Learning is For Everyone

Paving the pathway for inclusive education for children with disabilities

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Executive summary

Ensuring all children can access, participate in and thrive through quality education is a fundamental human right and a cornerstone of equitable and sustainable development. Yet children with disabilities remain among the most excluded learners globally. Barriers related to stigma, inaccessible environments, rigid education systems and insufficient support continue to limit their opportunities to learn and thrive. While targeted programmes and interventions exist, moving towards disability-inclusive education requires systemic transformation that places inclusion at the core of education systems.

The Learning is For Everyone (LiFE) research initiative, led by the UNICEF Office of Strategy and Evidence – Innocenti in partnership with UNICEF country offices, produced a comprehensive analysis of how education systems can better respond to the needs of children with disabilities. Conducted across seven countries – Cambodia, Djibouti, Kyrgyzstan, Mozambique, Nepal, Niger and Paraguay – the mixed-methods study combined system-level analysis with insights from key stakeholders, including children with disabilities whose voices are often underrepresented in research. This approach offered a nuanced understanding of structural barriers and lived experiences, highlighting gaps in, and opportunities for, advancing inclusive education.

This global report synthesized primary findings from LiFE country studies and complemented them with a targeted literature review and secondary data analysis to situate the results within broader regional and global trends. By bringing together multiple sources of evidence, the report provides context-specific as well as cross-cutting insights, offering a robust foundation for policy and practice. Drawing on this evidence, a set of actionable, evidence-informed recommendations is presented, structured around three interconnected priorities: Recognize, Reform and Resource.

1. Recognize

Advancing inclusive education begins with recognizing children with disabilities as rights-holders, learners and active contributors to society. This requires shifting how disability is understood, measured and addressed within education systems, including strengthening the system's role in detecting learning needs as early as possible so that appropriate, timely support can be provided.

What the evidence shows

Across the LiFE countries, data systems often relied on inconsistent definitions of disability, with medical classifications prevailing. This limited the countries' ability to identify functional needs and barriers to learning and participation in a timely manner, and to provide the necessary support accordingly. Where data were available, they consistently pointed to disparities in

access, progression and learning outcomes for children with disabilities. However, many children remained uncounted, particularly those with less visible or less formally identified difficulties. Differences in definitions and methodologies also limited comparability across systems.

Qualitative findings further highlighted how stigma, low expectations and limited awareness among stakeholders, including teachers and families, shaped how disability is understood and addressed. In some contexts, these perceptions influenced enrolment decisions, school placement and the level of support provided. Together, these findings point to the need for more inclusive approaches to identification, data collection and awareness-raising, aligned with broader evidence from global literature.

Key policy recommendations include:

Foster positive attitudes towards disability aligned with the social and human-rights models, through awareness-raising and community engagement.

Communicate and demonstrate the benefits of disability-inclusive education for all learners, including among educators, families and communities.

Establish educational identification tools to effectively identify barriers to participation and learning, and to ensure that appropriate support is provided to children, by focusing on functional needs rather than medical diagnoses.

Strengthen collection, analysis and use of data to properly identify barriers to participation and learning, in line with inclusive principles, including using disaggregated and comparable indicators.

2. Reform

Inclusive education cannot be achieved through isolated measures, it requires systemic reform of education systems, policies and practices.

What the evidence shows

Findings from the LiFE research showed that many mainstream education systems are not yet fully equipped to respond to the diverse learning needs of children. Children with disabilities faced barriers not only in accessing school but also in participating and learning effectively once enrolled, with lower attendance, progression and learning outcomes observed across multiple data sources. Teachers frequently reported limited preparation in inclusive education, rigid curricula, and a lack of clear guidance on adapting instruction and assessment.

Nevertheless, many teachers were already applying inclusive practices, such as adapting instruction, providing individual support and using multiple ways to explain content, often without formal training. These practices are more effective when supported through structured training, peer learning and collaboration with specialists. This suggests that while the foundations for inclusive teaching exist, they remain fragmented, highlighting the need for systemic reform to align curricula, teacher professional development and classroom practice.

Key policy recommendations include:

Strengthen the capacity of mainstream schools to enrol students with disabilities, through improved teacher support, school leadership and collaboration with specialists.

Institutionalize the use of inclusive teaching strategies in teaching and learning, such as Universal Design for Learning (UDL), an approach that promotes multiple means of engagement, representation and expression; cooperative learning, which uses structured peer interaction; and differentiated instruction, which adapts content, learning processes and assessment to learners' diverse needs.

Transform teacher training to systematically integrate inclusive education, across both pre-service and in-service programmes.

Identify and institutionalize existing teaching practices that promote inclusion by embedding them within teacher professional development programmes.

Formalize disability-responsive assessment accommodation guidelines, ensuring alignment with inclusive curricula and classroom practice.

3. Resource

Achieving inclusive education requires sustained investment in both materials and human resources. Without adequate resourcing, policy commitments cannot be translated into practice.

What the evidence shows

Across the LiFE countries, limited resources were consistently identified as a major barrier to inclusion. Schools often lacked accessible infrastructure, appropriate teaching and learning

materials, assistive devices and regular access to multidisciplinary specialist support. These constraints affected both access to school and the quality of learning once children with disabilities are enrolled. Transportation barriers further restrict access, particularly for children with physical disabilities, contributing to their irregular attendance or exclusion.

Findings showed teachers and schools actively responded to these constraints by adapting resources and creating low-cost, locally sourced materials. While these efforts demonstrate strong commitment, they were often not systematically supported or scaled. The limited availability of specialists and the underrepresentation of teachers with disabilities highlight further gaps in the human resources needed to sustain inclusive systems, underscoring the importance of both increased investment and more strategic resource allocation.

Key policy recommendations include:

Improve physical accessibility for children with disabilities, including school infrastructure and transportation systems.

Strengthen resource provision and scale teacher-created low-cost materials to support inclusive curriculum implementation by combining system-level investment with support for teacher-led innovation.

Recruit and support teachers with disabilities to strengthen inclusive education through inclusive recruitment, accessible training and supportive working environments.

Overall, the LiFE research showed that exclusion is not inevitable but often reflective of systemic gaps across education systems. These are shaped by interconnected challenges across data systems, teaching practices, infrastructure and resource allocation. At the same time, the research highlighted promising practices already present within systems, demonstrating that inclusive education is achievable and can be scaled if effectively supported.

Disability-inclusive education is not a one-time reform but an ongoing transformation. It requires political will and a shift in mindset, from viewing inclusion as a challenge to seeing it as an opportunity to strengthen education systems for all learners. By recognizing diversity as a strength, reforming systems to respond to it, and allocating the necessary resources, countries can build education systems in which every child is able to access school, participate, learn and thrive.

1. Introduction

Globally, children with disabilities are half as likely to attend school compared with their peers without disabilities, despite education being a fundamental right for every child.[1,2] Education enables children to learn, thrive and participate fully in society. Yet even when children with disabilities are enrolled in schools, they face persistent barriers to learning – data from 2021 show they were 42 per cent less likely to develop foundational literacy and numeracy skills. These figures underscore that access alone is not enough. Education systems must enable meaningful participation and learning for every child, including children with disabilities, who represent 10 per cent of children aged 0–17 globally.[3]

Providing meaningful learning opportunities for all children requires a systemic shift towards inclusive education. As defined in General Comment No. 4 of Article 24 of the Convention on the Rights of Persons with Disabilities (CRPD), inclusive education involves comprehensive reforms to content, pedagogy, structures and strategies (*see Box 1.1*). Its aim is to ensure that all learners experience responsive, participatory and supportive learning environments tailored to their needs and preferences.[4] This vision aligns with Sustainable Development Goal 4, which reaffirms the global commitment to inclusive and equitable quality education for all children, including those with disabilities.[5]

Inclusive education provides better learning opportunities for all children. Evidence shows that inclusive education settings offer students with disabilities a more stimulating environment that strengthens their self-efficacy and social skills. Inclusive education supports all learners, including neurodivergent students and those with invisible or uncertified disabilities whose needs may go unnoticed. It creates a more responsive learning environment that recognizes the uniqueness of every child and the multiple factors that shape learning.[6] Differentiated instruction and the presentation of content in multiple ways help foster deeper understanding, and provide the flexibility needed to accommodate diverse learning needs.[7,8] As a result, students may feel more accepted and supported, become more academically engaged, and achieve improved learning outcomes.[9,10] At the same time, students without disabilities benefit from exposure to diverse perspectives, which enhances problem-solving, interpersonal and socioemotional skills.[11,12,13]

Several global milestones to advance inclusive education have contributed to an evolved understanding. The key turning point was the signature and ratification of the CRPD, which recognized different inclusive practices and provided the most advanced definition of inclusive education, as shown in Box 1.1. Since its adoption in 2007, the Convention has achieved significant progress – by 2024, it had reached near-universal ratification among 191 State Parties,

demonstrating a strong global commitment to protecting the rights of persons with disabilities. Likewise, the 2024 *UN Disability and Development* Report highlights a substantial expansion of disability-inclusive laws and policies over the past decade.[14] The 2026 Global Education Monitoring Report also shows significant shifts in national legal and policy frameworks since 2020. As of 2025, 29 per cent of countries had legislation that explicitly supports inclusive education, while the majority (59 per cent) combined inclusive provisions with allowances for segregated or separate settings. Policies were even more progressive; 56 per cent of countries have adopted policy frameworks promoting inclusive education[15] (see Box 1.1 for the definition of inclusive education). However, policy commitments often fall short in practice as countries continue to struggle with limited financial and system capacity, insufficient teacher preparation, and persistent social norms that undermine inclusive practices.

BOX 1.1

What different education delivery modalities mean for children with disabilities

- **Exclusion:** Children with disabilities are directly or indirectly excluded or denied access to any form of education.
- **Segregation:** Children with disabilities learn in separate environments designed to respond to a single or various difficulties, in isolation from their peers without disabilities (e.g., special classrooms or special schools). They often follow a different curriculum, which may include reduced content and lower expected learning outcomes.
- **Integration:** Children with disabilities are enrolled in mainstream schools with the expectation that they can adjust to the standard requirements of such institutions and participate in the regular programme without adaptations or support.
- **Inclusion:** Children with disabilities participate in all learning and recreational activities in the same schools and age-appropriate classrooms as their peers without disabilities, where the educational environment has been intentionally designed and adapted to enable their active participation and learning. This typically involves a systemic reform that includes modifications to school infrastructure, teaching methods, curriculum and overall school culture.

Source: adapted from UN (2016) General Comment N°4 on the right to inclusive education, UNICEF (2017) Inclusive Education: Understanding Article 24 of the Convention on the Rights of Persons with Disabilities, and UNICEF Regional Office for Europe and Central Asia (2022), The Use of Assistive Technology in Education: A guide for teachers and schools

The understanding of inclusive education and disability shapes multiple components of education delivery. This includes placement in mainstream schools, curriculum design, teaching and assessment practices, teacher preparation, pedagogical approaches, societal perceptions and the type of data collected within education systems. Thus, placing children with disabilities at the centre requires recognizing them as capable learners with diverse strengths and agency, whose perspectives, participation and learning experiences should guide all aspects of the system. However, in many countries, including across parts of Southeast Asia, Eastern and Western Africa, and the Middle East and North Africa,[16,17] segregated education remains the predominant provision for children with disabilities, while integration is often mislabelled as inclusion. Teaching and assessment practices often lack flexibility and alignment with UDL principles, although some countries in East Asia and Latin America have begun shifting towards more flexible, learner-centred teaching approaches and the increased use of formative assessments. Teacher training in inclusive education remains insufficient and inappropriate in most regions, directly affecting teachers' ability to support learners with disabilities.

High levels of stigma around disability, rooted in misguided beliefs that children with disabilities are less capable than their peers without disabilities, along with limited awareness and understanding of the rights of learners with disabilities and the benefits of inclusion, contribute to negative attitudes and discriminatory practices among other children, teachers, parents and communities, restricting learners' full participation in school and society.[18] In addition, the absence of reliable, disaggregated data aligned with the social model of disability (defined in Box 1.2) continues to be a major barrier for many countries that hinders the effective monitoring and needs assessments of schools, teachers and children.[19,20]

These challenges are further compounded by the absence of unified, globally consistent frameworks that capture the nature and severity of difficulties, levels of functioning, and the interaction between the child and their environment. Tools such as the Washington Group (WG) questions, particularly the Child Functioning Module, have been widely used and are an important step forward in identifying barriers for children with disabilities. However, their primary purpose is the generation of population-level and programmatic statistics, and they are therefore less commonly integrated into systems that can enable identification, planning and the provision of targeted support.[21]

BOX 1.2

Models of disability and its definition

The understanding of disability has transformed throughout history, leading to the development of various explanatory models, each offering a distinct definition of disability, including:

- **Charity model:** Under this model, persons with disabilities are often regarded as dependent and in need of 'care', and their ability to learn, be autonomous and make their own decisions are underestimated.
- **Medical model:** Disability is conceived as a medical condition, trauma or health condition that must be treated individually. Under this model, persons with disabilities need to be 'cured' or treated through medical interventions to actively participate and learn in schools.
- **Social model:** Disability is perceived as a result of societal and environmental barriers that persons with disabilities face. The focus and approach of the social model is to remove barriers so that persons with disabilities have the same opportunities to participate and learn as persons without disabilities in society.
- **Human rights-based model:** This model recognizes persons with disabilities as having the right to equal opportunities and participation in all sectors of life, including education. It recognizes the barriers in society as discriminatory and provides mechanisms for persons with disabilities to seek action to address these barriers. In addition, it takes into consideration the criticism of the social model as inadequate to recognize the individual's identity as a whole.

The UN CRPD adopts the human rights model of disability,[22,23,24] defining persons with disability as "those who have long-term physical, mental, intellectual or sensory impairments which when interacting with various barriers, may hinder their full and effective participation in society on an equal basis with others".

Source: adapted from PiET Lab, York University, 2020; Olkin, 2022; United Nations High Commissioner for Refugees, n.d.; United Nations Convention on the Rights of Persons with Disabilities (UN CRPD) and UNICEF Regional Office for Europe and Central Asia (2022), The Use of Assistive Technology in Education: A guide for teachers and schools

While several countries have adopted policies supporting inclusive education aligned to the social and rights-based models of disability, gaps often remain between policy and practice. In some cases, policies contain internal contradictions – for example, promoting inclusive education while simultaneously upholding provision for segregated settings for children with certain kinds of disabilities or more advanced degrees of functional difficulty. However, this may reflect the gradual progress towards inclusive education, as some countries are in transition and different types of provision may coexist in policy and practice until stronger system capacity is developed.

Despite policy commitments for inclusive education, many policies remain largely descriptive, lacking information on the investment, capacity and resources needed to translate them into practice. Implementation is further hindered by limited financial and technical capacity; stigma and discriminatory attitudes towards disability, the lack of a unified definition of disability and inclusion across legislation, data systems, and programmes; weak monitoring and evaluation mechanisms; and poor coordination among stakeholders and ministries.[25,26,27,28,29] In practice, this means that many children with disabilities face barriers to participation even before entering school, as stigma and discrimination restrict their opportunities from the outset.[30] At the same time, the implementation of inclusive education for children with disabilities lacks a stable foundation, leading to fragmented approaches, inconsistent service delivery, weak accountability, and limited capacity to monitor progress or strengthen interventions over time. In many contexts, funding is inconsistent and heavily reliant on donor organizations, while opportunities for capacity building for ministries of education remain scarce.[31,32,33]

Several countries worldwide are implementing small-scale or early-stage efforts to strengthen inclusive education delivery. This includes system-wide understanding of inclusive education, harmonizing definitions and values with the social model of disability, and increasing accountability through inclusive planning, monitoring and financing. For example, efforts are increasingly focused on aligning definitions of disability and inclusion across legislation and data systems, as seen in Paraguay's law N° 5136 on inclusive education (2013) and its regulatory Decree N° 2837 (2014), which outline concrete actions to implement an inclusive model nationwide and remove barriers that limit the learning and participation of students with disabilities.[34] Some countries are also working to integrate disability indicators into Education Management and Information Systems (EMIS) and national monitoring frameworks. For instance, Fiji's EMIS enables teachers to continuously update individual student data, allowing the collection of reliable, disability-disaggregated information that strengthens planning and national responses for inclusive education.[35] Other countries are moving towards inclusive education by transforming special schools into resource centres, such as in Armenia, Ethiopia, Namibia and Paraguay. Others (e.g., Malawi) are developing costed models for inclusive education to strengthen inclusive education delivery. Meanwhile, in Moldova, there are efforts to establish more formal support systems, such as psycho pedagogical assistance centres that support the identification and provision of services for children with disabilities.[36,37] These efforts underscore both the commitment and the action towards more inclusive education systems.

