Involvement**

■ **Parenting.** Assist families with parenting skills, family support, understanding child and adolescent development, and setting home conditions to support learning at each age and grade level. Assist schools in understanding families' backgrounds, cultures, and goals for children.

■ **Communicating.** Communicate with families about school programs and student progress. Create two-way communication channels between school and home that are effective and reliable.

■ **Volunteering.** Improve recruitment and training to involve families as volunteers and as audiences at the school or in other locations. Enable educators to work with volunteers who support students and the school. Provide meaningful work and flexible scheduling.

■ **Learning at Home.** Involve families with their children in academic learning at home, including homework, goal setting, and other curriculum-related activities.

■ **Decision Making.** Include families as participants in school decisions, governance, and advocacy activities through school councils or improvement teams, committees, and other organizations.

■ **Collaborating with the Community.** Coordinate resources and services for families, students, and the school with community groups, including businesses, agencies, cultural and civic organizations, and colleges or universities.

While some schools have made great strides in engaging parents and others in the educational process, there is still much more that can be done.

### **How can we engage more stakeholders?**

Here are some specific ways that schools can engage more parents, families, and communities in education:

- Survey educators and families to determine needs, interests, and ideas about partnering.
- Develop and pass family-friendly policies and laws [i.e., leaves of absence for parents/caregivers to participate in school or education-related activities; flexible scheduling to encourage participation by diverse families].
- Provide professional development on family and community engagement for school faculties.
- Offer training for parents and community stakeholders on effective communications and partnering skills.
- Provide better information on school and school district policies and procedures.
- Ensure timely access to information, using effective communications tools that address various family structures and are translated into languages that parents/families understand.

- Hire and train school-community liaisons who know the communities' history, language, and cultural background to contact parents and coordinate activities.
- Collaborate with higher education institutions to infuse parent, family, and community involvement in education into teacher and administrator preparation programs.
- Develop an outreach strategy to inform families, businesses, and the community about school and family involvement opportunities, policies, and programs.
- Regularly evaluate the effectiveness of family involvement programs and activities. There are a number of parent-family-community-school partnerships that have documented their results:

**The National Network of Partnership Schools (NNPS)** recognizes schools, districts, states, and organizations that demonstrate excellence and continual progress in developing and sustaining comprehensive, goal-oriented programs of school, family, and community partnerships. Some 600 NNPS Partnership Award winners have been recognized since 1998 for programs and practices that improve family and community involvement resulting in increased student achievement and other indicators of success in school.<sup>12</sup>

#### **4.19 Summary**

The Parent-Teacher Home Visit Project is a partnership between the Sacramento City Teachers Association, a faith-based community organizing group, and the school district. Since 1998, teams of educators and parents have visited students and their families at home, built trusting relationships, and shared instructional tools. Evaluations of the project report increased parental involvement, improved parent/teacher relationships, and improved academic achievement.<sup>13</sup>

The Chicago Parent Centers model has been cited as evidence that parent participation has a major impact on children's academic success and social development, and that it is a sure strategy for reducing the dropout rate. Each year that parents took part in the program increased the chances—by 16 percent—that their child would complete high school. For students whose parents were involved for the whole six years of the project, more than 80 percent graduated from high

school, compared with 38 percent of students whose parents did not participate.<sup>14</sup> Since 1987, more than 375,000 immigrant parents in California have increased their knowledge and skills to support their children's academic achievement and enrollment in higher education by participating in the Parent Institute for Quality Education (PIQE) program. Since then, PIQE programs have expanded to other cities in Arizona, Texas, and Minnesota. A recent study documented that children of Hispanic parents who completed the San Diego PIQE program achieved a 93 percent high school graduation rate and 79.2 percent student enrollment in college or university.<sup>15</sup>

NEA believes that significantly more emphasis must be placed on the important roles that parents, families, and communities can and must play in raising student performance and closing achievement gaps. The Association has long advocated policies to assist and encourage parents, families, and communities to become actively engaged in their public schools and become an integral part of school improvement efforts. While some states and school districts have enacted laws and policies to encourage parent-community school partnerships, more enforcement is needed. At the same time, promising, locally developed practices should be rewarded, sustained, and expanded.

#### **4.20 References**

1Belfield, C. R. and H.M. Levin, H.M. 2007. *The Price We Pay: Economic and Social Consequences of Inadequate Education*. Washington, DC: Brookings Institution Press.

2Barton, Paul E. 2003. *Parsing the Achievement Gap: Baselines for Tracking Progress*. Princeton, NJ: Policy Information Report, Educational Testing Service.

3 Jeynes, W.H. 2003. A meta-analysis: The effects of parental involvement on minority children's academic achievement. *Education & Urban Society* 35(2): 202-218.

4Communities in Schools. 2007. "National Educational Imperative: Support for Community-Based, Integrated Student Services in the Reauthorization of the Elementary and Secondary Education Act." Alexandria, VA.



- 5 Henderson, Anne T. and K.L. Mapp. 2002. *A New Wave of Evidence: The Impact of School, Family, and Community Connections on Student Achievement*. Austin, TX: National Center for Family & Community Connections with Schools, Southwest Educational Development Laboratory.
- 6 Epstein, J. L. and K. Salinas. 1992. *School and Family Partnerships Encyclopedia of Education Research*, 6th edition, New York: Macmillan.
- 7 Zinth, K. 2005. *Parental Involvement in Education*. State Notes, Education Commission of the States. Denver. See [www.ecs.org](http://www.ecs.org).
- 8 Berliner, D. C. 2005. *Our impoverished view of educational reform*. New York: Teachers College Record, [www.trecord.org](http://www.trecord.org).
- 9 Henderson, A., K. Mapp, V. Johnson, and D. Davies. 2007. *Beyond the Bake Sale: The Essential Guide to Family-School Partnerships*. New York: The New Press.
- 10 Education Testing Service. 2007. *Standards, Accountability and Flexibility: Americans Speak on No Child Left Behind Reauthorization*. Princeton, NJ.
- 11 Wanat, C. 1992. Meeting the needs of single-parent children: School and parent views differ, *NASSP Bulletin*, 76(543): 43-48.
- 12 National Network of Partnership Schools, "Promising Partnership Practices," 1998-2007, [www.csos.jhu.edu/p2000/Awards/index.htm](http://www.csos.jhu.edu/p2000/Awards/index.htm).
- 13 Parent-Teacher Home Visit Project, [www.pthvp.org](http://www.pthvp.org).
- 14 Reynolds, Arthur and M. Clements. 2005. *Parental Involvement and Children's School Success*. In *School-Family Partnerships: Promoting the Social, Emotional, and Academic Growth of Children*, edited by E. Patrikakou et al. New York: Teachers College Press.
- 15 Vidano, G. and M. Sahafi. 2004. *Parent Institute for Quality Education Organizational Special Report on PIQE's Performance Evaluation*.

## UNIT 5

### Resource Mobilisation for Inclusive Education

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## 5.1 Introduction

During the last decade, much of the global debate on Official Development Assistance (ODA) focused on reversing the decline in overall ODA during the 1990s, especially for Sub-Saharan Africa (SSA), and on enhancing aid effectiveness. To reverse the decline, successive G8 meetings have pledged major increases in ODA. However, as discussed later, delivery on these pledges has been disappointing. The 2010 G20 meeting in Korea changed the focus of these summits, from pledging money to mapping out a “Multi-Year Action Plan on Development” with measures to ease the bottlenecks to growth in developing countries. The Plan focuses on nine areas, many of which directly relevant to the education and training sector.<sup>1</sup> However, the concrete follow-ups on this Plan are as yet unclear. Work on enhancing aid effectiveness culminated in the 2005 “Paris Declaration on Aid Effectiveness” comprising more than fifty commitments with targets for 2010. These are largely designed to foster higher *technical efficiency* in aid delivery and use through improved harmonization of aid modalities, better alignment of aid on recipient countries policies, stronger ownership and better governance by recipient countries, and enhanced mutual accountability for results. Progress is monitored by the OECD Development Assistance Committee (DAC) and was assessed at the September 2008 “Third High-Level Forum on Aid Effectiveness” in Accra, Ghana. The Forum concluded that the pace of progress was too slow (AAA 2008, paragraph 6, and OECD 2008). A Fourth High-Level Forum is scheduled for 2011.

Last decade’s international debate on ODA for *education* mirrors that of overall ODA: Most has focused on advocacy aimed at increasing the *volume* of aid, especially to attain the Education for All (EFA) and Millennium Development Goals (MDGs), and most of the concerns regarding aid effectiveness has focused on enhancing the *technical efficiency* of aid delivery and use once the decisions on how the aid should be allocated have been made. Much less attention has been given to how the purpose for which the aid is allocated affects overall effectiveness of any given amount of aid.<sup>2</sup> In most countries, by far the largest share of education spending is funded by domestic resources. Furthermore, over the last decade, there has been an increase in ODA from donors who are not

members of the DAC as well as in other external financial flows to developing countries, some of which support -- or could potentially support -- education. Therefore, what can be gained from more efficient delivery and use of aid from DAC countries is limited if this aid is not deployed strategically to maximize its overall effectiveness in terms of:

### **5.1.1 The impact of total domestic and external education funding on education outcomes.**

As discussed later, what represents strategic allocation of aid to maximize this impact is evolving rapidly. Key drivers for the next decade will include: (i) Major changes in the education challenges developing countries will face; (ii) Increase in the share of total education expenditures financed by domestic rather than external resources (with the exception of some fragile countries); and (iii) Decline in the *share* of external resources funded by ODA from traditional DAC donors.

