

Disabilities Inclusive Education Systems and Policies Guide for Low- and Middle-Income Countries

Anne M. Hayes and Jennae Bulat



RTI Press publication OP-0043-1707

RTI International is an independent, nonprofit research organization dedicated to improving the human condition. The RTI Press mission is to disseminate information about RTI research, analytic tools, and technical expertise to a national and international audience. RTI Press publications are peer-reviewed by at least two independent substantive experts and one or more Press editors.

Suggested Citation

Hayes, A. M., and Bulat, J., (2017). *Disabilities Inclusive Education Systems and Policies Guide for Low- and Middle-Income Countries*. RTI Press Publication No. OP-0043-1707. Research Triangle Park, NC: RTI Press. <https://doi.org/10.3768/rtipress.2017.op.0043.1707>

This publication is part of the RTI Press Research Report series. Occasional Papers are scholarly essays on policy, methods, or other topics relevant to RTI areas of research or technical focus.

RTI International
3040 East Cornwallis Road
PO Box 12194
Research Triangle Park, NC
27709-2194 USA

Tel: +1.919.541.6000
E-mail: rtipress@rti.org
Website: www.rti.org

Cover photo: Tusome Early Literacy Programme

©2017 RTI International. All rights reserved. RTI International is a registered trademark and a trade name of Research Triangle Institute. The RTI logo is a registered trademark of Research Triangle Institute.



This work is distributed under the terms of a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 license (CC BY-NC-ND), a copy of which is available at <https://creativecommons.org/licenses/by-nc-nd/4.0/legalcode>.

<https://doi.org/10.3768/rtipress.2017.op.0043.1707>

www.rti.org/rtipress

Contents

| | | | |
|---|----|---|----|
| Abbreviations Used | i | Using Itinerant Teachers/Specialist Teachers | 18 |
| About the Authors | ii | Engaging Teacher Assistants | 19 |
| Acknowledgments | ii | Moving From a Diagnosis-Based Approach to an Individualized One | 19 |
| Abstract | ii | Identification of Children With Disabilities | 19 |
| Introduction | 1 | Challenges of Labeling | 20 |
| Structure and Purpose of the Guide | 2 | Adaptable Learning Environments and UDL | 21 |
| Summary of the School and Classroom Disabilities Guide | 2 | Inclusive Teaching and Learning Materials | 21 |
| What Is Inclusive Education? | 3 | Teacher Training | 22 |
| Dispelling Myths about Inclusion and the Education of Learners with Disabilities | 4 | Embed Disability in All Preservice and In-Service Trainings | 23 |
| Myth 1. Inclusive Education Will Have a Negative Impact on Students Without Disabilities | 5 | Include All Teachers, Regardless of Specialization, in Teacher Training | 23 |
| Myth 2. Inclusive Education Is More Expensive Than Educating Students in Special Education Settings | 5 | Promote the Diversification of Skill Sets | 23 |
| Myth 3. Segregated Schools and Classrooms Are More Effective Than Inclusive Schools and Classrooms for Educating Students with Disabilities | 6 | Address Potential Attitudinal Barriers | 23 |
| Myth 4. When Faced with Limited Resources, Inclusive Education Can and Should Only Be Addressed Once the Education of “Normal Students” Is Achieved | 6 | Provide Follow-Up and Hands-On Experience | 23 |
| Myth 5. Educating Students with Disabilities Is a “High-Income Country Luxury” and Does Not Apply to LMI Countries | 6 | Data Collection, Prevalence Rates, and Enrollment | 24 |
| Understanding Inclusive Education Policies | 6 | Budgeting for Inclusion | 25 |
| International Policies and Frameworks for Inclusive Education | 7 | Per Capita or Cost-Based Models | 25 |
| National Policies for Inclusive Education | 8 | Resource- or School-Based Models | 26 |
| Refining National Education Plans | 13 | Output-Based Models | 26 |
| Understanding the Systems Approach to Inclusive Education | 14 | Monitoring Systems for Improvement | 26 |
| Engaging Stakeholders | 14 | Conclusion | 27 |
| Models of Moving From a Segregated System to an Inclusive One | 18 | References | 28 |
| Developing Resource Centers | 18 | Appendix A. Inclusive Education Systems and Policy Checklist | 33 |
| | | Appendix B. Glossary of Disability Inclusive Education Terminology | 35 |

Abbreviations Used

| | | | |
|------|--|---------|---|
| CRPD | United Nations Convention on the Rights of Persons with Disabilities | READ-TA | Reading for Ethiopia’s Achievement Developed Technical Assistance (USAID) |
| DPO | disabled persons’ organization | SDG | Sustainable Development Goal |
| EGRA | Early Grade Reading Assessment | UDL | Universal Design for Learning |
| EMIS | Education Management Information System | UN | United Nations |
| IEP | Individualized Education Plan | UN CRC | United Nations Convention on the Rights of the Child |
| LMI | low and middle income | UNESCO | United Nations Educational, Scientific and Cultural Organization |
| MOE | Ministry of Education | UNICEF | United Nations Children’s Fund |
| OECD | Organisation for Economic Co-operation and Development | USAID | United States Agency for International Development |
| | | WHO | World Health Organization |

About the Authors

Anne M. Hayes, MA, is an international disability and development consultant.

Jenna Bulat, PhD, directs the Teaching and Learning team in the International Development Group at RTI International.

Acknowledgments

The authors thank reviewers Elizabeth Randolph, Alastair Rodd, Pamela Baird, and Ann Turnbull and editors Amy Morrow and Lynda Grahill for their expert input and recommendations. They express sincere appreciation to Felice Sinno-Lai for her diligent and responsive assistance in the preparation of this paper.

Abstract

Having a disability can be one of the most marginalizing factors in a child's life. In education, finding ways to meet the learning needs of students with disabilities can be challenging, especially in schools, districts, regions, and countries with severely limited resources. Inclusive education—which fully engages all students, including students with disabilities or other learning challenges, in quality education—has proven particularly effective in helping all students learn, even while challenges to implementing inclusive education systems remain. This guide provides suggestions for developing inclusive education systems and policies, especially for low- and middle-income countries that are moving from a segregated system toward an inclusive system of education. We specifically address the needs of countries with limited resources for implementing inclusive education. However, our strategies and recommendations can be equally useful in other contexts where inclusive education practices have not yet been adopted.

Introduction

Disability is present in every race, ethnicity, gender, sexual orientation, age, and religion. More than a billion people, or 15 percent of the world's population, have some category of disability. Of these, an estimated 150 million children have a disability, and 80 percent of these children live in the developing world (World Health Organization [WHO], 2011). These children often face conditions of extreme poverty, exclusion, and discrimination and are denied the basic services offered to their peers without disabilities. The United Nations Children's Fund (UNICEF) estimates that 90 percent of children with disabilities in low-income countries have never received any form of education (UNICEF, 2014a). Also, once enrolled, students with disabilities are more likely to drop out of school than students without disabilities.

It is estimated that only 5 percent of all students with a disability complete primary school (Peters, 2003). Even when students with disabilities attend school, a curriculum that has not been adapted to their needs may mean they do not have the same access to education as their classmates do. Moreover, teachers may not know how to accommodate the needs of students with disabilities, books may not be available in braille for students who are blind, and teachers may not know sign language for students who are deaf (International Disability and Development Consortium, 2013).

The United Nations (UN) Convention on the Rights of Persons with Disabilities (CRPD) signifies a paradigm shift from seeing disability as a clinical and social welfare issue toward recognizing that disability is a fundamental human rights issue and that meeting the development goals of persons with disabilities is necessary to meeting overall global development goals. This Convention provides a legal framework for all issues related to the lives of persons

The Convention on the Rights of Persons with Disabilities was adopted in 2006 and entered into full force in 2008 (UN Division for Social Policy and Development: Disability, 2006).

with disabilities, and it includes explicit language stating that children with disabilities have the right to receive education in an inclusive setting and with the supports needed to succeed. Currently, 173 countries have ratified the CRPD (UN Division for Social Policy and Development: Disability, 2016)¹ and are developing new policies and reforming educational systems to align and comply with the treaty.

For many low- and middle-income (LMI) countries, ratifying the CRPD signals that they are following the global shift of moving from a system where children with disabilities are educated in segregated schools or classrooms toward a system that allows for children to be educated in the same classrooms as their nondisabled peers. However, many countries struggle with this development and are seeking recommendations on how to transition and examples of proven good practices in special education and inclusive education reform. This guide provides recommendations for developing inclusive education policies and systems and examples of effective models from around the world. Although each country will undoubtedly approach reform differently based upon its cultural context, current education programs, and existing special education systems and needs, the recommendations provided in this guide can serve as an additional resource to help each country meet its goal of inclusive education reform.

At the heart of this guide is the premise that *all* children can and deserve the right to learn and reach their full potential. For many children with disabilities, this means receiving specialized supports or special education to address students' individual learning differences and needs. This guide discusses the supports that should be provided within an education system and provides suggestions on how to adjust education systems to affect improved learning outcomes for students with, and without, disabilities.

Special education is a service, not a place.

¹ Country ratification status as of May 2017.

Structure and Purpose of the Guide

The guide's primary audiences are policymakers and national-level education stakeholders working on education reform, although international organizations working in the field of education and other education program implementers can also benefit from understanding and, hopefully, supporting the strategies provided. Disabled persons' organizations (DPOs) and parents may also find the guide helpful when advocating for improved educational policies and programs. The principles of this guide align closely with Article 24 of the UN CRPD and the recent general comments on Article 24 (<http://www.ohchr.org/>). A user-friendly checklist included as Appendix A to this paper covers the core elements that are typically found in inclusive systems and policies based upon the guidance provided by the Committee on the CRPD on Article 24. Appendix B provides a glossary of terms related to disabilities inclusive education.

This guide encourages strategies that are specifically intended to support inclusive education strategies for all children, regardless of the type or severity of disability, because an ideal system would be able to serve all children equitably. At its core, this guide recognizes that inclusive schools and classrooms benefit all students, not just those with disabilities, and that students do not need to be officially identified as having a disability to benefit from inclusive education strategies.

This guide outlines the relevant international legislations and policy frameworks that have set the stage for inclusive education and highlights the core principles of these documents that may be relevant for countries looking to develop more inclusive education systems. This guide also provides recommendations for elements to include in national education policies to help ensure compliance with the CRPD and suggestions for other components that often exist in successful inclusive systems. Finally, the guide introduces models for how to move from segregated systems toward inclusive ones, including basic suggestions for teacher training budget development, data collection, and monitoring.

This guide does not address barriers that extend beyond the school system, such as those related to inadequate transportation systems or parental or community-based resistance to enrolling children with disabilities in school. Such barriers are real, relevant, and deserve serious attention in all communities. However, they are not included in this guide so that the guide can focus more deeply on the characteristics, constraints, and opportunities of education systems themselves.

Summary of the School and Classroom Disabilities Guide

This guide serves as a companion piece to the *School and Classroom Disability Inclusion Guide for Low- and Middle-Income Countries* (School and Classroom Guide) (Bulat et al., 2015), which provides school- and classroom-based guidance for including children with mild to severe disabilities in general education schools and classrooms. The School and Classroom Guide provides practical classroom strategies and suggestions that build upon the Universal Design for Learning (UDL) model and that encourage instruction that benefits all children, regardless of the presence or type of disability.

The School and Classroom Guide is particularly useful for schools that have not yet implemented inclusive education or are only beginning to do so. Basic concepts of Response to Intervention and practical modifications to classroom instruction to ensure that children with physical, sensory, communication, and intellectual disabilities benefit from instruction are also highlighted within the guide. Together, the School and Classroom Guide and this guide on inclusive education systems and policies can provide policymakers and implementers with recommendations and concrete suggestions regarding how to better provide quality education services for students with disabilities.

Response to Intervention is a tiered framework for identifying students who may need additional educational support and then providing them with increasingly intensive supports as needed to meet learning objectives (RTI Action Network, n.d.).

What Is Inclusive Education?

The goal of educating children with disabilities is the same as that of educating children without disabilities: to support children in reaching their full potential and leading productive lives as active members of their communities. Children with disabilities often require specialized services and supports to master content being taught. Unfortunately, however, in many countries, specialized education services take the form of segregating students with disabilities in separate classrooms or schools, with no opportunities for engaging with peers who do not have disabilities and often no access to the curriculum that these peers are learning. Shifting away from segregation toward including all students in general education classrooms and schools means providing all students in these classrooms with the unique supports and services that they need—such as access to assistive devices, teacher assistants, and an adapted curriculum—to participate effectively in the classroom.² This shift is often a substantial one that requires time, political will, and an understanding of the benefits of inclusive education for all students.

That said, no universal definition of disability exists. The CRPD states that disability is an “evolving concept and that disability results from the interaction between persons with impairments and attitudinal and environmental barriers that hinder their full and effective participation in society on an equal basis with others.” The CRPD further elaborates that “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” (UN Division for Social Policy and Development: Disability, 2006). This definition provides important guidelines for disability but leaves specific

² Note that inclusive education does not mandate that students must spend 100 percent of time with their peers. Specialized intensive instruction in alternative settings—such as pulling a child out of a general education classroom for intensive literacy or language support—may also be helpful for some students in some areas of instruction. However, it is important to ensure that removing a student from the classroom does not become the default practice and that this practice is used sparingly and only in cases where such intensive and specialized instruction is not feasible in the general education class and is clearly beneficial for that student.



Noninclusive Models of Special Education

Segregated Education. Children are educated in different schools because of their disability and are typically educated with students with similar diagnoses (e.g., schools for students who are blind). In many LMI countries, these schools do not follow the national curriculum. In many cases, students with disabilities are not taught literacy or math skills; rather, instruction is often focused on “life skills.” Segregated schools are typically located within urban areas and often provide residential services because of issues related to transportation.

Integrated Education. The definition of integrated education may vary depending on language, culture, or context. Some refer to integrated classrooms as general education settings that include students with disabilities but do not provide the accommodations or supports needed for those students to learn and participate effectively. Others refer to integrated schools as general education schools that include students with disabilities but give those students instruction solely or predominantly in specialized or segregated classrooms. Typically, in these instances, students with disabilities have limited interaction with their peers without disabilities and often lack access to the national curriculum.

categorization based on diagnosis to education systems themselves.

