Education

Estimates for the number of children (0–14 years) living with disabilities range between 93 million (1, 2) and 150 million (3). Many children and adults with disabilities have historically been excluded from mainstream education opportunities. In most countries early efforts at providing education or training were generally through separate special schools, usually targeting specific impairments, such as schools for the blind. These institutions reached only a small proportion of those in need and were not cost-effective: usually in urban areas, they tended to isolate individuals from their families and communities (4). The situation began to change only when legislation started to require including children with disabilities in educational systems (5).

Ensuring that children with disabilities receive good quality education in an inclusive environment should be a priority of all countries. The United Nations *Convention on the Rights of Persons with Disabilities* (CRPD) recognizes the right of all children with disabilities both to be included in the general education systems and to receive the individual support they require (see **Box 7.1**). Systemic change to remove barriers and provide reasonable accommodation and support services is required to ensure that children with disabilities are not excluded from mainstream educational opportunities.

The inclusion of children and adults with disabilities in education is important for four main reasons.

- Education contributes to human capital formation and is thus a key determinant of personal well-being and welfare.
- Excluding children with disabilities from educational and employment opportunities has high social and economic costs. For example, adults with disabilities tend to be poorer than those without disabilities, but education weakens this association (8).
- Countries cannot achieve Education for All or the Millennium Development Goal of universal completion of primary education without ensuring access to education for children with disabilities (9).
- Countries that are signatories to the CRPD cannot fulfil their responsibilities under Article 24 (see Box 7.1).

For children with disabilities, as for all children, education is vital in itself but also instrumental for participating in employment and other areas of social activity. In some cultures, attending school is part of becoming a complete person. Social relations can change the status of people with

Box 7.1. The rights and frameworks

The human right of all people to education was first defined in the United Nations' Universal Declaration of Human Rights of 1948 and further elaborated in a range of international conventions, including the Convention on the Rights of the Child and more recently in the CRPD.

In 1994 the World Conference on Special Needs Education in Salamanca, Spain produced a statement and framework for action The Salamanca Declaration encouraged governments to design education systems that respond to diverse needs so that all students can have access to regular schools that accommodate them in child-centred pedagogy (5).

The Education for All Movement is a global movement to provide quality basic education for all children, youth and adults (6). Governments around the world have made a commitment to achieve, by 2015, the six EFA goals: expand early childhood care and education; provide free and compulsory education for all; promote learning and life skills for young people and adults; increase adult literacy by 50%; achieve gender parity by 2005, gender equality by 2015; and improve the quality of education (6).

In Article 24 the CRPD stresses the need for governments to ensure equal access to an "inclusive education system at all levels" and provide reasonable accommodation and individual support services to persons with disabilities to facilitate their education (7).

The Millennium Development Goal of universal primary completion stresses attracting children to school and ensuring their ability to thrive in a learning environment that allows every child to develop to the best of their abilities.

disabilities in society and affirm their rights (10). For children who are not disabled, contact with children with a disability in an inclusive setting can, over the longer term, increase familiarity and reduce prejudice. Inclusive education is thus central in promoting inclusive and equitable societies.

The focus of this chapter is on the inclusion of learners with disabilities in the context of quality Education for All – a global movement that aims to meet the learning needs of all children, youth, and adults by 2015 and on the systemic and institutional transformation needed to facilitate inclusive education.

Educational participation and children with disability

In general, children with disabilities are less likely to start school and have lower rates of staying and being promoted in school (8, 11). The correlations for both children and adults between low educational outcomes and having a disability is often stronger than the correlations between low educational outcome and

other characteristics – such as gender, rural residence, and low economic status (8).

Respondents with disability in the World Health Survey experience significantly lower rates of primary school completion and fewer mean years of education than respondents without disability (see Table 7.1). For all 51 countries in the analysis, 50.6% of males with disability have completed primary school, compared with 61.3% of males without disability. Females with disability report 41.7% primary school completion compared with 52.9% of females without disability. Mean years of education are similarly lower for persons with disability compared with persons without disability (males: 5.96 versus 7.03 years respectively; females: 4.98 versus 6.26 years respectively). In addition, education completion gaps are found across all age groups and are statistically significant for both sub-samples of low-income and high-income countries.

Turning to country-specific examples, evidence shows young people with disabilities are less likely to be in school than their peers without disabilities (8). This pattern is more pronounced in poorer countries (9). The gap in primary school attendance rates between disabled and non-disabled children ranges from

Table 7.1. Education outcomes for disabled and not disabled respondents

Individuals	Low-income countries		High-income countries		All countries	
	Not disabled	Disabled	Not disabled	Disabled	Not disabled	Disabled
Male						
Primary school completion	55.6%	45.6%*	72.3%	61.7%*	61.3%	50.6%*
Mean years of education	6.43	5.63*	8.04	6.60*	7.03	5.96*
Female						
Primary school completion	42.0%	32.9%*	72.0%	59.3%*	52.9%	41.7%*
Mean years of education	5.14	4.17*	7.82	6.39*	6.26	4.98*
18-49						
Primary school completion	60.3%	47.8%*	83.1%	69.0%*	67.4%	53.2%*
Mean years of education	7.05	5.67*	9.37	7.59*	7.86	6.23*
50-59						
Primary school completion	44.3%	30.8%*	68.1%	52.0%*	52.7%	37.6%*
Mean years of education	5.53	4.22*	7.79	5.96*	6.46	4.91*
60 and over						
Primary school completion	30.7%	21.2%*	53.6%	46.5%*	40.6%	32.3%*
Mean years of education	3.76	3.21	5.36	4.60*	4.58	3.89*

Note: Estimates are weighted using WHS post-stratified weights, when available (probability weights otherwise) and age-standardized.

10% in India to 60% in Indonesia, and for secondary education, from 15% in Cambodia to 58% in Indonesia (see Fig. 7.1). Household data in Malawi, Namibia, Zambia, and Zimbabwe show that between 9% and 18% of children of age 5 years or older without a disability had never attended school, but between 24% and 39% of children with a disability had never attended (13–16).

Enrolment rates also differ according to impairment type, with children with physical impairment generally faring better than those with intellectual or sensory impairments. For example in Burkina Faso in 2006 only 10% of deaf 7- to 12-year olds were in school, whereas 40% of children with physical impairment attended, only slightly lower than the attendance rate of non-disabled children (*17*). In Rwanda only 300 of an estimated 10 000 deaf children in the country were enrolled in

primary and secondary schools, with another 9 in a private secondary school (18).

In India a survey estimated the share of disabled children not enrolled in school at more than five times the national rate, even in the more prosperous states. In Karnataka, the best performing major state, almost one quarter of children with disabilities were out of school, and in poorer such states as Madhya Pradesh and Assam, more than half (11). While the best-performing districts in India had high enrolment rates for children without disabilities - close to or above 90%, school attendance rates of children with disabilities never exceeded 74% in urban areas or 66% in rural. Most special education facilities are in urban areas (19, 20), so the participation of children with disabilities in rural areas could be much worse than the aggregated data imply (19, 21).

Partly as a result of building rural schools and eliminating tuition fees, Ethiopia nearly

^{*} t-test suggests significant difference from "Not disabled" at 5%. Source (12).