The Learning is For Everyone (LiFE) research project implemented in partnership between UNICEF Office of Strategy and Evidence – Innocenti and UNICEF country offices conducted a system-level analysis of inclusive education for children with disabilities, aiming to identify the challenges countries face in making their education systems more inclusive. The study was conducted in seven countries: Cambodia, Djibouti, Kyrgyzstan, Mozambique, Nepal, Niger and Paraguay. These countries were selected for their commitment to advancing inclusive education through policies, strategies and regulations, and their need for robust evidence and analysis to inform further action. The selection ensured geographical diversity and representation of countries at different stages of reform.

The LiFE research was guided by the Education Sector Analysis (ESA) guidelines (Volume 3).[38] This approach allowed emphasis on the principle that inclusive education should be a core component of an education system, requiring systemic reform rather than being treated as an add-on. The research adopted a participatory approach, engaging national stakeholders to ensure the analysis reflected local priorities, realities and perspectives. A key strength of the LiFE research is that it included the voices of children with disabilities, a perspective rarely captured in education system research, providing insight into learners' lived experiences alongside quantitative and policy-level data.

Evidence-based recommendations were developed collaboratively between UNICEF Office of Strategy and Evidence – Innocenti, UNICEF country offices and ministries of education,[39] ensuring that findings translate into actionable strategies to strengthen equitable learning opportunities for children with disabilities in each context.

This report synthesizes findings from six of the seven LiFE countries[a] and draws on literature and existing data beyond these countries to provide recommendations for education systems worldwide. The report is structured around three key actions for governments derived from the research findings and country-level policy recommendations:

1. **Recognize:** the need to recognize children with disabilities as rights-holders, learners and contributors, and to make their inclusion understood, valued and measured. Recommendations under this action explore how governments must change the way in which disability is understood, discussed and documented.
2. **Reform:** the need to reform education systems, policies and practices to respond to learner diversity. Recommendations under this action identify which aspects require structural and professional change, not just additional inputs.
3. **Resource:** the need for inclusive education to be resourced with the infrastructure, materials and human capacity required for its implementation. Recommendations under this action identify those areas that require investment, including human and physical resources and accessible environments.

a Due to difficulties in conducting the primary data collection in research in Niger during 2023, the results from Niger are not referenced in the report.

2. Methodology

Countries are undertaking varied reforms to align their education systems with global inclusive education commitments and frameworks, creating a rapidly evolving landscape. These developments make it essential to assess progress and gather evidence on how they are being translated into practice – a core objective of the LiFE project. As such, the overarching goal of this research was to generate evidence on the status of inclusive education for children with disabilities across pre-primary, primary and secondary education levels,[b] and to provide evidence-based policy recommendations, relevant at both country and global levels. To meet this objective, the study adopted a comprehensive mixed-methods design, combining a system-level analysis with literature and policy reviews, secondary data analysis and primary research.

Given that the barriers to achieving inclusive education are predominantly systemic rather than project-based, the study was intentionally designed to generate system-level evidence. The research questions and thematic focus areas were therefore selected to examine how policies, school structures, data systems and accountability mechanisms interact to enable or constrain implementation in practice. This approach responds to a key gap in the existing evidence base, which often documents challenges to inclusion without sufficiently analysing the system conditions that sustain them across contexts.

2.1 Conceptual framework guiding the research

The LiFE research project draws on the *Education* Sector Analysis (ESA) Volume 3 guidelines as its conceptual framework. Developed collaboratively by UNICEF, UNESCO, the UK Foreign, Commonwealth and Development Office, and the Global Partnership for Education, these guidelines offer a comprehensive approach for analysing disability-inclusive education systems across four dimensions: 1) supply (teachers, infrastructure, learning materials); 2) quality (curriculum, student assessment, learning support); 3) demand (attitudes, costs, benefits); and 4) the enabling environment (laws and policies, data and evidence, leadership and management, finance).[40] This framework informed all stages of the research, from methodological design to data analysis and the interpretation of findings.

b There were variations in education levels targeted across different countries. For more information, please refer to country-level reports linked in Annex B.

2.2 Research questions

This report aims to generate contextualized, evidence-based recommendations for advancing inclusive education for children with disabilities in low- and middle-income countries. The following questions guided the analysis and development of the report:

1. What challenges are hindering access to inclusive settings and their learning for children with disabilities?
2. What challenges are education systems facing in providing inclusive settings for children with disabilities?
3. What opportunities and local solutions exist to advance inclusive education for children with disabilities, and how can they be scaled up within countries and regions?

To achieve this, three data sources were leveraged:

1. **A targeted literature review on inclusive education for children with disabilities:** Global and regional evidence was reviewed to identify current trends in inclusive education for children with disabilities. See Annex A for further details.
2. **A synthesis of findings from country-level research and policy recommendations that were part of the LiFE research project:** The synthesis of the country-level data for this report drew on both quantitative and qualitative insights gathered, across eight key topics (screening, school provision for children with disabilities, attitudes towards disability and inclusive education, teacher training, inclusive pedagogies, teaching learning materials, school

accessibility and school relationships) aligned with the ESA framework identified as central themes emerging consistently across all participating countries. Policy recommendations were formulated based on the synthesis of these findings and complemented by global literature. Country-level research included analysis of national education policies, frameworks and strategies, as well as literature; secondary data analysis of existing datasets that include information related to children with disabilities and inclusive education; and in-depth mixed-methods research with children with and without disabilities (both in and out of school) aged 10 to 16, their parents, teachers, head teachers and district education officers. Accommodations were provided as needed to support the participation of children with disabilities and ethical standards were upheld throughout. See Annex B for further details.

3. **Analysis and synthesis of existing data on learning outcomes and access to education for children with disabilities, beyond the seven LiFE countries:** This primarily included analysis of data from the Programme for International Student Assessment for Development from 2018 (PISA-D 2018), which included questions on children's functional difficulties, as well as the PISA 2022 teacher data.[41] Cambodia and Paraguay were the only countries from the LiFE project among the seven countries that participated in PISA-D; however, the authors analysed all PISA-D countries beyond those that participated in the LiFE research for the purposes of this report. Additional results were drawn from existing analyses of data from the Child Functioning Module of the sixth round of the Multiple Indicator Cluster Survey (MICS 6), collected between 2017 and 2023.

2.3 Limitations

First, while the core questionnaire topics remained consistent across countries, certain items were adapted to local contexts, limiting the scope for direct cross-country comparison. Second, digital surveys were disseminated by ministries of education to ensure national coverage, but response rates varied across countries, participant groups and geographic areas. This variation limits generalizability and introduces potential response bias. Third, interviews and focus group discussions were conducted in participants' preferred languages and then translated into French, Spanish or English, which may have resulted in a loss of nuance. Fourth, although accommodations were provided for children with intellectual disabilities – such as simplified questions and assistance from teachers or parents – additional adjustments to the research protocol were required in some cases. For instance, in cases involving more severe functional difficulties, parents were interviewed on behalf of their children. These experiences contributed to the development of a set of considerations to ensure the meaningful participation of children with disabilities throughout the research process (Annex C). Finally, regarding the secondary data analysis, access to datasets varied across countries, and the available data were compiled using different criteria and definitions of disability. These inconsistencies limited comparability and required careful interpretation.

3. Key findings and policy recommendations

This section outlines the global policy recommendations needed to strengthen the delivery of disability-inclusive education, organized into three action areas for countries:

1. **Recognize** children with disabilities as rights-holders, learners and contributors, and make their inclusion understood, valued and measured.
2. **Reform** education systems, policies and practices to respond to learner diversity.
3. **Resource** schools with the infrastructure, materials and human capacity required for the implementation of inclusive education.

Recommendations for each action area are presented below with the supporting findings.

3.1 RECOGNIZE

Inclusive education as a long-term goal requires countries to change perceptions on disability, making it understood and recognizing inclusion as an asset to all parts of society. This commitment means not only changing attitudes towards disability but also providing the means to identify learning difficulties in education systems, supported by robust monitoring processes and evidence. The following four recommendations are interconnected and mutually reinforcing, supporting the recognition of children with disabilities as rights-holders and their right to inclusive education:

1. Foster positive attitudes towards disability aligned with the social and human-rights models.
2. Communicate and demonstrate the benefits of disability-inclusive education for all learners.
3. Establish educational identification tools to effectively identify barriers to participation and learning and ensure that children are given appropriate support.
4. Strengthen collection, analysis and use of data to properly identify barriers to participation and learning, in line with inclusive principles.

Recommendation 1: Foster positive attitudes towards disability aligned with the social and human-rights models

Building inclusive education systems requires cultural and societal transformation. True inclusion starts with fostering positive attitudes towards disability through increased awareness and empathy across society, from legislation and policymaking to public discourse and everyday interactions.[42] Within schools, it is essential to engage teachers, head teachers, students, families and communities in efforts to challenge stereotypes, reduce stigma and promote inclusive values. Discrimination, stigma and negative societal attitudes undermine the education of children with disabilities, contributing to exclusion, violence and academic disengagement, and often discourage investment in inclusive education.[43] Only by addressing these attitudes can schools become safe, welcoming environments where all learners feel respected and supported, and have a sense of belonging.

The evidence

Policy analysis from the LiFE research showed variation in how disability is conceptualized across countries. In Cambodia and Kyrgyzstan, policies tended to reflect the medical model, focusing on individual deficits and framing disability as a biological condition to be managed. In Djibouti, Mozambique, Paraguay and Nepal, a more social perspective was adopted, highlighting how exclusion stems from inaccessible environments, discriminatory attitudes and lack of support systems. Where medical models dominate, policies tend to reinforce segregated provision and narrowly targeted data systems, whereas social model-oriented frameworks are more likely to support inclusive pedagogies, broader identification of learning needs and system-level reforms.

Across all countries, participants' understanding of disability varied but were generally shaped by medical interpretations. Many respondents described disability as a "lack of something" or a "difficulty with the body". Awareness often differed for visible versus non-visible disabilities. For example, in Kyrgyzstan, children without disabilities primarily associated disability with visible physical or sensory impairments, while parents and teachers also referenced intellectual and psychosocial disabilities.

> *"Boys with disabilities are people just like us; they are not different from us – they are beautiful human beings. My classmate, he is just like me; he simply has pain in some part of his body."*
>
> **Child without disability**
>
> Primary school, Paraguay

Across LiFE countries, attitudes towards disability were mixed, with positive intentions often coexisting alongside misconceptions, discomfort or uncertainty about inclusion:

- **Parents of children with disabilities** often expressed deep affection and pride, while also sharing experiences of internalized stigma and concerns about how their children were perceived. Many described discrimination in schools, including bullying, exclusion by peers or, at times, negative attitudes from teachers.
- **Parents of children without disabilities** demonstrated varied perspectives. Some strongly supported inclusive education, recognizing its social and academic benefits. Others expressed uncertainty or negative beliefs, often shaped by limited exposure to disability, persistent misconceptions or limited understanding of what inclusive education entails.
- **Teachers** held diverse views. Some described children with disabilities as those who "lag behind" or mentioned colleagues hesitant to teach them. Yet many educators actively supported disability inclusion, adapting lessons, setting high expectations and creating supportive learning environments. At the same time, some teachers expressed support for inclusive education while also raising concerns about managing classrooms that include children both with and without disabilities.
- **Children without disabilities** generally demonstrated positive attitudes and a recognition of equal rights. However, some expressed pity rather than solidarity, reflecting lingering stereotypes and highlighting the need for ongoing awareness-raising and exposure to inclusive practices.

These understandings have direct implications for inclusive education, as medicalized perceptions tend to frame disability as an individual deficit rather than a result of systemic barriers. This reinforces expectations of separate provision, limits pedagogical adaptation in mainstream classrooms, and contributes to the under-identification and exclusion of children with non-visible disabilities.

Some of the participating LiFE countries have demonstrated efforts to bring together children with and without disabilities learning in different schools to foster more positive attitudes. For example, in Djibouti, mainstream schools organized exchange visits to special schools, creating opportunities for shared activities and peer learning. In Nepal, teachers in schools with resource classrooms — dedicated spaces that provide targeted instructional support to children with disabilities in a separate setting — actively encourage students without disabilities to spend time with their peers with disabilities during recess or through extracurricular activities.

Policy implementation and considerations

Building on these findings, the following key considerations outline how policies and practices can foster positive attitudes and promote meaningful inclusion for all learners.

- **Implement multilevel awareness campaigns and sensitization activities:** This requires collaboration among the health, protection and education sectors at central, provincial and district levels. Public campaigns, implemented in collaboration with organizations of persons with disabilities (OPDs), should challenge stereotypes and highlight the social and educational benefits of inclusion. These efforts should span all sectors and intentionally showcase concrete examples of successful inclusion of persons with disabilities across different fields, helping visualize what meaningful participation looks like. Within schools, curricula should integrate disability-related content that reflects the lived experiences of persons with disabilities. Teacher training institutions should include training modules on disability rights, unconscious bias, and critical reflection on assumptions about disability,[44] as well as practical guidance on addressing stigma and discrimination. For example, UNICEF's training in disability inclusion for frontline workers aims to build disability awareness and prepare staff to foster inclusion; in particular, Module 2 outlines concrete actions that workers can take.[45] Awareness alone does not shift attitudes or translate into everyday practices of inclusion. Sensitization goes further by fostering empathy, reducing fear or discomfort and promoting inclusive interactions.[46] This can be achieved through experiential learning and regular, meaningful engagement between children with and without disabilities.
- **Engage persons with disabilities in designing and implementing initiatives:** To ensure authenticity, relevance and impact, persons with disabilities, including children, should be meaningfully involved in planning, delivering and evaluating awareness and sensitization activities.[47] Their lived experiences offer perspectives that challenge stereotypes and reshape public understanding. Collaboration with persons with disabilities as well as OPDs helps ensure these efforts are grounded in rights-based approaches and reflect the diversity of disability experiences, especially in rural areas where formal organization may be scarce.

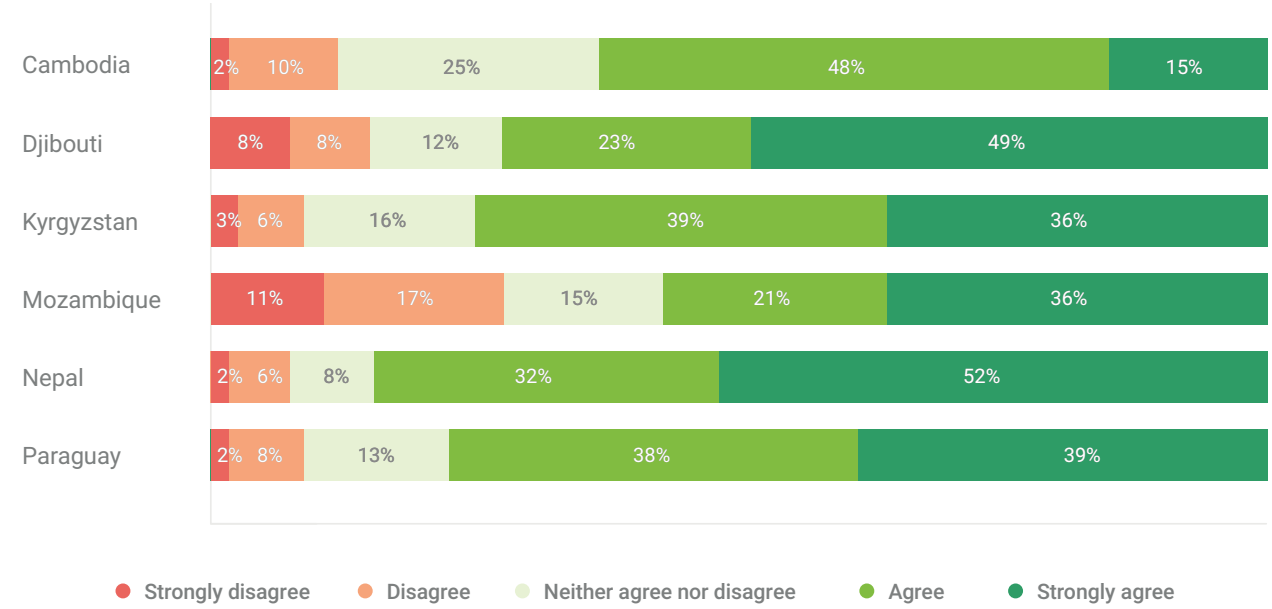
Recommendation 2: Communicate and demonstrate the benefits of disability-inclusive education for all learners

Disability-inclusive education is not only a matter of equity, it is associated with stronger learning for children with and without disabilities.[48,49] Inclusive practices support differentiated instruction, promote collaboration and foster environments in which diverse learning needs are met, leading to improved academic outcomes, social cohesion and well-being for all students.[50] Yet these benefits are often overlooked, particularly for children without disabilities, reinforcing the misconception that inclusion serves only a minority. Raising awareness is therefore essential to highlight its system-wide advantages and reduce barriers stemming from limited exposure or understanding. Identifying these shared benefits also strengthens concrete efforts towards inclusion, by building a collective commitment among schools, families and communities.