Similarly, there is no single concept of inclusive education that applies across all contexts. Most fundamentally, inclusive education is considered to be the “least restrictive environment” for children with disabilities. As such, it is the preferred educational



Inclusive Model of Special Education

Within an inclusive education system, the student with a disability is educated in the least restrictive environment, typically along with peers who do not have disabilities. In an inclusive education system, supports needed by students with disabilities are ideally provided in the classroom by either the teacher or designated support staff, but can also be provided outside of the classroom by specialists—such as speech therapists, physical therapists, or intensive literacy or mathematics coaches—as best meets the student’s needs. Time spent outside of the classroom should be minimized, however, and limited to only those services or supports that are needed by the student.

setting, as specified in Article 24 of the CRPD and many domestic laws, including the US Individuals with Disabilities Education Act.

However, some organizations and countries have used a broader definition of inclusion that includes the education of all individuals who may be marginalized. For example, the Salamanca Statement and Framework for Action on Special Needs Education states that inclusive 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. (UN Educational, Scientific and Cultural Organization [UNESCO], 1994)

Regardless of how inclusive education systems are defined, educational stakeholders should have a clear understanding of the principles of inclusive education

as they develop and strengthen special education systems. Following is a text box below that provides a general overview of what are—and are not—characteristics of inclusive education.

Dispelling Myths about Inclusion and the Education of Learners with Disabilities

Misperceptions related to the education of students with disabilities can impact the motivation of government officials, school administrators, teachers, communities, and international development staff to implement or support inclusive education systems. In some cases, the largest resistance to the shift from segregated to inclusive systems comes from special education teachers themselves, who may be concerned about their place within inclusive systems and can have unsubstantiated prejudices against inclusion (McLeskey & Waldron, 2000). This section helps to dispel some of the more frequently held myths about inclusive education and teaching students with disabilities.



Characteristics of Inclusive Education

Inclusion means...

- Students with disabilities attend their neighborhood schools or the schools they would attend if they were not disabled.
- Each student is in an age-appropriate general education classroom.
- Every student is accepted and regarded as a full and valued member of the class and the school community.
- Special education supports are provided to each student with a disability within the context of the general education classroom.
- All students receive an education that addresses their individual needs.
- No student is excluded based on type or degree of disability.
- All members of the school (e.g., administration, staff, students, and parents) promote cooperative/collaborative teaching arrangements.
- There is school-based planning, problem-solving, and ownership of all students and programs.

Adapted from McLeskey & Waldron (2000).

Inclusion does not mean...

- Placing students with disabilities into general education classrooms without careful planning and adequate support.
- Reducing services or funding for special education services.
- Placing all students who have disabilities or who are at risk in one or a few designated classrooms.
- Teachers spending a disproportionate amount of time teaching or adapting the curriculum for students with disabilities.
- Isolating students with disabilities socially, physically, or academically within the general education school or classroom.
- Jeopardizing the achievement of general education students through slower instruction or a less challenging curriculum.
- Relegating special education teachers to the role of assistants in the general education classroom.
- Requiring general and special education teachers to team together without careful planning and well-defined responsibilities.

Myth 1. Inclusive Education Will Have a Negative Impact on Students Without Disabilities

Decades of research in the United States and other high-income countries have demonstrated that inclusive education benefits not only students with disabilities but also students without disabilities. Inclusive classrooms teach all students about the importance of diversity and acceptance. Evidence also indicates that students with and without disabilities who are educated in inclusive classrooms have better academic outcomes than students who are educated in noninclusive classrooms. For example, several studies have shown that students without disabilities make significantly greater progress in reading and math when taught in an inclusive setting with students with disabilities (Cole, Waldron, & Majd, 2004; Cosier, Causton-Theoharis, & Theoharis, 2013). One meta-analysis of existing research demonstrated that 81 percent of the reported outcomes showed that including students with disabilities in the general education classroom resulted in either a positive or neutral effect on students without disabilities (Kalambouka, Farrell, & Dyson, 2007). A possible reason for this improved educational outcome is that all students benefit from differentiated learning techniques and other accommodations—such as visual schedules, manipulatives, and comprehension strategies—that are used in inclusive classrooms.

Myth 2. Inclusive Education Is More Expensive Than Educating Students in Special Education Settings

Inclusive education is the most pedagogically effective way to support the education of students with disabilities; it is also the most financially effective. More than 100 studies have shown that establishing segregated, separate, and parallel education systems within a country (i.e., one system of schools for the general population and a different system of segregated schools for students with disabilities) is more expensive and less sustainable than inclusive education models (McGregor & Vogelsberg, 1998). This is partly because segregated school systems incur additional costs for transportation, infrastructure, and in many countries, on-campus residences. For example, the 1999 Organisation for Economic Co-operation and Development (OECD) report estimated that the costs for segregated school systems



The Cost of Exclusion

- In Bangladesh, the exclusion of people with disabilities from the labor market results in an estimated total loss of US\$891 million/year.
- In Morocco, lost income resulting from the exclusion of individuals with disabilities from work has been estimated to result in national-level losses of 9.2 billion dirhams (approximately US\$1.1 billion).
- In South Africa, lost earnings per adult with severe depression or anxiety disorder per year averaged US\$4,798 (approximately half of the gross domestic product per capita), totaling \$3.6 billion when aggregated to the national level.
- Conversely, inclusion could lead to substantial gains. In Pakistan, for example, it was estimated that rehabilitating people with blindness could lead to gross aggregate gains in household earnings of \$71.8 million per year (Banks & Polack, 2014).

were 7 to 9 times higher than those for inclusive education systems (Labon, 1999). Furthermore, ignoring the costs of establishing and maintaining segregated schools—thus denying students with disabilities the opportunity to receive an inclusive education—is ultimately a financial liability to a country.

A recent international study of the costs of exclusion compared to the gains of inclusion found that exclusion results in lower employment and potential earning, which impacts individuals with disabilities and their families and limits a country's national economic growth. That study also demonstrated that increased education of students with disabilities results in lower crime rates, improved health and family planning, and increased citizen participation (Banks & Polack, 2014). Additionally, a World Bank study showed that the return on investment for educating a student with a disability tends to be two to three times higher than that for educating students without disabilities (Patrinos, 2015).

Although there are initial costs associated with establishing an inclusive system, special education (regardless of setting) can have associated costs above and beyond the general education for students without disabilities and should be budgeted for accordingly. The recurring costs required to maintain

an inclusive system are less than those needed to maintain two parallel systems.

Myth 3. Segregated Schools and Classrooms Are More Effective Than Inclusive Schools and Classrooms for Educating Students with Disabilities

No studies conducted since the 1970s have shown students with disabilities who are educated in separate settings (Falvey, 2004) perform better than students in inclusive settings. In fact, the amount of time a student with a disability spends in the general education classroom is positively correlated with higher test scores in math and reading, less disruptive behavior, and increased future employment opportunities. Indeed, this positive correlation has been found in all students with disabilities, regardless of the type of disability or its severity (Wagner et al., 2006). Inclusive education may also have other benefits, including increased community awareness and acceptance. For example, a 14-nation UNESCO study showed that in countries where there were laws requiring inclusion, teachers expressed a more favorable view of inclusion (Bowman, 1986).

Conversely, segregated classrooms or schools perpetuate the misconception that individuals with disabilities are fundamentally different from their nondisabled peers and need to be isolated or separated. This approach can negatively impact both the classroom climate and students' attitudes about diversity and acceptance (Fisher, Sax, Rodifer, & Pumpian, 1999).

Myth 4. When Faced with Limited Resources, Inclusive Education Can and Should Only Be Addressed Once the Education of "Normal Students" Is Achieved

Many practitioners are reluctant to include children with disabilities within their general education programs because they are concerned that doing so might distract from the educational needs of students without disabilities. Prioritizing education based on a child's disability or other factors, such as gender, race, ethnicity, or sexual orientation, is discriminatory and should not be supported by the international development community. Creating an education system that does not serve all of a country's

children and youth is not only unethical, a social injustice, and contradictory to most countries' internal laws, international policies, and the UN Sustainable Development Goals (SDGs), it is also a financial liability for a country, as illustrated above.

Myth 5. Educating Students with Disabilities Is a "High-Income Country Luxury" and Does Not Apply to LMI Countries

Education for All goals and the new SDGs, which include learners with disabilities as part of Goal 4 ("Ensure inclusive and quality education for all and promote lifelong learning"), cannot be achieved unless the global needs of children with disabilities are considered (UN, 2016b). As practitioners work to improve policies and systems, they should consider international best practices on inclusive education and build upon local lessons learned to strengthen policies and systems that include all individuals. In other words, all nations, not only high-income countries, must provide inclusive education to children and youth with disabilities.

Understanding Inclusive Education Policies

Inclusive education can only exist with strong support from the government and specific legislation (UNICEF, 2014b). Fortunately, the general understanding that children with disabilities have the right to education is growing. Indeed, most countries currently have laws or regulations specifically designed to ensure that children with disabilities have equal opportunities to receive an education (UNICEF, 2012). The quality and details of these laws, however, vary significantly. Also, even where there are laws or provisions promoting inclusive education, these commitments have not yet necessarily been harmonized with general education planning (United States Agency for International Development [USAID], 2010). In some countries, such as Egypt, laws simply state that children with disabilities have the right to education. Other countries, such as Ethiopia, are more prescriptive. In the case of Ethiopia, the National Plan of Action of Persons with Disabilities not only describes the rights of individuals with disabilities but also addresses outputs, activities, and indicators associated with those



Education in Schools for Children Who Are Deaf

Typically, the deaf community sees sign language as part of its culture, and many parents and individuals prefer that education be provided among other students who use sign language to promote social inclusion and communication. The World Federation of the Deaf promotes the use of bilingual education that educates students in both local sign language and the national written language. In the past, the desire to be educated with others who use sign language has been interpreted as supporting segregated education. Recently, the World Federation of the Deaf has clarified its stance on this issue, stating that schools for students who are deaf should be viewed as linguistic immersion schools that provide bilingual education but follow the national curriculum. These schools should be open to any individual, regardless of hearing ability, as long as they are willing to be fully immersed in the use of sign language in the classroom.

rights (Ethiopia Ministry of Labour and Social Affairs, 2012).

This section of the guide provides an overview of relevant international policies related to inclusive education, describes components that should be included in national policies, and introduces the importance of national inclusive education strategies or plans.

International Policies and Frameworks for Inclusive Education

International legislation and legal frameworks, such as the CRPD, describe human rights principles and legal requirements for upholding those principles. Studies have demonstrated that countries with ratified human rights treaties are associated with better or improved human rights practices (Hathaway, 2002). Anecdotal evidence also suggests that champions for improved education for persons with disabilities are using these legislative tools to advocate effectively for improved laws and services within their countries. For example, within the first 4 years of the CRPD, 91 percent of countries that had ratified the legislation had already adopted national laws for people with disabilities and 72 percent of those countries' laws included a definition of reasonable accommodation (Ruh, 2012).

Here we present a summary of some of the most prominent international policies and legal frameworks that promote inclusive education for disabilities.

United Nations Convention on the Rights of the Child

Adopted in 1989, Article 23 of the UN Convention on the Rights of the Child (CRC) specifically addresses the rights of children with disabilities and states that children with disabilities should have access to and receive education in a “manner conducive to the child’s achieving the fullest possible social integration and individual development” (UN Office of the High Commissioner for Human Rights, 1989). The Committee on the Rights of the Child further clarified that inclusive education, not segregated education systems, must be the goal of educating children with disabilities (UN Office of the High Commissioner for Human Rights, 2007).

World Declaration on Education for All

Adopted in 1990 with support from UNESCO, UNICEF, and the UN Development Program, the World Declaration on Education for All served as one of the first milestones to support inclusive education throughout the world. A total of 155 countries adopted the Declaration, which asks countries to commit to universal primary education and stresses the need to provide access to education for all children with disabilities (UNESCO, 1990).³

Salamanca Framework for Action

Adopted in 1994 at the World Conference on Special Needs Education, the Salamanca Framework for Action highlights the necessity to educate children with disabilities within the general education system. This statement urges governments and the international community to endorse inclusive education as the best approach to educating children with disabilities (UNESCO, 1994).⁴

³ Disability is mentioned throughout the World Declaration on Education for All. For example, disability is mentioned within the goals and target section, Article 3.3 (d), and as part of the overall commitment.

⁴ The Salamanca Conference, which developed the Framework of Action, was attended by more than 300 participants representing 92 governments.

United Nations Convention on the Rights of Persons with Disabilities

Adopted in 2006, the CRPD provides the most comprehensive international legal framework for supporting the educational rights of children with disabilities. The CRPD states that countries that have ratified the CRPD must ensure an inclusive education system at all levels and that children with disabilities have the right to free primary and secondary education and cannot be discriminated against based on their disability. Other requirements related to the education of individuals with disabilities include the following (UN Division for Social Policy and Development: Disability, 2006):

- All schools must be accessible (tied to Article 9 on Accessibility), both physically and regarding information and communication.
- Students with disabilities should receive reasonable accommodations within the classroom.
- Schools should address the academic, social, and life skills needs of each student.
- If needed, alternative learning methods should be used, such as braille instruction or alternative communication devices.
- Local sign language instruction should be provided for students who are deaf to promote linguistic identity.
- Individuals with disabilities should have access to tertiary, vocational, and adult education.

In 2015, the Committee on the CRPD drafted the General Comments on the right to inclusive education. This document provides additional information about the systems and legal frameworks that countries should establish based upon the CRPD. Appendix A presents a checklist based on this document and the CRPD. For the full document, see <http://www.ohchr.org/EN/HRBodies/CRPD/Pages/GCRightEducation.aspx>.

Sustainable Development Goals

Established in 2015, the SDGs serve as a set of aspirational goals for countries to work toward over the next 15 years. Goal 4 on education specifically addresses disability within two of the



Donor Policies on Disability-Inclusive Development

Article 32 of the CRPD requires that countries that have ratified the CRPD must provide international cooperation support in a manner that is fully inclusive of and accessible to individuals with disabilities. As a result, the vast majority of bilateral and multilateral international donor agencies have adopted policies, guidelines, frameworks, and/or strategic plans requiring the inclusion of individuals with disabilities within their supported programs. Any education project funded by such agencies should likely, therefore, have a requirement to include children with disabilities as beneficiaries. Examples of international donor agencies that have taken public and proactive measures to include persons with disabilities in their programs include the Australian Department of Foreign Affairs and Trade; European Commission; Ministry of Foreign Affairs of Finland; German Development Cooperation; Norwegian Development Cooperation; Swedish International Development Cooperation; United Kingdom Department of International Development; USAID; United States Department of State; and World Bank.

education targets (UN Division for Social Policy and Development: Disability, 2016):

- **Target 4.5.** “By 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples, and children in vulnerable situations.”
- **Target 4.a.** “Build and upgrade education facilities that are child, disability and gender sensitive and provide safe, non-violent, inclusive and effective learning environments for all.”