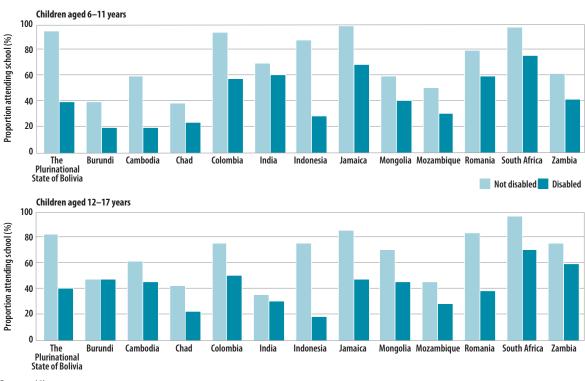


Fig. 7.1. Proportion of children aged 6–11 years and 12–17 years with and without a disability who are in school

Source (8).

doubled its net enrolment ratio, from 34% in 1999 to 71% in 2007 (22). But there are no reliable data on the inclusion or exclusion of disadvantaged groups in education (23). A national baseline survey in 1995 estimated the number of children with disabilities of school age at around 690 000 (24). According to Ministry of Education data, there were 2276 children with disabilities in 1997 – or just 0.3% of the total – attending 7 special boarding schools, 8 special day schools and 42 special classes. Ten years later there were still only 15 special schools, but the number of special classes attached to regular government schools had increased to 285 (25).

Even in countries with high primary school enrolment rates, such as those in eastern Europe, many children with disabilities do not attend school. In 2002 the enrolment rates of disabled children between the ages of 7 and 15

years were 81% in Bulgaria, 58% in the Republic of Moldova, and 59% in Romania, while those of children not disabled were 96%, 97%, and 93%, respectively (26). Fig. 7.2 confirms the sizable enrolment gap for disabled young people between the ages of 16 and 18 years in selected countries of eastern Europe.

So, despite improvements in recent decades, children and youth with disabilities are less likely to start school or attend school than other children. They also have lower transition rates to higher levels of education. A lack of education at an early age has a significant impact on poverty in adulthood. In Bangladesh the cost of disability due to forgone income from a lack of schooling and employment, both of people with disabilities and their caregivers, is estimated at US\$ 1.2 billion annually, or 1.7% of gross domestic product (27).

Understanding education and disability

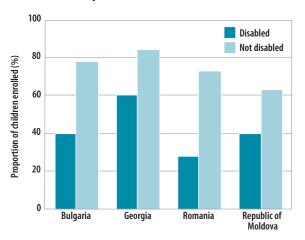
What counts as disability or special educational need and how these relate to difficulties children experience in learning is a much debated topic for policy-makers, researchers, and the wider community (28).

Data on children with disabilities who have special education needs are hampered by differences in definitions, classifications, and categorizations (29, 30). Definitions and methods for measuring disability vary across countries based on assumptions about human difference and disability and the importance given to the different aspects of disability - impairments, activity limitations and participation restriction, related health condition, and environmental factors (see Chapter 2). The purpose and underlying intentions of classification systems and related categorization are multiple including: identification; determining eligibility; administrative; and guiding and monitoring interventions (29, 30). Many countries are moving away from medically-based models of identification of health condition and impairments, which located the difference in the individual, towards interactional approaches within education, which take into consideration the environment, consistent with the International Classification of Functioning, Disability and Health (ICF) (28, 29).

There are no universally agreed definitions for such concepts as **special needs education** and **inclusive education**, which hampers comparison of data.

The category covered by the terms special needs education, special educational needs, and special education is broader than education of children with disabilities, because it includes children with other needs – for example, through disadvantages resulting from gender, ethnicity, poverty, war trauma, or orphanhood (8, 31, 32). The Organization for Economic Co-operation and Development (OECD) estimates that between 15% and 20%

Fig. 7.2. School enrolment rates of children aged 16–18 years in selected European countries



Source (26).

of learners will have a special educational need at some point in their school career (33). This chapter focuses on the education of learners with disabilities, rather than on those covered in the broader definition of special needs. But not every person with a disability necessarily has a special educational need.

The broad sense of inclusion is that the education of all children, including those with disabilities, should be under the responsibility of the education ministries or their equivalent, with common rules and procedures. In this model education may take place in a range of settings – such as special schools and centres, special classes in integrated schools or regular classes in mainstream schools – following the principle of "the least restrictive environment". This interpretation assumes that all children can be educated and that regardless of the setting or adaptations required, all students should have access to a curriculum that is relevant and produces meaningful outcomes.

A stricter sense of inclusion is that all children with disabilities should be educated in regular classrooms with age-appropriate peers. This approach stresses the need for the whole school system to change. Inclusive education

entails identifying and removing barriers and providing reasonable accommodation, enabling every learner to participate and achieve within mainstream settings.

Policy-makers need increasingly to demonstrate how policies and practice lead to greater inclusion of children with disability and improved educational outcomes. Current statistical data collected on the numbers of disabled pupils with special educational needs by setting provide some indications on the situation in countries and can be useful for monitoring trends in provision of inclusive education - if there is a clear understanding of which groups of pupils are included in data collection (28). Data and information useful in informing and shaping policy would focus more on the quality, suitability, or appropriateness of the education provided (28). Systematic collection of qualitative and quantitative data, which can be used longitudinally, is required for countries to map their progress and compare relative developments across countries (28).

Approaches to educating children with disabilities

There are different approaches around the world to providing education for people with disabilities. The models adopted include special schools and institutions, integrated schools, and inclusive schools.

Across European countries 2.3% of pupils within compulsory schooling are educated in a segregated setting – either a special school or a separate class in a mainstream school (see Fig. 7.3). Belgium and Germany rely heavily on special schools in which children with special needs are separated from their peers. Cyprus, Lithuania, Malta, Norway, and Portugal appear to include the majority of their students in regular classes with their same-age peers. A review of other OECD countries shows similar trends, with a general movement in developed countries towards inclusive education, though with some

exceptions (31). In developing countries the move towards inclusive schools is just starting.

The inclusion of children with disabilities in regular schools – inclusive schools – is widely regarded as desirable for equality and human rights. The United Nations Educational, Scientificand Cultural Organization (UNESCO) has put forward the following reasons for developing a more inclusive education system (35).

- Educational. The requirement for inclusive schools to educate all children together means that the schools have to develop ways of teaching that respond to individual differences, to the benefit of all children.
- Social. Inclusive schools can change attitudes towards those who are in some way "different" by educating all children together. This will help in creating a just society without discrimination.
- Economic. Establishing and maintaining schools that educate all children together is likely to be less costly than setting up a complex system of different types of schools specializing in different groups of children.

Inclusive education seeks to enable schools to serve all children in their communities (36). In practice, however, it is difficult to ensure the full inclusion of all children with disabilities, even though this is the ultimate goal. Countries vary widely in the numbers of children with disabilities who receive education in either mainstream or segregated settings, and no country has a fully inclusive system. A flexible approach to placement is important: in the United States of America, for example, the system aims to place children in the most integrated setting possible, while providing for more specialized placement where this is considered necessary (37). Educational needs must be assessed from the perspective of what is best for the individual (38) and the available financial and human resources within the country context. Some disability advocates have made the case that it should be a matter of individual

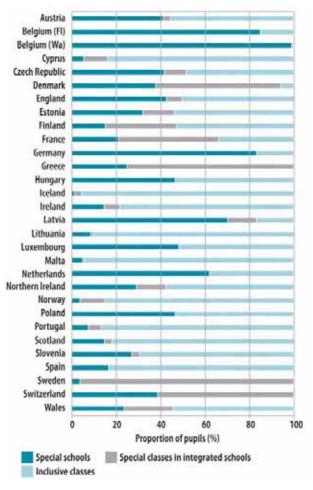


Fig. 7.3. Delivery of education by type of model for selected European countries

Note: The data refer to pupils who have been officially identified as having SEN. However, many more pupils may receive support for their special educational needs but they are not "counted". The only comparable data is the percentage of pupils who are educated in segregated settings. The European Agency for Development in Special Needs Education has an operational definition for segregation: "education where the pupil with special needs follows education in separate special classes or special schools for the largest part (80% or more) of the school day", which most countries agree upon and use in data collection.