The evidence

Teachers in the LiFE research primarily emphasized the benefits of inclusive education for children with disabilities but rarely acknowledged its advantages for children without disabilities. This highlights a common misconception that inclusion is only about disability rather than about creating equitable, accessible and high-quality learning environments for all children. Teachers' perceptions of inclusive education are critical because they shape how inclusion is implemented in the classroom (*see Figure 3.1*). When teachers view inclusion as an effective approach for all learners, they are more likely to foster welcoming learning environments, provide positive feedback and maintain higher expectations for students' achievements.[51] Strengthening beliefs about the benefits of inclusion for all is therefore essential for fostering practices that support every child.

Figure 3.1 Teachers' agreement on whether inclusive education benefits students without disabilities



Source: authors' analysis of LiFE data – teacher surveys

Data from the Southeast Asia Primary Learning Metrics (SEA-PLM) programme show inclusive schools are associated with higher learning outcomes for children. In Cambodia, children enrolled in schools with a high 'child-friendly school' rating performed better academically than those in schools rated basic or medium.[52] The school child-friendliness classification relies on inclusivity criteria, including access for children with physical disabilities. Similarly, in the Philippines, student achievement was found to be higher in schools with no incidence of offensive behaviour towards students with disabilities.[53] Existing qualitative research further reveals socioemotional benefits for children without disabilities, such as learning to value diversity, recognizing different abilities, supporting peers' participation and learning, and developing stronger communication skills through interactions with classmates with disabilities.[54] These findings reinforce that inclusive practices benefit all learners, creating environments that foster engagement, equity and achievement, and improve system performance.

Children with and without disabilities often recognized benefits of inclusive education that adults overlooked. They valued inclusive schools for the opportunities to build cohesive, supportive environments and foster meaningful peer interactions. In contrast, some parents of children without disabilities expressed concerns that the inclusion of children with disabilities in mainstream schools could negatively affect the learning of other students or disrupt the classroom environment. Teachers in some LiFE countries reported feeling unprepared to meet the needs of children both with and without disabilities in the same classroom. These insights underscore the importance of promoting inclusive education as a shared benefit and a driver of equity, preparing all learners to thrive in diverse, collaborative societies.

> *"Our school is an inclusive school… it breaks down those communication barriers, and it's easier to integrate into groups. It's very easy to make friends, to learn new things. And it's more fun too… It's not like in other schools – they bring us closer together. Everyone is part of the same group."*
>
> **Child without disability**
>
> Primary inclusive school, Paraguay

Policy implementation and considerations

Promoting awareness of the benefits of inclusion is essential to translating policies into classroom practices that strengthen learning and social outcomes for all students. This can be achieved by:

- **Highlighting the universal benefits of inclusive education:** Strong political will from governments is essential to promote an inclusive perspective and drive these efforts forward, with ministries of education playing a central leadership role. In this context, ministries of education should raise awareness of the benefits, and sensitization initiatives should communicate that inclusion improves cognitive, social and emotional outcomes for all students.[55] While Recommendation 1 focuses on shifting attitudes towards disability, this recommendation emphasizes the importance of clearly communicating the evidence that inclusive education strengthens outcomes for all learners. Children with disabilities should be actively engaged in these efforts, with their perspectives, experiences and leadership helping to shape how inclusion is understood and promoted.
- **Engaging school leaders and teachers as advocates for inclusion:** Head teachers and experienced teachers from successful inclusive schools can act as advocates and change agents. For instance, in Paraguay and Nepal it was identified that head teachers played a key role in fostering an inclusive environment by encouraging positive attitudes among their teachers, mobilizing resources (e.g., accessible teaching and learning materials (TLMs), accessible infrastructure, access to specialists such as speech and physical therapists) and creating safe spaces to talk and provide support for teachers facing challenges when teaching students with disabilities.

  In countries where education decision-making is more decentralized, it is essential to coordinate and collaborate with existing sub-national systems such as local government structures and school districts. Engaging with school leaders and encouraging teachers to share practical strategies, lessons learned and firsthand experiences can demystify inclusive education and build confidence among peers. Platforms such as peer learning networks, workshops and mentoring opportunities can enable them to support other schools in implementing inclusive approaches effectively.

Recommendation 3: Establish educational identification tools to effectively identify barriers to participation and learning, and ensure that children are given appropriate support

Strong identification systems are essential to turn commitments for inclusive education into action, effective resource allocation and early intervention. Screening is an initial step to identify children who may be at risk of developmental or learning difficulties and who may require further assessment. Disability assessment, in turn, is a more comprehensive, multidisciplinary process used to determine the nature of a child's disability and the type of support required.[56]

Within education systems, primary emphasis should be on the early identification of barriers to learning and participation that children experience in the classroom and school environment, rather than on diagnosis. Identifying these barriers early allows schools to organize appropriate accommodations if they are not already available, such as differentiated instruction, adapted learning materials, accessible learning environments, the provision of assistive technologies, and collaboration with special schools acting as resource centres.

Nonetheless, screening and diagnostic processes are important and should be strengthened to ensure that children who need additional support can access services beyond the school. This includes specialized educational services, healthcare and social protection. In this way, identification systems can both support inclusive practices within schools and connect learners to the broader systems of support they may require.

The evidence

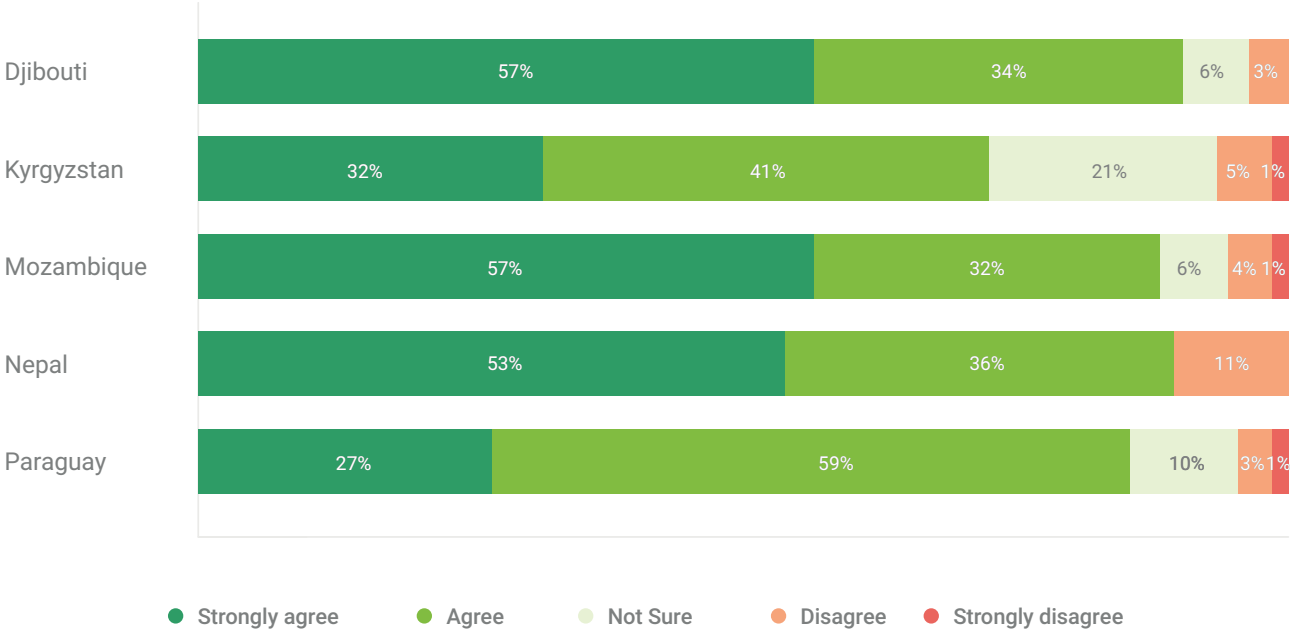
Consistent with global trends, the LiFE research highlighted a lack of systematic and adequate protocols for barrier identification, screening and disability assessment. Importantly, the findings revealed a frequent lack of clarity and distinction between these processes. When education systems focus primarily on diagnosis or fail to assess children's learning potential and functional needs, many learners risk remaining unidentified and consequently lack access to the school support they require. LiFE findings showed that in most countries, screening tools existed, but tools designed to identify barriers to learning and participation within classrooms and schools were largely absent. This gap limits the ability to assess children's learning, functioning, potential, needs, and necessary support to thrive in educational environments.

Furthermore, although screening tools were the most commonly available instruments, LiFE findings and global literature point to persistent challenges. Coverage remained uneven and many children, particularly in low- and middle-income countries (LMICs), were unidentified.[57] This uneven coverage is partly due to the lack of culturally and contextually adapted screening tools in LMICs. Although 'culture-free' tools have gained traction for their usefulness in cross-country comparisons, they often underestimate context-specific developmental issues.[58]

Several systematic reviews have identified recurring challenges in adapting screening tools to different cultural contexts. For instance, Rah et al. (2023) emphasize that screening tools tend to underperform when used outside their original linguistic or cultural settings,[59] while Faruk et al. (2020) found that culturally sensitive screening instruments for disabilities in LMICs remain scarce.[60,61]

Many trained teachers reported that training courses included content on recognizing signs of potential disability or learning difficulties. More than 70 per cent of trained teachers in Djibouti, Kyrgyzstan, Mozambique, Nepal and Paraguay agreed or strongly agreed that their training helped them identify risk indicators (*see Figure 3.2*). This type of training should be strengthened and complemented by guidance on how to comprehensively assess children's learning potential, monitor progress, and adapt teaching and support strategies to ensure meaningful participation and learning for all students.

Figure 3.2 Teachers' agreement on how training courses have helped them to identify indicators of a potential disability or learning difficulty



Source: authors' analysis of LiFE survey data – teacher surveys

Both the LiFE findings and global literature emphasize that clear referral pathways must be in place to ensure effective support provision in and outside of school. Country level qualitative data highlighted persistent challenges in accessing adequate support within schools and from external services when needed, in many cases due to the absence of an official disability certificate. This emphasizes the importance of screening as a preliminary step towards disability assessment and diagnosis. However, a disability certificate alone is not sufficient to guarantee

effective support provision. Participants reported difficulties obtaining essential supports at school, including assistive devices, flexible assessment options, and access to specialists such as physiotherapists, sign language interpreters and psychologists. In cases where children and their families required services beyond the school, they often struggled to identify the correct procedures and institutions to approach. Lengthy, complex and burdensome administrative processes frequently hindered access to services, even after screening had taken place.

Consistent with these findings, previous research underscores the importance of linking screening to clear referral pathways and ensuring it is accompanied by appropriate educational supports and services. A well defined referral pathway that strengthens intersectoral coordination among health, education and social services is essential to guarantee the timely provision of support.[62,63]

Policy implementation and considerations

To ensure the effective implementation of disability screening protocols and their integration with referral mechanisms, the following aspects should be prioritized:

- **Develop tools focused on identifying barriers to learning and participation:** Ministries of education in collaboration with disability specialists and local universities should design tools for use in schools to help teachers with early identification of barriers to learning and participation, and how to provide adequate support. These tools should focus on understanding children's functional needs, classroom and school engagement, and participation. The information gathered should be used to provide timely and appropriate reasonable accommodation when needed. Tools may include adapted materials, assistive devices or flexible teaching strategies.[64]
- **Provide adequate teacher training to apply these identification tools and deliver appropriate school support:** Teachers require strong preparation, both in initial training and through ongoing professional development, to effectively use tools focused on identifying barriers to learning and participation and provide appropriate and tailored support in response to identified needs. Teacher training institutes should develop curricula and courses that equip teachers to observe and assess children's functioning and participation, recognize early signs of learning difficulties, and understand how to provide reasonable accommodations so that students can fully learn and participate.
- **Establish clear and coordinated referral systems through cross-sector collaboration:** When children require support beyond what schools can provide, it is essential to have a well-structured, accessible and efficient referral system that ensures timely access to non-educational services such as rehabilitation, healthcare and social protection. This requires strong interministerial collaboration – particularly among the ministries of education, health and social protection – to ensure continuity of care and prevent service gaps. Coordinated policies and services are critical to avoid inefficiencies, such as duplication of roles, overlapping

responsibilities and competition between different levels of government. In this context, network governance plays a vital role in fostering cooperation among stakeholders at central, sub-central and school levels. It enables the establishment of a single coordinating body and promotes collaboration across institutions, serving as a key driver for building a cohesive and accountable system for inclusive education.[65]

- **Establish monitoring mechanisms to strengthen screening:** Existing education data systems, such as EMIS, should be leveraged to monitor how effectively barriers to learning and participation are being identified, whether teachers receive adequate training for early detection, and whether appropriate support is being provided. Ministries of education should build on existing efforts, or initiate new ones where needed, to make EMIS more disability inclusive.[66] This includes ensuring that education data systems collect information that allows for the identification of children with disabilities, including out-of school children, the learning and material barriers they face, the availability of human resources and support services, and measures of student success.[67] These indicators should be systematically collected and tracked over time to provide a strong evidence base for planning and resource allocation. This enables decision-makers to adjust strategies as gaps or emerging needs are identified, ultimately contributing to more responsive and inclusive education systems.

Recommendation 4: Strengthen collection, analysis and use of data to properly identify barriers to participation and learning, in line with inclusive principles

High-quality, internationally comparable data on children with disabilities, capturing their learning needs, the barriers they face and the support they require, are essential for shaping effective policies, targeting interventions and tracking progress.[68] Data must be grounded in social and human rights models of disability and capture multiple dimensions of disadvantage that may affect a child (such as gender, socioeconomic background, race/caste). Strengthening these approaches is crucial for improving national monitoring frameworks and ensuring that EMIS can produce reliable data for inclusive education.

The evidence

Substantial gaps persist in the availability of reliable and comparable data on disability and education across many regions, including East Asia and the Pacific, East and Southern Africa, the Middle East and North Africa, and West and Central Africa.[69] These gaps are often linked to the absence of a unified definition of disability across legislation and data systems, and the reliance on medical or impairment-based classifications of disability within many education management information systems (EMIS).

There were, however, promising developments. Several countries in the Middle East and North Africa have expanded the collection of disability-disaggregated data on demographics, education and employment.[70] The 2022 UNICEF report on West and Central Africa, based on analysis of data from the sixth round of the Multiple Indicator Cluster Survey (MICS), provided the first internationally comparable data on access, progression and learning outcomes for children with disabilities across nine countries.[71] In East and Southern Africa, many countries have adopted the Washington Group questions, which assess functional difficulties rather than medical diagnoses, offering a more meaningful basis for identifying learning support needs.[72]

Historically, international large-scale assessments have excluded students with disabilities for comparability reasons, targeting mainstream schools and providing very few accommodations. For those who do participate, the lack of adaptations limits the analysis of their outcomes in a comparable and fair way, and data identifying specific learning difficulties are scarce. A first step towards a more inclusive data-collection process was taken in the PISA for Development study in 2018, which asked students about functional difficulties (eyesight, hearing, physical disabilities and frequent illness).[73] While limited in detail, for instance not addressing severity or assistance in place, these data offered initial insights into the experiences of children with disabilities, both in and outside school, and reveal regional patterns similar to MICS findings.[74] More recently, the OECD conducted a pilot study to test the implementation

of new accessibility guidelines for PISA science items. Results showed these adaptations were more accessible for students with moderate difficulties and highlighted areas for further inclusive design improvements.[75] This highlights the importance of adapting large-scale assessments to obtain data on the needs and learning realities of children with disabilities, building on inclusive education data initiatives already in place in some countries and providing internationally comparable data and definitions that can feed back into national administrative data systems.

The LiFE secondary data analysis reflects these trends. Most LiFE countries collected some form of disability data, typically focused on disability types, but few captured functional difficulties. This limits their ability to tailor learning environments, teaching approaches and support services. *Table 3.1* shows four of the six countries have incorporated the WG questions into their national census, signalling progress towards a functional approach. However, integration into EMIS was limited (*Table 3.2*), with only Mozambique and Nepal having adopted the framework, and Mozambique also integrating the Child Functioning Module (CFM) into its most recent Demographic and Health Survey (DHS) 2022–2023. Integrating the CFM into EMIS would enable countries to generate comparable population-level data on the number of children with functional disabilities, providing a starting point for identifying barriers to learning and participation.

Finally, disability classifications in data-collection systems varied widely. Some countries used medical categories, including illnesses as disabilities, while others adopted broader classifications aligned with the social and human rights model – for example, by including psychosocial disabilities, as seen in Paraguay and Nepal.