As governments work to implement the education goal, the data that are gathered and monitored will provide valuable information that will hopefully inform and strengthen education systems in the future (UN, 2016c).

National Policies for Inclusive Education

Once a country has committed to the concept of inclusion in education, it is important to adapt national policies and laws. The education of children with disabilities and the importance of inclusive

education are best integrated into the country's overall education strategic plan, with implementation strategies reflected in the national education strategic implementation plan. In this way, the commitment to inclusive education is clearly reflected in national policy and strategic planning in general, included in the education budget, and recognized in bilateral and multi-lateral partnerships with funding agencies. According to UNESCO's Policy Guidelines for Inclusion in Education, national legal frameworks should, at a minimum, achieve the following (UNESCO, 2009):

- Recognize inclusive education as a right;
- Identify minimum standards in relation to the right to education, including physical access, communication access, social access, economic access, early identification, adaption of curriculum, and individualized student supports;
- Identify minimum standards regarding the right to education and ensuring that families and communities are active participants in inclusive education;
- Ensure a transition plan for students with disabilities;⁵
- Identify stakeholders and their responsibilities;
- Provide resources for students with disabilities; and
- Establish monitoring and evaluation mechanisms for ensuring that education is truly inclusive.

Furthermore, many successful national inclusive education policies provide even more explicit guidance to stakeholders and implementers, such as described below.

Contextualized Definition of Disability and Inclusion

To be most useful for implementers, national disability inclusion policies and legislation should include clear definitions of disability and inclusive education and state the specific objectives a country

is seeking to achieve through its national inclusive education policy and legislation. In addition, policies and legislation should clarify that the goal of inclusion is for children, regardless of type or severity of disability, to have the right to free primary and secondary education within their public neighborhood schools (UN Office of the High Commissioner for Human Rights, 2015).

Reasonable Accommodations

National disability inclusion policies should include language related to reasonable accommodations, as required in the CRPD. Article 2 of the CRPD defines reasonable accommodation as “the 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” (UN Division for Social Policy and Development: Disability, 2006). The CRPD Committee also clarifies that there is not a “one size fits all” formula for reasonable accommodations and that different students with the same type of disability may require very different accommodations based on the severity of their disability and their personal learning preferences. The type of reasonable accommodations provided should be determined by a joint consultation involving the school, parents, and student (UN, 2016a).

Adapting and Modifying National Curriculum

National disability inclusion policies should explicitly state that all students should have access to the national curriculum. Too often, students with disabilities are taught only life skills (such as a basic understanding of how to do household chores and basic hygiene) and are not allowed access to the general curriculum, which includes vital literacy and math skills. Although life skills are important, they are not sufficient. Recognizing that not all students with disabilities can equally access the national curriculum, the curriculum should be modified or adapted to promote individualized instruction. Curriculum adaptation does not mean developing a separate or alternative curriculum based on a student's diagnosis, because doing so can limit a

⁵ Students with disabilities may require different transition plans throughout their academic career. Most notable is the development of a transition plan that supports students with disabilities as they move from school to the workforce. Other transition plans may include transitioning from an early childhood program to kindergarten and transitioning from primary to secondary school.



Reasonable accommodations can include...

- providing or facilitating tape recordings of a session or asking other students to help take notes;
- rearranging furniture or allowing special seating in the classroom;
- providing braille materials or texts in large print to students who might need them;
- removing barriers and providing physical access to the school;
- providing teaching assistants or tutors within the classroom; and
- providing space within a classroom in which students can work without undue distractions.

Reasonable accommodations are not...

- excusing all students, regardless of their type or severity of disability, from completing their homework assignments or taking tests;
- providing housing options for students and their families;
- providing wheelchairs, eyeglasses, or mobility aids (this is typically done through referrals or by the Ministry of Health or comparable ministry);
- giving students with disabilities the answers to the test in advance; and
- providing tutors to students with disabilities in their homes or outside of the classroom.

student's potential growth, even if unintentionally. Rather, adaptation requires reviewing the national curriculum standards and determining how best to expose the student to each standard and related performance goal using accommodations. Uniquely adapting a curriculum for each student with disabilities can challenge educators; even in high-income countries, such as the United States and



Inclusion Strategy

Although the national curriculum can be modified or adapted as needed, students with disabilities should follow the same curriculum as their nondisabled peers. For some students, this could mean that teachers preview new concepts or vocabulary with them before the class or teach them how to use graphic organizers, chunking (combining related pieces of information into units), and questioning techniques so that they can keep pace with their nondisabled peers during the class (Lee et al., 2006).

the United Kingdom, it is not done consistently for all students. Curriculum adaptation can be an even greater challenge in LMI countries, where education supports are often limited. However, a shift toward national curriculum adaptation is emerging in even the most resource-constrained countries, and as more countries begin to expand their national legislation on inclusive education, access to the curriculum should be included as a key component of new laws.

Deinstitutionalization

The practice of institutionalizing children with disabilities remains a reality in many parts of the world. Institutionalization is especially relevant for children who have intellectual or severe disabilities, as parents may feel they have no other option. Therefore, governments should establish plans to eliminate institutions, social homes, or residential care facilities for children with disabilities and develop programs to reunite and strengthen family and community living. To be effective, deinstitutionalization policies must acknowledge and address reasons for institutionalization, such as “social attitudes that shame the family that has a child with disabilities; lack of skills to provide appropriate nursing care; financial difficulties; and the belief there is very little chance a child with disabilities can be integrated into society” (UNICEF, 2004). The CRPD clearly states that children and adults with disabilities should have the right to live in the communities in which their families live, and the Committee on the CRPD states that “the introduction of inclusive education must take place alongside a strategic commitment to the ending of long-term institutions for persons with disabilities” (UN, 2016a). As national governments review their current practices related to



An Example of Deinstitutionalization

In 2013, the Croatian government began a 5-year deinstitutionalization initiative along with Open Society Foundations, the Association for Promoting Inclusion, and the Center for Adult Education Valdius. During this 5-year period, more than 400 people will be moved from institutions into community settings, such as homes with their own families or foster homes. More than 300 former institution staff members will also be retrained to provide community-based services (Klein, 2014).

institutionalization and residential care and develop a clear plan to eliminate these structures and systems in the future, they can draw upon principles provided in the CRPD.

Accessibility Standards

Establishing physical and communication accessibility in schools is essential for inclusive education. Many countries, such as Honduras, Costa Rica, and Brazil, are enacting laws that require all new schools to be accessible—able to be accessed and used by all students, regardless of mobility or other limitations—and all existing schools to be retrofitted over time. In addition, national standards on accessibility should require that schools implement a range of accessibility features to accommodate students with diverse disabilities. Each country has the opportunity to develop its own accessibility standards, and when doing so, it is important to review international best practices. The International Standards Organization (2017) provides general guidance to policymakers as they work to establish domestic accessibility standards.

Inclusion Strategy

Develop standards for accessible schools—schools that accommodate mobility, sensory, and other needs of students with disabilities—based on international best practices and accepted international accessibility standards.

Access to Assistive Technology

Assistive technology devices can help students to access information and be successful in the classroom. Currently, however, only 5–15 percent of children with disabilities in low-income countries have access to assistive technologies or assistive devices (Saebones et al., 2015). Furthermore, many countries may be using severely outdated technology—for example, teaching students to write braille using slates and stylus tablets rather than braille. A mandate to make assistive technology devices available to students is clearly stated within the CRPD, and countries that are developing specific domestic laws should consider including a specific reference to assistive technology. To this end, it is important first to assess what, if any, assistive technologies are currently being used in classrooms



Examples of physical accessibility include

- building ramps to enter the building and within the building using a 1:12 gradient slope;
- constructing accessible bathrooms or latrines; and
- ensuring that doorways and pathways are wide enough for a person using a wheelchair to easily use and moving items that may obstruct someone's path.



Braille

Examples of accessible communication include

- creating accessible websites;
- developing materials in alternative formats, such as audio, large print, or braille;
- avoiding placing text over pictures;
- describing pictures using text;
- not using visual language in descriptive text (e.g., referring to “the text in yellow highlight”); and
- making sure that multicolumn text, tables, or boxes are in the correct reading order for a text reader.

and then, based on this information, develop a strategy for increasing access to assistive technologies in the classroom. In low-income countries where budgets for assistive devices are limited, funding assistance from donor agencies supporting the education sector may be an avenue for obtaining this equipment.



The USAID Reading for Ethiopia's Achievement Developed Technical Assistance (READ-TA) program includes a specific focus on researching and providing effective assistive technology supports to children with disabilities. Through regional consultative workshops, the READ-TA team helped Ministry of Education (MOE) staff to assess needs and design, implement, and evaluate technology-supported initiatives that promote early reading and writing. These working groups identified low vision and hearing loss as primary areas of educational need. In response, the READ-TA team identified and is piloting tablet-based vision and hearing screening tools that will help to identify students with hearing and/or vision loss and is incorporating supports into tablet-based versions of teacher guides to help teachers provide the targeted instruction for students with these disabilities.



There is no universal sign language. The adoption of a local, indigenous sign language is encouraged over the use of an imported, foreign sign language. Some countries, such as Uganda and South Africa, have officially recognized their local sign language as a minority language in the country; this is considered global best practice.

Access to Instruction in Sign Language

Globally, children who are deaf are often not taught sign language and have limited access to instruction given in sign language, which affects their ability to learn and reach their full potential. Partly because of the lack of teachers trained to teach in sign language, an estimated 90 percent of children who are deaf worldwide are illiterate (Rau Barriga, 2010). As with the right to assistive technology, the CPRD clearly obligates the right to receive education in local sign language. Inclusive education policies must underscore the right to receive education in local sign language for individuals who are deaf or have very limited hearing.

Individualized Education Plans

Individualized education plans (IEPs) were established in the United States in the 1970s and have since become an integral part of special education strategies in many countries worldwide (Mariga et al., 2014). IEPs are ideally developed through a multidisciplinary process involving parents, teachers, administrators, the student, and other relevant support staff and service providers. Through this process, the individual needs, learning goals, placement, and related services of students with disabilities and the appropriate teaching strategies and required classroom accommodations can be identified. IEPs are an important tool for helping learners with disabilities to succeed and progress in school, and because of their role in facilitating special education, IEPs are legally mandated in many



Inclusion Strategy

- Promote the systematic use of IEPs for all children with disabilities.
- Consider the use of IEPs as part of the national domestic legislation.

countries. For example, the United States, Australia, Canada, New Zealand, and the United Kingdom all have legislation that requires the development and use of IEPs for students with disabilities (National Council for Special Education, 2006). The use of IEPs is also increasingly prevalent in other countries, such as Costa Rica, Malawi, Turkey, South Africa, and Uganda. In Uganda, for example, at the request of the Ministry of Education and Sports, RTI developed an IEP teacher's guide, on which teachers in the USAID/ Uganda School Health and Reading Program have been trained, with positive feedback emerging from trainers and teachers. In Ireland, where IEP usage is voluntary rather than compulsory, 85 percent of teachers reported IEPs to be useful in delivering inclusive education services (Nugent, 2002). Given IEPs' proven success in facilitating the education of students with disabilities, they should be considered as a possible component of countries' special education legislation.

Complaint and Redress Mechanism

The CRPD Committee specifies in its General Comments on Article 24 that individuals with disabilities and the families of children with disabilities "must be provided with a safe and accessible mechanism for complaints and redress through which to challenge violations of their right to education" (UN, 2016a). Countries that have signed the CRPD Optional Protocol should develop and implement specific processes for addressing rights violations. Furthermore, it is critical that national human rights institutes fully engage in issues related to the right to inclusive education for all children. When developing domestic laws, viable structures and channels for filing complaints must be established and clearly stated so that people with disabilities or their family members are fully aware of the steps they need to take to submit a complaint when full access to education has been denied. The role of a child or disability ombudsperson to receive complaints and investigate when rights are violated should be made clear and strengthened, and individuals should be allowed to seek direct litigation if consistent with national laws and culture. For example, in the United States, the Individuals with Disabilities Education Act provides escalating steps to address complaints

that begin with mediation between the parents and the school, allowing for state or federal complaints if issues are not resolved through mediation (Turnbull, Stowe, & Huerta, 2007).

Additionally, safeguards must be in place to ensure that families cannot be retaliated against after filing a complaint. As for all students, students with disabilities have the right to be heard within the school system, including through their participation in school councils and other governing bodies, such as local and national governments. Mechanisms through which individual students or student groups can appeal decisions concerning their education should also be identified and upheld by law. Parents must be made fully aware of their rights so that they will know if their rights are being violated. Therefore, all policy systems should be coupled with parent education and awareness raising related to children's educational rights.

Refining National Education Plans

Strong national policies and legislation are a critical first step toward providing children with disabilities an education within an inclusive setting. However, legislation is not an end in itself, and policy and legal frameworks must be translated into practice at the school level. Having strong national plans related to inclusive education will help reduce this gap and ensure that a transition plan—from a segregated to an inclusive education system—and programs to support this plan are established. Of course, the extent to which education plans are implemented depends on multiple factors, including funding levels, commitment and motivation of education leadership, the availability of trained staff, the availability of and guidance for adapting curricular materials, access to assistive devices, and importantly, the level of monitoring of and support given to service providers. These context-specific challenges should be addressed in the transition plan.

Although time frames vary per country and strategic plan, most **initial strategic plans** address a 10- to 20-year period.

Developing a national plan for implementing inclusive education and policies has proved to be very useful for many countries, regardless of income, by encouraging the development of goals, targets, and budgetary requirements to support the process of inclusive education. National plans or strategies are also an effective way to incorporate the input of teachers, administrators, parents, and disability leaders. WHO's World Report on Disability (2011, pp. 217–218) suggests that all national plans related to inclusive education 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 parent partnerships and community partnerships;
- plan for the main aspects of provision, such as making school buildings accessible, and developing the curriculum, teaching methods, and materials to meet diverse needs;
- increase capacity by expanding the provision of training programs;
- make sufficient funds available; and
- conduct monitoring and evaluation and improve qualitative and quantitative data on students.