Denmark: data only collected for pupils with extensive support needs who are generally educated in segregated settings; up to 23 500 receive support in the mainstream schools. Finland: data do not include 126 288 learners with minor learning difficulties (e.g. dyslexia) who receive part-time special needs education in the mainstream schools. Ireland: no data available for pupils with SEN in mainstream secondary schools. Germany and the Netherlands: no data available on numbers of pupils in special classes in mainstream schools. Hungary, Luxembourg and Spain: "special schools" includes special classes in mainstream schools. Poland: special classes in mainstream schools do not exist. Sweden, Switzerland: data indicate that pupils are educated in segregated settings, however data are not collected on those who receive support in inclusive settings.

Source (28, 34).

choice whether mainstream or segregated settings meet the needs of the child (39, 40).

Deaf students and those with intellectual impairments argue that mainstreaming is not always a positive experience (41, 42). Supporters of special schools – such as schools for the blind, deaf, or deafblind – particularly in low-income countries, often point to the fact that these institutions provide high-quality and specialized learning environments. The World Federation of the Deaf argues that often the best environment for academic and social development for a Deaf child is a school where both students and teachers use sign language for all communication. The thinking is that simple placement in a regular school, without

meaningful interaction with classmates and professionals, would exclude the Deaf learner from education and society.

Outcomes

The evidence on the impact of setting on education outcomes for persons with disabilities is not conclusive. A review of studies on inclusion published before 1995 concluded that the studies were diverse and not of uniformly good quality (43). While placement was not the critical factor in student outcomes, the review found:

 slightly better academic outcomes for students with learning disabilities placed in special education settings;

- higher dropout rates for students with emotional disturbances who were placed in general education;
- better social outcomes for students with severe intellectual impairments who were taught in general education classes.

While children with hearing impairments gained some academic advantage in mainstream education, their sense of self suffered. In general, students with mild intellectual impairments appeared to receive the most benefit from placement in supportive general education classes.

A review of research from the United States on special needs education concluded that the impact of the educational setting – whether special schools, special classes, or inclusive education – on educational outcomes could not be definitely established (44). It found that:

- most of the studies reviewed were not of good quality methodologically, and dependent measures varied widely across studies;
- the researchers often had difficulty separating educational settings from the types and intensity of services;
- the research was frequently conducted before critical policy changes took place;
- much of the research focused on how to implement inclusive practices, not on their effectiveness.

There are some indications that the acquisition of communication, social, and behavioural skills is superior in inclusive classes or schools. Several researchers have documented such positive outcomes (45–48). A meta-analysis of the impact of setting on learning found a "small-to-moderate beneficial effect of inclusive education on the academic and social outcomes of special needs students" (49). A small number of studies have confirmed the negative impact of placement in regular education where individualized supports are not provided (50, 51).

The inclusion of students with disabilities is generally not considered to have a negative impact on the educational performance of students without disabilities (52–54). Concerns

about the impact of inclusion of children with emotional and behavioural difficulties were more often expressed by teachers (53).

But where class sizes are large and inclusion is not well resourced, the outcomes can be difficult for all parties. There will be poor outcomes for children with disabilities in a general class if the classroom and teacher cannot provide the support necessary for their learning, development, and participation. Their education will tend to end when they finish primary school, as confirmed by the low rates of progression to higher levels of education (55). In Uganda, when universal primary education was first introduced, there was a large influx of previously excluded groups of children, including those with disabilities. With few additional resources schools were overwhelmed, reporting problems with discipline, performance, and drop-out rates among students (56).

A proper comparison of learning outcomes between special schools and the inclusion of children with disabilities in mainstream schools has not been widely carried out, beyond the few smaller studies already mentioned. In developing countries, almost no research comparing outcomes has been conducted. There is thus a need for better research and more evidence on social and academic outcomes. Box 7.2 presents data from a longitudinal study in the United States on the educational and employment outcomes of different groups of students with disabilities.

Barriers to education for children with disabilities

Many barriers may hinder children with disabilities from attending school (59–61). In this chapter they are categorized under systemic and school-based problems.

System-wide problems

Divided ministerial responsibility

In some countries education for some or all children with disabilities falls under separate

Box 7.2. Transition from school to work in the United States

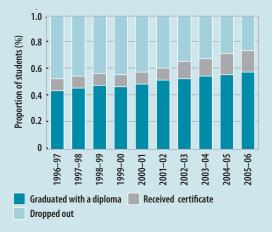
All secondary education students with documented disabilities in the United States are protected by Section 504 of the Vocational Rehabilitation Act and the American Disabilities Act. A subgroup of students with disabilities also meets the eligibility requirements under Part B of the Individuals with Disabilities Education Act (IDEA). In the former category are students whose disability does not adversely affect their ability to learn, and who can progress through school with reasonable accommodations that enable them to have access to the same resources and learning as their peers. The students eligible under Part B of the IDEA are entitled to a "free and appropriate public education", which is defined through their individualized education plan. This case study refers to students with such a plan.

The National Longitudinal Transition Study 2 (NLTS2) provides data about students with disabilities covered by IDEA. The NLTS2 was launched after a nationally representative survey in 2000 of a sample of 11 272 students aged 13–16 years who were receiving special education. Of this sample of disabled students, 35% were living in disadvantaged households with annual incomes of US\$ 25 000 or less. In addition, 25% were living in single-parent households. Of all sample students, 93.9% were attending regular secondary schools in 2000, 2.6% were attending special schools, and the remainder attending alternative, vocational, or other schools.

Graduation rates

The following figure shows the proportion of students aged 14–21 years who finished high school and the proportion who dropped out, over 10 years.

Proportion of exiting students with disabilities, aged 14–21 years, who graduated, received a certificate, or dropped out, 1996–2005



Source (57).

Post-school outcomes

According to NLTS2, 85% of young people with disabilities were engaged in employment, post-secondary education, or job training in the four years since leaving school. Of the sample students, 45% had enrolled in some type of post-secondary education, compared with 53% of students in the general population. Among those in post-secondary education, 6% had enrolled in business, vocational, or technical schools, 13% in a two-year college course, and 8% in a four-year college or university. Of young people within the same age ranges in the general population, 12% were enrolled in two-year colleges and 29% in four-year institutions (58).

About 57% of the young people with disabilities aged 17–21 years were employed at the time of the 2005 follow-up, compared with the 66% among the same age group in the general population. Young people with intellectual impairments or multiple impairments were the least likely to be engaged in school, work, or preparation for work.

... continued

Young people with learning, cognitive, behavioural, or emotional impairments were 4–5 times more likely to have been involved with the criminal justice system than young people in the general population.

Young people with intellectual impairments were the least likely to have graduated with a diploma and had the lowest employment rates among all disability categories. Dropouts were far less likely to be engaged in post-school work or education and 10 times more likely than students with disabilities who finished high school to have been arrested.