Table 3.1 Disability data collected across countries within national censuses

Country	Census year	Typology	Uses WG?
Cambodia	2019	6 functional domains	Yes
Djibouti	2024	6 functional domains	Yes
Kyrgyzstan	2022	6 functional domains	Yes
Mozambique	2017	6 functional domains	Yes
Nepal	2021	12 disability types	No
Paraguay	2022	4 disability types	No

Source: authors' elaboration

Table 3.2 Disability data collected across countries within EMIS/administrative data

Country	Typology	Uses WG?
Cambodia	7 disability types + other disability	No
Djibouti	—	—
Kyrgyzstan	Impairment categories	No
Mozambique	6 functional domains	Yes
Nepal	10 disability types	Yes
Paraguay	8 disability types + 4 learning difficulties	No

Source: authors' elaboration

Policy implementation and considerations

Key considerations for departments within ministries of education that are responsible for data collection and management include:

- **Align education data systems with inclusive principles:** This entails not only implementing disability-specific data actions but strengthening the overall structure, linkages, standards, classifications and institutional roles of the education data system to ensure it functions coherently. Specifically for disability data, review and adapt national and local education data systems so they can capture disaggregated information on participation, learning barriers and support needs. Nepal, for instance, is in the process of embedding the Disability Management Information System (DMIS) self screening application into its IEMIS (integrated education management information system). Similarly, data must be collected to assess the full inclusion cycle: inputs (e.g., teacher training, resources), processes (e.g., school practices, collaboration), outputs (e.g., participation of students with disabilities) and outcomes (e.g., achievement, postschool pathways). Finally, strengthen system-wide coherence by harmonizing definitions and data variables across institutions and regions to promote consistency and comparability, while allowing for context-sensitive terminology and adaptable data-collection tools. This will help account for regional variations in cultural norms and perceptions around disability that may influence the way data are collected and recorded.
- **Train officials in data collection and management:** Equip local governments, and education and data officers with the skills to collect, enter and analyse data accurately. Digital data systems should be used where possible to streamline processes and enable timely referral to support services.
- **Establish quality assurance and feedback mechanisms:** Regularly update and analyse data to inform decision-making at school, district and national levels. Establish national guidelines to ensure coherence within the education system, while still allowing schools flexibility to respond to local needs.[76]

3.2 REFORM

Ensuring meaningful inclusion requires more than additional accommodations or isolated measures, it calls for systemic transformation and a rethinking of the way in which schools are organized, how teachers are trained and how curricula are developed. Countries must prioritize structural and professional reforms to embed inclusive education at the core of their systems. The five recommendations below outline key conditions for advancing this transformation.

1. Strengthen the capacity of mainstream schools to enrol students with disabilities.
2. Institutionalize the use of inclusive teaching strategies in teaching and learning.
3. Transform teacher training to systematically integrate inclusive education.
4. Identify and institutionalize existing teaching practices that promote inclusion by embedding them within teacher professional development programmes.
5. Formalize disability-responsive assessment accommodation guidelines.

Recommendation 1: Strengthen the capacity of mainstream schools to enrol students with disabilities

Inclusive education systems are grounded in the principle that mainstream schools must enrol and support all learners. Achieving this requires moving away from segregated approaches and ensuring that every school has the conditions to meet the needs of all students through stronger teacher preparation, inclusive teaching practices and leadership committed to equity.[77] A comprehensive approach combining resource allocation, professional expertise and community engagement should be tailored to the context and stage of inclusive education in each country. Strengthening the capacity of mainstream schools in this way enables education systems to include children with disabilities without limiting their learning or social development.

The evidence

Comparisons across secondary data sources reveal that disability hinders access to and learning in schools. Both PISA-D and MICS 6 data indicated that children with disabilities were less likely to attend school and were more likely to have never attended, with higher proportions observed in countries in Africa than in Latin America.[78,79] PISA-D also highlighted that, in some contexts, up to 28 per cent of out-of-school children faced obstacles in completing compulsory education due to health problems or disability. MICS 6 results showed that children with functional difficulties were less likely to attend school than those without, both at primary level and in early education programmes, and that they were more likely to have never attended school.[80]

Girls with disabilities may face multilayered challenges in accessing schools compared with boys with disabilities. While MICS 6 data showed there were equal proportions of children with at least one functional difficulty by sex,[81] and PISA-D indicated that health- and disability-related barriers prevent completion of compulsory education equally among boys and girls, some barriers to education faced by girls specifically are compounded with disabilities. This is especially true for inaccessible or inadequate water, sanitation and hygiene facilities that prevent girls from going to school during menstruation, a risk that is higher for girls with disabilities.[82] This underscores the need for inclusive reforms that not only tackle systemic barriers affecting all learners but address the specific challenges and barriers they may experience along the way.

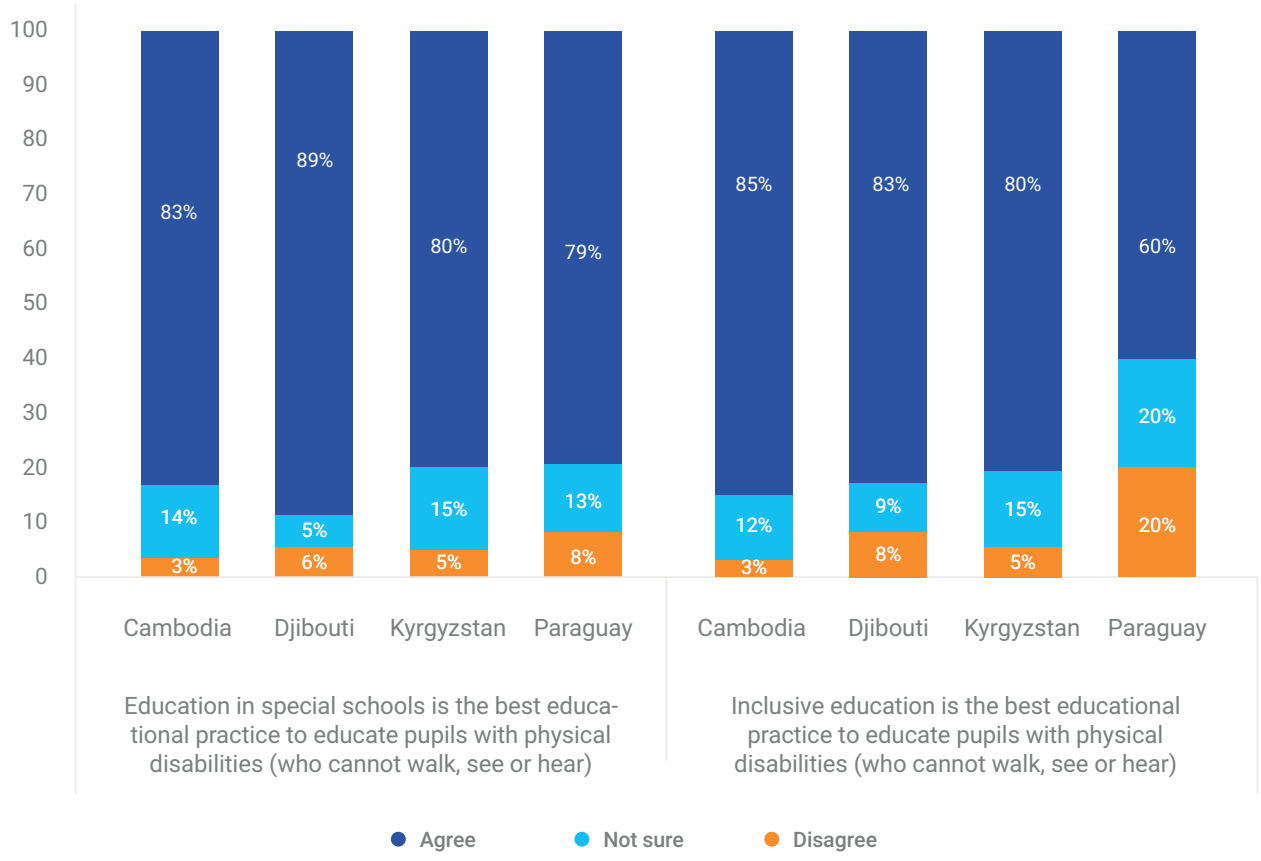
Beyond access, learning outcomes reveal persistent inequalities. PISA-D data showed that students who reported functional difficulties performed consistently lower than their peers who did not, linked to a lower sense of belonging at school and higher risks of feeling depressed. MICS 6 data highlighted that children with functional difficulties are not only less likely to have acquired foundational learning skills but also that this risk increases with the severity of the difficulties.[83] These results on access and learning gaps for children with disabilities highlight persistent systemic inequities that mainstream schools must address.

There was an overreliance on special schools for children with disabilities across multiple countries.[84,85] Laws and regulatory frameworks in countries such as Cambodia, Kyrgyzstan, Djibouti and Nepal reinforced the use of special schools, either recommending them for severe disabilities or including them as one of several schooling options for children with disabilities. Support for special education was largely driven by concerns about mainstream schools' capacity and readiness to serve children with disabilities, as well as broader considerations related to student safety. LiFE data suggest that parents of children with and without disabilities perceived special schools as safer and better equipped, in terms of both physical resources (e.g., accessible teaching and learning materials) and human resources (e.g., trained teachers and specialists such as physiotherapists, speech therapists and sign language interpreters). In addition, some countries still used residential institutions for children with disabilities. In Kyrgyzstan, the

government has sought to reduce reliance on residential institutions since 2012 by transforming or closing them through the Resolution on the Optimization of the Management and Financing of Residential Institutions for Children of the Kyrgyz Republic. However, progress has been slow. For this reform to be effective, it must be closely coordinated with inclusive education initiatives and accompanied by efforts to reallocate existing resources towards strengthening mainstream education systems.

Many teachers similarly believed that special schools are the best educational approach for children with physical and intellectual disabilities (*see Figures 3.3 and 3.4*). At the same time, data from LiFE teacher surveys showed that teachers were almost equally likely to consider inclusive education as the best educational practice. These contradictory findings may indicate that teachers acknowledge the benefits of inclusive education for children with disabilities, yet considering the status of mainstream schools in their countries, agree special education is the most suitable. These attitudes reflect the recognition of system constraints rather than resistance to inclusive education. LiFE qualitative findings further support this – parents and teachers reported children with disabilities face less bullying and discrimination in special schools.

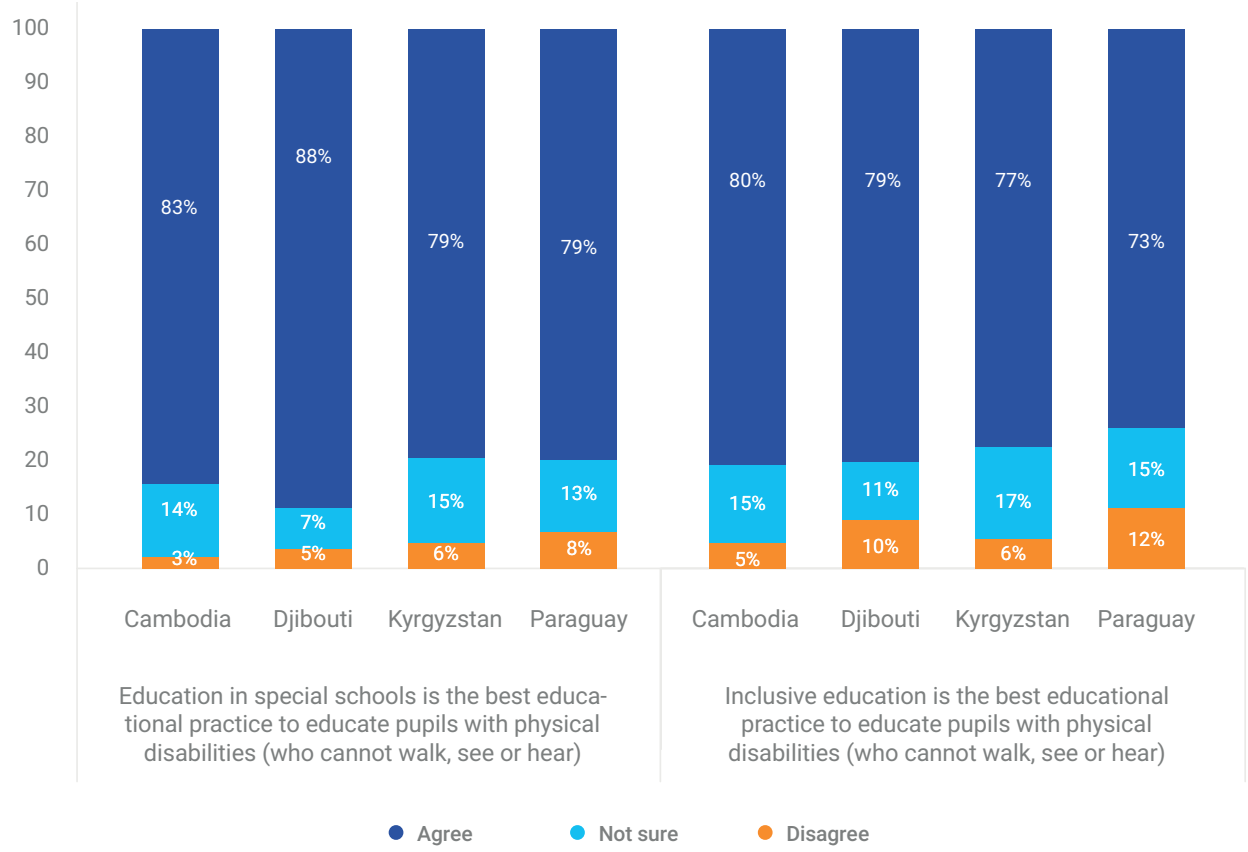
Figure 3.3 Percentage of teachers agreeing with statements on which school types are best for children with physical disabilities, by country



Source: authors' analysis of LiFE data – teacher surveys.

Note: for physical disabilities, there were minor differences in statements across countries to adapt to local definitions by adding "sensory" alongside physical

Figure 3.4 Percentage of teachers agreeing with statements on which school types are best for children with intellectual disabilities, by country



Source: authors' analysis of LiFE data – teacher surveys

Additionally, preferences for special schools often varied depending on the type and severity of disability – students with more severe functional difficulties were more likely to be directed towards separate settings. Teacher surveys further revealed slight differences in attitudes towards inclusive education depending on disability type. Although not statistically significant, agreement was slightly higher for physical/sensory disabilities compared with intellectual disabilities, except in Paraguay, where qualitative data highlighted persistent challenges in meeting the needs of children with sensory disabilities (*see Figures 3.3 and 3.4*).

Head teachers' attitudes in the PISA-D context reinforced these findings on the role of special schools.[86] Many head teachers at mainstream schools agreed that students with disabilities should be taught in separate schools. In five of the seven countries that participated in PISA-D, including Cambodia, this view was widespread, yet in practice, students with functional difficulties[87] were enrolled in mainstream schools at similar rates regardless of head teachers' attitudes. Academic outcomes, as measured by reading performance in PISA-D, were also comparable across schools, showing that segregation is not necessary for effective learning, although no information was available regarding the level of support provided across schools.

Leveraging the expertise of special schools offers a key pathway to reinforcing the capacity of mainstream education. Special schools hold a vast reservoir of expertise which, if effectively mobilized, can contribute to strengthening mainstream schools. By sharing their knowledge and resources, special schools can help mainstream schools build the capacity to enrol children with disabilities and become more inclusive and accessible. Although not all teachers in special schools have been trained in inclusive practices, they have specialized knowledge to work with specific types of disabilities that can help mainstream teachers develop more appropriate teaching strategies and adapt classroom settings and materials. This collaborative model has been successfully implemented in Ethiopia, where resource centres for inclusive education have been established. These centres deploy itinerant special teachers (also known as peripatetic teachers in certain contexts) who visit mainstream schools to provide training on inclusive pedagogy, share teaching materials and offer practical strategies for supporting children with disabilities.[88,89] Similarly, in Paraguay, special schools have been transformed into inclusive education support centres (CAIEs, by its Spanish acronym), staffed with specialists who work closely with teachers in nearby mainstream schools.

Strong school leadership and collaboration with the community are essential to strengthen the capacity of mainstream schools to enrol children with disabilities. LiFE findings in Mozambique showed that the head teachers' role was key to establishing partnerships with local communities and international organizations to improve inclusive school infrastructure and learning materials, and find mechanisms to support families of children with disabilities. For example, in one community school, a solidarity model was introduced to help the most vulnerable children to attend the school without paying fees, while more affluent families contributed to school expenses. These efforts underscore that sustainable inclusion in mainstream settings requires not only school level leadership but also active collaboration with communities and external partners.

Taken together, these findings indicate that mainstream schools require structural support, guidance from specialists, and community engagement to ensure all children can access and succeed in inclusive education.

Policy implementation and considerations

The following initiatives to strengthen mainstream education should be accompanied by adequate financial resources and staffing models that enable their sustained provision:

- **Promoting collaboration between mainstream schools and special education staff:** Local governments should identify and connect special schools with mainstream schools within the same areas, to enable them to work closely together, leveraging their disability-specific expertise to help mainstream teachers better support learners with diverse needs.

Collaboration can take the form of formal programmes, such as structured training modules, joint professional development, and technical guidance from specialists, and informal exchanges, including peer learning, mentoring, and school-to-school knowledge sharing. Through these partnerships, all teachers can receive comprehensive training to support students with disabilities, integrated into pre-service preparation and reinforced through ongoing professional development.