### **5.1.2 The mobilization of domestic education resources.**

The way aid is deployed can stimulate national resource mobilization in two interrelated ways. First, by maximizing the additionality of the aid to ensure that it adds to -- rather than substitutes for -- domestic resources. The nine priority areas are: infrastructure, human resources development, private investment and job creation, trade promotion, domestic resources mobilization, financial inclusion, resilient growth and knowledge sharing. The terms "allocation" and "deployment" of aid to given purposes are used to denote aid targeted to such purposes through specific projects or through budget support with performance indicators aimed at rising public spending for such purposes. Unless otherwise stated, "education aid" refers to ODA for education from DAC donors. Education Resource Mobilization and Use in Developing Countries Substitution risks creating harmful aid dependency without adding to the resource base for education in a sustainable way. Second, avoiding substitution also helps avoid creating **disincentives to national resource mobilization**. To allocate aid in ways that minimize such potential harmful long-term aid dependency effects is particularly important for SSA where both the level and the duration of dependency in the education sector are without historic precedence. On the above background, this paper aims to stimulate discussion on four propositions:

**5.1.3 Addressing the coming decade's education challenges in developing countries will require much more capacity and knowledge intensive policies and programs than in the past.**

Some of these are "old" challenges in areas where progress remain elusive. Others stem from successes over the last decade, such as increased demand for post-primary education, and the pressure on labor markets from the growing number of graduates. Still others reflect the increasing need for education systems to respond timely to the demand for better quality and more relevant education stemming from historically unparalleled rapid *global* economic and social change. Thus, instead of setting the pace of change, the education system's ability to serve effectively the economy and society depends increasingly on how well it is able to respond to developments *outside* the system. In turn, the system's capacity to respond will depend on its ability to enhance radically its institutional capacity for adaptability, accountability and innovation.

- **Systemic weaknesses in aid recipient countries** hamper effective response to these new challenges by constraining the countries' ability to make effective and equitable trade-offs in education resource mobilization, allocation and utilization.
- **Systemic weaknesses in the global education aid architecture** hamper effective mobilization, allocation and use of education aid to help countries response to these new challenges. This limits the effectiveness of both domestic and external education funding.
- **More strategic use of education aid would help correct systemic weaknesses** at both the country and global levels. However, current aid allocation by sector, purpose and country is the outcome of complex processes and represents commitments that can only be changed gradually over time. New external funding can help speed up this change process if used in targeted, innovative ways. Such new funding may include a combination of new (or perhaps frontloading) of ODA from "old" and "new" donors, funds from private foundations or funds mobilized in innovative ways. The funds would support a three-step strategy designed to enhance the effectiveness of education aid by:

(1) Strengthening the global leadership capacity of the education aid community by building high level political consensus on a reform agenda to enhance aid effectiveness.

(2) Enhancing the capacity of the global education aid architecture to translate the reform agenda into agreed actions by reforming, harnessing synergies and scaling up the capacity of promising existing agencies and networks, with special attention to those producing regional and global public good *functions* in the education sector.

(3) Providing target funding to priority areas at the country level that need urgent attention to enhance the effectiveness of both domestic and external education funding. The rest of the paper discusses the rationale for the above four propositions. Section 1 highlights ongoing changes in education priorities necessitating shifts in aid policies. Sections 2 and 3 exemplify key systemic weaknesses at country and global levels hampering effective domestic and external Education Resource Mobilization and Use in Developing Countries education resource allocation and use to address evolving priorities. Section 4 expands on the proposed three-step strategy to enhance education aid effectiveness. There should be no illusions as to the complexity of removing some of the many bottlenecks to effective allocation of education aid discussed in Section 3. But the scope for effectiveness gains is likely to be considerable. And given the current constraints on aid budgets in DAC donor countries and the growing disillusionment about aid effectiveness, it is urgent both to make ODA work better and to integrate external funding beyond that provided by traditional DAC donors into the discussion. Therefore, it is time to act.

However, success will require strong political leadership, including in donor countries and agencies. In fact, insufficient high-level global political attention to education aid is perhaps the key factor explaining why widely recognized major weaknesses in the education aid architecture are not addressed. True, this reflects similar slow progress in addressing key systemic weaknesses in the overall aid architecture, such as reforming the multilateral system, promoting more effective distribution of labor among different parts of the aid architecture, and extending efforts to promote more effective use of DAC ODA to include non-DAC ODA and non-ODA funding. Nevertheless, the low attention to education aid is

paradoxical, given the prominence of education issues in national elections debates in poor and rich countries like. It is also interesting to note that while education's share of total ODA has remained at about 10% over the last decade, the share of health increased from 11% in 1999-2000 to 17% in 2006-07. Much attention has rightly been paid over the last decade to helping aid-recipient countries develop their capacity to prepare evidenced-based EFA plans and handle related budgetary trade-offs. The same degree of attention has not been given to increasing the catalytic impact of education aid through Better quality decision-making and follow-up on aid allocation and coordination matters by donor countries and agencies. To do so should be the next phase in implementing the aid effectiveness agenda.

## **5.2 Parent Mobilisation Resource Group**

The Parent Mobilisation Resource Group (PMRG) is an interesting example of parent networking. The World Congress of the International League of Societies for Persons with Mental Handicap, renamed Inclusion International in 1995, was held in New Delhi, India, in November 1994. At this congress the Norwegian Association for Persons with Developmental Disabilities, NFU, took on the task of co-ordinating the Parent Mobilisation Resource Group. A preliminary meeting of this group was held in Spanish Town, Jamaica, in August 1994. The first official PMRG seminar was held in Lesotho in April 1995. Two further seminars were held in 1996: in March in Mauritius; and in September in Zambia, when there was also a representative from Mali. The PMRG had a strong focus on the right of people with learning difficulties to full inclusion, and on an awareness of international documentation. The findings of the PMRG were presented to Inclusion International's World Congress in The Hague, 1998, and then the group ceased to exist. However, in November 2001 a meeting was held in Johannesburg to discuss the setting-up of a southern African network of advocacy organizations. The following extracts are from the seminar reports. They express the value and power of networking.

In one of the seminars, a vibrant organization was compared to the water post where people go to fetch water. The organization is a source of knowledge and information with an atmosphere of sharing and free counseling. It is a point of referral for the mothers, fathers, caretakers and families in search of answers,



guidance, comfort and support in their daily lives. Parent empowerment and mobilisation involves the building of self-confidence by sharing knowledge and information. The aim is to build awareness and influence the capacity of the organization on matters of social and political justice in the community. Advocacy organizations should be judged according to their capacity to share information and empower their members. LSMHP's involvement in the PMRG helped to extend its networking from within Lesotho to other countries in Africa and internationally. This diagram illustrates the type of networking that LSMHP is involved in.

### **5.3 Drivers for Change in Education Priorities and Policies**

In the coming decade, education systems everywhere, but especially in developing countries, will face a number of major, interrelated challenges:

- Some are continuation of “old” challenges in areas where progress remain elusive, such as poor quality and relevance; inequity in education provision; persistence of high levels of dropout; poor teacher support, management and accountability; and weak institutions.
- Others stem from education successes, such as pressure on post-primary education resulting from last decade's impressive growth in primary education, and growing demand for gainful employment caused by the rapid increase in outputs from all levels of education. It is in the nature of education progress that every problem solved tends to generate new challenges.
- Still other challenges reflect major societal changes outside the education system, such as the phenomenal advance in ICT; demographic change; the advance of democracy; the desire for more cohesive and equitable societies; and the need to produce the skills, knowledge and “change agility” needed to compete in the increasingly knowledge-based global economy.

This section highlights a few major challenges that will be key drivers for change in education policies and priorities over the next decade. But, as discussed in Section 2, most countries' ability to address such challenges is severely hampered by one overarching constraint: Slow progress in developing institutions that can (a) prepare and implement more evidenced-based policies; (b) better monitor the

quality of service delivery and exercise accountability; and (c) be more inclusive and innovative. Greater progress on such systemic reforms is likely to be crucial to success in addressing next decade's challenges. In turn, successful implementation of such reforms will require *sustained political commitment* and an ability to handle the *political economy* of complex trade-offs. Finally, as discussed in Section 3, the ability of *external aid* to effectively support countries in the design and implementation of systemic reforms will depend closely on the extent to which systemic weaknesses in the global education aid architecture itself can be addressed.

#### **5.4 Shift in focus from access to quality, equity and retention**

Successive issues of the UNESCO EFA Global Monitoring Report (GMR) have shown both the impressive growth in *access* to primary education over the past decade and the limited progress in improving quality, equity and school retention. This is especially the case for most Sub-Saharan African (SSA) countries: Between 1999 and 2008 primary school enrollment grew by 57% (5.1% annually) and the Gross Enrollment Ratio (GER) increased from 80% to 102%.<sup>3</sup> However, about one-third of those who enter drop out prior to completing the primary cycle, and of those who complete, only about half master the skills and knowledge they were expected to acquire. About 28 million primary school aged children remain out of school in SSA (40% of the world total) of which two-third are expected to never enter school.<sup>4</sup> And those excluded from school are largely from poor families, live in rural areas, and are predominantly female, orphaned or disabled. To improve the quality of learning is likely to be the single most difficult challenge in reaching universal primary completion. Much is known about what needs to be done. However, implementation has been to better appreciate this growth it is worth noting that SSA's GER in primary education grew from about 40% in 1960 to about 80% in 1980, then declined to about 74% in 1992 and only regained its 1980 level in 1999. <sup>4</sup> UNICEF and the UNESCO Institute of Statistics are conducting an important global initiative to document why children do not enroll or drop out from school as well as successful policy responses, see UNICEF (2010). Poor, often because of a combination of weak political leadership, poor institutional capacity, and the difficult political economy of implementing reforms designed to exercise accountability for resource use and

learning outcomes. To address such issues will require a complex set of interventions. While some will require additional investments, others require systemic changes in terms of willingness and ability to set and monitor service standards and to hold actors at the classroom, school and system levels accountable for delivering on these standards.<sup>5</sup> For example, in many SSA countries, resource constraints is not the main factor explaining some major causes of low education quality and relevance such as lack of textbooks; short effective length of the school year; high teacher absenteeism; poor teacher management and support; and curricula which some 50 years after independence often remain poorly adapted to the national cultural, social and economic context. As regards equity, *supply factors* such as lack of or incomplete schools, long walking distance to schools and lack of adapted options for children of nomadic families are still a major cause of exclusion.