Of the students with visual or hearing impairments, more than 90% received a regular diploma and were twice as likely as other students with a disability to have enrolled in some type of post-secondary school.

For some students, such as those with emotional disturbances, the educational outcomes are disturbingly low. Research is required to find forms of curricula, pedagogies, and assessment methods that take better account of students' diverse needs within education and in the transition to work.

ministries such as Health, Social Welfare, or Social Protection (El Salvador, Pakistan, Bangladesh) or distinct Ministries of Special Education. In other countries (Ethiopia and Rwanda) responsibilities for the education for disabled children are shared between ministries (25).

In India children with disabilities in special schools fall under the responsibility of the Ministry of Social Justice and Empowerment, while children in mainstream schools come under the Department of Education in the Ministry of Human Resource Development (32). This division reflects the cultural perception that children with disabilities are in need of welfare rather than equality of opportunity (11). This particular model tends to further segregate children with disabilities, and shifts the focus from education and achieving social and economic inclusion to treatment and social isolation.

Lack of legislation, policy, targets, and plans

While there are many examples of initiatives to include children with disabilities in education, a lack of legislation, policy, targets and plans tends to be a major obstacle in efforts to provide Education for All (62). The gaps in policy that are commonly encountered include a lack of financial and other targeted incentives for children with disabilities to attend school – and a lack of social protection and support

services for children with disabilities and their families (63).

A review of 28 countries participating in the Education for All Fast Track Initiative Partnership found that 10 had a policy commitment to include children with disabilities and also had some targets or plans on such issues as data collection, teacher training, access to school buildings, and the provision of additional learning materials and support (64). For example Ghana has enrolment targets, including one that all children with "nonsevere special educational needs" should be educated in mainstream schools by 2015. Djibouti and Mozambique mention targets for children in regular schools. Kenya is committed to increasing the gross enrolment rate of disabled children to 10% by 2010 and also has targets for training teachers and providing equipment. However, while a further 13 countries mentioned disabled children they provided little detail of their proposed strategies and five countries did not refer to disability or inclusion at all.

Inadequate resources

Limited or inappropriate resources are regarded as a significant barrier to ensuring inclusive education for children with disabilities (65). A study in the United States found that the average cost for educating a child with a disability was 1.9 times the cost for a child without a disability, with

the multiplier ranging from 1.6 to 3.1 depending on the type and extent of the disability (66). In most developing countries it is difficult to reach all those in need even when educational systems are well planned and support inclusion.

National budgets for education are often limited and families are frequently unable to afford the costs of education (9, 17, 67). There are shortages of resources such as few schools, inadequate facilities, insufficient qualified teachers and a lack of learning materials (6). An assessment in 2006 on the status of El Salvador's capacity to create inclusive educational opportunities for students with disabilities found that there was limited funding to provide services to all students with disabilities (68).

The Dakar Framework for Action recognizes that achieving Education for All will require increased financial support by countries and increased development assistance from bilateral and multilateral donors (67). But this has not always been forthcoming, restricting progress (17).

School problems

Curriculum and pedagogy

Flexible approaches in education are needed to respond to the diverse abilities and needs of all learners (69). Where curricula and teaching methods are rigid and there is a lack of appropriate teaching materials - for example, where information is not delivered in the most appropriate mode such as sign language and teaching materials are not available in alternative formats such as Braille - children with disabilities are at increased risk of exclusion (69). Assessment and evaluation systems are often focused on academic performance rather than individual progress and therefore can also be restrictive for children with special education needs (69). Where parents have anxieties about the quality of mainstream schools, they are more likely to push for segregated solutions for their children with disabilities (17).

Inadequate training and support for teachers

Teachers may not have the time or resources to support disabled learners (70). In resourcepoor settings classrooms are frequently overcrowded and there is a severe shortage of well trained teachers capable of routinely handling the individual needs of children with disabilities (71, 72). The majority of teachers lack sign-language skills creating barriers for Deaf pupils (73). Other supports such as classroom assistants are also lacking. Advances in teacher education have not necessarily kept pace with the policy changes that followed the Salamanca Declaration. For example, in India the preservice training of regular teachers includes no familiarization with the education of children with special needs (64).

Physical barriers

Physical access to school buildings is an essential prerequisite for educating children with disabilities (65). Those with physical disabilities are likely to face difficulties in travelling to school if, for example, the roads and bridges are unsuitable for wheelchair use and the distances are too great (17). Even if it is possible to reach the school, there may be problems of stairs, narrow doorways, inappropriate seating, or inaccessible toilet facilities (74).

Labelling

Children with disabilities are often categorized according to their health condition to determine their eligibility for special education and other types of support services (29). For example, a diagnosis of dyslexia, blindness, or deafness can facilitate access to technological and communication support and specialized teaching (75). But assigning labels to children in education systems can have negative effects including stigmatization, peer rejection, lower self-esteem, lower expectations, and limited opportunities (29). Students may be reluctant about revealing their disability due to negative

attitudes, thus missing out on needed support services (76). A study in two states of the United States examined the responses of 155 preschool teachers to the inclusion of children with disabilities (77). Two distinct versions of a questionnaire were created, including short sketches describing children with disabilities. One included a "labelling" version that used terms such as cerebral palsy. The other did not use labels, but simply described the children. The teachers who completed the non-labelling version were more positive about including disabled children than those who completed the labelling version. This suggested that a label can lead to more negative attitudes and that adults' attitudes were critical in developing policies on the education of children with disabilities.

Attitudinal barriers

Negative attitudes are a major obstacle to the education of disabled children (78, 79). In some cultures people with disabilities are seen as a form of divine punishment or as carriers of bad fortune (80, 81). As a result, children with disabilities who could be in school are sometimes not permitted to attend. A community-based study in Rwanda found that perceptions of impairments affected whether a child with a disability attended school. Negative community attitudes were also reflected in the language used to refer to people with disabilities (82, 83).

The attitudes of teachers, school administrators, other children, and even family members affect the inclusion of children with disabilities in mainstream schools (74, 84). Some school teachers, including head teachers, believe they are not obliged to teach children with disabilities (84). In South Africa it is thought that school attendance and completion are influenced by the belief of school administrators that disabled students do not have a future in higher education (85). A study comparing Haiti with the United States found that

teachers in both countries generally favoured types of disabilities they perceived to be easier to work with in mainstream settings (36).

Even where people are supportive of students with disabilities, expectations might be low, with the result that little attention is paid to academic achievement. Teachers, parents, and other students may well be caring but at the same time not believe in the capacity of the children to learn (86, 87). Some families with disabled students may believe that special schools are the best places for their children's education (76).

Violence, bullying, and abuse

Violence against students with disabilities – by teachers, other staff, and fellow students – is common in educational settings (20). Students with disabilities often become the targets of violent acts including physical threats and abuse, verbal abuse, and social isolation. The fear of bullying can be as great an issue for children with disabilities as actual bullying (88). Children with disabilities may prefer to attend special schools, because of the fear of stigma or bullying in mainstream schools (88). Deaf children are particularly vulnerable to abuse because of their difficulties with spoken communication.

Addressing barriers to education

Ensuring the inclusion of children with disabilities in education requires both systemic and school level change (89). As with other complex change, it requires vision, skills, incentives, resources, and an action plan (90). One of the most important elements in an inclusive educational system is strong and continuous leadership at the national and school levels – something that is cost-neutral.