- **Repurposing existing special schools into inclusion support centres:** Ministries of education should establish a progressive support model to transfer knowledge and resources from special education settings to mainstream schools, by transforming special schools into inclusion support centres. This is the case in Paraguay, where the Education Action Plan 2018–2023 proposed the gradual transformation of special schools and services into support centres for inclusive education, which provide both human and material resources to teachers, families and students. As in Paraguay, these centres should provide ongoing guidance to teachers, support students with disabilities and their families, and ensure access to specialized resources such as adapted teaching materials, assistive technologies and targeted professional development. By formalizing this network of support centres, education systems can build sustainable capacity for inclusion and reduce reliance on segregated schools. Such reforms require strong political will and leadership, as ministries must prioritize inclusion, mobilize adequate financial and human resources, and ensure coherent policies that support the restructuring of special education.
- **Strengthening community-based outreach to promote enrolment of children with disabilities in mainstream schools:** Outreach should raise awareness among head teachers, teachers and families about the right to education for all children and reinforce the message that mainstream schools are responsible for enrolling and supporting children with disabilities. Effective outreach requires close collaboration among government authorities, including ministries of family or social protection or departments of statistics, to identify children with disabilities, schools, OPDs and local leaders to promote positive messages about inclusion, build trust with families, provide clear information on enrolment procedures and develop support mechanisms for vulnerable households. Using diverse communication channels, including community meetings and mass media, can expand reach and shift social norms that may discourage enrolment.[90]

Recommendation 2: Institutionalize the use of inclusive teaching strategies in teaching and learning

To ensure all learners can meaningfully participate, education systems must make teaching flexible and responsive to diverse needs. Strategies such as UDL, an approach that promotes multiple means of engagement, representation, and expression, alongside cooperative learning, which emphasizes structured peer interaction, and differentiated instruction, which adapts content, learning processes, and assessment to learners' diverse needs, provide practical and

complementary frameworks for inclusive teaching.[91,92,93] Institutionalizing these practices can help create more inclusive, equitable, and effective classrooms for all students, including those with both visible and invisible disabilities, while fostering engagement, autonomy, and improved learning outcomes for all.

The evidence

Implementation of inclusive teaching practices varies across regions. In East Asia and the Pacific, teachers are beginning to apply inclusive strategies, such as flexible instruction, differentiated activities, and UDL principles, even though curricula remain rigid and training opportunities are limited.[94] In Southeast Asia, several systems are strengthening inclusive pedagogy through improved pre-service training and whole-school approaches. For example, Indonesia has revised teacher education to better support diverse learners, and Singapore implements inclusive practices in mainstream classrooms at scale.[95] In South Asia, inclusive teaching practices remain uneven, with many countries still relying on segregated models and teachers lacking the tools and resources to adapt instruction.[96] In Eastern and Southern Africa, inclusive pedagogy is at an earlier stage: most teachers receive little or no preparation on inclusive methods.[97] Meanwhile, in Latin America and the Caribbean, inclusive teaching practices have gained greater policy attention, with some countries integrating accessibility, differentiated instruction and UDL-aligned approaches into national frameworks and teacher training reforms.[98]

Across LiFE countries, many teachers reported using inclusive practices, even without formal training. This included repeating key information to reinforce understanding; providing one-on-one support to address individual needs; using real-life examples and hands-on activities to make abstract concepts more relatable; applying teaching and assessment accommodations as needed, such as providing extra time or support from a teaching assistant, to create a fair and supportive learning environment; and organizing classrooms to improve accessibility, such as seating students with disabilities closer to the teacher for better communication and visibility.

Many of these practices were reported by teachers in LiFE countries with systems that were not yet fully inclusive, suggesting that inclusive approaches can be implemented while resources or capacity are growing. For example, LiFE survey data showed that 93 per cent of teachers in Nepal reported seating students based on individual needs. In Cambodia, students with disabilities shared that their favourite teachers explained lessons in multiple ways until everyone understood. Similarly, in Djibouti, children with disabilities noted that teachers' repetition of key information from lesson explanations helped them better understand the content.

The intuitive use of inclusive strategies by teachers suggests that elements of inclusive practice are already present in many classrooms. Acknowledging these efforts can help reposition inclusive strategies as practical and achievable methodologies rather than complex or burdensome. In Paraguay, where UDL is formally included in national policy, some teachers still perceive it as demanding, yet many already apply some of its principles without labelling them as UDL.

> *"Tell them UDL is easy, that it's not something you don't know; it's something you already know. Tell them that it's about channelling the experience they already have."*
>
> **Head teacher**
>
> Inclusive school, Paraguay

However, substantial challenges limited teachers' ability to fully apply inclusive strategies. Teachers in LiFE countries commonly cited large class sizes, limited resources and rigid curricula. Existing research echoes these constraints – for inclusive approaches such as UDL to be effective, it must be implemented as a dynamic and evolving framework, one that builds on a flexible curriculum and is grounded in inclusive principles, and should be adapted based on the subject.[99,100] Studies show that rigid curricula often prevent teachers from effectively applying UDL principles, leaving them feeling overwhelmed and stressed when attempting to use it in their classrooms.[101]

Collaborative work was reported in some LiFE countries, but teachers often favoured individual tasks because they found group activities harder to manage. In Djibouti, teachers in mainstream schools described using both individual and group work, yet they noted relying more on individual tasks for learners with disabilities, believing that these students either struggle to follow group activities or risk disrupting the lesson. Group work was found to be more common in special schools. In Paraguay, teachers try to include children with disabilities in groups where they feel comfortable; however, they note that inclusion can be challenging when students require higher levels of support, leading them to prioritize individual work with some adaptations to the activities. This points to the importance of strengthening teachers' skills to effectively design and manage group activities in inclusive classrooms, ensuring that learners with disabilities benefit from the social and academic value of collaborative work.

> *"I prefer working in groups. When I have to write, they write for me. We work together and they help me. When I don't understand something, they explain it to me."*
>
> **Student with a visual disability**
>
> Primary school, Djibouti

Strengthening teacher training is key to deepening and sustaining the implementation of inclusive pedagogies. Multiple studies, including systematic reviews, show that training in disability-inclusive education enables teachers to provide differentiated instruction, identify and address classroom barriers, and tailor curriculum accommodations to individual learners.[102,103] LiFE findings mirror this: teachers in Nepal emphasized the value of UDL-focused training – particularly in classroom management – and called for more regular, hands-on professional development. In addition to formal training programmes, it is crucial that teachers have opportunities to share their experiences of applying inclusive pedagogies. In Paraguay, findings from the LiFE research revealed that teachers highly valued the meetings held at the start of the school year and collaborative planning sessions, during which they exchanged practical examples of UDL implementation and benefited from workshops led by more experienced colleagues.

Furthermore, it is essential to emphasize that UDL guidelines support all types of students. This is particularly critical in the case of invisible disabilities, such as neurodivergence and learning differences, which often go unnoticed. The LiFE policy analysis revealed that neurodivergence and learning differences, such as attention deficit hyperactivity disorder (ADHD) or dyslexia, are rarely acknowledged in disability legislation, education policies or data across LiFE countries. Evidence suggests these forms of difference are commonly pathologized or overlooked altogether, as they fall outside traditional or 'conventional' definitions of disability.[104] Therefore, UDL implementation is especially important because it ensures the needs of students requiring support that are not yet formally identified by the system are addressed.

Policy implementation and considerations

To support widespread and sustainable adoption of inclusive pedagogies, collaborative learning and differentiated instruction:

- **Design and adopt flexible curricula to support implementation of inclusive teaching frameworks:** Curriculum design, whether during revision or initial development, should be built to be flexible and adaptable to the diverse learning needs and contexts of students. Drawing on frameworks such as UDL, curricula must enable teachers to adjust instruction to varied student profiles.[105,106] These considerations must be implemented by curriculum designers – whether they act as independent bodies or departments within ministries of education – and integrated into education plans and budgets from the outset to avoid the significantly higher costs of retroactive adjustments.[107]
- **Promote sharing of good inclusive practices among teachers:** Evidence from LiFE countries illustrates the value of these collaborative approaches. In Mozambique, Paraguay and Nepal, peer-to-peer collaboration at the school level was a regular practice in some schools, with teachers holding meetings to jointly discuss learning goals, plan support strategies for students with disabilities and reflect on classroom challenges. These meetings enabled the exchange of innovative and inclusive teaching methodologies. The structural mechanisms for scaling these exchanges – from communities of practice to ministry-supported mentoring programmes – are detailed in Recommendation 4, which addresses how to institutionalize teacher-led learning at the system level.
- **Teacher training must embed inclusive frameworks – UDL, collaborative learning, differentiated instruction – as mandatory content.** The full scope of transforming teacher education is addressed in Recommendation 3 below.

Recommendation 3: Transform teacher training to systematically integrate inclusive education

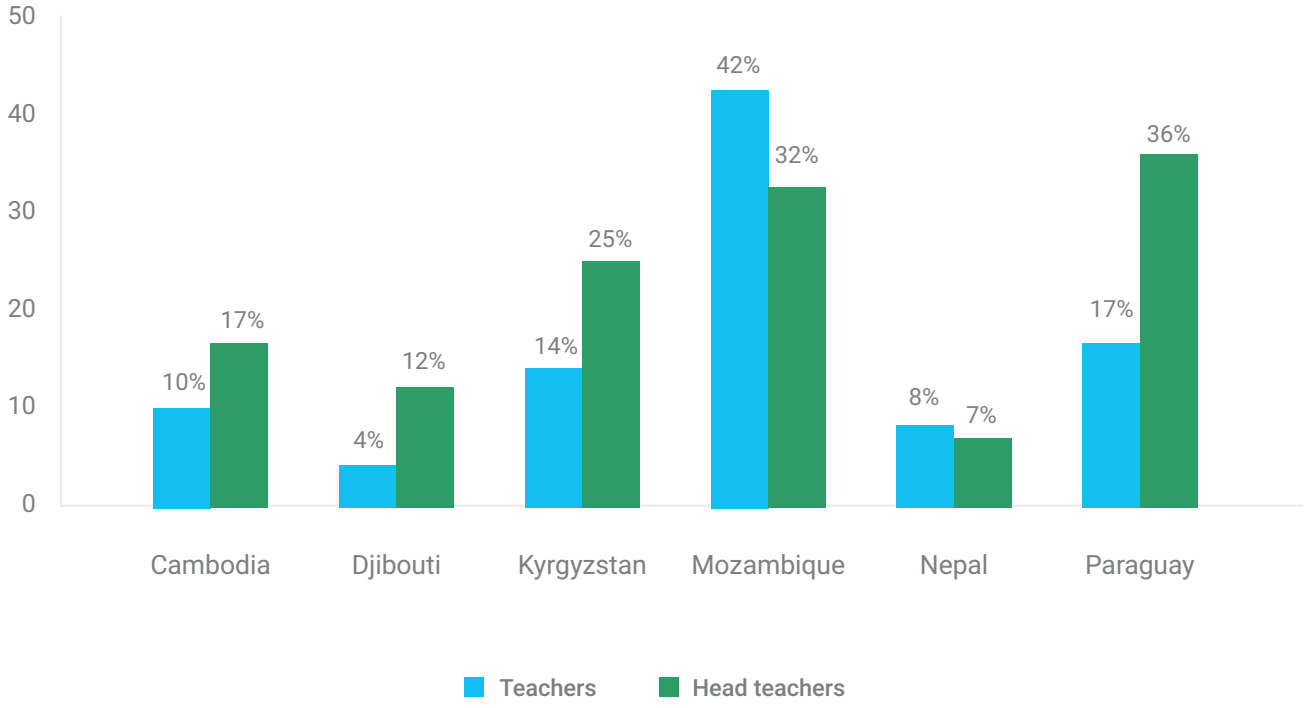
Teachers play a central role in creating inclusive classrooms and their ability to do so depends on ensuring they possess the right set of skills and knowledge.[108] This requires guaranteeing that all teachers acquire these competencies through both pre-service training and in-service professional development.[109] Crucially, inclusive teaching approaches must be understood as a mandatory component of teacher training, not an optional or voluntary add-on.

The evidence

While LiFE data showed that teachers were already applying inclusive practices intuitively, fewer than 20 per cent received formal training to do so (*see Figure 3.5*). Sustained ongoing teacher professional development in inclusive practices can only strengthen and institutionalize the implementation of such practices. Gaps in teachers' readiness and training were felt by students: interviewed children with disabilities and their parents emphasized that when teachers were not adequately trained, classroom instruction was often inaccessible.

> *"The teachers teach us the same way they teach other students. That might also be due to the lack of training for them. They might not know how we understand things. So, to me the teachers should teach students in ways accessible to us as well."*
>
> **Child with visual disability**
> Inclusive school, Nepal

Figure 3.5 Percentage of teachers and head teachers who reported receiving training in disability-inclusive education, by country



Source: authors' analysis of LiFE data – teacher surveys

Teachers and head teachers were more likely to have received in-service compared with pre-service training (*see Table 3.3*). These findings underscore the need to strengthen pedagogy-related degree programmes so that inclusive education is embedded as mandatory content from the outset. Evidence from previous research reinforces this need: a systematic review found that teachers who participated in training made significant improvements in their classroom practices, including the use of UDL, differentiated instruction and strategies to address learning barriers.[110] Importantly, the systematic review showed that even short introductory courses on UDL were sufficient to prompt more responsive and inclusive instructional planning. However, without sustained and targeted professional development, teachers' preparedness remains limited, which can undermine their confidence and effectiveness.[111]

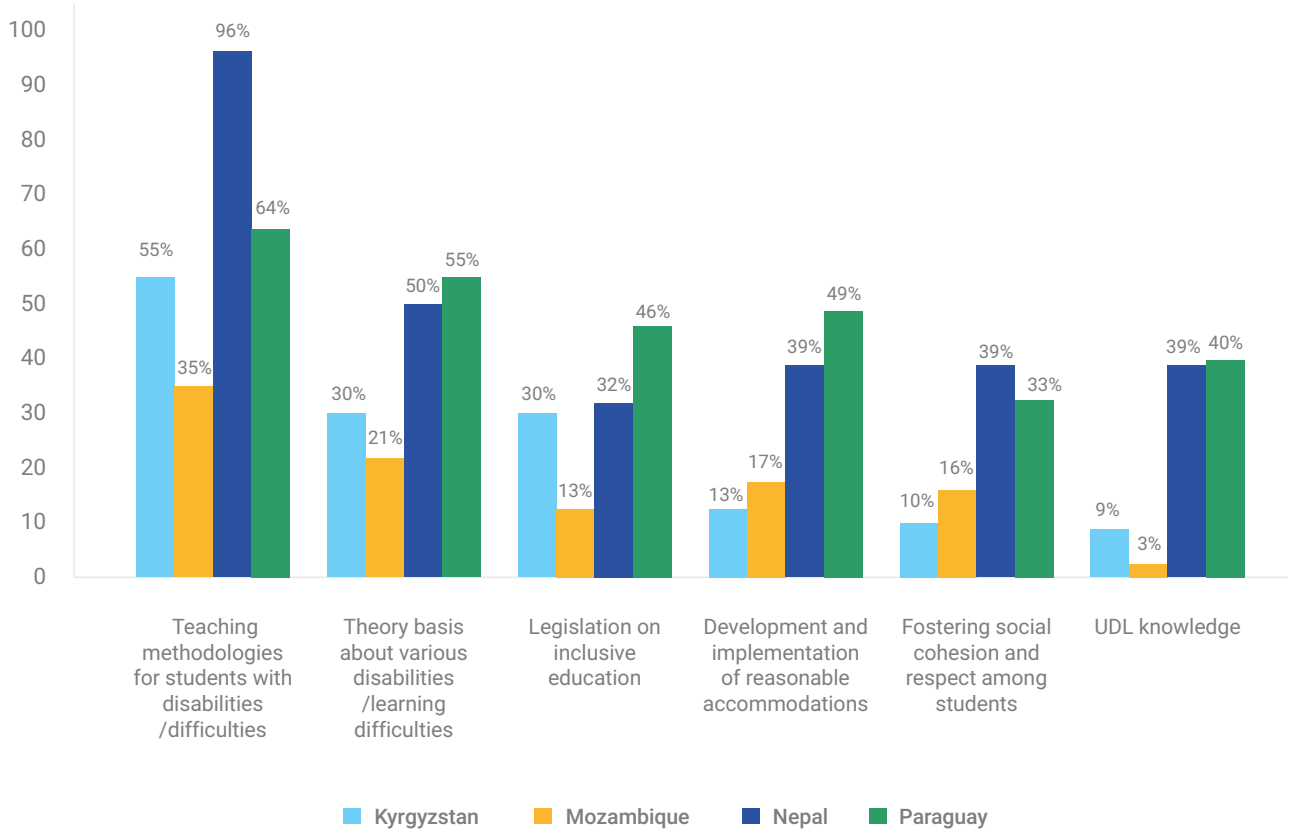
Table 3.3 Percentage of trained teachers and head teachers per type of training, by country

	Training type	Cambodia	Djibouti	Kyrgyzstan	Mozambique	Nepal	Paraguay
Teachers	Pre-service	32%	37%	19%	38%	7%	29%
	In-service	39%	60%	75%	29%	93%	67%
	Both	29%	3%	6%	33%	0%	4%
Head teachers	Pre-service	30%	33%	20%	27%	8%	29%
	In-service	35%	67%	75%	48%	92%	68%
	Both	35%	0%	5%	25%	0%	3%

Source: authors' analysis of survey data – teachers' and head teachers' survey

Interviewed teachers consistently expressed the need for more frequent, hands-on and practical training in disability-inclusive education. Many reported that existing training opportunities were short, irregular and theoretical, leaving them unprepared to address diverse learning needs in their classrooms. LiFE survey findings reflect this: while the topics covered mostly relate to teaching methodologies by type of disability and theoretical foundations of disability and learning difficulties, far fewer teachers reported receiving training on UDL, accommodations or strategies to foster social cohesion (*see Figure 3.6*). This mismatch between what is offered and what teachers say they need, combined with the low overall proportion of teachers trained, highlights the need to strengthen, expand and better align training programmes with classroom realities.