However, as supply is improved, the need for actions to stimulate demand increases. Even well-endowed and managed schools cannot ensure attendance and effective learning if children are hungry, need to work long hours at home, or the parents are illiterate. In particular, making education provision more accessible to the poor means reducing direct and opportunity costs to families. SSA's education stagnation in the 1980s was closely associated with increased fees to replace reduced public funding. Conversely, the large enrollment increases in the many countries that abolished fees in recent years show their impact on poor parents' enrollment decisions.<sup>6</sup> Other interventions include school-feeding and health programs; small, multi-grade schools close to home; reduced need for child labor, especially for girls, through labor-saving devices such as drilling wells and providing fuel-efficient stoves; and adult literacy courses. But such interventions will often be more costly, and demand stronger implementation capacity, than those used for children who are currently enrolled who, on average, come from more accessible areas and have a more favorable family background.

#### **5.4.1 Neglected EFA goals**

Successive EFA GMRs have also shown that while great strides have been made towards universal access to primary education, progress towards the other EFA goals has been modest.<sup>7</sup> Because of their impact on the quality of primary education and, more broadly, on the children's future life chances – ranging from

health standards and individual fulfillment to social integration and employment prospects -- it is now urgent to give much higher priority to these other EFA goals. In addition to the importance of improving quality (EFA Goal 6) discussed above, three other EFA goals should be particularly important drivers for aid priorities for the next decade:

For example, Glewwe and Kremer (2006) found that while access can be increased largely by adding more resources, there is little evidence that more resources alone have an impact on learning outcomes. Bruns, Filmer and Patrinos (2011) provide a stock-taking of the evidence of school accountability reforms in developing countries. Fredriksen (2009) reviews the experience in abolishing school fees in selected African countries. The six EFA goals are (abbreviated): (1) Expand early childhood care and education (ECCE) to all; (2) Ensure that by 2015 all children have access to and complete free and compulsory primary education of good quality; (3) Provide all young people and adults with appropriate learning and life-skill programs; (4) Achieve a 50% improvement in levels of adult literacy by 2015, especially for women; (5) Achieve gender parity in primary and secondary education by 2005, and gender equality by 2015; and (6) Improve all aspects of the quality of education.

#### **5.4.2 Children affected by conflict**

Though included under the other EFA goals, this group deserves special attention by the education aid community. UNESCO (2011a) estimates that of the 67 million primary school aged children who are out of school; 28 million are in conflict-affected poor countries. The importance and complexity of providing education to such children is reviewed in the UNESCO report as well as in Nicolai (2009) and Brannelly et al. (2009). Suffice it to emphasize here that this is a sad example of education aid not being used strategically to help where it could really have additionality, be poverty-focused and help equalize life chances of children who otherwise will miss out on this basic human right. For example, less than 2% of emergency assistance is allocated to getting children affected by emergency quickly back to school. More broadly, but especially for these children, education has the potential to act as "a force for peace" by building mutual trust and understanding among different population groups, and by offering hope for the future. But education can also fuel conflict if used to

reinforce social divisions, inequalities and prejudices. To avoid this, deliberate choices must be made with respect to content of programs and equity in provision. Education aid can do a better job in supporting countries in this regard.

#### **5.4.3 The “youth bulge”**

A rapidly growing number of jobless, uneducated and restless young people threaten many countries’ stability and development progress, especially in African and Arab States where the demographic transition remains slow. However, the youth is also these countries most abundant asset if they can reap the “demographic dividend” of the demographic transition -- a large, young workforce with fewer dependents -- in the way enjoyed by East Asian countries. But, as noted in World Bank (2008a) and IDB/IFC (2011) discussing the situation in North Africa and the Middle East, successfully harnessing this opportunity requires a coherent and integrated response from all major stakeholders. While making education more relevant to employment is absolutely a necessary part of this response,<sup>9</sup> *education alone* is not sufficient to turn the “youth bulge” from being a potential danger into an opportunity: If education is not coupled with policies leading to growth and employment generation, the result is likely to just postpone the problem by shifting from a jobless *uneducated* “youth bomb” to an *educated* one. Governments that ignore the urgency and complexity of this challenge do so at their own peril as illustrated by the ongoing uprisings in many Arab States.

#### **5.4.4 Higher priority to teachers.**

Teachers constitute the single-most important input into the education process, be it in terms of determining learning outcomes, success of education reforms or costs. They also often constitute the largest share of a country’s civil servants. And yet, education strategies often pay little attention to factors affecting teacher effectiveness, such as policies for training, deployment, management, incentives, supervision and accountability for learning outcomes. Moreover, in many countries, and especially in SSA, the economic stagnation in the 1980s and 1990s led to drastic decline in salaries, with associated decline in teacher morale. Despite some progress over the last decade, on average (there are variations between countries) the real value of primary school teacher salaries in SSA is just

back to where it was in the mid-1970s (UNESCO-UIS, 2011, p. 52). Despite some progress over the last decade, teachers' working conditions remain poor in most low-income countries, with large class sizes and limited access to professional support, in-service training, and learning materials.

Successive EFA GMRs have shown that teacher recruitment must increase sharply in many countries in order to reach universal primary education (UPE) by 2015. It will be even more difficult to provide the teachers required to rapidly expand the coverage of ECCE and post-primary education. While a survey of youth in nine Arab States found that only a third of those surveyed believe that their education prepare them adequately for the job market, see IDB/IFC (2011 p.10). The study also note that despite a robust rate of annual rate of GDP growth of almost 5% in the Arab states over the decade 2000-2010, the region suffers from the highest youth unemployment in the world, around 25%, exceeding 30% for young women (*op.cit.*, p. 9).

Developing the teacher training capacity needed is a huge challenge, that obstacle is often minor compared to the problem of financing the salaries of the teachers once trained. Therefore, recruitment of more teachers needs to be accompanied by concerted and consultative efforts to use more effectively available teachers. As shown in Bruns et al. (2011), many developing countries are now developing strategies for doing that by introducing a variety of reforms to increase teachers' accountability for education outcomes through interventions such as generating and disseminating information about schooling rights and responsibilities, resources received and outcomes; decentralization of school-level decisions to various types of school-level bodies; and policies that link pay or regular recruitment to performance. But developing sustainable options is complicated by the fact that the ability of ministries of education and teacher unions to interact constructively is often quite poor. In short, from whatever angle the "teacher issue" is approached, it is a major concern for education policy makers, a concern that will grow in importance in the coming decade.

#### **5.4.5 Pressure on post-primary education**

Numerous studies have shown the urgent need for low-income countries to develop sustainable policies for expansion of secondary education, both to

respond to rising social demand resulting from the progress towards UPE and to develop the skills needed by the economy.<sup>10</sup> Secondary education may well be one of the highest-return investments available to many countries. But to maximize these returns, secondary education must provide the language, math, and science skills needed to prepare for productive employment and/or pave the way for further training or university education. Success will require financially sustainable strategies, often starting with an 8-10 year basic education cycle followed by competitive entrance to upper secondary. Furthermore, to successfully join the knowledge-based global economy, countries must revitalize both their technical and vocation education and training (TVET) systems and higher education, especially by prioritizing quality improvement and labor market relevance of programs. There is an extensive literature analyzing issues and options. For the purpose of this paper, suffice it to underline three points. First, to develop TVET systems that can respond effectively to labor force development needs in low income countries – to the cutting-edge skill needs of the modern, knowledge-based economy as well as to the needs of the majority of the labor force engaged in the rural sector and informal economy -- may be the most complex part of any education reform. Existing systems suffer from a multitude of problems: Poor quality and relevance of programs to labor market needs; weak links between the training system and employers; lack of sustainable funding; and perception by parents and students of TVET as “second rate” education. Further, while clear success stories exist,<sup>11</sup> there is no blueprint applicable to everybody.

Old as well as newly industrialized countries have successfully followed quite different approaches. Second, reforming higher education may be *technically* less complex than to reform TVET because what must be done is better understood. But the *political economy* of higher education reform is even more difficult than for TVET. Reforms are also hugely more costly. Higher education in many low-income countries and, especially, in SSA suffers from multiple problems such as low access, dismal quality, poor relevance to national development needs and severe underfunding. Often, shortages of trained labor in scientific and technical fields coexist with severe unemployment among graduates in other fields. Some countries are attempting to reform, but progress is mixed, especially in countries where historically university education has been provided free or at very low cost. While sustainable when catering to small elites, such systems cannot be scaled up.

<sup>10</sup> See Lewin and Caillods (2001), World Bank (2005a), di Gropello (2006), Verspoor (2008), Mingat et al. (2010). <sup>11</sup> Law (2008) explains how the TVET system in Singapore evolved over time to become one of the world's best.

Finally, aid has an important role to play in helping countries develop sustainable policies and programs in these areas, including ensuring that they are fully informed by worldwide experience to avoid costly pitfalls. Currently, the support provided by the education aid community for higher education and, especially, for TVET is piecemeal, reflecting weak global aid coordination and inadequate attention to the technical support needed in these sectors.

#### **5.4.6 Unemployment and skills miss-match**

High levels of unemployment and supply-demand miss-match for certain types of skilled labor are already serious problems in most countries. In most low-income countries, and especially in SSA, these problems could grow much worse over the next decade. On the *supply side*, the total population of working age will continue to grow rapidly, a result of the slow demographic transition. The population with at least some education will grow even more rapid because the share of each age cohort entering school is rising at all levels of education (especially in post-primary where intake is still low especially in SSA), and because dropout must decline. Moreover, the share of women entering the formal labor force is likely to increase. Over the next decade, the combination of these and other factors will produce an unprecedented increase in the supply of unskilled and, especially, skilled labor in most low-income countries. The pressure on the labor market will be particularly high in urban areas resulting from increased rural to urban migration.