System-wide interventions

Legislation

The success of inclusive systems of education depends largely on a country's commitment to adopt appropriate legislation, develop policies and provide adequate funding for implementation. Since the mid-1970s Italy has had legislation in place to support inclusive education for all children with disabilities resulting in high inclusion rates and positive educational outcomes (33, 91, 92).

New Zealand shows how government ministries can promote an understanding of the right to education of disabled students by:

- publicizing support available for disabled children
- reminding school boards of their legal responsibilities
- reviewing information provided to parents
- reviewing complaints procedures (93).

A survey of low-income and middle-income countries found that if political will is lacking, legislation will have only a limited impact (31). Other factors leading to a low impact include insufficient funding for education, and a lack of experience in educating people with disabilities or special educational needs.

Policy

Clear national policies on the education of children with disabilities are essential for the development of more equitable education systems. UNESCO has produced guidelines to assist policy-makers and managers to create policies and practices supportive of inclusion (94). Clear policy direction at the national level has enabled a wide range of countries to undertake major educational reforms – including Italy, the Lao People's Democratic Republic, Lesotho, and Viet Nam (see Box 7.3).

In 1987 Lesotho started work on a series of policies on special education. By 1991 it had established a Special Education Unit and launched a national programme of inclusive education (95). A 1993 study carried out in a quarter of the country's primary schools, involving interviews with more than 2649 teachers, found that 17% of children in Lesotho had disabilities and special educational needs (95). The national programme for inclusive education was launched in 10 pilot schools, one in each district of the country. Training in inclusive teaching was developed for teachers in these schools, and for student teachers, with the help of specialists and people with disabilities themselves. A recent study on inclusive education in Lesotho found variability in the way that teachers addressed the needs of their children (96). There was a positive effect on the attitudes of teachers, and without a formal policy it is unlikely that improvements would have occurred.

National plans

Creating or amending a national plan of action and establishing infrastructure and capacity to implement the plan are key to including children with disabilities in education (79). The implications of Article 24 of the CRPD are that institutional responsibility for the education of children with disabilities should remain within the Ministry of Education (97), with coordination, as appropriate, with other relevant ministries. National plans for Education For All should:

- reflect international commitments to the right of disabled children to be educated;
- identify the number of disabled children and assess their needs;
- stress the importance of parental support and community involvement;
- plan for the main aspects of provision such as making school buildings accessible, and developing the curriculum, teaching methods, and materials to meet a diversity of needs;
- increase capacity, through the expansion of provision and training programmes;
- make available sufficient funds;

Box 7.3. Inclusion is possible in Viet Nam – but more can be done

In the early 1990s Viet Nam launched a major programme of reform to improve the inclusion of students with disabilities in education. The Centre for Special Education worked with an international nongovernmental organization to set up two pilot projects, one rural and one urban. Local steering committees for each project were active in raising awareness in the community and conducting house-to-house searches for children who were missing from official school lists. The pilot projects identified 1078 children with a wide range of impairments who were excluded.

Training was provided to administrators, teachers, and parents on:

- the benefits of inclusive education
- special education services
- individualized educational programmes
- carrying out accommodation and environmental modifications
- assessment
- family services.

In addition, technical assistance was given in such areas as mobility training for blind students and training for parents on exercises to improve mobility for children with cerebral palsy.

Four years later, an evaluation found that 1000 of the 1078 children with disabilities had been successfully included in general education classes in local schools – an achievement welcomed by both teachers and parents. With international donor support a similar programme was conducted in three other provinces. Within three years attendance rates in regular classes of children with disabilities increased from 30% to 86%, and eventually 4000 new students were enrolled in neighbourhood schools.

Follow-up evaluations found that teachers were more open to including students with disabilities than previously – and were better equipped and more knowledgeable about inclusive practices. Teachers and parents had also raised their expectations of children with disabilities. More important, the children were better integrated into their communities. The average cost of the programme for a student with disabilities in the inclusive setting was US\$ 58 per year, compared with US\$ 20 for a student without disabilities and US\$ 400 for education in segregated settings. This sum did not cover specialized equipment – such as hearing aids, wheelchairs, and Braille printers, which many students with disabilities required and whose cost was prohibitive for most families.

Despite the progress, only around 2% of preschool and primary schools in Viet Nam are inclusive, and 95% of children with disabilities still do not have access to school (90). But the success of the pilot projects has helped change attitudes and policies on disability and has led to greater efforts on inclusion. The Ministry of Education and Training has committed itself to increase the percentage of children with disabilities being educated in regular classes. New laws and policies that support inclusive education are being implemented.

• conduct monitoring and evaluation, and improve the qualitative and quantitative data on students (64).

Funding

There are basically three ways to finance special needs education, whether in specialized institutions or mainstream schools:

through the national budget, such as setting up a Special National Fund (as in Brazil), financing a Special Education Network of Schools (as in Pakistan), or as a fixed proportion of the overall education

- budget (0.92% in Nicaragua and 2.3% in Panama);
- through financing the particular needs of institutions – for materials, teaching aids, training, and operational support (as in Chile and Mexico);
- through financing individuals to meet their needs (as in Denmark, Finland, Hungary, and New Zealand).

Other countries, including Switzerland and the United States, use a combination of funding methods that include national financing that can be used flexibly for special needs education at the local level. The criteria for eligibility of funding can be complex. Whichever funding model is used, it should:

- be easy to understand
- be flexible and predictable
- provide sufficient funds
- be cost-based and allow for cost control
- connect special education to general education
- be neutral in identification and placement (98, 99).

One system for comparing data on resources between countries categorizes students according to whether their needs arise from medical conditions, behavioural, or emotional conditions, or socioeconomic or cultural disadvantages (31). The resources dedicated to children with medical diagnoses remain the most constant across ages. Those allocated to children with socioeconomic or cultural disadvantages

are more heavily concentrated among younger age groups, and drop off sharply by secondary school (100). The decline in resources for these categories may reflect higher drop-out rates for these groups, especially in the later stages of secondary school, implying that the system is not meeting their educational needs.

Table 7.2 summarizes the data for a range of Central and South American countries, making comparisons with similar data from New Brunswick province in Canada, the United States, and the median of the OECD countries. It is clear that the Central and South American countries are providing resources for students with disabilities in the pre-primary and primary years. But there is a rapid fall-off of provision in the early secondary school period and no provision at all in the later secondary period. This contrasts with the OECD countries, which provide education for students with disabilities across the full age range, even though the provision is reduced at older ages.

Table 7.2. Percentage of students with disabilities receiving educational resources by country and by level of education

Country	Compulsory education (%)	Pre-primary (%)	Primary (%)	Lower secondary (%)	Upper secondary (%)
Belize	0.95	-	0.96	-	-
Brazil	0.71	1.52	0.71	0.06	_
Chile	0.97	1.31	1.17	1.34	_
Colombia	0.73	0.86	0.84	0.52	N/A
Costa Rica	1.21	4.39	1.01	1.48	N/A
Guyana	0.15	N/A	0.22	N/A	N/A
Mexico	0.73	0.53	0.98	0.26	-
Nicaragua	0.40	0.64	0.40	_	_
Paraguay	0.45	N/A	0.45	N/A	N/A
Peru	0.20	0.94	0.30	0.02	N/A
Uruguay	1.98	_	1.98	_	_
United States of America	5.25	7.38	7.39	3.11	3.04
New Brunswick province, Canada	2.89	-	2.19	3.80	3.21
Median of OECD countries	2.63	0.98	2.43	3.11	1.37

Note: Mexico is an OECD country. Only partial data are available for countries listed in *italics*. N/A not applicable.