When national policy and planning are not yet implemented in a country, initiatives started at subnational levels have been shown to lead national inclusive education reforms. Kwa-Zulu Natal Province in South Africa is a case in point. The Kwa-Zulu Natal Provincial Department of Education was instrumental in demonstrating how the national policy on inclusive education (South Africa Department of Education White Paper 6) could be translated into practice at the local level, providing a model program for other South African Provincial Departments of Education (South Africa Department of Education, 2001). The following text box briefly describes the South African Department of Education strategic plan on inclusive education. Additional countries, including Malta and Rwanda, have developed inclusive education strategies, while others, such as Jordan, are in the process of developing them. In addition to having a dedicated plan for

inclusive education, it is also beneficial to include inclusive education in the country's general disability plans. For example, countries such as Afghanistan, Kazakhstan, Macedonia, and the Republic of Georgia have developed National Disability Plans that address inclusive education as part of a larger strategy.



South African Strategic Plan on Inclusive Education

In 2001, South Africa developed a strategic plan on inclusive education entitled "Education White Paper 6, Special Needs Education: Building an Inclusive Education and Training System." This document outlines the steps that the government must take to develop an inclusive education system within 20 years that incorporates both training needs and how to address and accommodate a diverse range of learning needs. The strategy calls for training for administration, other school staff, and teachers on inclusive education and special education strategies; identifying and reducing barriers to inclusion; mobilizing out-of-school youths to return to school; converting 500 primary schools to full-service schools; developing district-based support teams; and converting specialized segregated schools into resource centers to support districts. The strategy articulates short-, medium-, and long-term goals and a funding strategy for how the various goals will be accomplished. Although the implementation of the strategy is challenging, several successes have been achieved. For example, inclusive education is now part of the qualification framework for all general education teachers.

Understanding the Systems Approach to Inclusive Education

Developing an inclusive system implies a shift from seeing the child with a disability as the problem to seeing the education system as something that must be strengthened to better serve the child. It requires strong commitments from local government, ministries, administrators, teachers, parents, and citizens. A systems approach, by definition, involves the coordination and shared responsibility and commitment of a broad base of stakeholders, including national and subnational government officials, education managers and service providers, parents and other community members, and the students themselves. UNESCO (2009), which takes a broad view of the concept of inclusion, has identified four key tenets of an inclusive education system:

1. Inclusion is a process.
2. Inclusion is concerned with the identification and removal of barriers.
3. Inclusion is about the presence, participation, and achievement of all students.
4. Inclusion involves an emphasis on those groups of learners who may be at risk of marginalization, exclusion, or underachievement.

This section pulls together international best practices related to the development of educational systems that allow the inclusion of learners with disabilities. Although each country may approach the recommendations differently to incorporate its unique cultural context, much of the general guidance will still apply.

Engaging Stakeholders

Many different stakeholders need to be meaningfully engaged to ensure and promote effective educational practices for students with disabilities. The attitudes of these stakeholders can have a tremendous impact on the success or failure of an inclusive education system. These stakeholders include the following.

Ministries of Education

Lead policymakers in the education sector, such as the national and subnational Ministries of Education (MOEs) or the equivalent entities within a country that lead educational planning, play a pivotal role in shaping education policy and reforming curriculum and delivery systems. To advocate for inclusive education for all children, including the most vulnerable and children with disabilities, these policy bodies must include experts in the field of special education who are knowledgeable about the advantages of inclusive education (Skrtric, 1991).

The MOE should be responsible for the education of all children, including those with disabilities. In many low-income countries, the responsibility for the education of children with disabilities is divided across separate entities: the MOE and other ministries, such as the Ministry of Social Affairs, the Ministry of Health, or the Ministry of Social Protection (WHO, 2011). When the responsibility is divided among ministries, the MOE is typically



Inclusion Strategy

The Ministry of Education should be responsible for all school-aged children, regardless of disability diagnosis or severity. Dividing the responsibilities for supporting children with disabilities among ministries “further segregates children with disabilities, and shifts the focus from education and achieving social and economic inclusion to treatment and social isolation” (WHO, 2011).

responsible for the education of children deemed able of being educated in an inclusive setting, whereas the alternative ministry is responsible for children with more severe disabilities, such as those who are too often institutionalized. Both international disability advocates and international organizations have criticized this approach because it implies that children with severe disabilities cannot learn or that they need welfare rather than education. Likewise, any policies developed outside of the MOE are often not seen as education policies and frequently do not have the same influence or impact (Sightsavers, 2011). The World Report on Disability states that dividing this responsibility among ministries “further segregates children with disabilities, and shifts the focus from education and achieving social and economic inclusion to treatment and social isolation” (WHO, 2011). As a result, having one Ministry be responsible for the education of all children—with and without disabilities—is recommended. In many countries, an office or subdivision within the MOE is dedicated to ensuring the education of students with disabilities. Regardless of the internal structure, the individuals who direct and manage this component of the educational system need the appropriate training and experiential background to appropriately guide policy related to education for children with disabilities and provide the oversight required to ensure the provision of inclusive education for children with disabilities.

A systems approach requires cross-disciplinary cooperation and commitment from leaders in the health, social welfare, and finance sectors. This cooperation must occur at national and subnational levels of governance. For example, referral networks for ensuring that children receive needed services, such as access to health care and child protection, should be established within the school community

(UN, 2016a). Precisely how this relationship is negotiated and managed will be unique to each country’s context but will likely require participation from all sectors and can be guided by CRPD guidelines.

Administrators and School Leadership

Administrators, principals, and other leaders are typically responsible for ensuring that national and local laws are being adhered to, that students with disabilities receive needed supports, that such supports are appropriately used by teachers, and that teacher training related to inclusive education is ongoing. The leadership of these individuals is pivotal for the improvement of educational opportunities for all students, especially those with disabilities or unique learning needs (DiPaola & Walther-Thomas, 2003). Many studies have found that administrators are as much, and sometimes more, of a barrier to including children with disabilities in the classroom as teachers. Some studies, including ones conducted in the United State, Egypt, and Finland, have revealed that administrators and principals may not have a good understanding of inclusive education and may have received limited training or preparation on how to run an inclusive school (Daane, Beirne-Smith, & Latham, 2000; Moberg, 2000; Sadek & Sadek, 2000). Thus, training education officials and school managers on issues related to inclusive education is important. Knowledge building on the ethics, delivery, and impact of inclusive education services is not sufficient. The attitudes of administrators and support staff toward educating students with disabilities, in general, and toward inclusive education, in particular, must be addressed. Approaches that involve personal and group reflection and dialogue are often successful in shifting



Catholic Relief Services’ Program in Laos

As part of their inclusive education program, Catholic Relief Services (2014) developed an *Inclusive Education Training Manual* for administrators in Laos. This document provides training modules on topics such as seeking out schoolchildren; the roles and responsibilities of families, teachers, and the community; understanding punishment and creative education; gender awareness; and disability awareness.

educators' attitudes from resistance to inclusive education to advocacy for students with disabilities.

Teachers and Support Staff

In many LMI countries, support staff and therapists—including teachers' assistants, social workers, psychologists, speech therapists, occupational therapists, and physical therapists—may not be available in the classroom, and even when they are, parents may have to pay for their services. These support staff can play an important role in the education of students with disabilities, however, and should ideally be made freely available and should work together with the general education and special education teachers to help identify students who have specific learning needs, deliver national curriculum-led instruction, identify supports and/or assistive devices that could benefit the student, and engage parents in students' learning. Because special educators may have technical knowledge and expertise, they should serve as resources and supports for the general education teacher, who is ultimately responsible for educating all students within their classroom. Classrooms in low-resource areas can provide these types of critical supports in several ways.

Teachers' attitudes toward inclusion and disability can have a substantial impact on the success of including students with disabilities into the general education classroom (Cochran, 1998). For example, teachers are often more open to including students with physical or sensory disabilities than those with intellectual, learning, and behavioral disabilities (Avramidis & Norwich, 2002). This is typically because of the misconception that children with moderate to severe learning, cognitive, or intellectual disabilities are not able to learn while children with physical or sensory disabilities are. These attitudes should be addressed directly through reflection and dialogue. Research has also shown that the more opportunities teachers have to engage with individuals with disabilities, the more likely they are to support the concept of inclusive education (Avramidis & Norwich, 2002).



Inclusion Strategy

- Make pre- and in-service trainings on disability and inclusive development mandatory for all teachers, staff, administrators, and related support staff.
- Allow teachers to engage and work with students with disabilities as part of their preservice training.
- Hire teachers with disabilities so that their unique insight can be used in the classroom and they can serve as role models.
- Engage community-based health workers to work with teachers in identifying student learning needs.

For example, a study in Egypt revealed that teachers who had social relationships with individuals with disabilities were more supportive of inclusive education (El-Ashry, 2009). Teachers' sense of their ability to teach students with disabilities should also be addressed. As teachers become more confident in their teaching skills, they become more comfortable accepting children with disabilities in their classroom and adapting their teaching methods to include a variety of learning styles (Vaz et al., 2015). Thus, pre-service education programs should be required to provide opportunities for student teachers to engage directly and teach students with disabilities, and training on the principles and benefits of inclusive education should be included throughout preservice programs. Another positive way to promote inclusive education is to actively recruit and hire individuals with disabilities as school staff. To make this feasible, teacher training colleges should not discriminate against students with disabilities and should, if possible, actively recruit students with disabilities so they can become effective teachers and mentors. This strategy allows students with disabilities to engage with role models and provides all teaching staff an opportunity to learn from their unique insight related to teaching students with disabilities and their skills in the classroom (UN, 2016a).

Parents

Engaging parents with and without children with disabilities is another key component in the establishment of successful inclusive schools. It is not uncommon for parents of children with disabilities to resist school reforms that promote inclusive education because they fear that their children might

not receive needed services in an inclusive setting (Daniel & King, 1997). These parents may also harbor concerns regarding their children's safety; the attitudes of other students, staff and program quality; and transportation (Hanline & Halvorsen, 1989). However, parent engagement and partnership can lead to increased acceptance of disability, improved learning, and better classroom behaviors (Edutopia, 2000), and research has shown that, as inclusive education systems become more established, parents adopt a decisively positive view of inclusive education (Miller & Phillips, 1992). Additionally, evidence suggests that increased parent engagement and partnership in the special education process leads to improved learning outcomes for students with disabilities (Stoner et al., 2005).



Inclusion Strategy

- Sensitize all parents on the benefits of inclusive education, create opportunities for parents to raise concerns, and address those concerns proactively.
- Encourage teachers to include parents of students with disabilities in the different aspects of the students' school experience.

Teachers should engage parents in their child's learning as much as possible and find ways to share classroom achievements and challenges with parents. Teachers should also partner with parents to determine how to best support a student with a disability outside of the classroom and how to advocate jointly for support to address the student's needs. Including parents of children with disabilities in community programs is important to ensure that their children benefit from community support. Additionally, the attitudes of parents of children without disabilities toward inclusive education have been clearly demonstrated to become more positive over time (Boer, Pijl, & Minnaert, 2010), and teachers should help to build sensitivity among the parents of children without disabilities. For effective inclusive education to become a reality, inclusive education reform must raise community awareness of benefits and basic concepts of inclusive education. Such awareness-building activities should not be limited to information sharing or sensitization but should

include opportunities for personal reflection and dialogue.

Community

In addition to school and parent partnership, community engagement is especially important during times of transition or education reform. For example, research conducted within the United States found that parent-community ties constituted one of the five essential supports needed for schools to be effective (Sebring & Montgomery, 2014). This support develops when school staff reach out to parents and the community and encourage them to participate in strengthening student learning (Epstein, 2001). As WHO (2011) states, "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 obtained."

To support community participation, USAID (2011) has developed five steps to engage communities in education programs; these also apply to engaging the community in inclusive education programs:

- Step 1.** Conduct a participatory assessment of the current situation, attitudes, concerns, opportunities, and aspirations related to education.
- Step 2.** Strengthen or form formalized structures for engagement.
- Step 3.** Assist school management committees, parent teacher associations, or other coordinating bodies in setting goals and developing plans.
- Step 4.** Build capacity to strengthen community-level human resources.
- Step 5.** Conduct continuous monitoring and follow-up.

Communities also benefit from having inclusive schools. For example, an inclusive education project in Vietnam showed that communities with inclusive education programs "become more open minded, creating a more favorable environment for people with disabilities in the future" (Catholic Relief Services/Vietnam, 2008).

DPOs and Parent Associations

In most countries, DPOs and associations for parents of children with disabilities serve as helpful resources to build awareness and acceptance of children with disabilities and to promote inclusive education. These groups are also well positioned to educate parents on their children's rights and advocate for improved education policies and legislation. Engaging these groups is critical in establishing inclusive education systems, because they use their national network of members to support educational reforms and improved policies and also have unique and important insight gained through their lived experience. One study conducted in both high- and low-income countries showed that disability advocates and DPOs participating in and advocating for improved education services have led to distinct improvements in special education (Eleweke, 2001). Examples of international DPOs working in the field of education and rights of children with disabilities include the following:

- International Disability Alliance: <http://www.internationaldisabilityalliance.org/>
- Disabled Persons International: <http://www.dpi.org/>
- Inclusion International: <http://inclusion-international.org/>

What Is a DPO?

A DPO is an organization in which people with disabilities constitute a majority (more than 51 percent) of the staff, board, and volunteers and are well represented within the organization. This definition includes parent organizations (i.e., organizations representing children or individuals with intellectual disabilities) whose primary aim is empowering and growing self-advocacy among persons with disability (Disability Rights Fund, 2016).

Models of Moving From a Segregated System to an Inclusive One

Many countries are moving away from segregated systems and toward a more inclusive model that allows for students with disabilities to be taught alongside their nondisabled peers. The incentives for this shift vary by country, although compliance with the CRPD has played a significant role in this

change. No standardized approach for how to shift from a segregated system to an inclusive one is available. Issues such as a country's current education system, cultural views on disability, political will, and socioeconomic stability can impact how a country may choose to approach its inclusive educational reform. However, several models have been helpful for different countries as they work toward developing an inclusive education system.

Developing Resource Centers

Many countries—including Armenia, Hong Kong, the United Kingdom, the United States, and South Africa—have worked to transition segregated schools to national or regional resource centers. For example, in this model, teachers who used to teach students who are blind now serve as on-site supports, trainers, and mentors for general education teachers who may have students who are blind in their classroom. This model, in which previously designated specialized, segregated schools and inclusive schools collaborate and work together, has resulted in positive gains, especially relating to student outcomes (Paulsen, 2008). Examples of collaboration include co-teaching, support to modify curriculum, and provision of behavioral supports (Forlin & Rose, 2010). This model typically facilitates a smoother transition toward inclusion and allows special educators to continue to use and share their practical hands-on experience and knowledge to provide positive support for students.