On the demand side, the overwhelming majority of the labor force in most low-income countries is still in the agricultural sector and informal economy. In SSA, the modern sector accounts in most countries for not more than 10-15% of the labor force; this share has not changed much over the last couple of decades. Under- and unemployment in the rural and informal sectors are already severe, and the productivity is very low and must improve, resulting in limited capacity for these sectors to generate new gainful employment. Also, efforts by



industrialized countries to constrain immigration may cause less possibility for finding employment abroad.

The strategy needed to successfully address the unemployment problem, especially for young people, goes well beyond the education and training sector. Still, this sector must play a crucial role. To define exactly what that role should be in different country contexts and to enable the sector to play its role well, will be an important challenge for national policy makers. And it will be important for donors to use aid strategically to help countries in this endeavor.

#### **5.4.7 Growing role of knowledge and innovation in development**

Beyond the need to expand the coverage and quality of education and training, the role played by knowledge and innovation in the development process has risen dramatically over the last couple of decades. The rise has been caused by many factors, including a greater understanding of the role knowledge plays in determining economic growth,<sup>13</sup> emergence of the “knowledge economy,” increased globalization, and ICT revolution. Furthermore, the very concept of “knowledge” has been extended beyond technical knowledge to include its successful and innovative application in different national political, economic, and cultural contexts. As a corollary, policies to narrow the “knowledge gap” and promote innovation<sup>14</sup> are an essential part of any successful development strategy.

How should these developments impact aid priorities? The answer is complex, country- and time specific, and goes well beyond deciding on the priorities for education aid. Still, two important aspects deserve to be emphasized. First, given the role of the education sector in creating, adapting, and transmitting knowledge, it is important to review the role of aid in helping poor countries benefit from the knowledge revolution.<sup>15</sup> This includes finding the right balance between using aid to, respectively, enhance the national capacity to develop *new knowledge* and to acquire and adapt existing knowledge often developed abroad. The latter function is especially important in many low-income countries where (a) <sup>13</sup> Warsh (2006) discusses the gradual integration of knowledge in economic growth theory. <sup>14</sup> Fan et al. (2009) discusses the role of innovation in the rapid economic growth of East Asian countries. <sup>15</sup> World Bank (2002) discusses the role of tertiary education in constructing knowledge societies.

Modern private industry is weak and plays a minor role in knowledge creation and diffusion, and (b) the knowledge base is poor and acquiring and adopting new knowledge from abroad is more important than in countries that are economically more advanced. In this context, aid can help develop the capacity of the public sector not only to create knowledge, but also to acquire and adapt knowledge, as well as to improve the skills of the labor force to absorb new knowledge, thereby helping countries “leapfrog” by drawing on other countries’ experiences.<sup>16</sup>

Second, as underlined when discussing the need for a new capacity development strategy (Section 3), the effective role aid may play in supporting well-designed knowledge exchange and peer learning through south-south cooperation is bound to grow, and should be given higher priority in aid allocation.

#### **5.4.8 Unprecedented societal change**

In addition to the many ways education enhances the quality of life and life chances of individuals, research has shown the determining role education plays in spearheading a nation’s economic and social development. However, the research also shows that these causal relationships are complex, including the impact of education on economic growth. Moreover, the drivers for economic growth and societal change -- including for change in the education and training system-- increasingly come from forces outside the education sector. Key examples are the advance in ICT; demographic change; progress towards elected governments which are more accountable to their populations; the desire for more cohesive and equitable societies to consolidate peace and enhance national viability and sustainability;<sup>17</sup> and the need to produce the skills, knowledge and “change agility” required to compete in the increasingly globalization and knowledge-based economy. The role of *good quality* education will remain a *necessary* condition supporting progress in these areas, perhaps even more so in the future than in the past). For example, Hanusehek and Woessmann (2008) found that the quality of education, as measured by student scores on international assessments of literacy and math, is important in explaining differences between countries in economic growth. The importance of quality and relevance is reinforced by the fact that, as societies move towards universal secondary and even higher education, the additionalityof education change to economic and social progress derives less from further expansion in coverage and more from

how well the skills, values and attitudes imparted by the education system respond to the demands from outside the system. Also, rapid economic, societal and demographic change increases the importance of developing viable lifelong education systems.

The challenge in developing education systems that effectively support the above type of society-wide change processes will be most daunting in SSA where education simultaneously faces the challenge of serving the production modes of pre-industrial, industrial and post-industrial societies. For example, TVET systems must help enhance productivity in the rural economy where most people eke out a living as well as prepare young people for “traditional” technical jobs (carpenters, car mechanics, electricians, plumbers) and for jobs in the emerging modern sector that compete in the global, knowledge-based economy. In addition, the region has the highest share of conflict/post-conflict countries, a point discussed below.

#### **5.4.9 The imperative of economic growth to education financing**

Sustained economic growth at a high level is indispensable to maintaining the education momentum in low-income countries. This is especially true for SSA where, despite the good progress made over the last 16 World Bank (1999, pp. 130-143) emphasizes the key role of international agencies in this process and World Bank (2008b) evaluates the World Bank’s effort to use knowledge to improve development effectiveness.

<sup>17</sup> Collier (2009, p. 2) notes that, since the end of the Cold War, two major encouraging changes have occurred in the countries where most of the “bottom billion” people live: Outbreak of peace and spread of elections. decade in many areas (including education and economic growth), the gap between this region and the rest of the world continued to increase on many key social indicators. In fact, while SSA’s progress during the last decade is impressive when compared to its dismal record in the 1980s and 1990s, it is less impressive when compared to the progress of other developing regions. For example, between 2000 and 2007, GDP per capita increased annually by 3.7% in SSA as compared to 4.5% in Latin America, 7.0% in South Asia and 9.6% in East Asia. And despite good progress towards universal *access* to primary education, the gaps in coverage for secondary

and higher education have increased. The increasing gap is particularly striking for basic health indicators. SSA faces multiple education challenges that cannot be solved without sustained economic growth at a level significantly higher even than that achieved over the last decade. The importance of the strong mutual interdependency between economic growth and education development cannot be over-emphasized:

### **5.5 Systemic Weaknesses Constraining Countries' Ability to Respond**

Systemic weaknesses in aid recipient countries as well as in the global aid architecture hamper effective response to the type of challenges highlighted above, thus limiting the effectiveness of both domestic and external education funding. The former (discussed in this section) constrain *countries'* ability to develop and, especially, implement effective policies and make equitable trade-offs in education resource mobilization, allocation and utilization. The latter (discussed in Section 3) constrain the extent to which education aid can be strategically allocated to support countries most effectively in this effort. To address the type of education challenges discussed above will often require major changes in policies, programs and budget trade-offs that are complex, knowledge and capacity-intensive and politically sensitive. Few low-income countries have the institutional capacity required to handle this effectively. As noted in the 2008 EFA Global Monitoring Report, "...extraordinary limited attention (has been) paid to strengthen national capacity" and "... countries need much stronger capacity to deal with the political economy of reforms and with technical constraints on implementation" (UNESCO, 2007, p. 27). Capacity development (CD) has been a key element of education aid since the inception of aid programs. However, progress has been elusive. A new CD strategy is needed by both countries and donors, designed to address a sets of interrelated systemic weaknesses found in most countries. What must be done is largely known: The problem is to translate this knowledge into the needed political commitment and actions in the countries *and* for donors to find more effective ways to support CD.<sup>20</sup> In particular, as noted in the above quotation, an important aspect of "weak capacity" is poor ability to deal with the "political economy of reforms" by building national consensus on essential reforms and mobilizing existing capacity to ensure effective implementation. The

following paragraphs discuss some key areas that deserve special emphasis by countries and development agencies in a new CD strategy.

- **Building institutions for leadership, accountability and innovation**

As noted by Moss et al (2006), "... institutional issues have recently returned to the foreground in debates on economic development. The critical importance of sound public institutions to the development process has become an article of faith, not only among political scientists ... but also has emerged more recently as a consensus among economists" (p.3). This growing consensus also applies to the imperative of strengthening institutions in the education sector. But different from the situation a decade or two ago, the *single-most* important institutional constraint in most countries is no longer severe shortage of *technical expertise* in education planning and management (except for in fragile states) but low capacity to mobilize, utilize and retain existing expertise, to monitor performance and to hold managers and teachers accountable for outcomes. Or, as noted in the new World Bank education strategy (World Bank, 2011a, p.21): "In sum, to strengthen an education system means to align its governance, management, financing and incentive mechanisms to produce learning for all. This means reforming accountability relationships among all participants in the system so that these relationships are clear, coordinated, and consistent with their assigned functions, and that they support national education goals." To strengthen the sector's capacities to perform these functions effectively is a prerequisite for addressing most of the type of challenges highlighted in Section 1.

Success will require *strong political leadership* to be able to manage the often difficult political economy of education reform including handling inter-sectorial links since such reforms often involve wider public sector reforms (e.g., teacher management). Also, the budget trade-offs are becoming more difficult: The growing demand for post-primary education risks squeezing the funding needed to enhance quality and <sup>20</sup> World Bank (2005b) and OECD (2006) review issues and options in building the capacity of public institutions. FTI (2008), de Grauwe (2009) and Nielsen (2009) review capacity-building in the education sector. equity in primary education as well as to address the neglected EFA goals. Those not yet enrolled in primary schools have little political clout; those knocking on the doors to enter post-primary education can bring down governments. As noted in World

Bank (2003, p. 60): "Because institutional reforms change power relationships among actors, they are political reforms. But politics generally does not favor reforms that improve the service of poor people. Such reforms require upsetting entrenched interests, which have the advantage of inertia, history, organizational capability and knowing exactly what is at stake."