Source (31, 101).

⁻ not available/never collected.

Ensuring children with disabilities are able to access the same standard of education as their peers often requires increased financing (17). Low-income countries will require longterm predictable financing to achieve this. In the Lao People's Democratic Republic, Save the Children and the Swedish International Development Cooperation Agency provided long-term funding and technical support for an Inclusive Education Project from 1993-2009. The project resulted in a centralized, national approach to the development of policy and practice in inclusive education. Services began in 1993, when a pilot school opened in the capital, Vientiane. There are now 539 schools across 141 districts providing inclusive education and specialized support for more than 3000 children with disabilities (102).

While the costs of special schools and inclusive schools are difficult to determine it is generally agreed that inclusive settings are more cost-effective (33). Inclusion has the best chance of success when school funding is decentralized, budgets are delegated to the local level, and funds are based on total enrolment and other indicators. Access to small amounts of flexible funds can promote new approaches (103).

School interventions

Recognizing and addressing individual differences

Education systems need to move away from more traditional pedagogies and adopt more learner-centred approaches which recognize that each individual has an ability to learn and a specific way of learning. The curricula, teaching methods and materials, assessment and examination systems, and the management of classes all need to be accessible and flexible to support differences in learning patterns (19, 69).

Assessment practices can facilitate or hinder inclusion (103). The need to attain academic excellence often pervades school cultures, so policies on inclusion need to ensure that all children reach their potential (104). Streaming

into ability groups is often an obstacle to inclusion whereas mixed-ability, mixed-age classrooms can be a way forward (17, 69). In 2005 the European Agency for Development in Special Needs Education studied forms of assessment that support inclusion in mainstream settings (105). Involving 50 assessment experts in 23 countries, the study addressed how to move from a deficit – mainly medically-based – approach to an educational or interactive approach. The following principles were proposed:

- Assessment procedures should promote learning for all students.
- All students should be entitled to be part of all assessment procedures.
- The needs of students with disabilities should be considered within all general assessment policies as well as within policies on disability-specific assessment.
- The assessment procedures should complement each other.
- The assessment procedures should aim to promote diversity by identifying and valuing the progress and achievements of each student.
- Inclusive assessment procedures should explicitly aim to prevent segregation by avoiding – as far as possible – forms of labelling. Instead, assessments should focus on learning and teaching practices that lead to more inclusion in a mainstream setting.

Individualized education plans are a useful tool for children with special educational needs to help them to learn effectively in the least restrictive environments. Developed through a multidisciplinary process, they identify needs, learning goals and objectives, appropriate teaching strategies, and required accommodations and supports. Many countries such as Australia, Canada, New Zealand, the United Kingdom and the United States have policies and documented processes for such plans (106).

Creating an optimum learning environment will assist children in learning and achieving their potential (107). Information and communication technologies, including

assistive technologies, should be used whenever possible (69, 108). Some students with disabilities might require accommodations such as large print, screen readers, Braille and sign language, and specialized software. Alternative formats of examination may also be needed, such as oral examinations for non-readers. Learners with difficulty in understanding as a result of intellectual impairments may need adapted teaching styles and methods. The choices regarding reasonable accommodations will depend on the available resources (71).

Providing additional supports

To ensure the success of inclusive education policies some children with disabilities will require access to additional support services (5). The additional costs associated with these is likely to be offset in part by savings from students in specialized institutions transferring to mainstream schools.

Schools should have access to specialist education teachers where required. In Finland the majority of schools are supported by at least one permanent special education teacher. These teachers provide assessments, develop individualized education plans, coordinate services, and provide guidance for mainstream teachers (109). In El Salvador "support rooms" have been set-up in mainstream primary schools to provide services to students with special education needs, including those with disabilities. The services include assessments of students. instruction on an individual basis or in small groups, support for general education teachers, and speech and language therapy and similar services. Support room teachers work closely with parents, and receive a budget from the Ministry of Education for training and salaries. In 2005 about 10% of the schools nationwide had support rooms (68).

Teaching assistants – also known as learning support assistants, or special needs assistants – are increasingly used in mainstream classrooms. Their role varies in different settings, but their main function is to support

children with disabilities to participate in mainstream classrooms – they should not be regarded as substitute teachers. Their successful deployment requires effective communication and planning with the classroom teacher, a shared understanding of their role and responsibilities, and ongoing monitoring of the way support is provided (110, 111). There is a danger that extensive use of teaching assistants may discourage more flexible approaches and sideline disabled children in class (93). Special needs assistants should not hinder children with disabilities from interacting with non-disabled children or from engaging in age-appropriate activities (88).

Early identification and intervention can reduce the level of educational support children with disabilities may require throughout their schooling and ensure they reach their full potential (107). Children with disabilities may require access to specialist health and education professionals such as occupational therapists, physiotherapists, speech therapists, and educational psychologists to support their learning (107). A review of early childhood interventions in Europe stressed the need for proper coordination among health, education, and social services (112).

Making better use of existing resources to support learning is also important, particularly in poorer settings. For example, while schools in poor rural environments may have large class sizes and fewer material resources, stronger community involvement and positive attitudes can overcome these barriers (65). Many teaching materials that significantly enhance learning processes can be locally made (103). Special schools, where they exist, can be valuable for disability expertise (early identification and intervention) and as training and resource centres (5). In low-income settings itinerant teachers can be a cost-effective means of addressing teacher shortages, assisting children with disabilities to develop skills - such as Braille literacy, orientation and mobility - and developing teaching materials (113).

Box 7.4. Teacher education in Ethiopia

Teacher training on special educational needs has been conducted in Ethiopia since the 1990s, a focus for much international support. Until the early 1990s, teacher education on special educational needs was primarily through short nongovernmental organization-funded workshops. This approach did not produce lasting changes in teaching and learning processes. Nor did it enable the government to be self-reliant in training special education staff.

Starting in 1992, with support from the Finnish government, a six-month training course was launched at a teacher training institute (114). This was part of a drive to support existing special schools, introduce more special classes, and increase the number of learners within mainstream classes with support from itinerant teachers. Fifty teachers received university education from Finnish universities – 6 in Finland itself, 44 through distance learning, which cost around 10% of the direct education.

Short support courses were developed at Addis Ababa University, and a special centre, the Sebeta Teacher Training Institute, was created as part of Sebeta School for the Blind. Between 1994 and 1998, 115 people graduated as special education teachers, and thousands of mainstream teachers received in-service training. But the facilities do not train enough teachers to meet the full demand for inclusive education (115).

Other regular colleges and universities in Ethiopia now offer special needs education courses to all students, and Sebeta continues to offer a 10-month course to qualified teachers. As a result of Sebeta's training programme, there has been an expansion in the numbers of special classes and disabled children attending school. But using Ministry of Education statistics, it is estimated that only 6000 identified disabled children have access to education of a primary school population of nearly 15 million (64).

Building teacher capacity

The appropriate training of mainstream teachers is crucial if they are to be confident and competent in teaching children with diverse educational needs. The principles of inclusion should be built into teacher training programmes, which should be about attitudes and values not just knowledge and skills (103). Post-qualification training, such as that offered at Ethiopia's Sebeta Teacher Training Institute, can improve provision and – ultimately – the rate of enrolment of students with disabilities (see Box 7.4).

Teachers with disabilities should be encouraged as role models. In Mozambique a collaboration between a teacher training college and a national disabled people's organization, ADEMO, trains teachers to work with learners with disabilities and also provides scholarships for students with disabilities to train as teachers (116).