Inclusion Strategy

Transition segregated schools or institutions to resource centers that can provide technical support and guidance based upon their area of expertise and past experience.

Using Itinerant Teachers/Specialist Teachers

In many countries where the number of trained special education teachers is limited, itinerant or visiting teachers or, in some cases, health professionals can provide support to general education teachers. Under this model, special educators or experts who are trained in a specific type of disability travel to different inclusive schools to offer advice and mentorship and to provide technical

assistance to general education teachers and schools. In this way, even schools with limited funding (i.e., where special educators cannot be present in each school) can benefit from special education expertise and knowledge. Countries that have implemented the itinerant teacher model include Kenya, Malawi, and Uganda (Lynch & McCall, 2007).

Engaging Teacher Assistants

Using teacher assistants, sometimes also referred to as “paraprofessionals,” to support teachers in inclusive classrooms is an effective approach in many countries. Although teacher assistants’ roles within the classroom may vary significantly by context, research has demonstrated that teaching assistants are most successful when assigned to support a classroom rather than assigned to an individual student, because the latter may inadvertently increase the stigma associated with disability, isolate the student with a disability, and increase the student’s dependency and/or reduce her/his interactions with the teacher or peers (Giangreco et al., 2001). In some exceptions, assigning a teaching assistant to a student who, for example, needs support to communicate or who is medically fragile may be needed. Even in such cases, however, it is important that teacher assistants supplement and support teachers but not replace them as the primary source of instruction (Giangreco & Doyle, 2007).



Inclusion Strategy

Have teacher assistants support the entire classroom rather than only one or two students with disabilities; this reduces unintended stigma and avoids limiting students’ interaction with their peers.

Moving From a Diagnosis-Based Approach to an Individualized One

In some countries—such as Gabon, India, Macedonia, and Morocco—before children can enter school, even an inclusive school, they must receive a certificate from a doctor diagnosing their disability. This approach can limit educational opportunities for low-income families who may not be able to afford medical appointments to receive the required certificate. Furthermore, as discussed previously, a diagnosis does not inform a teacher about a specific

student’s educational needs. Instead, countries should allow all children to access school, regardless of disability, and implement a screening and classroom evaluation process to determine eligibility for special education services and assess what type of supports or services might be beneficial for each student. An evaluation process can also inform IEPs that can serve as additional support for both teachers and countries as they move toward a more individualized approach.



Inclusion Strategy

Requirements that children *must* be diagnosed or receive a certification *prior* to being allowed into school should be removed from laws and practice.

Many countries, such as Costa Rica, have eliminated diagnosis-based educational services and have transitioned to providing individualized supports to students (Stough, 2003).

Identification of Children With Disabilities

Children with disabilities can be identified as needing special education in various ways. Typically, initial suspicions that a child has special learning needs come through school referrals, concerns raised by the child’s parents, or the health care system (i.e., identification by a pediatrician or health care professional). However, reliably identifying a child as having a disability can be extremely challenging in countries that struggle with community misperceptions of disabilities, limited resources for conducting screenings and evaluation, and the limited availability of skilled professionals who are trained to conduct a comprehensive diagnostic evaluation.

Even within high-income countries, too often only children with relatively severe disabilities are identified prior to reaching school age, and children with less-noticeable disabilities (e.g., low vision, hard of hearing, learning disabilities, and mild-to-moderate autism spectrum disorders) are generally identified after they enter preprimary or primary school (Wirz, Edwards, Flower, & Yousafzai, 2005). In fact, even in the United States, fewer than one in five children are properly screened and identified as having possible special needs before school (Data

Resource Center for Child & Adolescent Health, 2009). Identifying a disability as early as possible is important, because interventions introduced early are much more likely to lead to long-term gains than those that are implemented later in life (Fernald, Kariger, Engle, & Raikes, 2009). Furthermore, early intervention is linked to several positive life outcomes, such as higher academic performance, increased likelihood of graduating secondary school, and decreased likelihood of committing crimes (Heckman & Masterov, 2005).



Making Early Grade Reading Tools Accessible

In Malawi, RTI and Perkins International conducted a pilot program to assess the reading skills of students who are blind. In the program, the Early Grade Reading Assessment (EGRA) was adapted for braille readers. The EGRA tool was given to 44 students in grades 1–3 who were receiving braille instruction. The objective of this study was to understand the degree of instrument and protocol adaptation required to conduct an EGRA with braille readers. The results of the pilot suggest that standard EGRA protocols, training methodologies, and assessment tools can be easily adapted for use by braille readers. A larger-scale pilot would allow for more rigorous assessment of the validity and reliability of the adapted measures.

Most early and primary education programs in LMI countries do not have systems in place to systematically identify students with disabilities. As a result, many students, especially those with less severe disabilities, are never identified and, thus, never receive special education services or other aids. Furthermore, these countries rarely administer vision and hearing screenings, and if they do, these tests typically do not take place at school. Simple screenings should be administered within the classroom to assess learning, vision, and hearing challenges. Countries should establish referral systems to ensure that these students, once identified, can receive services or aids, such as glasses. In addition, Response to Intervention strategies can be used to assess whether a student will benefit from additional academic support and can also inform teachers if a more comprehensive evaluation should be conducted. Evaluations within the school setting

should follow international best practices, which include having a trained multidisciplinary team conduct the evaluation, using multiple tools that have been translated into the local language and adapted to the cultural context, actively engaging parents, and summarizing findings in a comprehensive report that outlines additional supports or services that might benefit the student.

In many countries, including the United States, a diagnosis is not needed for a child to enroll and access education, including inclusive education. Instead an evaluation is used to determine access to special education services and inform the types of supports or accommodations a student may need that are ultimately selected using a very individualized approach. Because of the wide range of abilities that exist within a diagnosis, giving a child a specific diagnosis, such as Down syndrome or autism spectrum disorder, does not provide accurate information on that child's ability to function and succeed within the classroom. Instead, each child will have her strengths and weaknesses that should be fostered and supported, respectively. Access and functional needs should be identified for each student on a case-by-case/individual basis through an interactive process involving the student, family, and others knowledgeable about the student.

Challenges of Labeling

In many countries with developed special education systems, labeling students with disabilities is linked to additional funding or classroom supports and is, therefore, needed in some way (Lauchlan & Boyle, 2007). Identifying students who require additional educational supports and collecting data on disability are essential to ensuring that students receive appropriate services. However, in other contexts, this process of identification can lead to increased stigmatization, peer rejection, lower self-esteem, lower expectations, and limited opportunities (Florian et al., 2006). Moreover, once a student is categorized as requiring special education, he or she can be stigmatized by teachers who may have lower expectations for the student (Henley, Ramsey, & Algozzine, 2010). To mitigate potential prejudicial labeling, all identification systems should be coupled with disability awareness programs to help

administrators, teachers, students, and parents better understand and fully accept diversity and disability. For example, in Ethiopia, Kenya, and Malawi, RTI is piloting teacher training and guidance intended, in part, to sensitize teachers about the dangers of disability stigma and to provide specific instructional techniques to support the learning of students with disabilities. Additional low-cost resources and training for teachers must be made available in LMI countries if teachers are to be able to effectively meet the needs of their students with disabilities.



Inclusion Strategy

Focus on the student's functional and access needs and strengths rather than his specific diagnosis. Ensure that all identification systems are coupled with disability awareness programs for administrators, teachers, and parents.

Adaptable Learning Environments and UDL

Promoting adaptable learning environments, and building awareness of the importance of differentiated learning, are important in establishing an inclusive education system. One relatively successful way of promoting an adaptable learning environment is using UDL. This approach recognizes that all students, with and without disabilities, learn in different ways. When the curriculum is designed to meet the needs of "average" students, it fails to address the natural diversity and backgrounds that exist in all classrooms. Although the goal of UDL is to meet the diverse learning needs of students with disabilities, it can also enhance the education of all students in the classroom. Research has revealed that teachers find UDL to be an effective instructional approach and that it enables teachers to better engage diverse groups of students (Kurtts, 2006). UDL may also be an effective technique in countries that may not yet have a disabilities identification system in place, by helping teachers to support diverse learning needs even without knowing which students may have disabilities. Of course, particularly in resource-constrained contexts, the demands on teachers are great, and achieving adaptable learning environments can be only aspirational at first. Even in these contexts, however, simple shifts in how teaching and learning materials are developed, how classrooms

UDL is a "set of principles for curriculum that give all individuals equal opportunities to learn" (National Center on Universal Design for Learning, 2016). For more than 30 years, CAST (<http://www.cast.org/>) has driven the use of UDL to expand learning opportunities for all individuals.

are set up, and how teachers are trained can go far in meeting UDL goals.

Strategies on how teachers can use UDL include the following (Rose & Meyer, 2002):

- **Use multiple strategies to present the content.** Use a variety of techniques, including case studies, music, role play, cooperative learning, hands-on activities, and field trips, and a variety of learning contexts, including individual, pair, and group work; peer learning; and field work.
- **Use a variety of materials.** To present, illustrate, and reinforce new content, use different materials, such as online resources, manipulatives, and existing textbooks and supplemental reading books.
- **Provide cogitative supports.** Present background information for new concepts using pictures, objects, and other materials that are not lecture based. Scaffold student learning by providing a course syllabus, outlines, summaries, and study guides.
- **Teach to a variety of learning styles.** Build movement into learning and give both oral and written instructions for students who learn auditory or visually.
- **Provide flexible opportunities for assessment.** Enable students to demonstrate their learning in multiple ways, including visual and oral presentations, as well as written assignments.

Inclusive Teaching and Learning Materials

Addressing inclusive education and portraying people with disabilities in positive and empowering ways can facilitate reducing stigma and discrimination. Unfortunately, students with disabilities are rarely included in teaching and learning materials, and when they are included, they are often underrepresented or presented in demeaning ways.

For example, a recent study reviewed the visibility of persons with disabilities in illustrations of seven Iranian English as a foreign language textbooks used in US secondary schools. The study demonstrated that people with disabilities were underrepresented and that images of students with disabilities were typically shown in disadvantageous positions that perpetuated the invisibility of the students and promoted negative stereotypes (Cheng & Beigi, 2011). Teaching and learning materials should address inclusive education and include positive and empowering images and stories of students with disabilities. To promote this, USAID has developed *A Guide to Promote Gender Equality and Inclusiveness in Teaching and Learning Materials* (USAID, 2015), which recommends that images and stories in teaching and learning materials reflect the diversity of social characteristics within a country. As children with disabilities represent approximately 15 percent of the population, USAID recommends that 15 percent of images and stories should include students with disabilities. In addition, it is important that these images show girls and boys with all types of disabilities as productive members of society. This guide also provides a checklist for what to look for when developing new teaching and learning materials. In summary, teaching and learning materials should:

- Use language that stresses the person first and the disability second (people with disabilities, not disabled people).
- Promote empathy and an overall feeling of understanding for people with disabilities, as well as provide accurate information about a specific disability.
- Demonstrate respect for and acceptance of people with disabilities, and depict them as more similar than different from other people (“one of us” rather than “one of them”).
- Emphasize the successes of people with disabilities and show their strengths and abilities along with their disabilities.
- Promote positive images of persons with disabilities and represent them as strong, independent people, who others can look up to or admire.

- Represent people with disabilities from different racial and cultural backgrounds, religions, and age groups, as well as rural versus urban representations.
- Depict valued occupations for persons with disabilities and show them in diverse and active roles.
- Depict people with disabilities in integrated settings and activities—in school, at work, or in the community among peers with and without disabilities.
- Illustrate characters and adaptive equipment accurately. (Anti-Defamation League, 2005)

Teacher Training

Teachers represent the most powerful resource in all educational systems, and the importance of continuously building their knowledge and skills cannot be overstated. Teachers in LMI countries may not have a formal training on explicit instructional techniques, and national standards for teacher training can vary significantly from country to country. In some countries, a 1-month training course can qualify as training, whereas other countries require a 3-year education degree (Global Campaign for Education, 2012). Where training does exist, the curriculum often does not include training related to the nature of disabilities and approaches for working with students who have disabilities. As a result, there is a severe shortage of teachers and teacher assistants capable of effectively supporting the



CASE STUDY:

RTI Malawi Early Grade Reading Activity

As part of the USAID Malawi Early Grade Reading Activity project, RTI reached out to special education teachers, including teachers at schools for the deaf and for the blind, to attend Early Grade Reading Activity trainings. One teacher reported that the 5-day training on effective early grade reading practices helped her find ways to adapt teaching techniques to address the literacy needs of her students who are deaf. Because of the techniques she obtained through participating in the training, her students are now reading after one term (i.e., 3 months), a task that used to take a year (USAID, 2017).

individual needs of students with disabilities (WHO, 2011). Without building these skills and ensuring the positive attitudes of teachers toward disability, true inclusive education will be difficult to achieve. Recommendations for successful approaches to preparing teachers include the following.

Embed Disability in All Preservice and In-Service Trainings

The curriculum for preservice and in-service trainings designed to provide teachers with the knowledge and skills needed to support students with disabilities in an inclusive setting should be integrated and mutually supportive. These curricula should not address disability as a stand-alone subject, but should embed explicit training in teaching students with disabilities as an integral part of core teacher competencies. Stand-alone courses on disability have been shown to be ineffective, because this approach perpetuates the misunderstanding that disability is a separate training initiative and not a core competency required of all teachers. Whenever feasible, enormous value added can be achieved when teacher training related to students with disabilities includes local stakeholders, such as disability leaders or parents of children with disabilities, who can provide a lived experience of disability and ground-truth theory into reality (International Disability and Development Consortium, 2013).

Include All Teachers, Regardless of Specialization, in Teacher Training

Too often, in-service trainings for special education teachers and general education teachers take place separate from each other. As a result, special education teachers do not receive the new skills related to literacy, math, and other topics that are offered to general education teachers, whereas general education teachers fail to receive continuing education related to disability. As emphasized previously, teacher training related to students with disabilities must be inclusive. That is, all teachers, regardless of their area of specialization, should have access to training and international best practices that can be adapted or modified as needed to the specific reality of their classrooms.

Promote the Diversification of Skill Sets

UNESCO recommends a hierarchy of teacher training opportunities in an inclusive education system:

All teachers should be trained on inclusive practices as they will undoubtedly have a child with a disability in their classroom at some point in time.

Many teachers (ideally, at least one per school) should develop more comprehensive expertise on disability related to more common learning challenges and disabilities. These individuals can serve as an on-site resource and advisor to their peers.