- **New areas of capacity development (CD)**

To address emerging challenges, CD must go beyond developing the capacity to collect and use education statistics to e.g., project enrollment and resulting teacher, textbooks, classroom and budget requirements. For example, countries need capacity to monitor resource allocation and use by different schools, geographical areas, and population groups; to assess learning outcomes and hold teachers and administrators accountable for resource use and learning outcomes; and to analyze how well the system responds to labor market demands. To do this does not only require new systems and methods of data collection and use; it also requires development and application of norms, mechanisms, technical capacity and political will to use these data to improve system performance and accountability. Moreover, as noted by Hallak and Poisson (2007, p. 21), "...creating and maintaining transparent regulatory systems, strengthening management capacities for greater accountability and enhancing ownership of the management process can help build a virtuous triangle that is favorable to educational systems free from corruption." Various types of corruption and academic fraud are indeed a very persistent problem in many countries.

- **New audiences**

The challenges of improving management and leadership capacity are also huge at the sub-national level.

At present, district officers and headmasters are not well trained in using data to identify and solve problems; nor are they provided with incentives to do so. They are particularly weak in the area of teacher management, missing significant opportunities for reducing absenteeism and inequity in geographical distribution and ensuring the crucial foundational learning needs in the early grades. To address such issues, many countries are decentralizing decision-making in key

areas to the schools through various types of “school based management” (SBM). As noted in Barrera-Osorio et al. (2009, p. 98): “Most countries whose students’ perform well in international student achievement tests give local authorities and schools substantial autonomy to decide the content of their curriculum and the allocation and management of their resources.” But, as also noted by the authors, “The number of rigorous studies of the impact of SBM is very limited” (*op. cit.*, p. 100). A more inclusive approach also requires less “silo”-thinking by education professionals, and more pragmatism and openness to cooperating with and learning from other sectors. Even more so than in most sectors, education policies need to be developed through broad-based participation, and implementation needs to be closely monitored with continuous feed-back to improve outcomes. This means that capacity-building goes well beyond developing technical skills in education planning departments. A host of players inside and outside the education sector are essential to the performance of the sector and need to be an integral part of the CD effort, with interventions tailor-made to the role they play in the national education enterprise. This includes sensitizing officials in ministries of finance, planning, and labor as well as in teacher unions, parent associations, private institutions and education NGOs to the key challenges in the sector and their role in handling them.

## **5.6 Systemic Weaknesses in the Global Education Aid Architecture**

The allocation of education aid by level of education, purpose, country, etc., is the outcome of complex processes within aid recipient countries as well as within donor countries and agencies, each responding to a variety of constituencies such as the parliament, national and international civil society organizations, and global goals such as EFA and the MDGs. In addition, much bilateral aid is determined by historical ties. Notwithstanding the EFA coordination efforts led by UNESCO, and the work under the Fast Track Initiative (FTI) to mobilize more financial support for EFA, inadequate global attention is paid to monitoring the extent to which aid allocation decisions by individual donors add up to anything like an “optimal” distribution of total education aid by e.g., education level, purpose and country to maximize its impact on national and global education outcomes.<sup>25</sup> There is also no global effort to coordinate funding between “old” and “new”

donors, NGOs, foundations and other private sources. Given the constraints on aid budgets in DAC countries and the growing questioning of aid effectiveness, it is urgent both to make ODA work better *and* to integrate external funding beyond that provided by traditional DAC donors into the discussion.<sup>26</sup>

This paper argues that this inadequate attention to global aid coordination issues is largely the result of a set of systemic weaknesses in the global education aid architecture. These weaknesses combine to limit the effectiveness of education aid in helping countries address the type of issues highlighted in Sections 1 and 2. They also explain part of the poor progress towards the objectives agreed upon in the “Paris Declaration.” For example, there have been no concerted efforts by the education aid architecture to develop an action program to follow up on the actions agreed upon in the 2008 Accra Agenda for Action (AAA) as they relate to education aid.

### **5.7 Education aid commitment, delivery and predictability**

This section highlights issues related to the share of total ODA allocated to education, the distribution of education aid by country and the degree of aid delivery and predictability.

- **Low share of education in total ODA**

The debate on education aid focuses largely on the need to increase the *volume* to bridge estimated “funding gaps” to reach the EFA goals. This advocacy to increase the volume needs to be part of a more global dialogue of how well the present distribution of *total* ODA by sector responds to how effective aid can be in each sector *as a catalyst to promote overall development*. As noted, the sectoral allocation of ODA is the aggregated outcome of complex processes that have resulted in only 10% of total ODA for education. This share has largely remained unchanged over the last decade. Does this low share reflect well the multi-faceted role education plays in the development process, especially at a time where education quality as well as knowledge and innovation play increasingly important roles as determinants economic growth?

There is no easy or “objective” answer to this question. But it does deserve more attention by the international aid community. It also deserves more attention by



governments in aid recipient countries who often prioritize other sectors over education in their discussions with donors.<sup>27</sup> Finally, as noted below, the share of ODA for education must be seen in the context of ODA being a declining share of total financial flows to developing countries and the fact that education benefits less from most other flows than do sectors such as health and infrastructure.

- **Low aid predictability**

This is a central concern in the “Paris Declaration.” A study of aid flows between 1975 and 2003 covering seventy-six countries found that aid was far more volatile than domestic funding and that aid disbursements were only weakly related to commitments (Bulir and Hamann 2006). The gap between aid pledges and delivery is especially detrimental to highly aid-dependent SSA. Recent OECD estimates suggest that the region will receive less than half the pledges made for 2010 at the G8 2005 Gleneagles summit (UNESCO 2011a, p. 102). Also, even when overall aid pledges are met, the delivery may not be timely. For example, in 2007, only 46% of aid (all sectors) scheduled for a given year was disbursed during that year (UNESCO 2011a, p. 111). Further, aid pledged for one purpose, sector or country is sometimes reallocated to other sectors, purposes or countries. Despite efforts to address such issues, progress could remain elusive because of factors such as:

- there may be a lack of realism about what it takes in terms of high-level political leadership in donor countries and implementation capacity in aid agencies to translate aid pledges into delivery. <sup>27</sup> Based on data on education and national accounts for the last 60 years, Patrinos and Psacharopoulos (2011) estimate that a too slow rate of human capital accumulation has led to considerable loss in income and equity. <sup>28</sup> For example, the Netherlands, one of the top donors in terms of both share of ODA in GNI and share of education in ODA aims to reduce the former from 0.8% in 2011 to 0.7% in 2014, and education is no longer a priority sector.

Promises made at pledging conferences may look good diplomatically, but may not survive in national budget debates since aid budgets do not always have powerful domestic constituencies.<sup>29</sup> Sometimes this leads to funding new pledges by reallocating funds already pledged for other purposes in order to respond to

urgent new demands for, for example, humanitarian help arising from natural catastrophes such as the earthquake in Haiti, refugees resulting from the current civil strifes in North Africa and the Middle East, or rising food insecurity.

□ **In addition to complications on the side of donors**, there may be governance and capacity constraints in recipient countries, leading to withdrawal of aid. For examples, in recent years, aid has been cut for many countries in response to deteriorating governance conditions (e.g., Cote d'Ivoire, Guinea, Guinea Bissau, Madagascar, Mauritania, and Niger). While this is understandable, abrupt stop of aid could reinforce existing fragilities. Therefore, care should be taken by donors to coordinate their withdrawals or entry to a country and/or sector to assess the *global* impact of individual donor decisions.

□ **High aid dependency for salaries:** As discussed under point (ix) below, aid volatility poses considerable risks in countries which depend heavily on aid to pay teacher salaries.

□ **Counter-cyclic funding to maintain momentum.** UNESCO (2010a) estimates that the current economic downturn could cause a US\$4.6 billion loss in SSA domestic education budgets annually in 2009 and 2010. This would exceed the total amount of education aid disbursed to SSA in 2008 (US\$ 3.2 billion). In past downturns, education aid has declined as well. If this <sup>29</sup> Little research has been done on why the level of ODA varies so much across donor countries, by sector and in the share disbursed through bilateral and multilateral channels. One cross-national study concludes that public attitudes to aid is key in determining aid policies and that attitudes are influenced by religiosity, beliefs about causes of poverty, awareness of international affairs, and trust in peoples and institutions, see Paxton and Knack (2008).

## 5.8 Effectiveness of the global education aid architecture

This section urges a strengthening of the capacity of the education aid architecture to enable it to provide the type of global coordination and leadership required to ensure that (a) education gets its "fair share" of total external funding, including but not limited to ODA and funding from DAC countries, and (b) these funds are

allocated strategically to promote effective use of *all* domestic and externally-generated resources in the education sector.

(iv) **Declining share of DAC-funded ODA in total external funding**The discussion in Section 3.1 focused on *ODA for education from DAC donors*. It does not reflect the increasing importance of external funding to developing countries from other sources. While much more needs to be done to document how much the *education sector* benefits from such funding, there is no doubt the importance is growing. Particularly important among such other external sources are:

□ Total net flow to developing countries from DAC countries amounted to \$380 billion in 2009 of which only one-third (\$120 billion) was ODA (OECD 2011, p. 6). The main non-ODA flows include various types of “private flows at market terms” totaling \$228 billion, of which \$159 billion was for “direct investments.” Another important element was \$22 billion in net grants from NGOs. Many NGOs clearly supports education. Some private investments may support provision of private education and, as part of their “social responsibility” objective, many private companies supports provision of education. Metzger et al. (2008) compares the aid given by Nestlé (one leading multinational supporting poverty alleviation) with Swiss ODA and the aid from NGOs. The study found that about 9% of Nestlé’s aid was for MDG 2 (universal primary education). One of the main conclusions is that, since foreign direct investment is “...strongly concentrated in a few countries, and absent in large parts of Africa, corporate aid activities tend to widen the gap between haves and have-nots, rather than helping achieve the MDGs where needed most – unless corporate aid is delinked from commercial processes” (p. 20).