Figure 3.6 Percentage of trained teachers who received training in the following content areas, by country



Source: authors' analysis of LiFE data – teacher surveys

This pattern is observed beyond the LiFE research countries. Findings from the OECD Teaching and Learning International Survey (TALIS) 2024 showed that teaching students with "special education needs"[112] was the second most frequently reported area in which teachers feel they require additional training. Specifically, across OECD education systems, one in every four teachers reported training needs in this area.[113] The SEA-PLM 2024 findings point in the same direction: training in inclusive and special needs education was among the least common forms of professional preparation for teachers in Cambodia, Lao PDR, Malaysia, Myanmar, the Philippines and Viet Nam.[114] Similarly, analysis of PISA 2022 data from middle-income countries shows limited preparation: more than half of teachers reported that their initial training did not cover teaching students with disabilities, and a higher proportion indicated they had not participated in disability-related professional development in the previous year. Teachers did report a high need for training in this area, often greater than their reported need for support in other adaptive practices such as individualized learning or teaching in multicultural settings.[115]

These findings confirm that insufficient training in disability-inclusive education is a systemic challenge, not limited to LiFE countries, and that teachers are both aware of and eager to address this gap. This stresses the need for transforming professional development and preparatory trainings to systematically integrate inclusive education approaches. Doing so can enable teachers to provide meaningful learning opportunities for children with disabilities and further strengthen mainstream schools' capacity to enrol children with disabilities.

Policy implementation and considerations

Ways to transform teacher training in inclusive education include:

- **Building coherent teacher professional development programmes:** Teacher training institutes, universities and ministries of education must revise pre- and in-service training to ensure teachers are fully prepared to implement inclusive education. Pre-service programmes should establish a strong foundation in inclusive education principles, equipping future teachers with essential knowledge and practical skills. Disability inclusive education should be mandatory in all pre-service teacher programmes and incorporated into accreditation criteria to ensure programme quality. In-service professional development should reinforce and expand this foundation.
- **Ensuring comprehensive and relevant training content in all teacher education programmes:** Training content must cover the full spectrum of inclusive teaching requirements, including the application of UDL principles, curriculum adaptations, formative assessment for diverse learners, accessible learning materials and differentiated teaching strategies. Training programmes should be fully accessible, engaging all teachers, including those with disabilities, as active participants and contributors, so that content is informed by diverse experiences and responsive to real classroom needs.[116]
- **Securing sustained government commitment and policy integration:** Effective teacher training requires continuous government support. This includes dedicated funding, enabling policies and the integration of inclusive education into national professional development frameworks. Disability-inclusive education should be prioritized within teacher training plans, combining national investments in quality education with localized strategies tailored to individual school needs.[117]
- **Strengthening supportive school leadership to enhance teacher preparation and practices:** Effective inclusive education depends not only on teacher competencies but also on the support structures provided by school leadership. Head teachers play a pivotal role in shaping school culture,[118] allocating resources, fostering collaboration with parents and other stakeholders, and enabling teachers to implement inclusive practices effectively.[119] Ensuring that teacher training institutes effectively build head teachers' capacity in these areas is therefore critical to maximizing the impact of teacher preparation and professional development.

Recommendation 4: Identify and institutionalize existing teaching practices that promote inclusion by embedding them within teacher professional development programmes

Harnessing the expertise of teachers who already implement inclusive practices is a high-impact way to reform teaching and learning across the education system. Teachers who build strong relationships with students, adapt instruction, and use flexible, child-centred approaches not only improve outcomes for their own classrooms but can serve as catalysts for system-wide change.[120] By identifying, supporting and enabling these teachers to mentor colleagues, education systems can accelerate the adoption of effective inclusive practices, foster professional collaboration and signal a genuine commitment to putting children at the centre of learning.

The evidence

Children with disabilities interviewed in the LiFE research consistently highlighted the importance of feeling seen, valued and supported by their teachers. In every country, warm and respectful teacher–student relationships emerged as a defining feature of inclusive learning environments. These relationships help students feel safe to participate, boost confidence and encourage engagement in classroom activities, particularly among children who face additional barriers. Teachers who excel at building these relationships often also excel in implementing inclusive teaching approaches. This includes adjusting instruction, adapting materials, using multiple modes of representation and creating opportunities for every child to participate. These teachers communicate high expectations for students with disabilities, an essential component of inclusive, child-centred teaching that helps children build their confidence. As one child in Nepal noted:

> *"I like my teacher so much because he loves all of us and the way he communicates with us is very good. Also, he plays with us after the class."*
>
> **Child with a hearing disability**
>
> Integrated school with resource classrooms, Nepal

Several teachers in the LiFE research applied a variety of inclusive practices in schools serving children with disabilities. These included arranging seating to meet individual needs (e.g., placing students with hearing disabilities in the front row or near a sign language interpreter), providing assessment accommodations such as alternative exam formats or accessible venues, and applying UDL principles by incorporating real-life examples and inviting students to share experiences to make lessons more meaningful and accessible. This further highlights the efforts some teachers have made to provide equitable learning opportunities.

Evidence from PISA-D 2018 reinforces the impact of teacher support. Across PISA-D 2018 participating countries, students with disabilities generally reported lower levels of teacher support than their peers without disabilities. However, where students with disabilities did report feeling supported, such as in Zambia, their academic achievement was significantly higher than that of peers who felt less supported.[121] This highlights that effective teacher support is not just beneficial, it directly shapes student achievement and should be scaled across the system.

Teachers in LiFE countries reported that peer learning was critical to implementing inclusive pedagogies, particularly UDL and curriculum adaptations. In Paraguay, teachers explained that learning from colleagues with deeper experience in UDL helped them overcome misconceptions, reduce anxiety and understand how to apply the framework meaningfully in daily practice. This underscores the value of peer learning: teachers trust practical knowledge that comes from fellow practitioners. Meaningful peer-to-peer collaboration, through regular meetings, observing each other's classes or co-planning lessons, as well as communities of practice, are proven strategies that can mobilize teachers' expertise, showing positive effects on teaching quality and teacher motivation, which can subsequently impact student learning outcomes.[122,123,124]

Taken together, these findings show teachers who demonstrate strong inclusive practices exist in every education system and can be leveraged to drive reform. By fostering peer collaboration, reflective dialogue and joint problem-solving, they can help scale effective teaching practices and strengthen inclusive school cultures.

Policy implementation and considerations

To harness and scale the expertise of teachers demonstrating inclusive, child-centred practices, ministries of education can:

- **Identify teachers who demonstrate strong inclusive practices:** Local governments should integrate the recognition of strong inclusive practices into existing teacher monitoring and evaluation processes. Within these processes, transparent criteria can guide head teachers in identifying teachers who excel in inclusive practices. These criteria should reflect child-centred teaching, including effective use of inclusive pedagogies, strong teacher–student relationships and inclusive leadership within the school community. Identification should rely on information already collected through routine school processes, such as classroom observations, peer input and student feedback.
- **Create structured peer learning opportunities:** Ministries of education should formally integrate teacher-led learning into national professional development frameworks. This can include ministry-supported peer-led workshops, mentoring programmes, communities of practice and school-based networks developed by local governments, where teachers can share tools, strategies and real examples of inclusive practice.
- **Recognize and support the leadership role of teachers who model inclusive practices:** Ministries of education and local governments should provide professional recognition, leadership training, and both financial and non-financial incentives to individuals and schools to sustain motivation and demonstrate value.[125] Recognition should reinforce that inclusive, child-centred practice is a core professional competency.

Recommendation 5: Formalize disability-responsive assessment accommodation guidelines

Countries must establish clear and appropriate curriculum and assessment accommodation guidelines that respond to the diverse needs of students with disabilities. Such guidelines should be aligned with the inclusive principles to enable all learners to participate meaningfully and demonstrate their knowledge on an equitable basis with their peers.

The evidence

While many countries have adopted inclusive education policies, their assessment frameworks often lagged behind.[126,127] This trend was evident in most of the countries examined in the LiFE research, where formal policies on inclusive assessment were either absent or underdeveloped. Even in countries where assessment policies existed, their implementation was inconsistent. For instance, in Paraguay, this inconsistency was often attributed to logistical, technical and attitudinal barriers that hinder effective execution.

Existing literature reinforces this trend. Kleinlein's (2025) review shows that inclusive assessment remains conceptually underdeveloped and inconsistently applied. The review illustrates how dominant assessment practices continue to emphasize categorization, allocation and narrow performance indicators, resulting in limited analyses and without offering meaningful frameworks for interpreting or using assessment outcomes to support students.[128]

Children with disabilities were often assessed in the same way as their peers without disabilities, limiting their ability to demonstrate learning and reinforcing inequities. This was typically due to the absence of clear assessment policies, or challenges in implementing them. This was confirmed by both students and teachers in nearly all LiFE countries. Nonetheless, participants reported minor accommodations to assessment procedures, most commonly the provision of extra time. Despite its widespread use, research has shown that the effectiveness of extra time depends on students' learning needs, suggesting that while it can be beneficial in many cases, it may be counterproductive for students who struggle with focus, as it can lead to fatigue or attention lapses.[129]

However, positive practices exist: in Paraguay and Nepal, teachers were implementing various forms of assessment accommodations. These included the use of sign language interpreters and Braille versions of tests, allowing verbal responses instead of written ones, and providing scribes for students who required them, or administering exams in separate rooms, small groups or one-on-one environments to reduce distractions and anxiety.

> *"No, the students can write by themselves, but a guard (exam proctor) must sit next to them. The guard has to help by saying, 'You need to start writing now.' Then the guard reads out the question, like 'Question number one: What are the features of society?' The student listens and writes the answer in Braille. Later, when we go for checking the answer sheets, we take them to a visually impaired teacher. The teacher feels Braille and checks whether the answer is correct or not."*
>
> **Teacher**
>
> Inclusive school, Nepal

Other reported accommodation practices included creating supportive examination environments through offering separate classrooms, providing extra time or assigning resource teachers to support students with disabilities, ensuring fair and accessible assessment conditions without altering exam content.

These examples demonstrate that effective accommodations are possible but rely on teacher initiative rather than systemic guidance. Without formalized protocols, inclusive assessment remains inconsistent, inequitable and dependent on individual effort. Widespread, systematic inclusive assessment policies are needed to support diverse learning needs. Aligning assessment with curriculum and UDL principles is therefore critical to ensure that all students can meaningfully participate and succeed.

Policy implementation and considerations

Ways to formalize disability-inclusive assessment practices include:

- **Identifying, documenting and systematizing existing accommodations:** The first step is for ministries of education to document existing assessment accommodations with the aim of integrating them into a comprehensive national protocol, leveraging the role of technical supervisors operating at the sub-national level. This process should involve mapping accommodations currently in use, identifying good practices and detecting gaps, particularly for students with specific types of disabilities. Instead of prescribing a single, rigid framework, the protocol should offer a flexible list of accommodation options that teachers can select and adapt based on their students' individual needs.[130,131]
- **Training teachers on the use and implementation of assessment accommodations protocol:** Effective implementation depends on teachers' capacity to apply the protocol in their classrooms. Teacher training institutes and universities should provide comprehensive training on how to use the guidelines and on differentiated instruction and inclusive pedagogical strategies. This will help ensure accommodations are applied consistently, appropriately and in ways that meaningfully support all learners.
- **Using assessment outcomes to identify learning needs and provide appropriate support to students:** Assessment outcomes should inform teaching by highlighting students' strengths and areas requiring attention. Research has shown that formative assessments give students timely and accessible feedback while helping teachers monitor their progress.[132,133] Building on the ways in which formative assessments have been applied, teachers can use assessment results to adjust lesson plans, group students for targeted activities, and provide individualized support where needed. Crucially, curriculum design and teacher training institutes should draw on assessment data to refine curriculum content and strengthen instructional practices and teacher preparation. This helps create a coherent system where assessment not only measures learning but actively drives improvements in teaching practices and support.

3.3 RESOURCE

The implementation of the recommendations outlined in this report – from shifting attitudes to strengthening teacher training systems – requires adequate, sustained and well-targeted investment (*see Box 3.1* for examples on costs and financing models from two inclusive education systems). This section sets out three key recommendations for resourcing inclusive education in practice:

1. Improve physical accessibility for children with disabilities.
2. Strengthen resource provision and scale teacher-created low-cost materials to support inclusive curriculum implementation.
3. Recruit and support teachers with disabilities to strengthen inclusive education.

BOX 3.1

Financing for inclusive education for children with disabilities: Italy and Portugal

Both Italy and Portugal have achieved near full inclusive education, with 98.9 per cent of students with disabilities enrolled in mainstream schools as of the 2021/2022 school year.[134] This success reflects a combination of factors, including sustained and adequate funding.

In Italy, education spending stands at 3.9 per cent of gross domestic product (GDP), slightly below the OECD average, with an average expenditure of USD 12,666 per student from primary to post-secondary non-tertiary levels.[135] The government provides the majority of funding, with the Ministry of Education covering around 80 per cent of school funding, including salaries for mainstream and support teachers as well as core inclusion services. Regional and local authorities contribute around 20 per cent of funding, mainly for ancillary services such as transport, meals, textbooks and additional assistance for students with disabilities. Allocation is generally pupil-based, with additional targeted resources often tied to Individualized Education Plans (IEPs). This multilevel funding structure aims to ensure both core provision and locally tailored support for inclusive education.[136]

For the 2025/2026 budget, Italy increased investments to support students with disabilities. The Ministry of Education allocated EUR 328 million to Regional School Offices (USR, by its Italian acronym) to strengthen pedagogical skills and material resources tailored to the needs of students with disabilities.[137] Funding for the Single Fund for the Inclusion of People with Disabilities was also increased, including a EUR 60 million rise in the autonomy and communication fund (reaching EUR 260 million) and EUR 70 million for upper secondary student transport, on top of EUR 100 million provided by the Ministry of the Interior for early childhood education, primary and lower secondary students. These increases are intended to support integration projects and targeted services.[138]

In Portugal, education spending is higher, at 4.8 per cent of GDP, with expenditure per student roughly USD 11,124 for primary to post-secondary non-tertiary levels, close to the OECD average.[139] Funding is primarily managed by the Ministry of Education, with increasing decentralization, giving municipalities and schools greater autonomy in resource use. Inclusive education funding covers specialist teachers, assistive technologies, infrastructure adaptations and support services, backed up by decentralized budgets and local revenues. Targeted national programmes such as Priority Intervention Educational Territories (TEIP, by its Portuguese acronym) and the National Programme to Promote School Success (PNPSE, by its Portuguese acronym) provide additional funding for vulnerable students, including for dropout prevention and individualized support. Early childhood intervention is supported through cross-sector collaboration involving the ministries of Education, Health and Social Security.[140,141]

Portugal also allocates substantial resources to specific inclusion provisions: in the 2020/2021 school year, approximately EUR 283.2 million was dedicated to specialized teachers, EUR 27.8 million to Resource Centres for Inclusion (CRIs, by its Portuguese acronym), EUR 26.3 million to TEIP schools, EUR 29.7 million for psychology services and EUR 8.5 million for specialized technicians (non-psychologists).[142]

Recommendation 1: Improve physical accessibility for children with disabilities

Physical accessibility is a foundational requirement for inclusive education. When children cannot reach schools, enter all facilities or use basic infrastructure such as toilets, they are effectively excluded from learning regardless of existing policies. Accessibility must extend beyond school infrastructure to include the ability to reach schools through accessible and affordable transportation. Because accessibility improvements require time, coordination and sustained financing, a phased approach is needed, combining immediate, low-cost accommodations with longer-term investments in inclusive infrastructure and transport systems. Addressing physical accessibility therefore requires coordinated action across sectors, including education, transport, infrastructure and finance, to ensure that inclusion is planned, funded and sustained at the system level. Additionally, accessibility must consider the diverse needs of students with different types of disabilities. This includes those with physical, visual and hearing impairments, as well as neurodivergent students who may go unnoticed but are often sensitive to environmental factors such as lighting, noise levels and classroom layout.[143]