A few teachers should develop higher levels of expertise in the diverse challenges that mainstream teachers may encounter and serve as a consultant to those schools and teachers as needed. (UNESCO, 2003)

Address Potential Attitudinal Barriers

Attitudes have a sizeable impact on the performance of students with disabilities in inclusive settings. Prejudicial beliefs may result in lower expectations of students with disabilities and lead to these students focusing less on academic achievement. Thus, as for any stakeholder dialogue on disability, it is important to address attitudes, beliefs, and practices in pre-service and in-service trainings on inclusive education. In this process, rather than telling teachers what their attitudes and beliefs should be, training should allow for personal reflection on these attitudes and practices, and opportunities should be provided for open discussion among teachers related to these attitudes and fears about including students with disabilities in their classrooms. Training should also help teachers reflect on how to dispel myths and fears associated with inclusive education among education officials, school managers, parents and other community members, and other service providers.

Provide Follow-Up and Hands-On Experience

It is vital to follow up on the trainings with ongoing support and mentoring, to the extent possible within the country or context. Having ongoing support for teachers in the classroom can strengthen their skills and their confidence in establishing an inclusive education setting in the classroom. In some countries, designated support supervision staff can be trained in providing this kind of support to teachers. Special

education teachers who have previously worked within segregated settings might also serve as coaches and resources to general education teachers; such special education teachers should receive training and guidance in how to effectively serve in this new role as a resource, coach, and mentor. Communities of practice and distance learning may also serve as viable options for teachers in many countries.



Inclusion Strategy

Enable teachers to obtain real-life experience working with students with disabilities, especially during preservice trainings.

Data Collection, Prevalence Rates, and Enrollment

Poor data collection is one of the many reasons why children with disabilities are left out of education plans, because a lack of data impedes education planning and implementation. Poor data are not surprising given the challenges of identifying students with disabilities. Moreover, even when prevalence data on children with disabilities are collected, data on participation restrictions and environmental factors are generally lacking (e.g., data regarding barriers to full participation, whether schools are physically accessible, and whether students with disabilities can participate equitably in all areas of the school, including sports and recreation). This type of information is needed in developing better program and policy interventions (UNICEF, 2013). For example, Education Management Information Systems (EMISs), which most countries use to monitor and guide education sectors, even when used systematically typically do not include indicators on disability (UNICEF, 2014e). Additionally, even a well-functioning EMIS only captures information on the number of students attending school who may have a disability; it cannot determine how many children with disabilities are eligible to attend school and are not enrolled.



EMIS and Disability

UNICEF has developed a technical booklet with sample questions about children with disabilities that can be used within an EMIS (UNICEF, 2014e).

Three primary approaches for generating disability data through censuses or surveys exist: (1) the respondent self-identifies as having a disability (e.g., “Do you have a disability and, if so, what disability?”); (2) the respondent selects from a list of disability categories (e.g., “From this list of disabilities, select those that apply”); and (3) the respondent answers questions regarding her level of functionality, or questions related to what she can and cannot do without help (e.g., “Do you need help feeding yourself?”). Due to concerns related to stigmas or prejudice, or perhaps a lack of a common understanding of disability, typically fewer than 10 percent of people will respond honestly to the first two types of questions, especially in LMI countries; this results in artificially low percentages of individuals indicating that they have disabilities. When functionality questions are used, however, the number of individuals with disabilities increases to approximately 10–20 percent of the population (Mont, 2007). To support countries in developing more accurate data, the Washington Group developed a simple set of six functionality questions that can be used in censuses and household surveys throughout the world to determine prevalence of disabilities. Countries such as Timor-Leste and Bangladesh have begun to use these functionality questions in their respective EMIS systems to track students with disabilities (UNICEF, 2014c). More recently, the Washington Group on Disability Statistics & UNICEF (2016) developed an additional set of functionality questions specifically designed for children.

Although the exact numbers are typically unknown, strong evidence suggests that many children with disabilities in LMI countries have never attended school. A 2004 study in Malawi showed that children with disabilities were twice as likely to have never attended school compared to their peers without disabilities (UNICEF, 2014c). Additionally, a recent study in Rwanda demonstrated that of those surveyed, 57.4 percent of children with disabilities had never attended school and that the rest (42.6 percent) dropped out after attending school for just a few years (Baptiste, Malachie, & Struthers, 2013). There are a wide range of reasons why parents do not enroll their children in school. These reasons include

inaccessible facilities, a lack of transportation, a lack of programs that accept children with disabilities, negative attitudes and unkindness toward children with disabilities, and the bullying and stigmatization often experienced by children with even mild disabilities (WHO, 2011). A robust situational analysis is a critical first step toward reforming school programs to promote the equality and inclusion of children with disabilities. Such studies should provide data that are aggregated at both the national and subnational levels of government and public service. The information collected should include household surveys to define the population, attitudes related to the inclusive education of students with disabilities, and the accessibility of school programs and referral networks, such as special education support and health, psychosocial, and child protection services that can provide important outpatient services for children with disabilities and their parents or guardians. Through a comprehensive study of the opportunities and barriers to education for children with disabilities, curricular and system reforms can be developed to inform forward movement toward inclusive education for children with disabilities.



In 2006, RTI collaborated with USAID and the Morocco Ministry of National Education and Vocational Training to assess the state of disabilities inclusion in the country. This assessment engaged a number of DPOs and other disabilities rights organizations and has informed ongoing dialogue regarding the structure of schools and the education system in Morocco (USAID, 2016).

Budgeting for Inclusion

Funding for inclusive education, as for all education initiatives, is a substantial concern for governments. In fact, Namibia, South Africa, Zambia, and Zimbabwe have cited the lack of financial resources as a primary reason for delaying the implementation of an inclusive education system (Chireshe, 2013; Sukhraj, 2008). Other countries, such as Morocco, Senegal, and Mozambique, have limited budgets allocated for special education or inclusive education and rely heavily on nongovernmental organizations and civil society to educate children with disabilities.

The challenge of relying solely on nongovernmental organizations to educate children with disabilities is that, in these cases, large discrepancies often arise in the quality of the services provided, there is a tendency to not follow the national curriculum for instruction, and because of tuition costs, only affluent families often receive services. The provision of financial support by the government to implement an inclusive education system is a critical factor in its success. It is also important to recognize that although an initial investment will be needed, especially during times of reform and transition, the inclusive education model will be a more cost-effective model in the long term (UNICEF, 2012).



Inclusion Strategy

Reallocate the budget used for segregated schools toward financing inclusive education systems. Ensure that all budgets are transparent and available to the public.

The costs initially allocated to segregated systems should be transitioned to budgets for inclusive education systems. However, in countries with emerging or limited special education systems, additional funding may be needed. Typically, higher-income countries spend 12–20 percent of their education budgets on special education (Sharma, Forlin, & Furlonger, 2015). Several models for financing inclusive education exist, and the predominant models include the following models.

Per Capita or Cost-Based Models

In these models, a formula is developed and applied to the number of children with disabilities in the country to determine the amount of total spending. For example, certain amounts of money are allocated for students without disabilities, those who are socially disadvantaged, those who speak a minority language, and those who have a disability. A student with a disability is frequently estimated to require 2–2.5 times more financial support than a student who does not have a disability, is not socially disadvantaged, or does not speak a minority language (UNICEF, 2014d). Countries that use this model to determine their budgets include the United States, Canada, and Serbia.



Inclusion Strategy

Countries with limited experience or with emerging identification services should consider using the resource- or school-based model for budgeting, as it does not require accurate identification and data collection.

Resource- or School-Based Models

In these models, funding is based upon the services needed within a country versus the number of children who require services. For example, using this model, a country determines the number of special education specialists and the equipment needed to implement inclusive education and then allows municipalities and schools to decide on how the money is specifically spent. Countries that use this model to determine their budget allocations include Austria, Denmark, Finland, Germany, and Norway (UNICEF, 2014d).

Output-Based Models

In these models, school funding is tied to student achievement scores, and sanctions are imposed on low-performing schools. In the context of special education, this form of funding has been highly criticized by the disability community, because it may encourage segregated settings and penalize schools for circumstances outside of their control (such as a lack of trained teachers or access to adapted materials). Parts of Australia, the United Kingdom, and the United States have used this model to finance inclusive education (UNICEF, 2014d).

Each of these funding models has advantages and disadvantages. For example, the per-capita model can be challenging for countries that do not have reliable identifications systems within the school (Sharma et al., 2015). Governments should carefully review their options and select the model that is best aligned with their country's context and the current budgeting systems used for the general education system.

Monitoring Systems for Improvement

Routine monitoring systems are critical for continuous learning and adaptation of an inclusive education program. To implement a robust monitoring system, a set of performance indicators must be developed that can be used to gauge the quality of programming and the outcomes for all students, including but not limited to students with disabilities. This may mean that assessment instruments are modified to measure learning outcomes among children with disabilities.

The European Agency for Development in Special Needs Education (2009) developed a set of indicators for inclusive education in collaboration with 23 countries in the region. The project resulted from a survey conducted in 22 European countries that listed indicators on inclusive education as one of the primary needs of the different ministries of education. Indicators were established in three areas: policy/legislation, participation, and financing. Although additional work is still needed in this area, these joint indicators may provide governments with ideas for developing their own indicators for inclusive education.

Information related to participation, accessibility, and the availability of supports for students with disabilities should be collected within an EMIS. This information is helpful in informing the planning, budgeting, and programming for students with disabilities. However, national education statistics systems are generally limited in their ability to access certain information needed to inform allocations to schools based on relative need. For example, EMISs rarely include information from households, and thus, access to an emerging inclusive education program may be unknown. Furthermore, national education statistics rarely provide information on the quality of teacher instruction or learning outcomes. Building avenues for collecting such information is critical to ensure that inclusive programs are aligned with the government's national policy and curriculum requirements. Regularly evaluating the access to education, quality of the instruction, needed support structures, and learning outcomes is critical. Having this information allows the education

system to become a learning system and, through learning, to adapt to ensure that all students with disabilities receive an education in the least-restrictive environment possible and that schools are positive and supportive.

Conclusion

Countries are increasingly moving toward adopting inclusive education systems that are supported by policy and best-practice legislative frameworks. Although there is an increasing number of success stories in this area, substantial challenges related to implementation persist. For example, even in situations where quality inclusive education legislation exists, a large gap between policy and practice often remains. In some cases, this gap results from a lack of budget for general education can serve as a barrier to implementing inclusive education policy. Additionally, persistent prejudicial views or questions regarding the value of inclusive education can impede progress and result in gaps between in policy and practice.

UNESCO states that the “concept and practice of inclusive education have gained importance in recent years. Internationally, the term is increasingly understood more broadly as a reform that supports

and welcomes diversity amongst all learners” (UNESCO, 2009, p. 4). For educational reform to be successful within a country, political will must be combined with support from teachers, administrators, parents, and the community. Additionally, the false belief that some children have more value than others and, thus, deserve more opportunities to succeed must be eliminated. All children and youths have the right to receive a quality education and reach their full potential. For students with disabilities to receive the best possible education, governments must commit to providing education in inclusive settings. As stated by the CRPD Committee, “only inclusive education can provide both quality education and social development for persons with disabilities... [and] it is the most appropriate modality for States to guarantee universality and non-discrimination in the right to education” (United Nations, 2016a). Although challenges in implementing inclusive education reform exist, they are not insurmountable, and changes made through such reform will only strengthen the educational system by addressing the needs of all students.

Education reform and inclusive education reform should be a process and not a project.

References

- Anti-Defamation League. (2005). *Evaluating children's books that address disability*. Retrieved February 7, 2017, from <https://www.adl.org/sites/default/files/documents/assets/pdf/education-outreach/evaluating-children-s-books-that-address-disability.pdf>
- 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.
- Banks, L. M., & Polack, S. (2014). *The economic costs of exclusion and gains of inclusion of people with disabilities: Evidence from low and middle income countries*. Retrieved September 15, 2016, from <http://disabilitycentre.lshtm.ac.uk/files/2014/07/Costs-of-Exclusion-and-Gains-of-Inclusion-Report.pdf>
- Baptiste, S. J., Malachie, T., & Struthers, P. (2013). Physical environmental barriers to school attendance among children with disabilities in two community based rehabilitation centers in Rwanda. *Rwanda Journal of Health Sciences, 2*(1), 10-15.
- Boer, A., Pijl, S. J., & Minnaert, A. (2010). Attitudes of parents towards inclusive education: A review of the literature. *European Journal of Special Needs Education, 25*(2), 165-181.
- Bowman, I. (1986). Teacher-training and the integration of handicapped pupils: Some findings from a fourteen nation UNESCO study. *European Journal of Special Needs Education, 1*(1), 29-38.
- Bulat, J., Hayes, A., Macon, W., Ticha, R., & Abery, B. (2015). *School and classroom disabilities inclusion guide for low- and middle-income countries*. Research Triangle Park, NC: RTI Press. <https://doi.org/10.3768/rtipress.2017.op.0031.1701>
- Catholic Relief Services. (2014). *Inclusive education training manual*. Retrieved June 23, 2017, from https://resourcecentre.savethechildren.net/sites/default/files/documents/new_iem_march2014_eng_111.pdf
- Catholic Relief Services/Vietnam. (2008). *Inclusive education for children with disabilities: How-to guide*. Retrieved October 6, 2017, from <http://www.crs.org/sites/default/files/tools-research/how-to-guide-inclusive-education-children-disabilities.pdf>
- Cheng, K. K. Y., & Beigi, A. B. (2011). Addressing students with disabilities in school textbooks. *Disability & Society, 26*(2), 139-242.
- Chireshe, R. (2013). The state of inclusive education in Zimbabwe: Bachelor of education (special needs education) students' perceptions. *Journal of Social Science, 34*(3), 223-228.
- Cochran, H. K. (1998, October 14-16). *Differences in teachers' attitudes toward inclusive education as measured by the scale of teachers' attitudes toward inclusive classrooms* (STATIC). Paper presented at the meeting of the Mid-Western Educational Research Association, Chicago, IL.
- Cole, C. M., Waldron, N., & Majd, M. (2004). Academic progress of students across inclusive and traditional settings. *Mental Retardation, 42*(2), 136-144.
- Cosier, M., Causton-Theoharis, J., & Theoharis, G. (2013). Does access matter? Time in general education and achievement for students with disabilities. *Remedial and Special Education, 34*(6), 323-332.
- Daane, C. J., Beirne-Smith, A., & Latham, D. (2000). Administrators and teachers' perceptions of the collaborative efforts of inclusion in the elementary grades. *Education, 121*(2), 331-338.
- Daniel, L. G., & King, D. A. (1997). Impact of inclusion education on academic achievement, student behavior and self-esteem, and parental attitudes. *The Journal of Educational Research, 91*(2), 67-80.
- Data Resource Center for Child & Adolescent Health. (2009). *The national survey of children's health*. Retrieved September 15, 2016, from <http://childhealthdata.org/learn/NSCH>
- DiPaola, M. F., & Walther-Thomas, C. (2003). *Principals and special education: The critical role of school leaders*. Retrieved September 12, 2016, from <http://copsse.education.ufl.edu/docs/IB-7/1/IB-7.pdf>
- Disability Rights Fund. (2016). *Glossary of terms*. Retrieved October 3, 2016, from <http://www.disabilityrightsfund.org/glossary-of-terms/>
- Edutopia. (2000). *Parental involvement reaps big benefits*. Retrieved September 17, 2016, from <http://www.edutopia.org/parent-involvement-reaps-big-benefits>
- El-Ashry, F. R. (2009). *General education pre-service teachers' attitudes toward inclusion in Egypt* (Doctoral dissertation). Retrieved March 15, 2016, from http://etd.fcla.edu/UF/UFE0024244/elashry_f.pdf