□ **Private philanthropists and foundations** provided an estimated \$60 billion in 2008 (Burnett and Bermingham 2010). A part of this is for education.

□ **Remittances from oversea workers** are estimated at \$307 billion in 2009 (Mohapatra et al. 2010). Clearly, a part of the remittances is used to pay for education expenses; indeed, to pay for their children’s education is often one important reason for seeking employment in other countries. However, how much is used for this purpose is unclear.

□ **How different is aid allocation of non-traditional and DAC donors?** More than 30 donor countries have not joined DAC. Manning (2010) notes that most new donors "...see what they do as South-South cooperation for solidarity and mutual benefit, not as North-South 'aid' driven by a sense of obligation, whether of post-colonial guilt or of 'richness oblige'." Their allocation of aid by country, sector and purpose differs in many respects from that of DAC donors. Davis (2010) notes that a lower share of the aid of new donors is through multilaterals (18%) than for DAC donors (30%), more is focused on infrastructure, and most is through projects, is tied and related to trade and investments. Kragelund (2008, p. 580) notes that the presence of non-DAC donors tends to enlarge the group of African countries as well as sectors that receive bilateral aid.

□ **How much is and could education benefit from non-traditional funding?** As suggested for the different sources of external funding listed above, too little systematic information is available on the extent to which the education sector benefits from such funding. Such information could greatly help in promoting more strategic use of education ODA to ensure synergy and complementarity between different types of funding. For example, China support training in many African countries as part of its many investment projects. The increasing interest by DAC donors in supporting skills development in the region needs to be coordinated with that support. Similarly, increasing support for Global Public Goods (GPGs) and technical assistance needs be coordinated with such support provided by donors such as Brazil and China, e.g., for science and technology. Finally, education should emulate the health sector in attracting more funding for GPG functions from private foundations.

□ **What does the rise of "new" donors mean for global aid coordination?** The main conclusion related to the focus of this paper is that this adds to the urgency of enhancing such coordination. Many writers on aid call for more concerted efforts to promote collaboration between DAC and non-DAC donors to avoid the development of parallel systems hampering rather than advancing complementarity and synergies. A particular concern is how the increase in non-traditional donors will affect progress towards the objectives of the "Paris Declaration." Steiner-Khamsi (2010, p. 27) notes that many new donors "...are

held less accountable by their members or electorate ... to rules and regulations established by an international community.

- **Declining technical capacity of aid agencies**

The AAA calls for donors to "...strengthen their own capacity and skills to be more responsive to developing countries' needs" (paragraph 14). It also calls for support for south-south cooperation as well as for enhancing the capacity of "...all development actors – parliaments, central and local governments, CSOs, research institutes, media and the private sector" (paragraph 13).

At its inception, ODA focused on technical rather financial aid. This changed as bilateral and multilateral agencies were established to provide both types of aid. The volume of financial aid for education has increased considerably since 2000, though it has stagnated in recent years. However, the capacity of agencies to provide high-quality and well-coordinated technical support and other global public good functions<sup>35</sup> in the education sector appears to be declining. This happens at a time when poor countries need more, not less, assistance to help build their capacity to develop and implement evidenced-based policies and programs. The reasons for this decline in technical expertise include:

- More use of budget support and/or multi-sectoral operations. This shift has been motivated by a desire to channel aid through national budgets to strengthen ownership and national systems, and to better address inter-sectoral issues. It has also in many cases been part of a strategy to reduce staff costs in aid agencies. The result has been a shift towards generalists and macro economists managing many operations supporting education, and a <sup>35</sup> The terms "technical aid" and "technical support" are used in this paper to denote aid in support of capacity building activities such as analytical work, policy advice, knowledge-exchange, peer learning through "southsouth"/" south-south-north" cooperation, and work to develop national consensus on policies and strategies. As argued below, to provide such support as well as to help poor countries acquire, synthesize and adapt knowledge to local conditions are considered in this paper to be one important global public good function. corresponding decline in education specialists in many donor agencies. Thus, the reduced costs and gains in macro and inter-sectoral focus risk being at the cost of the quality of *education* aid if

agencies are not able to accompany funding with high-quality technical support. Most low-income countries, and especially fragile states,<sup>36</sup> need coordinated support in both areas *regardless of the funding instrument used*. Another factor is that increased use of *general* budget support has reduced funding for technical support under aid programs. In a context of severe budget constraints and many urgent demands, it has proven more difficult for education ministries to obtain financing for analytical work, knowledge sharing and technical support *through the national budget processes* than when such support was externally financed through projects.

□ **Market failure in the “technical assistance market.”** This market comprises a large number of suppliers ranging from individual consultants to private companies and universities, all mostly from donor countries. The market is very fragmented and often neither the providers nor the users are well informed about where to find the best expertise to address the problem at hand. Quality assurance is sometimes poor, and funding is often tied to use of expertise in the donor country. The market is further fragmented by the (otherwise welcome) increased provision of technical assistance from many new donors. The ability of funding agencies to provide effective advice and technical support is constrained by the decline in their own technical expertise. And, as discussed below, this is reinforced by the weak capacity of global public good agencies in the education sector.

- **Inadequate supply of “Global Public Goods” (GPGs) in education**

A pure GPG is one whose benefits are non-rival and non-excludable. The former means that one country benefitting from this good does not prevent another from doing so. Non-excludability means that no country can be excluded from benefitting. Most GPG are not pure, but they have important elements of non-rivalry and non-excludability. Or, said differently, “...public goods are goods in the public domain: available for all to consume and so potentially affecting all people. Global public goods are public goods with benefits – or costs, in the case of such “bads” as crime and violence – that extend across countries and regions...” (Kaul et al. 2003, p.3). Many studies have emphasized the growing importance of GPGs as the world becomes increasingly globalized as well as the

challenges in both providing and financing such goods.<sup>37</sup> The very definition of GPGs has evolved as globalization has led to new challenges that have made it increasingly necessary for countries to look beyond their borders to achieve national development objectives through greater international cooperation in a variety of areas.

The benefits from cooperation in producing GPGs are easily understood in areas such as preventing infectious diseases, promoting safe civil aviation or controlling pollution. It is also well recognized that education and knowledge has an important GPG element. The same is however the case for the *type of aid* that is most effective in promoting education development in poor countries, which is the main subject of this paper. The key proposition is that the provision of GPG type of aid, i.e., funding of analytical work, technical cooperation, knowledge exchange, peer learning through south-south cooperation, etc., will become an *increasingly important element of education aid*. In particular, the growing interconnectedness, made possible by the ICT and internet revolutions, has greatly increased the scope for drawing *crossborder externalities* from *national* experiences and technical expertise. But to turn this into GPGs requires competent international and regional agencies and networks that can identify, synthesize, and disseminate this type of experience and provide technical support to help adapt or pilot under local conditions policies and programs that have been successful in other countries.

- **Harnessing the comparative advantage of different agencies**

The “Paris Declaration” calls for development agencies to “...make full use of their comparative advantage at the sector or country level.” However, despite efforts to enhance inter-agency cooperation, progress is elusive. In practice, there are many obstacles to harnessing the synergy of the comparative strength of different agencies and to overcoming duplication and limiting transaction costs especially for recipient countries.<sup>45</sup> These challenges exist at many levels: between donor countries, between donor and recipient countries, between donor agencies and between DAC and non-DAC donors. For example:

□ Between donor countries: Notwithstanding the “Paris Declaration” call for partnerships and aid harmonization, legitimate differences may exist between

donor countries with respect to aid priorities and delivery mechanisms. For example, there are differences with respect to the *level of accountability demanded by their parliaments* as regards how aid is used and with respect to policies regarding the share of ODA channeled through *multi-lateral programs*<sup>43</sup>. The same is the case for the extent to which *bilateral aid is tied* to procurement from the donor country, and the use of separate project funding to gain visibility for their <sup>43</sup> Kaul and Le Goulven (2003, p. 340) estimate that, in around 2000, about \$32 billion or one-third of total ODA was spent on GPGs, including \$8 billion to fund core functions of international agencies. While difficult to compare these types of figures, this could suggest a much higher share of GPG in *total ODA* than in *education ODA*. <sup>44</sup> “We believe in global solutions to global problems. This is why as the aid programme grows; we are committed to putting a higher proportion of our new resources into multilateral spending. ...Our international institutions are only partially ready for this...So the UK will insist that more resources are matched by reforms to make our international institutions more accountable, responsive and representatives of their constituencies. A profound change is needed in the way our international institutions operate – not just their governance structure, but also what they do and how we, the member states and shareholders, engage with them” (DfID 2009, p. 104). For example, World Bank (2003, pp. 206-207) notes that, in 2000, the typical ODA recipient country received aid (all sectors) from about 15 bilateral and 10 multilateral donors. And the “Tanzanian government officials have to prepare about 2,000 reports of different kinds to donors and received more than 1,000 donor delegations each year”. <sup>46</sup> Jeffrey Sacks has argued that: “The traditional system of bilateral development assistance is broken”, and that, to more effectively fund the MDGs, “...we must replace the fragmentation of bilateral aid programmes with a new strategy based on multi-donor pooled funding that has clear timelines, objectives, and accountabilities”. .. “Bilateral aid would remain, but mainly to promote demonstration efforts and innovations. The core assistance would use pooled mechanisms to scale up what has proven to work, avoiding fragmentation and poor accountability, *Financial Times*, September 21, 2010. Currently, about 80% of total education ODA is bilateral.