The evidence

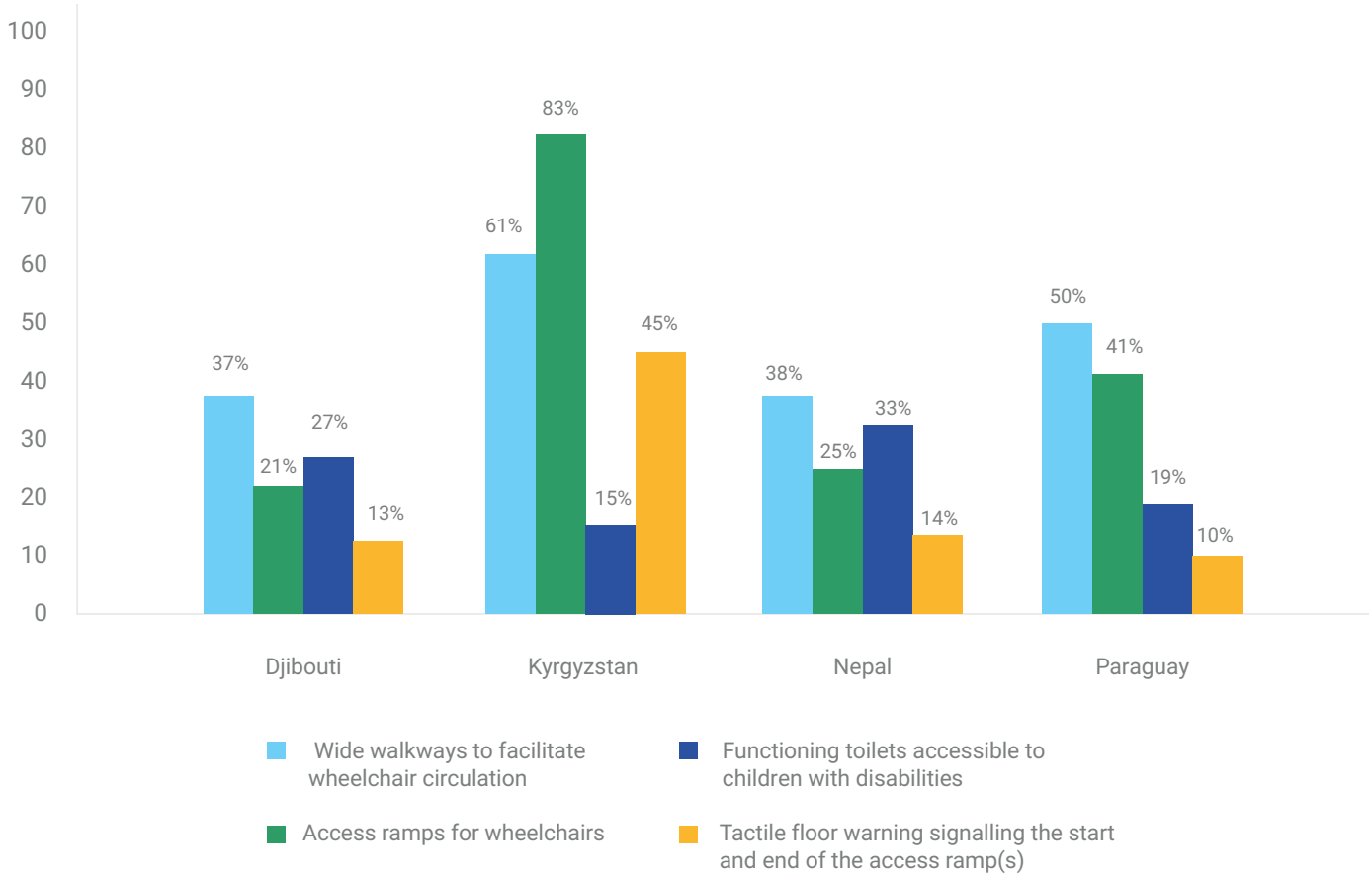
Across most LiFE countries, infrastructure and transportation were frequently identified as major barriers to accessing and remaining in schools. Children with disabilities and their parents reported challenges in reaching school, with the lack of accessible and affordable transportation emerging as one of the most critical obstacles. Many families shared that they had to travel long distances, often without any suitable transport options. Parents frequently mentioned that their children needed an escort to attend school, which in some cases forced a primary caregiver, often the mother, to leave their job to take on this responsibility. Findings from a study on the cost of disability in Tunisia echo these challenges, showing that the physical environment itself acts as a constraining factor that imposes additional costs on families of children with disabilities and can disrupt their schooling. The lack of adapted or accessible transportation often forced parents to interrupt their child's education because of the cost and time required to accompany them.[144]

> *"There were no conditions for chapa (transport), and someone also needs to go down there to follow."*
>
> **Parent of a child with disability out of school**
>
> Mozambique

Transportation barriers were especially pronounced among children with physical disabilities. Families reported that public buses sometimes refuse to take their children and hiring private transport was not feasible financially. These challenges not only disrupted regular attendance but also contributed to school dropout and non-enrolment among children with disabilities. These findings align with Sedláčková's (2025) systematic review, which identified physical barriers – relating to transportation, stairs, classrooms and sports facilities – as the primary obstacles faced by children with physical disabilities in mainstream schools.[145]

Survey data from head teachers confirmed that school infrastructure accessibility remains limited across most LiFE countries. While features such as wide walkways and wheelchair ramps were among the most commonly available features, other essential accessibility considerations such as tactile floor warning signals were less available (*see Figure 3.7*).

Figure 3.7 Percentage of head teachers who reported accessibility features available as part of their school infrastructure, by country



Source: authors' analysis of LiFE data – teacher surveys

Physical barriers restricted participation within school. Teachers, students with disabilities and their parents reported challenges including the absence of ramps, narrow doorways and overcrowded classrooms. These conditions hinder access to classrooms and restrict mobility within and between learning spaces, ultimately affecting the quality of students' learning environments. While these barriers disproportionately affect students with physical disabilities, children with visual and hearing disabilities face significant challenges linked with sensory environments – as evident in the LiFE research and literature more broadly.[146]

The lack of accessible water, sanitation and hygiene (WASH) facilities further restricts the independence and safety of children with disabilities in schools. Findings from LiFE countries revealed the challenges these learners face in reaching toilets from their classrooms and using facilities that are not adapted to their needs. In Kyrgyzstan, parents reported that toilets were often located far from classrooms, requiring children with disabilities to walk long distances. Meanwhile, in Mozambique, parents also highlighted the absence of ramps and accessible toilets as significant barriers to their children's enrolment.

In Kyrgyzstan, Paraguay and Nepal, mothers described facing challenges in ensuring adequate care for their children at school. In some cases, they reported feeling compelled to accompany their children to school and remain there to support them with mobility, toileting and eating. This caregiving responsibility places a substantial burden on families, particularly mothers, and can negatively affect their participation in the labour market, as some are forced to reduce working hours or leave employment altogether. To reduce this burden and its broader socioeconomic impact, these caregivers would benefit from structured support arrangements. For example, in Nepal, some mothers suggested options such as financial assistance, or school-based arrangements that would allow caregivers to remain on-site in designated spaces while still engaging in productive activities. They also proposed shared caregiving approaches, including rotating responsibilities among families to reduce the time each caregiver needs to spend at school and thereby enable greater participation in the workforce, even in part-time roles.

Existing research corroborates these findings; limited infrastructure accessibility is a persistent issue across several regions worldwide. For example, in Western and Central Africa and Eastern and Southern Africa, UDL principles are rarely applied in school construction. Most accessibility initiatives tend to be short-term projects with limited funding.[147,148] Similar challenges have been documented in Latin American and Caribbean countries, where despite ongoing efforts to remove physical barriers in schools, many facilities remain inadequate.[149]

Overall, these findings show that physical inaccessibility is a decisive factor shaping whether children with disabilities enrol in school, attend regularly and remain engaged in learning. Barriers related to school infrastructure, WASH and transport shift the cost of inclusion onto families, deepen inequalities and undermine the effectiveness of inclusive education policies when accessibility is not systematically planned and resourced.

Policy implementation and considerations

Improving physical accessibility requires addressing both transportation and school infrastructure through sustained and coordinated investment. To improve transportation accessibility, governments can:

- **Develop and enforce national guidelines and regulations for accessible transport:** Ministries of transport and education should collaborate to develop guidelines that reflect the needs of students with different types of disabilities. Such guidelines should be embedded into national policy frameworks so that accessibility is treated as a core requirement rather than an optional add-on.
- **Integrate transport accessibility into national budgeting cycles:** In collaboration with key ministries, such as those responsible for transport, roads and infrastructure, and finance, governments should ensure accessibility is incorporated into budgeting processes, prioritizing rural and underserved areas where mobility barriers are greatest.
- **Adopt a phased approach to retrofitting or procuring accessible vehicles:** This ensures that all new acquisitions comply with national accessibility guidelines to maximize cost effectiveness. In countries with school transportation systems, collaborate with the Ministry of Education to prioritize accessibility in school transport vehicles.

- **Foster community-based solutions and collaboration:** This encourages partnerships with local transport providers and organizes carpool systems to offer low-cost transportation alternatives. These initiatives can expand mobility options for children with disabilities and reduce barriers to access.[150,151]
- **Provide free or subsidized transportation fares for students with disabilities:** Collaboration with the ministries of finance, education and social protection can establish subsidized or free fare schemes for students with disabilities, supported by a clear implementation pathway to ensure consistent enforcement.

To strengthen accessible school infrastructure, governments can:

- **Prioritize low-cost, short-term accommodations in existing school buildings and classrooms:** Immediate, budget-friendly adjustments to support students with disabilities should be implemented by schools, with oversight and support from local governments. For instance, in Kyrgyzstan ground-floor classrooms were assigned to groups that included students with physical disabilities, whenever possible, to reduce mobility barriers. Modifying lighting and acoustics in classrooms is also essential to better accommodate students with sensory or neurodivergent needs. These changes are practical, cost-effective and can significantly improve the learning environment without the need for major renovations.
- **Embed Universal Design principles as part of school infrastructure standards and work to ensure existence and operation of regulatory bodies:** Ministries of education should mandate that Universal Design principles are embedded in all new school construction projects and included in education budgets from the outset. Existing national legislation on infrastructure and building compliance for persons with disabilities can serve as an entry point to ensure alignment with broader accessibility frameworks. This proactive approach prevents the need for costly retrofits later and ensures that schools are built to accommodate diverse learning needs. As highlighted by the Global Partnership for Education (2024), policies mandating Universal Design must be established, along with compliance mechanisms to ensure consistent implementation across all educational facilities.[152] Budget allocations for this purpose should be secured from the outset, supported by stronger partnerships and advocacy with a range of stakeholders, including ministries of education, finance, public works and local governments, ensuring that Universal Design becomes a sustained, system-wide commitment rather than an optional add-on.
- **Develop standardized accessibility checklists and conduct regular infrastructure audits:** To progressively improve the accessibility of existing school buildings, governments should create standardized checklists to assess infrastructure and carry out regular audits. These audits should focus on evaluating current conditions and providing actionable recommendations for improvement. They can be embedded within existing school oversight and quality assurance processes, such as licensing or monitoring procedures. The audits

should be conducted by existing civil works personnel, who must receive specialized and ongoing training in accessibility standards. The participation of school administrators, parent associations, OPDs and students is essential to gather feedback from primary users and foster local ownership on this audit process. This will enable schools and communities to understand what changes are needed and to plan and budget for them over time, as implementation may occur gradually.

Recommendation 2: Strengthen resource provision and scale teacher-created low-cost materials to support inclusive curriculum implementation

Effective inclusive curriculum implementation depends on the availability of both material resources and specialist human support, alongside mechanisms that recognize and scale teacher innovations. Governments must ensure schools have access to specialists, such as psychologists, speech therapists, physiotherapists and sign language interpreters, as well as accessible and contextually relevant teaching and learning materials and assistive technologies that enable meaningful participation for all learners. Yet the LiFE research shows teachers are already compensating for resource gaps by creating low-cost, locally sourced materials. Systematically documenting, sharing and scaling these practices can substantially extend the reach of limited resources, reduce inequities between schools and embed inclusive curriculum adaptations into routine teaching practice. This includes establishing platforms for collaboration, developing a central repository of examples and tutorials, and integrating these practices into teacher professional development so they become routine and sustainable. This requires ongoing funding, coordination and institutional support.

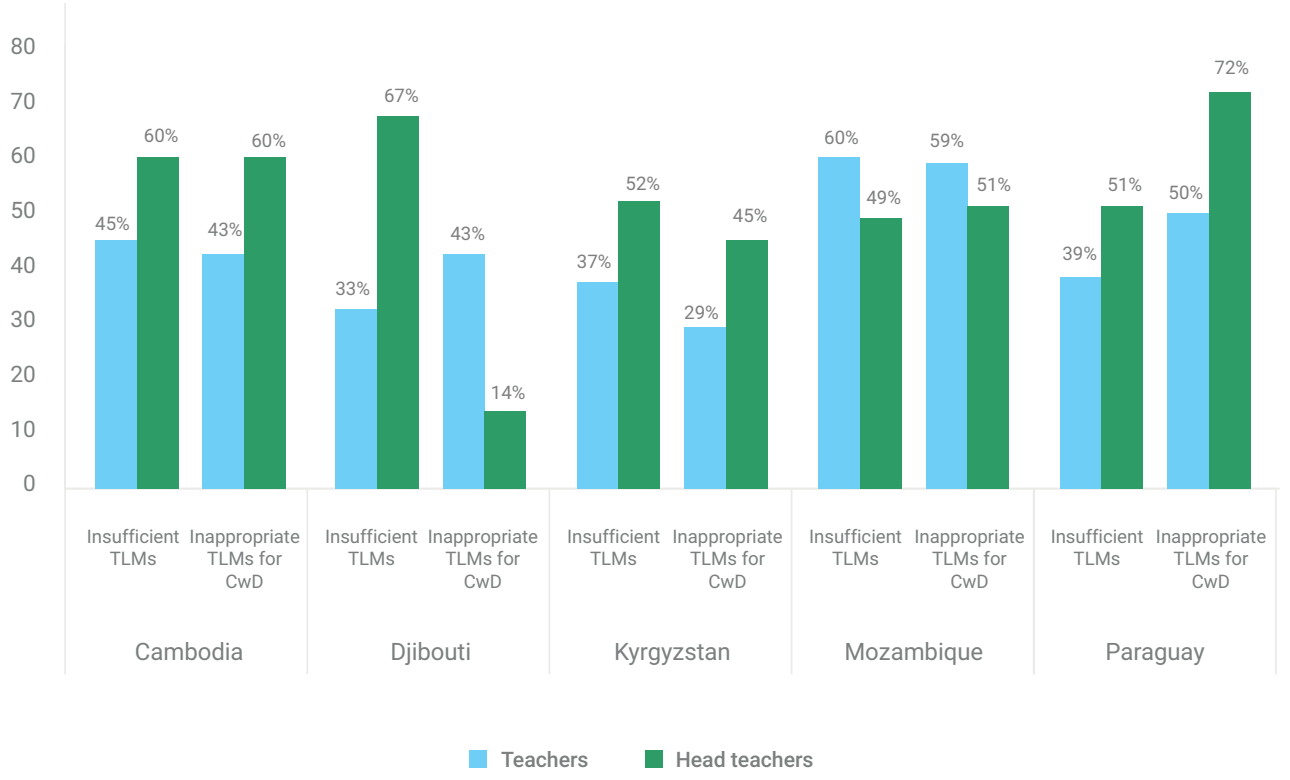
Artificial intelligence (AI) tools offer a promising complement to these efforts. When used deliberately and with appropriate training, AI can support teachers in developing resources adapted to diverse learning needs, including simplified texts, visual aids and alternative formats. Beyond adaptation, AI-powered tools can help governments to accelerate the production of materials across multiple communication formats and languages, with a potential to reduce the time, cost and expertise burden on individual teachers.[153]

The evidence

Teaching and learning materials

Across all LiFE countries, the lack of accessible TLMs emerged as one of the most significant barriers to inclusive education. Teachers, head teachers, children with disabilities and their parents consistently reported shortages of both general educational resources and disability-specific materials such as large-print books and tactile or hands-on manipulatives (*see Figure 3.8*). Access to digital tools varied widely, some schools having smart televisions, tablets or computers while others lacked basic equipment.

Figure 3.8 Percentage of teachers and head teachers reporting insufficient and inappropriate TLMs as challenges, across countries



Source: authors' analysis of LiFE data – teacher surveys

In several LiFE countries, such as Kyrgyzstan, Paraguay and Nepal, parents and teachers reported paying out of pocket to secure necessary materials. Teachers frequently reported compensating for shortages by creating low-cost learning resources using locally available materials. In many cases, students themselves helped develop these materials, increasing relevance and motivation. For example, in some community schools in Mozambique, teachers hold regular pedagogical meetings to exchange innovative teaching practices and collaboratively produce low-cost instructional materials by recycling everyday items, such as using egg cartons and cupboards to teach Braille. In Nepal, teachers reported using readily available resources, such as pebbles, sticks, grains, seeds and bottles, as part of mathematics instruction, pointing to the use of locally sourced materials within everyday classroom practice to support learning and accessibility at a minimal cost.