Several resources can assist teachers to work towards inclusive approaches for students with disabilities such as:

 Embracing diversity: Toolkit for creating inclusive, learning friendly environments

- contains nine self-study booklets to assist teachers to improve their skills in diverse classroom settings (107).
- Module 4: Using ICTs to promote education and job training for persons with disabilities in Toolkit of best practices and policy advice provides information on how information and communication technologies can facilitate access to education for people with disabilities (108).
- Education in emergencies: Including everyone: INEE pocket guide to inclusive education provides support for educators working in emergency and conflict situations (117).

Teacher training should also be supported by other initiatives that provide teachers with opportunities to share expertise and experiences about inclusive education and to adapt and experiment with their own teaching methods in supportive environments (69, 102).

Where segregated schools feature prominently, enabling special education teachers to make the transition to working in an inclusive system should be a priority. In extending inclusive education, special schools and

mainstream schools have to collaborate (62). In the Republic of Korea at least one special school in each district is selected by the government to work closely with a partner mainstream school, to encourage inclusion of disabled children through various initiatives such as peer support and group work (76).

Removing physical barriers

Principles of universal design should underlie policies of access to education. Many physical barriers are relatively straightforward to overcome: changing physical layout of classrooms can make a major difference (118). Incorporating universal design into new building plans is cheaper than making the necessary changes to an old building and adds only around 1% to the total construction cost (119).

Overcoming negative attitudes

The physical presence of children with disabilities in schools does not automatically ensure their participation. For participation to be meaningful and produce good learning outcomes, the ethos of the school – valuing diversity and providing a safe and supportive environment – is critical.

The attitudes of teachers are critical in ensuring that children with disabilities stay in school and are included in classroom activities. A study carried out to compare the attitudes of teachers towards students with disabilities in Haiti and the United States showed that teachers are more likely to change their attitudes towards inclusion if other teachers demonstrate positive attitudes and a supportive school culture exists (36). Fear and a lack of confidence among teachers regarding the education of students with disabilities can be overcome:

In Zambia teachers in primary and basic schools had expressed interest in including children with disabilities, but believed that this was reserved for specialists. Many had fears that such conditions as albinism were contagious. They were encouraged to discuss their negative beliefs and to write about them reflectively (120).

- In Uganda teachers' attitudes improved simply by having regular contact with children with disabilities (56).
- In Mongolia a training programme on inclusive education was run for teachers and parents with the support of specialist teachers. The 1600 teachers trained had highly positive attitudes towards the inclusion of children with disabilities and towards working with the parents: the enrolment of children with disabilities in preschool facilities and primary schools increased from 22% to 44% (121).

The role of communities, families, disabled people, and children with disabilities

Communities

Approaches involving the whole community reflect the fact that the child is an integral member of the community and make it more likely that sustainable inclusive education for the child can be attained (see Box 7.5).

Community-based rehabilitation (CBR) projects have often included educational activities for children with disabilities and share the goal of inclusion (5, 125). CBR-related activities that support inclusive education include referring children with disabilities to appropriate schools, lobbying schools to accept children with disabilities, assisting teachers to support children with disabilities, and creating links between families and communities (59).

CBR workers can also be a useful resource to teachers in providing assistive devices, securing medical treatment, making the school environment accessible, establishing links to disabled people's organizations, and finding employment or vocational training placements for children at the end of their school education.

Examples of innovative practices that link CBR to inclusive education can be found in many low-income countries:

 In the Karamoja region of Uganda, where most people are nomads and only 11.5% of the population are literate, children's

Box 7.5. Sport for children with disabilities in Fiji

Since March 2005 the Fiji Paralympic Committee (FPC) and the Australian Sports Commission have worked together to provide inclusive sport activities for children with disabilities in Fiji's 17 special education centres. These activities are part of the Australian Sports Outreach Program, an Australian government initiative that seeks to help individuals and organizations deliver high-quality, inclusive sport-based programmes that contribute to social development.

FPC's grassroots programmes are designed to increase the variety and quality of sport choices available for children in Fijian schools. Its activities include:

- Pacific Junior Sport a games-based programme that provides opportunities for children to participate and develop their skills;
- qito lai lai ("children's games") for smaller children;
- arranging for sport federations such as those of golf, table tennis, tennis, and archery to run sessions in schools;
- supporting schools so that students can play popular sports, such as football, volleyball, and netball, and paralympic sports such as boccia, goalball, and sitting volleyball;
- managing regional and national sport tournaments, as well as festivals in which students test their skills in football, netball, and volleyball against children from mainstream schools;
- providing role models through the athlete ambassador programme, in which athletes with a disability regularly visit schools, including mainstream schools.

Sport can improve the inclusion and well-being of people with a disability:

- by changing what communities think and feel about people with a disability and in that way reducing stigma and discrimination;
- by changing what people with a disability think and feel about themselves and in that way empowering them to recognize their own potential;
- by reducing their isolation and helping them integrate more fully into community life;
- by providing opportunities which assists young people to develop healthy body systems (musculoskeletal, cardiovascular) and improve coordination.

As a result of FPC's work, each Friday afternoon across the country more than 1000 children with a disability are playing a sport. As the FPC's sport development officer points out, "when people see children with a disability playing sport, they know that they are capable of doing many different things".

Source (122–124).

domestic duties are essential to the survival of their families. In this region a project called Alternative Basic Education for Karamoja has been set up. This community-based project has pushed for inclusion in education (126). It encourages the participation of children with disabilities and school instruction in the local language. The curriculum is relevant to the community's livelihood, containing instruction on such topics as livestock and crop production.

 The Oriang project in western Kenya has introduced inclusive education in five primary schools. Technical and financial assistance is provided by Leonard Cheshire Disability (60). The support includes training new teachers and working with students, parents, teachers, and the wider community to change attitudes and build the right structures for delivering inclusive education. The project benefits 2568 children, of whom 282 have a mild to severe disability (127).

Parents

Parents should be involved in all aspects of learning (128). The family is the first source of education for a child, and most learning occurs at home. Parents are frequently active in creating educational opportunities for their children, and they need to be brought on board

to facilitate the process of inclusion. In several countries individual parents, often with the support of parents' associations, have taken their governments to court, setting precedents that opened regular schools to children with disabilities. Inclusion Panama pressured the Panamanian government to change the law requiring children with disabilities to be educated in a separate system. In 2003, as a result of its campaign, the government introduced a policy to make all schools inclusive. NFU, a parents' organization in Norway, has lent support to parents in Zanzibar to collaborate with the education ministry in introducing inclusive education. In 2009 a parents' organization in Lebanon persuaded a teachers' training college to conduct its practical training for teachers in the community instead of in institutions.

Disabled people's organizations

Disabled people's organizations also have a role in promoting the education of disabled children - for example, working with young disabled people, providing role models, encouraging parents to send their children to school and become involved in their children's education, and campaigning for inclusive education. The Southern Africa Federation of the Disabled, for instance, has set up a range of programmes involving people with disabilities, including its children and youth programme, running for the past 15 years. The programme focuses on all aspects of discrimination and abuse of children with disabilities and their exclusion from education and other social activities. However such organizations frequently lack the resources and capacity to develop their role in education.

Children with disabilities

The voices of children with disabilities themselves must be heard, though they frequently are not. In recent years children have been more involved in studies of their experiences of education. The results of such child-informed research are of great benefit for educational planners and policy-makers and can be a source of evidence as educational

systems become more inclusive. Child-tochild cooperation should be better used to promote inclusion (94).