□ Donors and recipient countries: The need for strong country ownership is one key conclusion that has emerged from the aid effectiveness debate. To this end,



the “Paris Declaration” calls for donors to align aid with national strategies, institutions, and procedures. However, many of the factors highlighted above give incentives to donors to control their aid interventions. Also, in practice, legitimate differences may arise between donors and recipient countries on where aid may have the highest impact, or on trade-offs between different objectives. For example, as noted, it may be more difficult politically for governments in aid recipient countries to resist social demand for post-basic education than demands of marginalized out-of-school groups who have less political voice, but whose needs may be the top priority for many donors. Differences may especially arise in the case of aid recipient countries where there is low government accountability to the population for how aid is used, while parliaments in donor countries set priorities and demand accountability for the use of their aid.<sup>47</sup> In short, for countries that are highly aid dependent and at a time when donors are growing increasingly wary of how their taxpayers’ money are used, the meaning of slogans such as “putting the recipient country in the driver’s seat” in determining aid priorities and use is not obvious.

□ Donor agencies: Despite efforts to promote partnerships and greater division of labor between different agencies, progress is uneven. A UNESCO document discussing progress in agreeing on the respective roles and responsibilities of EFA partner agencies notes that: “Sustained achievements in this area, however, have been limited due in part to a lack of strong leadership to do more and also due to the nature of collaboration in which elements of competition and friction among partners can be potentially embedded” (UNESCO 2010b, p.12).

## **5.9 Strategic use of education aid in aid recipient countries**

This section highlights ways of using aid more strategically to enhance the impact of aid on the effectiveness of total education spending, and/or mitigate potential harmful risks of high aid dependency on both spending and domestic resource mobilization. <sup>47</sup> E.g., a January 2011 study by the Norwegian Government Auditor calls for better monitoring by the Ministry of Foreign Affairs of bilateral and multilateral aid to ensure that the aid meets the objectives set by the Parliament. <sup>48</sup> This section draws heavily on Fredriksen (2010a).

- **Using aid where it has comparative advantage**

As already noted, little attention has been paid to whether the allocation of aid by education sub-sector, purposes or type is such that it maximizes the aid's catalytic impact on *total education spending*. By far the largest share of education spending in most countries is funded by domestic resources. Therefore, what can be gained from more efficient delivery and use of *aid alone* is limited if the aid is not deployed strategically to maximize its impact on overall resource use in the sector.

One reason for this neglect is the often-made assumption that, because money is fungible, no special attention needs be paid to where the aid is used. This argument is often made in favor of using *general* budget support rather than more targeted aid instruments. As already noted, budget support has advantages, such as strengthening national systems and ownership. And, in principle, donors' priorities for supporting a particular sector or purpose through aid provided as budget support can be handled through performance indicators designed to increase budget allocations for this sector or purpose. However, in practice, this is not always easy to achieve. The assumption that aid and domestic funding are, or should be, fully fungible is also reflected in statements implying that it is a problem that "The input mix in aid-financed public spending often differs from that of recipient spending" (World Bank 2003, p. 207). If aid, as argued below, has comparative advantages over domestic spending in certain areas, then it follows that the "input mix" funded by aid often *should be different from that of domestic funding*.

- **Mitigate harmful effects of high aid dependency-----**

One important aspect of poor global monitoring of aid allocation is lack of attention to potential harmful long-term effects of lengthy, high level of aid dependency. The aid literature discussing such effects generally focuses on the macroeconomic impacts of high levels of total ODA, such as rising real exchange rates undermining the competitiveness of exports, distorted national administrative and budget processes, and slowdown in efforts to create sustainable systems for domestic resource mobilization.<sup>51</sup> There is little in this debate referring specifically to the impact on the *education sector* of a high aid dependency in that sector.

Concerns about harmful aid dependency are particularly relevant for SSA where both the *level of aid dependency* and the *length of high dependency* are unprecedented. As regards the *level*, in 2008, aid exceeded 10% of GDP in 21 SSA countries and 20% in seven of these countries.<sup>52</sup> Outside SSA, aid exceeded 10% of GDP in only *one* country (Afghanistan), and exceeded 5% in only five other (Cambodia, Georgia, Lao, Nepal, and Timor-Leste). Even more striking is the fact that, in 2007, aid exceeded domestic-funded (total) public budgets in 13 of the 38 SSA countries for which data were available, and the median share of aid in total public budgets (including aid) was close to 40%.<sup>53</sup> World Bank (2003) found that donors "...supply more than 40 percent of public resources in at least 30 poor countries" (p, 203). As regards *length of dependency*, Moss et al. (2006, p. 3) notes that: "Globally, there is a core set of roughly three dozen countries that have received a tenth of GNI or more in aid for at least the last two decades. This is a lengthy time period for receiving sizeable aid with few historical precedents." As regards *aid for education*, paucity of data makes it difficult to assess the share of public education budgets that is funded by aid.<sup>54</sup> Estimates made by the author suggest that, in 2006, aid comprised about <sup>51</sup> For a summary of the literature, see Moss et al. (2006).

□ To fund regular teacher salaries is politically more risky than to fund investments because to stop or delay investments poses fewer risks than to not pay teachers.

□ When funding salaries, it is likely less risky to fund adult literacy and "second chance education" programs than regular teachers because such programs are often conducted by contract teachers rather than by civil service teachers. It is also more sustainable in the long term because the need for such programs will gradually decline as literacy rates increase while the need to fund primary school teachers is permanent.

□ More generally, high volatility is another reason for using aid for investments that have strong catalytic impact on the effectiveness of total education resource use in the sector. Finally, as discussed below, one of the most harmful risks of high aid dependency in the education sector is the potential impact on the ability of a country to develop the revenue mobilization system needed for sustainable funding especially of primary school teachers.

- **Mitigate harmful impacts of high aid dependency on domestic resource mobilization**

This concern is highly relevant for the education sector, given the high share of aid in education budgets. Examples of potential negative impacts of high dependency include:

□ **Reduced long-term financial sustainability:** Aid may substitute for – rather than add to – domestic funding. To the degree that this happens, the aid does not boost the resources available for education proportionally to the level of aid, thus risking developing dependency without sustainably increasing the resource base. For example, Moyo (2009) argues that high levels of aid to Africa over several decades have negatively impacted the countries’ capacities to mobilize sustainable domestic funding for development.<sup>57</sup>

□ **Increased uncertainty:** In highly aid dependent countries, low aid predictability may interrupt education delivery, complicate long-term policy-making and planning, and create political risks.

□ **Hamper institutional development:** High aid dependency may weaken or slow down development of national institutions, including the capacity to mobilize domestic resources. Moss et al. (2006) reviews a number of reasons why this may be so, and why this danger has long been a concern among economists. For example, the possibility of mobilizing aid to cover budget deficits may: (i) Causes a “soft budget constraint” which may result in postponement of inevitable budget trade-offs and structural changes. As a result, a high level of aid risks hampering the development of the institutional capacity needed to sustainably generate the domestic revenues that will allow a country to grow out of aid dependency; (ii) Switch political accountability and legitimacy from citizens to donors and lessening Governments’ ownership of the development agenda. This would undercut the main principles of the “Paris Declaration”, i.e., fostering ownership, accountability, and participation; and (iii) Turn bureaucrats’ attention to donors rather than to core development functions. This is a widespread concern. The complaints range from the time senior officials spend on fulfilling the various reporting requirements of aid agencies to the incentives created by aid for rent-

seeking behavior, spanning from minor distractions, such as attending workshops to get per diem, to outright corruption.

### **5.10 A Three-Step Strategy to Enhance the Effectiveness of Education Aid**

This section proposes a three-step strategy to strengthen the technical, institutional and “political” capacity required at both the national and global levels to address the systemic weaknesses discussed in Sections 2 and 3. In turn, this should enable developing countries and their development partners to use education aid more strategically to address the type of education challenges discussed in Section 1. As already noted, current aid allocation by sector, purpose and country is the outcome of complex processes that can only be changed gradually over time. Furthermore, to be successful, such a change process would need to be evidence-based and would require strong leadership within the global education aid community. Therefore, **this paper proposes that some *new external funding* be raised to support actions that can help speed up this change process.** The new funding could be mobilized in a number of ways:

**Step 1: Strengthening the *global leadership capacity*** of the education aid community by building high-level political consensus on a “reform agenda” to enhance the effectiveness of education aid.

**Step 2: Enhancing the *capacity of the global education aid architecture*** to translate the reform agenda into agreed actions by reforming, harnessing synergies and scaling up the capacity of promising existing agencies and networks, with special attention to those producing *regional and global public good functions* in the education sector.

**Step 3: Providing *target funding to priority areas*** at the country level that need urgent attention to enhance the effectiveness of both domestic and external education funding and lay the foundation for more sustainable domestic resource mobilization for education. These three steps are discussed briefly below. Two points should be noted upfront. First, the steps are sequenced in the sense that most of the analytical work and policy dialogue proposed under Step 1 would form the basis for deciding on the actions under the following two steps. Second,

and important: To initiate this three-step process would require an initial set of actions by the international education aid community including (i) deciding to launch this process; (ii) determining the institutional arrangements for conducting and managing the process; and (iii) establishing the mechanism needed to mobilize and manage the funds needed to support the process, starting with the funding of Step 1.

### **5.11 Summary**

This paper calls for the international aid community to launch a proactive process to promote more *evidenced-based allocation and use of education aid* to enhance its catalytic impact on national and global education outcomes. Notwithstanding the considerable EFA coordination efforts led by UNESCO, and the work under the Fast Track Initiative to mobilize more financial support for EFA, *inadequate global attention* is paid to monitoring the extent to which aid allocation decisions by individual donors add up to anything like an “optimal” distribution of total education aid by e.g., education level, purpose and country to maximize its impact. Also, much more needs to be done to extend the coordination process to include education aid provided by “new” donors, NGOs, foundations and other private sources. Aid budgets in DAC countries are growing tighter, there is growing disillusionment about aid effectiveness, and various types of non-ODA funding are growing rapidly. Furthermore, there is a growing gap between, respectively, the need for the type of high-quality global public goods needed to address the coming decade’s education challenges and the technical and financial ability of regional and global public good agencies and networks to provide them. These are some of several trends that reinforce the need to strengthen the capacity of the global education aid architecture to ensure that the allocation and use of aid evolve to reflect the evolving comparative advantage of aid in helping countries address these challenges.