- Eleweke, C. J. (2001). Physician heal thyself: The role of disability organisations in countries of the south towards improvements in special needs provision. *African Journal of Special Needs Education*, 6(2), 107-113.
- Epstein, J. L. (2001). *School, family, and community partnership: Preparing educators and improving schools*. Boulder, CO: Westview Press.
- Ethiopia Ministry of Labour and Social Affairs. (2012). *National plan of action of persons with disabilities (2012-2021)*. Retrieved September 15, 2016, from <https://www.ilo.org/dyn/natlex/docs/ELECTRONIC/94528/110953/F-1258023553/ETH94528.pdf>
- European Agency for Development in Special Needs Education. (2009). *Development of a set of indicators—For inclusive education in Europe*. Retrieved September 15, 2016, from <https://www.european-agency.org/publications/ereports/development-of-a-set-of-indicators-for-inclusive-education-in-europe/development-of-a-set-of-indicators-for-inclusive-education-in-europe>
- Falvey, M. A. (2004). Toward realizing the influence of “Toward realization of the least restrictive educational environments for severely handicapped students.” *Research and Practice for Persons with Severe Disabilities*, 29(1), 9-10.
- Fernald, L. C. H., Kariger, P., Engle, P., & Raikes, A. (2009). *Examining early childhood development in low-income countries: A toolkit for the assessment of children in the first five years of life*. Washington, DC: The World Bank.
- Fisher, D., Sax, C., Rodifer, K., & Pumpian, I. (1999). Teachers’ perspectives of curriculum and climate changes. *Journal for a Just and Caring Education*, 5(3), 256-268.
- Florian, L., Hollenweger, J., Simeonsson, R. J., Wedell, K., Riddell, S., Terzi, L., & Holland, A. (2006). Cross-cultural perspectives on the classification of children with disabilities: Part 1 Issues in the classification of children with disabilities. *The Journal of Special Education*, 40(1), 36-45.
- Forlin, C., & Rose, R. (2010). Authentic school partnerships for enabling inclusive education in Hong Kong. *Journal of Research in Special Education Needs*, 10(1), 13-22.
- Giangreco, M. F., Broer, S. M., & Edelman, S. W. (2001). Teacher engagement with students with disabilities: Differences between paraprofessional service delivery models. *Research and Practice for Persons with Severe Disabilities*, 26(2), 75-86.
- Giangreco, M. F., & Doyle, M. B. (2007). Teacher assistants in inclusive schools. In L. Florian (Ed.), *The SAGE handbook of special education* (pp. 429-439). London, UK: Sage.
- Global Campaign for Education. (2012). *Closing the trained teachers gap*. Retrieved June 28, 2017, from http://www.campaignforeducation.org/docs/reports/ECNAT%20Report_RGB.pdf
- Hanline, M. F., & Halvorsen, A. (1989). Parent perceptions of the integration transition process: Overcoming artificial barriers. *Exceptional Children*, 55(6), 487-492.
- Hathaway, O. A. (2002). Do human rights treaties make a difference? *The Yale Law Journal*, 111(8), 1935-2042.
- Heckman, J., & Masterov, D. V. (2005). *The productivity argument for investing in young children*. Chicago, IL: University of Chicago.
- Henley, M., Ramsey, R. S., & Algozzine, R. F. (2010). *Labeling and disadvantages of labeling*. Retrieved September 14, 2016, from <http://www.education.com/reference/article/advantages-disadvantages-labeling/>
- International Disability and Development Consortium. (2013). *Teachers for all: Inclusive education for children with disabilities*. Retrieved January 15, 2017, from http://www.unicef.org/disabilities/files/IDDC_Paper-Teachers_for_all.pdf
- International Standards Organization. (2017). *Accessing my world*. Retrieved June 22, 2017, from <https://www.iso.org/accessing-my-world.html>
- Kalambouka, A., Farrell, P., & Dyson, A. (2007). The impact of placing pupils with special educational needs in mainstream schools on the achievement of their peers. *Educational Research*, 49(4), 365-382.
- Klein, J. E. (2014). *Deinstitutionalization in Croatia: A summary of Open Society support*. Retrieved June 22, 2017, from <http://bettercarenetwork.org/library/principles-of-good-care-practices/transforming-institutional-care/deinstitutionalization-in-croatia-a-summary-of-open-society-support>
- Kurtts, S. A. (2006). Universal design for learning in inclusive classrooms. *Electronic Journal for Inclusive Education*, 1(10).

- Labon, D. (1999). *Inclusion education at work: Students with disabilities in mainstream schools*. Washington, DC: Organisation for Economic Co-operation and Development.
- Lauchlan, F., & Boyle, C. (2007). Is the use of labels in special education helpful? *Support for Learning*, 22(1), 36–42. <https://doi.org/10.1111/j.1467-9604.2007.00443.x>
- Lee, S. H., Amos, B. A., Gragoudas, S., Lee, Y., Shogren, K. A., Theoharis, R., & Wehmeyer, M. L. (2006). Curriculum augmentation and adaptation strategies to promote access to the general curriculum for students with intellectual and developmental disabilities. *Education and Training in Developmental Disabilities*, 41(3), 199–212.
- Lynch, P., & McCall, S. (2007). The role of itinerant teachers. *Community Eye Health*, 20(62), 26–27.
- Mariga, L., McConkey, R., & Myezwa, H. (2014). *Inclusive education in low-income countries: A resource for teacher educators, parent trainers and community development workers*. Oslo, Norway: Atlas Alliance.
- McGregor, G., & Vogelsberg, R. T. (1998). *Inclusive schooling practices: Pedagogical and research foundations. A synthesis of the literature that informs best practices about inclusive schooling*. Baltimore, MD: Paul H. Brookes Publishing Co.
- McLeskey, J., & Waldron, N. L. (2000). Examining beliefs, attitudes and understandings as inclusive schools are developed. In *Inclusive Schools in Action* (pp. 48–59). Washington, DC: Association for Supervision and Curriculum Development.
- Miller, L. J., & Phillips, S. (1992). Parental attitudes toward integration. *Topics in Early Childhood Special Education*, 12(2), 230–246.
- Moberg, G. (2000). *Development of teacher perceptions of inclusive education in Finland*. Paper presented at the 11th International Association for Scientific Study of Intellectual Deficiency, World Congress, Seattle, WA.
- Mont, D. (2007). *Measuring disability prevalence*. Retrieved March 15, 2017, from <http://siteresources.worldbank.org/DISABILITY/Resources/Data/MontPrevalence.pdf>
- National Center on Universal Design for Learning. (2016). *About UDL: Learn the basics*. Retrieved September 12, 2016, from <http://www.udlcenter.org/aboutudl>
- National Council for Special Education. (2006). *Guidelines on the individual education plan process*. Retrieved September 15, 2016, from http://ncse.ie/wp-content/uploads/2014/10/final_report.pdf
- Nugent, M. (2002). Teachers' views of working with Individual Education Plans in an Irish special school. *REACH Journal of Special Needs Education in Ireland*, 15(2), 98–112.
- Patrinos, H. A. (2015). *Disability and education: From charity to investment*. Retrieved September 15, 2016, from <http://blogs.worldbank.org/education/disability-and-education-charity-investment>
- Paulsen, K. J. (2008). School-based collaboration: An introduction to the collaboration column. *Intervention in School and Clinic*, 43(5), 313–316.
- Peters, S. (2003). *Achieving education for all by including those with disabilities and special needs*. Washington, DC: World Bank Disability Group.
- Rau Barriga, S. (2010). Breaking through the silence: HIV and the deaf. *Huffington Post*. Retrieved February 7, 2017, from http://www.huffingtonpost.com/shantha-rau-barriga/breaking-through-the-sile_b_790689.html
- 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.
- RTI Action Network. (n.d.). *What is RTI?* Retrieved June 21, 2017, from <http://www.rtinetwork.org/learn/what/whatisrti>
- Ruh, D. (2012). *The CRPD—Impact & opportunities*. Retrieved September 6, 2016, from <http://www.ssbartgroup.com/blog/the-crpd-impact-opportunities/>
- Sadek, F. M., & Sadek, R. C. (2000). *Attitudes toward inclusive education in Egypt and implications for teachers' preparation and training*. Paper presented at the International Special Education Congress 2000, Manchester, UK.
- Saebones, A. M., Bieler, R. B., Baboo, N., Banham, L., Singal, N., Howgego, C., McClain-Nhlapo, C. V., Riis-Hansen, T. C., & Dansie, G. A. (2015). *Towards a disability inclusive education: Background paper for the Oslo Summit on Education for Development*. Retrieved September 12, 2016, from https://www.usaid.gov/sites/default/files/documents/1865/Oslo_Ed_Summit_DisabilityInclusive_Ed.pdf

- Sebring, P. B., & Montgomery, N. (2014). The five essential supports for school improvement: Mobilizing the findings. *Pensamiento Educativo. Revista de Investigación Educativa Latinoamericana*, 51(1), 63–85.
- Sharma, U., Forlin, C., & Furlonger, B. (2015). *Contemporary models of funding inclusive education for students with autism spectrum disorder*. Retrieved September 12, 2016, from http://www.education.vic.gov.au/Documents/about/department/psdlitreview_FundingInclusiveEducationforStudentswithASD.pdf
- Sightsavers. (2011). *Policy paper: Making inclusive education a reality*. Retrieved September 12, 2016, from http://g3ict.org/download/p/fileId_848/productId_171
- Skrtic, T. (1991). The special education paradox: Equity as the way to excellence. *Harvard Educational Review*, 61(2), 148–207.
- South Africa Department of Education. (2001). *Special needs education: Building an inclusive education and training system*. Retrieved June 23, 2017, from <http://www.education.gov.za/Portals/0/Documents/Legislation/White%20paper/Education%20%20White%20Paper%206.pdf>
- Stoner, J. B., Bock, S. J., Thompson, J. R., Angell, M. E., Heyl, B. S., & Crowley, E. P. (2005). Welcome to our world: Parent perceptions of interactions between parents of young children with ASD and education professionals. *Focus on Autism and Other Developmental Disabilities*, 20(1), 39–51.
- Stough, L. M. (2003). Special education and severe disabilities in Costa Rica: Developing inclusion in a developing country. *Research and Practice for Persons with Severe Disabilities*, 28(1), 7–15.
- Sukhraj, P. (2008). *The implementation and challenges to inclusive education policy and practice in South Africa*. Retrieved July 20, 2016, from http://icevi.org/publications/icevi_wc2006/09_inclusive_educational_practices/Papers/afr_006_praveena%20sukhraj.pdf
- Turnbull, H.R., Stowe, M., & Huerta, N. (2007). *Appropriate public education: The law and children with disabilities*. Denver, Colorado: Love Publishing Company.
- United Nations. (2016a). *General comment No. 4 (2016) on the right to inclusive education. Convention on the Rights of Persons with Disabilities*. Retrieved on January 24, 2017, from http://tbinternet.ohchr.org/_layouts/treatybodyexternal/Download.aspx?symbolno=CRPD/C/GC/4&Lang=en
- UN. (2016b). *Sustainable Development Goal 4*. Retrieved October 6, 2016, from <https://sustainabledevelopment.un.org/sdg4>
- UN. (2016c). *Sustainable Development Goals*. Retrieved June 22, 2017, from <https://sustainabledevelopment.un.org/sdgs>
- UN Division for Social Policy and Development: Disability. (2006). *Convention on the rights of persons with disabilities (CRPD)*. Retrieved September 12, 2016, from <https://www.un.org/development/desa/disabilities/convention-on-the-rights-of-persons-with-disabilities.html>
- UN Division for Social Policy and Development: Disability. (2016). *CRPD latest developments*. Retrieved September 12, 2016, from <https://www.un.org/development/desa/disabilities/convention-on-the-rights-of-persons-with-disabilities/latest-developments.html>
- UN Educational, Scientific, and Cultural Organization (UNESCO). (1990). *The world declaration on education for all and framework for action to meet basic learning needs*. Retrieved September 12, 2016, from <http://unesdoc.unesco.org/images/0012/001275/127583e.pdf>
- UNESCO. (1994). *The Salamanca statement and framework for action on special needs education*. Retrieved from September 6, 2016, http://www.unesco.org/education/pdf/SALAMA_E.PDF
- UNESCO. (2003). *Open file on inclusive education: Support materials for managers and administrators*. Retrieved September 6, 2016, from <http://unesdoc.unesco.org/images/0013/001321/132164e.pdf>
- UNESCO. (2009). *Policy guidelines on inclusion in education*. Retrieved July 7, 2016, from <http://unesdoc.unesco.org/images/0017/001778/177849e.pdf>
- UN Children's Fund (UNICEF). (2004). *Children and disability in transition in CEE/CIS and Baltic States*. Retrieved July 7, 2016, from <http://www.unicef.org/ceecis/Disability-eng.pdf>
- UNICEF. (2012). *The right of children with disabilities to education: A rights-based approach to inclusive education*. Retrieved July 15, 2016, from http://www.unicef.org/ceecis/Final_Draft_-_Position_Paper2.pdf
- UNICEF. (2013). *Children and young people with disabilities fact sheet*. Retrieved July 15, 2016, from http://www.unicef.org/disabilities/files/Factsheet_A5_Web_NEW.pdf
- UNICEF. (2014a). *Global initiative on out-of-school children: South Asia regional study*. Retrieved July 15, 2016, from https://www.unicef.org/education/files/SouthAsia_OOSCI_Study_Executive_Summary_26Jan_14Final.pdf