Audiovisual methods have been particularly effective in bringing out the views of children in a range of socioeconomic settings (129, 130).

- Young people in nine Commonwealth countries were consulted about their views on the CRPD through a series of focus groups. The right to education featured in the top three issues in three quarters of these groups (131).
- In a refugee programme in Jhapa, Nepal, children with disabilities were found to be a neglected and vulnerable group (132). A full-time disability coordinator for the programme was therefore appointed to undertake participatory action research. Disabled children talked about their family lives and described how they were taunted if they left their homes. Both children and parents listed education as the top priority. After 18 months more than 700 children had been integrated into schools, and sign-language training had been introduced in all refugee camps, for Deaf and non-deaf children.
- In September 2007 the Portuguese Ministry of Education organized a Europewide consultation in collaboration with the European Agency for Development in Special Needs Education (133). The young people consulted favoured inclusive education, but insisted that each person should be able to choose where to be educated. Acknowledging that they gained social skills and experience of the real world in inclusive schools, they also said that individualized specialist support had helped them to prepare for higher education.

Conclusion and recommendations

Children with disabilities are less likely than children without disabilities to start school and have lower rates of staying and being promoted in school. Children with disabilities should have equal access to quality education, because this is key to human capital formation and their participation in social and economic life.

While children with disabilities have historically been educated in separate special schools, inclusive mainstream schools in both urban and rural areas provide a cost-effective way forward. Inclusive education is better able to reach the majority and avoids isolating children with disabilities from their families and communities.

A range of barriers within education policies, systems and services limit disabled children's mainstream educational opportunities. Systemic and school-level change to remove physical and attitudinal barriers and provide reasonable accommodation and support services is required to ensure that children with disabilities have equal access to education.

A broad range of stakeholders – policy-makers, school administrators, teachers, families, and children with and without disabilities – can contribute to improving educational opportunities and outcomes for children with disabilities, as outlined in the following recommendations.

Formulate clear policies and improve data and information

- Develop a clear national policy on the inclusion of children with disabilities in education supported by the necessary legal framework, institutions, and adequate resources. Definitions need to be agreed on what constitutes "inclusive education" and "special educational needs", to help policy-makers develop an equitable education system that includes children with disabilities.
- Identify, through surveys, the level and nature of need, so that the correct support and accommodations can be introduced. Some students may require only modifications to the physical environment to gain access, while others will require intensive instructional support.

- Establish monitoring and evaluation systems. Data on the numbers of learners with disabilities and their educational needs, both in special schools and in mainstream schools, can often be collected through existing service providers. Research is needed on the cost-effectiveness and efficiency of inclusive education.
- Share knowledge about how to achieve educational inclusion among policymakers, educators, and families. For developing countries the experience of other countries that have already moved towards inclusion can be useful. Model projects of inclusive education could be scaled up through local-to-regional-toglobal networks of good practice.

Adopt strategies to promote inclusion

- Focus on educating children as close to the mainstream as possible. This includes, if necessary, establishing links between special education facilities and mainstream schools.
- Do not build a new special school if no special schools exist. Instead, use the resources to provide additional support for children with disabilities in mainstream schools.
- Ensure an inclusive educational infrastructure for example, by mandating minimum standards of environmental accessibility to enable access to school for children with disabilities. Accessible transport is also vital.
- Make teachers aware of their responsibilities towards all children and build and improve their skills for teaching children with disabilities. Educating teachers about including children with disabilities should ideally take place in both pre-service and in-service teacher education. It should have a special emphasis on teachers in rural areas, where there are fewer services for children with disabilities.
- Support teachers and schools to move away from a one-size-fits-all model towards flexible approaches that can cope with

- diverse needs of learners for example, individualized education plans can ensure the individual needs of students with disabilities are met.
- Provide technical guidance to teachers that can explain how to group students, differentiate instruction, use peers to provide assistance, and adopt other low-cost interventions to support students having learning difficulties.
- Clarify and reconsider policies on the assessment, classification, and placement of students so that they take into consideration the interactional nature of disability, do not stigmatize children, and benefit the individuals with disabilities.
- Promote Deaf children's right to education by recognizing linguistic rights. Deaf children should have early exposure to sign language and be educated as multilinguals in reading and writing. Train teachers in sign language and provide accessible educational material.

Provide specialist services, where necessary

- Increase investment in school infrastructure and personnel so that children with disabilities that are identified as having special educational needs obtain the needed support, and continue to receive that support during their education.
- Make available speech and language therapy, occupational therapy, and physiotherapy to learners with moderate or significant

- disabilities. In the absence of specialist providers, use existing community-based rehabilitation services to support children in educational settings. If these resources are absent, an attempt should be made to develop these services gradually.
- Consider introducing teaching assistants to provide special support to children with disabilities, while ensuring that this does not isolate them from other students.

Support participation

- Involve parents and family members. Parents and teachers should jointly decide on the educational needs of a child. Children do better when families get involved, and this costs very little.
- Involve the broader community in activities related to the education of children with disabilities. This is likely to be more successful than policy decisions handed down from above.
- Develop links between educational services and community-based rehabilitation

 and other rehabilitation services, where they exist. In this way, scarce resources can be used more efficiently, and education, health care, and social services can be properly integrated.
- Encourage adults with disabilities and disabled people's organizations to become more involved in promoting access to education for children with disabilities.
- Consult and involve children in decisions about their education.

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Chapter 8

Work and employment

"My disabilities deprived me of the chance to participate in farming; nevertheless I didn't give up. I raised ducks, sold aqua-cultural products, and traded waste materials. Although social discrimination and physical disability caused lots of difficulties, I never yielded. However, due to the hardship of the work, the ulcer on my right foot deteriorated, finally I had to have an amputation. Luckily with the help of friends and neighbours, I was successfully fitted with a prosthesis and restarted my career to seek a meaningful and independent life. From scratch, I began to raise cattle. I set up the Centre of Cattle Trading. It not only provides me a sufficient life, but also enables me to help many others who are also facing the challenges of leprosy."

Tiexi

"A lot of people, when I tried to get into university and when I applied for jobs, they struggled to see past the disability. People just assumed because I had a disability, that I couldn't perform even the simplest of tasks, even as much as operating a fire extinguisher... I think the main reason I was treated differently, since I set out to become a nurse, was probably because people were scared, because they've never been faced with anyone like me before."

Rachael

"I work at the catering unit of an NGO, supplying meals to 25 people who work there and sewing dolls when I am not cooking. The products are made for shops who buy because of the good quality, not because the things are made by people with disabilities. I have many friends at work. We all have intellectual disabilities. I do not have any other job choices because no one else would hire someone like me. It is hard to think what I would do if I had more choices, but maybe I would like to sing and dance and make music."

Debani

"Before the earthquake we were a big family with seven children all with our wishes and dreams. But only three of us survived in the ruined blocks of the buildings. The US doctors managed to save only one of my legs. With prosthesis I restarted attending school. I was living with memories of past, which were only a few pictures left. Even though I acknowledged the need to further my education I had no wish to do it. The turning point in my life was an offer to work in the local TV channel as a starting journalist. At first I had the anticipation that disability could be a hindrance upon becoming a professional journalist. But I had a very warm welcome; I was encouraged and had an on-job training for becoming a journalist. Very soon I felt comfortable in my new environment and position, was given equal number of responsibilities as others had and was not given any privilege."