Since the 2000 Dakar Education Forum, there has been much focus on the need for low-income countries to develop better quality sector plans, more evidenced-based decision-making processes, and stronger implementation capacity. Much progress has been made. However, the same degree of attention has not been paid to the potential for increasing the catalytic impact of education aid through better quality decision-making and follow-up on aid allocation and coordination matters

by donor countries and agencies. To do so should be the next phase in the ongoing struggle to enhance the effectiveness of education aid.

## 5.12 References

- AAA - Accra Agenda for Action (2008). "Statement Issued by the Third High Level Forum on Aid Effectiveness." Accra, Ghana, September 4, 2008.
- Abdullah, Azian, Devadason Robert Peter, Ng Khar Thoe and Wahyudi (2010). "Building Networks for Knowledge-Exchange and Peer Learning in Science and Mathematics Education within SEAMEO Member Countries and Beyond: The Role of SEAMEO RECSAM." *Journal of International Cooperation in Education*, Volume 13, Number 2, October 2010.
- Adams, Arvil V. (2007): "The Role of Youth Skills Development in the Transition to Work: A Global Review", HDNCY No. 5, The World Bank, Washington, DC.
- Agrawal, Subhash (2010). "Emerging Aid Donors: India." *NORRAG News*, Number 44, September 2010.
- Alderman, Harold (ed.) (2011): *No Small Matter: The Impact of Poverty, Shocks, and Human Capital Investments in Early Childhood Development*. World Bank, Washington, DC.
- Aldasoro, Inaki, Peter Nunnenkamp and Rainer Thiele (2009). "Less Aid Proliferation and More Donor Coordination? The Wide Gap between Words and Deeds", Kiel Institute for the World Economy, Working Papers No. 1516, Kiel, Germany.
- Amoako, K.Y. (2008). "Meeting Global Challenges: International Cooperation in the National Interest", in Kasekende, L. and M. Kisubi (eds.): *Eminent Speakers Series: Sharing Visions of Africa's Development*. Volume 1. African Development Institute, Tunis.
- Barrera-Osorio, Filipe, Tazeen Fasih, Harry Anthony Patrinos with Lucrecia Santibanez (2009).

*Decentralized Decision-Making in Schools. The Theory and Evidence on School-Based Management*, World Bank, Washington, DC.

Berg, Elliot (2000). "Aid and Failed Reform: The Case of Public Sector Management." In Finn Tarp (ed.), *Foreign Aid and Development: Lessons Learned and Directions for the Future*. Routledge, London. Birdsall, Nancy and Arvind Subramanian (2007). "From World Bank to World Development Cooperative." Center for Global Development, Washington, DC.

Brannelly, Laura, Susy Ndaruhutse, and Carol Rigaud (2009). *Donors' Engagement: Supporting education in fragile and conflict-affected states*. UNESCO/IIEP, Paris.

Bruns, Barbara, Deon Filmer and Harry Patrinos (2011): *Making Schools Work: New Evidence on Accountability Reforms*. World Bank, Washington DC.

Bulir, A. and Hamann, A. (2006). "Volatility of Development Aid: From the Frying Pan into the Fire?" *International Monetary Fund Working Paper*, Washington, DC.

Burnett, Nicholas (2010). "How to Develop the UNESCO the World Needs: The Challenges of Reform." *Journal of International Cooperation in Education*, Volume 13, Number 2, October 2010.

Burnett, Nicholas and Desmond Bermingham (2010). "Innovative Financing for education", *ESP Working Papers Series*, 2010 No 5. Results for Development Institute and Open Society Institute.

Cabral, Linda and Julia Weinstock (2010). "Brazil's Emerging Aid Programme: Time to Move Beyond the *Jaboticaba Complex*." *NORRAG News*, Number 44, September 2010.

Collier, Paul (2007). *The Bottom Billion. Why the Poorest Countries Are Failing and What Can Be Done About It*. Oxford University Press, New York. Collier, Paul (2009). *Wars, Guns and Votes. Democracy in Dangerous Places*. Harpers Collins Publishers, New York.



Davis, Penny (2010). "Roles and Activities of the 'New Development Partners'." *NORRAG News*, Number 44, September 2010.

de Grauwe, Anton (2009). *Without Capacity, there is no Development*. UNESCO/IIEP, Paris.

de Tray, Dennis (2011). "Capacity Strapping. How the international community contributes to capacity problems in fragile states, and what to do about it." Results for Development Institute, Washington, DC. Deutscher, Eckhard (2010). "DAC Approach to the New Donors." *NORRAG News*, Number 44,

September 2010.

Department for International Development (2009): "Eliminating World Poverty. Building our Common Future." White Paper, DfID, London.

Department for International Development (2011): "Multilateral Aid Review. Taking Forwards the Findings of the UK Multilateral Aid Review." DfID, London.

di Gropello, Emanuela (ed.) (2006). *Meeting the Challenges of Secondary Education in Latin America and East Asia: Improving Efficiency and Resource Mobilization*. World Bank, Washington, DC.

Dreher Axel, Peter Nunnenkamp and Rainer Thiele (2010). "Are 'New' Donors Different? Comparing the Allocation of Bilateral Aid between Non-DAC and DAC Donor Countries." Kiel Institute for the World Economy, Working Papers No. 1601, Kiel, Germany.

Easterly, William (2009). "How the Millennium Development Goals are Unfair to Africa", *World Development*, Vol. 37, No. 1, pp. 26-35.

Fan, Qimiao, Kouqing Li, Douglas Zhihua Zeng, Yang Dong and Runzhong Peng (eds.) (2009): *Innovation for Development and the Role of Government: A Perspective from the East Asia and Pacific Region*. World Bank, Washington, DC.

- Fredriksen, Birger, and Jee Peng Tan (eds.) (2008). *An African Exploration of East Asian Education Experience*. World Bank, Washington, DC.
- Fredriksen, Birger (2009). "Rationale, Issues, and Conditions for Sustaining the Abolition of School Fees." *Abolition of School Fees in Africa: Lessons from Ethiopia, Ghana, Kenya, Malawi, and Mozambique*. World Bank/UNICEF, Washington, DC.
- Fredriksen, Birger (2010a). "Enhancing the Allocative Efficiency of Education Aid: A Review of Issues and Options." *Journal of International Cooperation in Education*, Volume 13, Number 2, October 2010.
- Fredriksen, Birger (2010b). "Aid Dependency Risks in the Education Sector: A Review of Issues." *Journal of Educational Planning and Administration*, Volume XXIV, Number 3, July 2010.
- Fast Track Initiative (2008). "Guidelines for Capacity Development in the Education Sector." Washington, DC.
- Garcia, Marito, Alan Pence and Judith L. Evens (eds.) (2008). *Africa's Future, Africa's Challenge: Early Childhood Care and Development in Sub-Saharan Africa*. World Bank, Washington, DC.
- Garcia, Marito and Alan Pence (2010). "Early Childhood Development (ECD): Results from Experience in Africa." *Journal of International Cooperation in Education*, Volume 13, Number 2, October 2010.
- Gillies, John (2010): "The Power of Persistence. Education System Reform and Aid Effectiveness: Case Studies in Long-term Education Reform." USAID, Washington, DC.
- Glewwe, Paul and Michael Kremer (2006). "Schools, Teachers, and Education Outcomes in Developing Countries", in *Handbook of the Economics of Education*. Eric A. Hanushek and Finis Welch (eds.), vol. 2, 945- 1017. New Holland-Elsevier, Amsterdam.

Government of Japan (2010). *Japan's Education Cooperation Policy 2011 – 2015*. Ministry of Foreign Affairs of Japan, International Cooperation Bureau, Tokyo.

Hallak, Jacques and Muriel Poisson (2007). *Corrupt schools, corrupt universities: What can be done?* UNESCO/IIEP, Paris.

Hanushek, Eric A., and Ludger Woessmann (2008). "The Role of Education Quality in Economic Growth", *Policy Research Working Paper 4122*. World Bank, Washington, DC.

Harmer, Adele and Ellen Martins (2010). "Diversity in Humanitarian Donorship: The Role of Non-DAC Donors", *NORRAG News*, Number 44, September 2010.

Islamic Development Bank/International Finance Cooperation (2011): *Education for Employment: Realizing Arab Youth Potential*. IDB/IFC, Jeddah, Washington, DC.

Kanbur, Ravi (2001). "Cross-Border Externalities, International Public Goods and Their Implications for

Aid Agencies", Working Paper 2002-03, Department of Applied Economics and Management, Cornell University, Ithaca, New York.

Kanbur, Ravi and Andy Sumner (2011): "Poor Countries or Poor people? Development Assistance and the New Geography of Global Poverty." Cornell University, Ithaca, New York.

Kaul, Inge, Pedro Conceicao, Katell Le Goulven and Ronald U. Mendoza (eds.) (2003): *Providing Global Public Goods: Managing Globalization*. UNDP, New York.

Kaul, Inge and Katell Le Goulven (2003). "Financing Global Public Goods: A New Frontier of Public Finance", in Kaul et al. (eds.): *Providing Global Public Goods: Managing Globalization*. UNDP, New York.

King, Kenneth (2010). "China's Cooperation with Africa and Especially South Africa, in Education and Training. A Special Relationship and a Different

Approach to Aid?" *Journal of International Cooperation in Education*, Volume 13, Number 2, October 2010.

Kragelund, Peter (2008). "The Return of Non-DAC Donors to Africa: New Prospects for African

Development?" in *Development Policy Review*, 26 (5): 555-584.

Law Song Seng (2008). "Vocational Technical Education and Economic Development: The Singapore Experience", in Lee Sing Kong, Goh Chor Boon, Birger Fredriksen and Jee-Peng Tan (eds.) *Towards a Better Future. Education and Training for Economic Development in Singapore since 1965*. World Bank, Washington, DC.