- UNICEF. (2014b). *Legislation and policies for inclusive education: Webinar 3—Companion technical booklet*. Retrieved August 8, 2016, from http://www.inclusive-education.org/sites/default/files/uploads/booklets/IE_Webinar_Booklet_3.pdf
- UNICEF. (2014c). *Collecting data on child disability: Webinar 4—Companion technical booklet*. Retrieved August 8, 2016, from http://www.inclusive-education.org/sites/default/files/uploads/booklets/IE_Webinar_Booklet_4.pdf
- UNICEF. (2014d). *Financing of inclusive education: Webinar 8—Companion technical booklet*. Retrieved August 8, 2016, from http://www.inclusive-education.org/sites/default/files/uploads/booklets/IE_Webinar_Booklet_8.pdf
- UNICEF. (2014e). *Education management information systems and children with disabilities: Webinar 6 - Companion technical booklet*. Retrieved August 8, 2016, from http://www.inclusive-education.org/sites/default/files/uploads/booklets/IE_Webinar_Booklet_6.pdf
- UN Office of the High Commissioner for Human Rights. (1989). *Convention on the rights of the child*. Retrieved July 15, 2016, from <http://www.ohchr.org/en/professionalinterest/pages/crc.aspx>
- UN Office of the High Commissioner for Human Rights. (2007). Committee on the rights of the child, general comment No. 9: The rights of children with disabilities, CRC/C/GC/9, Feb 2007. In *Report of the committee on the rights of the child* (pp. 30-52). Retrieved July 15, 2016, from https://www.ohchr.org/jahia/webdav/shared/shared/mainsite/policy_and_research/un/63/A_63_41.pdf
- UN Office of the High Commissioner for Human Rights. (2015). *Committee on the rights of persons with disabilities: Draft general comment on the right to inclusive education*. Retrieved October 6, 2016, from <http://www.ohchr.org/EN/HRBodies/CRPD/Pages/GCRRightEducation.aspx>
- United States Agency for International Development (USAID). (2010). *Best practices in inclusive education for children with disabilities: Applications for program design in the Europe & Eurasia Region*. Retrieved July 15, 2016, from http://pdf.usaid.gov/pdf_docs/PA00HPH4.pdf
- USAID. (2011). *First principles: Community engagement in education programs*. Retrieved July 15, 2016, from http://www.equip123.net/docs/E1-FP_CommEng_Comp_Web.pdf
- USAID. (2015). *A guide for promoting gender equality and inclusiveness in teaching and learning materials*. Retrieved October 6, 2016, from <https://globalreadingnetwork.net/eddata/guide-promoting-gender-equality-and-inclusiveness-teaching-and-learning-materials-0>
- USAID. (2016). *EdData II task order 15: Data for education programming in Asia and the Middle East (DEP/AME) situation and needs assessment for students who are blind/low vision or deaf/hard of hearing in Morocco*. Prepared for USAID by RTI International. Retrieved June 30, 2017, from https://globalreadingnetwork.net/sites/default/files/eddata/R1-026_Morocco_Inclusion_Study_Report_ENGLISH_FINAL.pdf
- USAID. (2017). *Hearing impaired students learn to read faster in Malawi*. Retrieved June 28, 2017, from <https://www.usaid.gov/results-data/success-stories/classroom-innovations-help-deaf-students-learn-read>
- Vaz, S., Wilson, N., Falkmer, M., Sim, A., Scott, M., Corider, R., & Falkmer, T. (2015). Factors associated with primary school teachers' attitudes towards the inclusion of students with disabilities. *PLoS One*, *10*(8), e0137002.
- Villanueva, C. C. (2003). *Education Management Information System (EMIS) and the formulation of Education for All (EFA)*. Retrieved June 27, 2017, from <http://unesdoc.unesco.org/images/0015/001568/156818eo.pdf>
- Wagner, M., Newman, L., Cameto, R., Levine, P., & Garza, N. (2006). *An overview of findings from wave 2 of the national longitudinal transition study-2 (NLTS2)*. Menlo Park, CA: SRI International.
- Washington Group on Disability Statistics & UNICEF. (2016, December 18). *Child functioning question sets*. Retrieved from <http://www.washingtongroup-disability.com/washington-group-question-sets/child-disability/>
- Wirz, S., Edwards, K., Flower, J., & Yousafzai, A. (2005). Field testing of the ACCESS materials: A portfolio of materials to assist health workers to identify children with disabilities and offer simple advice to mothers. *International Journal of Rehabilitation Research*, *28*(4), 293-302.
- World Health Organization (WHO). (2011). *World report on disability*. Retrieved October 6, 2016, from http://www.who.int/disabilities/world_report/2011/en/

Appendix A. Inclusive Education Systems and Policy Checklist

This checklist is based upon the various articles of the United Nations Convention on the Rights of Persons with Disabilities (CRPD) and the CRPD Committee's draft General Comments on the right to inclusive education.

Government Education Systems Should:

- Include all children with disabilities under the responsibility of the Ministry of Education.
- Establish an intersectoral commitment to inclusive education across government ministries, including:
 - Ministry of Finance;
 - Ministry of Health;
 - Ministry of Planning; and
 - Ministry of Social Welfare and Child Protection.
- Require inclusive education as a component of preservice teacher training.
- Require inclusive education as a component of in-service teacher training.
- Actively recruit teachers with disabilities.
- Provide accommodations to teachers with disabilities.
- Ensure that general education sector plans and/or strategic plans address the needs of children with disabilities and inclusive education.
- Develop an Education Sector Plan to support disability-specific legislation that details the process for implementing an inclusive education system, including the allocation of sufficient, committed financial and human resources for both rural and urban areas.
- Ensure that teaching and learning materials are inclusive of individuals with disabilities and present disability in a positive and empowering manner that reduces stigmatization and supports inclusive education.

- Consult with parents of children with disabilities and individuals with disabilities on proposed laws and educational plans.
- Establish an outreach mechanism to build awareness of parents and the community on issues related to disability and inclusive education.
- Collect data on children with disabilities using the Washington Group functionality questions (<http://www.washingtongroup-disability.com/washington-group-question-sets>) to inform policies and programs.
- Capture disability data within the Education Management and Information System (EMIS).
- Develop monitoring frameworks with structural, process and outcome indicators.

Specific Inclusive Education Legal Framework Should:

- Prohibit discrimination on the grounds of disability.
- Provide a clear definition of inclusion and the specific objectives the law is seeking to achieve at all educational levels.
- Ensure that all legislation that potentially impacts inclusive education within a country clearly states inclusion as a goal.
- Reinforce that all children with disabilities, regardless of diagnosis or severity, have the right to free primary and access to secondary education within their public neighborhood schools.
- Guarantee that students with and without disabilities have the same access to inclusive learning opportunities.

- Provide reasonable accommodations to all children with disabilities.
- Reaffirm that children with disabilities have the right to live in their communities and to not be not placed in long-term institutional care. If children with disabilities are currently institutionalized, develop and establish, with a plan for sustainability and monitoring, a strong deinstitutionalization plan.
- Require all new schools to be designed and built to an acceptable standard of accessibility.
- Provide a time frame for the adaptation of existing schools to ensure they meet an acceptable standard of accessibility, along with a monitoring plan for ensuring that the work is completed in a timely manner.
- Develop a consistent framework for the identification, assessment, and support of individuals with disabilities.
- Ensure that all children, including children with disabilities, have the right to be heard within the school system, including through school councils, governing bodies, and local and national government, and establish mechanisms through which decisions concerning education can be appealed.
- Require that the national curriculum be available to all students and support a system to adapt curricula as needed for students with disabilities.
- Give students the opportunity to access assistive technology, including materials in braille, alternative script, augmentative and alternative modes, means, and formats of communication, and orientation and mobility skills, if needed.
- Give students who are deaf or hard of hearing the opportunity to learn and be taught in the local sign language.
- Develop an effective, accessible, safe, and enforceable complaints mechanism to challenge any violations of the right to education.

Appendix B. Glossary of Disability Inclusive Education Terminology

Adapted curriculum. A curriculum based on the general education curriculum that is designed to meet the learning needs of a child with a disability (e.g., the use of extended time on tests). These changes do not fundamentally alter the goals of the original curriculum.

Assistive technology. The Individuals with Disabilities Education Act defines assistive technology as “[a]ny item, piece of equipment or product system, whether acquired commercially off the shelf, modified, or customized, that is used to increase, maintain, or improve the functional capabilities of children with disabilities.”¹

Augmentative and assistive communication (AAC). A communication method that is used to supplement or replace oral speech or written language for individuals with limited speech or language abilities. AAC devices can include communication boards, symbols, or electronic devices.

Bilingualism for sign language. The use of a country’s (or region’s) local sign language as well as the country’s (or region’s) written local language.

Braille. A tactile writing system used by people who are blind; braille consists of six raised dots arranged in two parallel rows that are felt with the fingertips. Braille is not a language but rather a code by which languages can be read and written.

Diagnostic evaluation. A comprehensive evaluation of an individual child that can provide information about a child’s academic or behavioral problems. The results of a diagnostic evaluation can help teachers identify what educational supports are needed for an individual student.

Disabled persons organization. An organization in which people with disabilities constitute a majority (over 51 percent) of the staff, board, and volunteers and are well represented within the organization.

Disability. The United Nations Convention on the Rights of Persons with Disabilities defines disability as including “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” (UN Division for Social Policy and Development: Disability, 2006).

Disability-inclusive development. International development practices and services that address issues pertaining to people with disabilities; including poverty alleviation, education, health services, and others. Such initiatives ideally should include leaders who have disabilities.

Early identification. The assessment of a child with a delay or disability at the earliest age possible. Early identification for children with developmental, intellectual, hearing, or vision disabilities usually refers to assessment or evaluation of a child to receive support services before entering school and preferably before age 3.

Early intervention. A system of coordinated services that promote a child’s growth and development during the critical early years of life. Early intervention services usually refer to providing support before entering school and preferably before age 3.

¹ Retrieved from <http://ectacenter.org/topics/atech/definitions.asp>.

Education Management Information System.

According to UNESCO, an Education Management Information System (or EMIS) is “an organized group of information and documentation services that collects, stores, processes, analyzes and disseminates information for educational planning and management” (Villanueva, 2003).

General education. Formal school-based education that is made available to students in a community, generally by a ministry of education.

Inclusive education. The education of children with disabilities in their local schools alongside children without disabilities. Inclusive education “involves a process embodying changes and modifications in content, approaches, structures and strategies in education, with a common *vision that serves to include all students of the relevant age range*” (UN, 2016a).

Individualized education plan (IEP). A plan or program that is developed by a committee usually made up of a student’s teacher, resource staff, parent, and the student to ensure that a student with a disability receives specialized instruction and related services. An IEP sets out yearly goals for the student and monitors the progress of those goals to ensure that the student is progressing in school.

Integrated education. A system in which children with disabilities attend a general education school but receive instruction in specialized or segregated classrooms. Typically, in these instances, children with disabilities have limited interaction with their peers who do not have disabilities and often lack access to the national curriculum.

Itinerant teacher. A qualified teacher who travels from school to school to provide special education support and assistance to multiple schools, often across several communities.

Large print. An adaption made to a book or document where the font is larger than usual to allow for persons with low vision to better read the text. Large print text is usually 18-point font or larger.

Local sign language. A complete and often complex language that employs signs used by moving the hands combined with facial expression and postures of the body. Local sign language is the distinct sign language developed within a particular community or country.

Manipulatives. A physical object (e.g., blocks) that can teach abstract concepts to children using both physical and visual cues. Manipulatives are particularly useful in teaching mathematics.

Occupational therapy. A service that helps people better engage in activities of daily living and better develop, improve, sustain, or restore independence to any person who has an injury, illness, or disability.

Physical therapy. A therapy for preserving or enhancing movement and physical function that has been impacted by a disability, injury, or disease. Physical therapy often uses physical exercise, massage, and other forms of training.

Pull-out model. A model of instruction in which a child with a disability is removed from the general education classroom for some part of a school day to receive special education or additional supports in a separate special education classroom or resource room.

Push-in model. A model of instruction in which a child with a disability receives special education or additional supports in the general education classroom, from a specialist or other support person, without being pulled out of the classroom to receive support.

Reasonable accommodation. A change made to a curriculum, method of instruction, assessment, homework or other school-based activity or requirement that is designed to reduce or eliminate the effects of a disability on a student. An example is extending time on tests or homework. Reasonable accommodations are intended to provide equal access and do not fundamentally alter the nature of the material or instructional environment.

Resource center. A center for technical assistance and support for general education schools that are teaching children with disabilities. In some contexts, this can have been, formerly, a segregated school for children with disabilities.

Resource room. A separate room in a general education school where student with disabilities are given direct specialized instruction, therapy services (such as speech or occupational therapy), and/or assistance with homework and related assignments; instruction may be individualized or within small or large groups.

Response to Intervention. A tiered framework for identifying children who may need additional educational support, providing appropriate interventions, and measuring ensuing changes in academic or behavioral performance (RTI Action Network, n.d.). Children who do not respond to intervention may need to be assessed for potential eligibility for special education and related services.

Screening. The process of using tests and assessments to identify student who may have disabilities. All students attending a school may be screened, and initial testing may identify students who may need individual evaluation.

Segregated education. The education of children with disabilities in separate schools or classrooms. These classrooms typically only contain students with other similar disabilities.

Special education. Education that is specifically designed to meet the individual needs and strengths of children with disabilities. Such education can occur either in an inclusive general education classroom or in separate classrooms or resource rooms.

Speech therapy. A service that helps individuals obtain, maintain, or restore speech as well as to support individuals who may need assistance in speaking more clearly or in improving articulation.

Teacher assistant. An individual who supports the main teacher in instructional and administrative responsibilities. A teacher assistant is often assigned to support classrooms with children with special education needs, providing additional support and individualized attention if needed.

Universal Design for Learning. A set of principles for curriculum that give all individuals equal opportunities to learn. This approach recognizes that all students, with and without disabilities, learn information in different ways.

Visual schedules. A visual support that is intended for children who have difficulties understanding language due to a disability. The schedule consists of a series of images showing the steps of a given daily activity and is used to aid communication between the child and the adults in their lives.

RTI International is an independent, nonprofit research institute dedicated to improving the human condition. We combine scientific rigor and technical expertise in social and laboratory sciences, engineering, and international development to deliver solutions to the critical needs of clients worldwide.

www.rti.org/rtipress

RTI Press publication OP-0043-1707