These practices demonstrate both the resource constraints faced by schools and the latent capacity within education systems to innovate when teachers are supported and connected. While teachers play a vital role in creating inclusive classrooms, they cannot be solely responsible for adapting all instructional materials or curriculum components as this would

create excessive demands on their time and workload. Governments, which oversee and fund the development and procurement of educational materials, should therefore require that vendors design learning resources in alignment with inclusive principles from the start.

Assistive technologies

Existing evidence reinforces the benefits of assistive technologies in supporting children with disabilities to attend school, learn and achieve positive lifelong outcomes. Assistive technologies are associated with improved student autonomy, participation, motivation and social skills, and can increase lifetime earnings for children with disabilities by over USD 100,000 in low- and middle-income countries.[154] Costs decline as programmes scale, and emerging technologies, including AI, may further reduce expenses over time. Despite these benefits, access to assistive devices remains limited globally and children frequently cite their absence as a major barrier to learning.[155,156]

The lack of assistive technologies in mainstream schools was reported across all LiFE countries. Teachers, head teachers, parents and children with disabilities frequently noted shortages of Braille machines and paper, audiobooks, screen readers and hearing aids. However, in Paraguay, the Accessible Digital Textbooks (ADT) initiative was highlighted as a notable exception that helped reduce or remove barriers for learners with disabilities and learning difficulties. Teachers explained that the accessibility features of the digital books – such as audio narration (text-to-speech), Easy Read options, sign language videos, and adjustable font size and contrast – enabled students with disabilities to access the same content as their peers without disabilities and participate equally in class activities. Some countries, including Paraguay, are exploring how AI can make the development of ADTs faster, more cost-efficient and easier to scale. A pilot of this process, conducted in Uruguay in 2025, demonstrated this potential: ADT production time was reduced from months to days or weeks, with the time saved redirected to human validation and quality assurance.[157]

> *"The digital book opened up the possibility for us to have tools that can reach all children. If I have a video of a story and I'm going to work on text analysis, then that video is prepared so it can reach children who don't see very well or who don't pay much attention, since it [the ADT] also has short accessible videos."*
>
> **Teacher**
>
> Primary school, Paraguay

Ensuring the long-term impact of assistive technologies requires system-level commitment. The use of assistive technologies in schools requires ongoing financial investment in reliable infrastructure, such as stable internet connectivity, adequate devices and updated software, along with continuous teacher training to ensure educators can effectively integrate the materials into daily instruction. Maintenance plans are essential to ensure that assistive devices remain functional over time and that schools receive prompt technical assistance.[158]

Specialist support

Findings from the LiFE research showed that specialist support was uncommon across most countries. Teachers and parents consistently called for regular, school-based specialist support to strengthen children's learning and development and reduce reliance on private services, which are often unaffordable. Many parents reported having little or no access to specialists or receiving only occasional sessions. Where support was available, children made clear progress, but irregular provision often limited sustained development. Additional barriers included limited appointment availability and the logistical burden on parents needing to accompany children to external services. These patterns align with UNESCO's *Global Education Monitoring Report* (2026), which shows that although many countries have introduced systems of specialist support, actual provision remains inconsistent and highly dependent on system capacity. In many contexts, access to these services is uneven, often constrained by limited staff, capacity gaps and unequal distribution across regions.[159]

Among specialists present in schools, psychologists and physiotherapists were the most common, while sign language interpreters were scarce. UNICEF Innocenti's 2022 review of inclusive interventions similarly found that, regardless of income level, countries face a shortage of sign language interpreters, with interventions often relying on a single category of specialist.[160] Across LiFE countries, this gap was one of the most significant barriers for children with hearing impairments: only 9 per cent of surveyed head teachers in Nepal and 5 per cent in Paraguay reported having interpreters in their schools.

> *"My dream is that my classmates and teachers learn sign language so that I can participate too. Also, the principal, that she learns as well… We also need support. There's a lack of sign language interpreters."*
>
> **Child with hearing disability**
> Secondary school, Paraguay

This reflects a systemic challenge that requires progressive solutions. One promising approach is to draw on the expertise and resources already available in special schools, such as trained interpreters and adapted instructional materials, to support mainstream schools and strengthen the broader transition towards inclusive education systems. Itinerant models providing specialized support to students with disabilities are used in several countries, with special education teachers and specialists deployed to mainstream schools.[161] Their presence not only provides direct support to students but strengthens collaboration with school administrators and teachers, thereby reinforcing shared responsibility for inclusive education (*see Box 3.2*).[162,163]

BOX 3.2

Key lessons from initiatives on implementing and scaling specialist support

Humanity & Inclusion (HI), in collaboration with respective ministries and key partners, is supporting the implementation and potential scale-up of teaching assistants in Senegal and itinerant teachers in Togo to better support children with disabilities. Both initiatives focus **on training and deploying specialists,** namely itinerant teachers and special needs teaching assistants, to strengthen inclusive education in mainstream schools. Key lessons have been drawn from their implementation:

1. **Define specialist roles clearly:** Identify which specialists are needed, who they will support, and how responsibilities will be structured.
2. **Emphasize classroom support:** Specialists should guide and strengthen inclusive classrooms, not only provide one-on-one assistance.
3. **Build institutional capacity:** Establish steering committees, working groups and monitoring systems to oversee specialist programmes, ensure quality and integrate them into the broader education system.
4. **Considerations for scale-up:** When planning for scale-up, the following budget components should be prioritized: awareness-raising initiatives; remuneration and allowances for specialists; purchase of appropriate educational equipment and materials for schools; purchase of accessible TLMs; initial and ongoing training for specialists; and supervision of specialists and assessment of learning outcomes for children with disabilities.

Source: adapted from Humanity & Inclusion (HI) & Agence Française de Développement (AFD) (2025), *Budgetary impact analysis of scaling up the itinerant teachers in Togo*; adapted from Humanity & Inclusion (HI) & Agence Française de Développement (AFD) (2025), *Budgetary impact analysis of scaling up the special needs teaching assistants in Senegal*

These findings show that resource gaps directly constrain the implementation of inclusive education, while existing teacher innovation and specialist expertise remain underutilized. Without sustained investment and mechanisms to scale what already works, inclusive education relies on individual effort rather than system-level support. Multilevel funding structures, combining core budget allocations at the central level with locally tailored support through decentralized budgets and local revenues, can help ensure that sufficient financial resources are available for system-wide initiatives as well as for student-based support.[164]

Policy implementation and considerations

Allocating sufficient budget for both material and human resources is essential to achieving disability-inclusive education. Governments can strengthen resource provision through the following actions:

- **Mapping existing resources and gaps:** Conduct a comprehensive review of current initiatives, funding and capacities to guide equitable resource allocation, especially in underserved areas. Identify inefficiencies, financing gaps and opportunities to use innovative financing, including global mechanisms like the Innovative Finance Foundation for Education (IFFEd) that mobilize concessional resources for countries with limited fiscal space, to strengthen system capacity where needs are greatest.[165,166] Establish partnerships with international agencies, technology developers, OPDs, non-governmental organizations (NGOs and other relevant stakeholders), ensuring all collaboration builds government capacity for long-term sustainability rather than project based dependency.

- **Guaranteeing funding through a twin-track approach:** Combine system wide investments for disability-inclusive education with targeted funding for specific supports such as accessible TLMs, assistive devices and specialist support.[167] This ensures both structural reform and direct provision of the resources learners need. Leveraging funding mechanisms at the central, regional and local levels can help distribute resources more equitably and ensure that support is responsive to local needs.
- **Ensuring access to multidisciplinary specialists:** Ministries of education should expand itinerant models, leverage the expertise of special education professionals, and work in collaboration with health and social protection services and local governments to strengthen national systems that ensure students can access required specialists (e.g., sign language interpreters, speech therapists, psychologists, physiotherapists). The first key step is recognizing the critical role these support specialists play, enabling governments to assess demand accurately and hire more specialists accordingly. Sustaining these services requires coordinated financing across sectors and the strategic use of innovative financing mechanisms such as cross-sector pooled funds or outcome-based contracts to ensure long-term availability of specialist support.[168,169]
- **Promoting and scaling teacher-created accessible, low-cost materials:** Build on teachers' expertise and promote actions that scale up the creation of low-cost, teacher-designed materials. This includes local governments documenting and institutionalizing effective practices, creating collaborative spaces for teachers to exchange and co-design materials, and systematizing these approaches to identify what works across subjects and grade levels. Embedding these efforts in national financing and planning, through cost-efficient models, open access repositories and innovative financing that supports local production, including where relevant global initiatives such as the IFFEd, can ensure sustainability and reduce reliance on high cost external materials.[170,171]
- **Leveraging the use of AI-powered solutions to develop accessible materials:** Promote and scale the use of AI to accelerate the production of accessible teaching and learning resources. Realizing this potential requires national AI policies that regulate use and ensure ethical application in educational contexts, as well as sustained investment in training so that teachers and content developers can use AI tools effectively, ensuring alignment with UDL principles and curriculum guidelines.[172]

Recommendation 3: Recruit and support teachers with disabilities to strengthen inclusive education

Education systems should guarantee the meaningful presence of teachers with disabilities across schools. Teachers with disabilities are essential to building education systems that reflect, respect and respond to the diversity of all learners. They should be recognized as professionals in their own right, who have received training to participate fully in the teaching profession, and should be treated in the same way as their colleagues without disabilities. Their presence in classrooms

strengthens the quality of education for every child and helps reduce stigma, model inclusive practices and foster more positive attitudes towards diversity, contributing directly to more supportive and equitable learning environments.[173,174] However, without deliberate investment in accessible recruitment, training and working conditions, education systems continue to underutilize teachers with disabilities as a critical human resource.

The evidence

Teachers with disabilities bring both professional capability and their lived experiences, shaping inclusive classrooms. They often demonstrate strong relational and problem-solving skills, adopt adaptive instructional strategies and hold high expectations for learners with diverse needs. Research shows that their lived experiences often translate into greater empathy and understanding, enabling them to recognize and respond effectively to the challenges faced by learners with similar disabilities. Teachers with disabilities frequently employ innovative inclusive teaching strategies, such as UDL, scaffolding, multisensory techniques and differentiated instruction, making lessons more accessible and engaging for all learners.[175] They bring unique strengths such as fluency in sign language, Braille literacy, insights on accessibility measures, knowledge of navigating barriers in schools and identifying signs that can support early identification of learning or sensory challenges, facilitating timely referrals to specialists and implementing appropriate interventions.[176]

Yet, in most contexts, they remain underrepresented in the workforce due to inaccessible recruitment processes, limited accommodations and discriminatory attitudes.[177] As a result, education systems lose both trained educators and institutional knowledge critical for designing accessible learning environments.

> *"It's wonderful that people with disabilities can also be part of the teaching profession. I am very happy. I completed my Bachelor's using Braille (...) and became a relief primary teacher. My focus is on supporting the education of children with disabilities... Two of my students from this school have successfully passed the Teacher Service Commission exams and are now working as teachers. ... Some of my colleagues struggle. They often say, 'Ma'am, we can't check Braille assignments.' But they acknowledge that the students learn well and answer correctly. They ask me to check the assignments instead."*
>
> **Teacher with disability**
> Inclusive school, Nepal

Research finds that the visibility of teachers with disabilities can reduce peer stigma and strengthen acceptance among students without disabilities – an important driver of inclusive school cultures. These teachers serve as powerful role models, demonstrating that disability is not a barrier to achievement and inspiring confidence, aspirations and positive self-identities among students, especially those with disabilities. Their presence challenges assumptions within the teaching profession, demonstrates alternative ways of being effective teachers and promotes a culture of acceptance and equity among school staff.[178]

LiFE research findings echo these patterns. Teachers with disabilities interviewed across countries described how their lived experience enabled them to provide tailored support, anticipate accessibility barriers and communicate effectively with children who share similar disabilities. Parents consistently affirmed these strengths, noting that teachers with disabilities recognized their children's needs more quickly and offered guidance shaped by empathy and experience. Students also highlighted the importance of representation. Many children with disabilities spoke of seeing their teachers as role models and sources of encouragement, reflecting how teacher diversity can transform children's aspirations.

However, teachers with disabilities often face acute challenges in their work environments. Evidence from LiFE countries showed that stigma and discrimination from school staff and families, as well as inaccessible school infrastructure and teaching and learning materials, can hinder their ability to carry out their roles effectively. In Nepal, for example, teachers with disabilities reported difficulties moving around the school due to poor physical accessibility, and teachers with visual disabilities highlighted the lack of adapted tactile mathematics materials. In Djibouti, teachers with disabilities noted that pre-service teacher training programmes are not adapted to their needs, limiting their ability to participate fully and develop professionally. Despite these obstacles, however, many teachers with disabilities described a strong motivation to teach, grounded in their resilience, lived experiences and a desire to provide the kind of education they were denied as learners with disabilities.

As countries move towards more inclusive systems, teachers with disabilities must be recognized and supported as education professionals and as essential contributors to school quality and child well-being. Their perspectives are indispensable for designing accessible learning environments, informing inclusive pedagogy and demonstrating to every child that disability is not a barrier to achievement.[179]

Policy implementation and considerations

Achieving inclusive education requires systems to reflect the diversity they aim to serve, which depends on sustained investment in both teacher preparation and workforce diversity. Key considerations for enhancing the recruitment and thriving of teachers with disabilities include:

- **Strengthen inclusive recruitment practices at central and school levels:** Ministries of education and civil service bureaus should adopt clear measures – such as inclusive recruitment guidelines or targeted incentives for schools – to increase the representation of teachers with disabilities within the national workforce. Ensure that all recruitment and selection processes are fully accessible, including job announcements, application procedures, testing formats and interview environments. At the school level, integrate disability awareness and inclusive leadership training into head teacher preparation programmes to eliminate bias and ensure equitable hiring practices.[180]
- **Ensure accessibility and inclusion across all teacher training programmes:** Embed inclusive education throughout pre-service training, in-service training and continuing professional development by resourcing teacher education institutions and universities to provide accessible infrastructure, assistive technologies and learning materials. Support teacher education institutions to provide fully accessible learning environments across infrastructure, digital technologies and pedagogy, and to guarantee appropriate supports for trainees with disabilities from enrolment to certification. Integrate UDL and inclusive teaching strategies throughout the training cycle to equip all teachers to contribute effectively to inclusive school transformation.
- **Guarantee accessible school environments, teaching and learning materials, and assistive technologies:** Ensure that teachers with disabilities can perform their duties without barriers by enforcing accessibility standards in school buildings, providing teaching and learning materials in accessible formats and supplying necessary assistive devices. In this way, ministries of education can strengthen teachers' well-being, motivation and retention, at the same time modelling the inclusive environments that children need to learn and thrive.[181]
- **Foster professional networks and leadership pathways for teachers with disabilities:** Local governments should establish structured opportunities for teachers with disabilities within the same area to connect, collaborate and lead by developing peer networks, mentoring programmes and inclusive professional associations that provide sustained professional support. Promote communities of practice that include both teachers with and without disabilities to encourage mutual learning and prevent isolation.

4. Conclusions

The LiFE research initiative provided a comprehensive, disability-inclusive analysis of education systems, revealing persistent barriers that prevent children with disabilities from accessing quality, mainstream education. The evidence shows that exclusion is not inevitable; it reflects gaps in infrastructure, teacher preparation, societal attitudes and data systems. These gaps can be addressed.

Children with disabilities remain under-enrolled, under-supported and often segregated into special schools, despite clear evidence that inclusive mainstream education benefits all learners. Misconceptions about the challenges of inclusion, combined with insufficient teacher training, inadequate physical accessibility and limited resources, reinforce inequities. These barriers do not only affect children with disabilities, they undermine learning environments for all students and weaken the performance of education systems overall.

LiFE research findings point to three interconnected priorities for transforming education systems:

1. **Recognize:** Children with disabilities are rights-holders, learners and contributors – this recognition underpins the findings and informs the recommendations presented in this report. These include changing attitudes towards disability, recognizing and respecting the capabilities of children with disabilities, and challenging biases and stereotypes in schools and communities. It involves making visible the benefits of inclusive learning environments for all, acknowledging that positive attitudes are foundational to more inclusive systems. Recognition must also be operationalized through stronger screening processes that focus on identifying learning needs rather than labelling disabilities, implemented by trained professionals as part of coordinated support systems. Such processes should be monitored through robust data systems that track child outcomes, assess effectiveness of support, inform decision-making at the national level and allow for cross-country learning.

2. **Reform:** Advancing disability-inclusive education requires more than incremental improvements, it needs the systemic transformation highlighted throughout this report – sustained, coherent and grounded in evidence. Mainstream education systems must evolve to include and support all learners through concrete measures: creating accessible school environments, enforcing inclusive enrolment policies, adopting flexible curricula grounded in inclusive principles and issuing clear guidelines for assessment accommodations. Reforms must address how teachers are prepared and supported, ensuring that pre-service and in-service training equips educators to implement inclusive pedagogies effectively. Sustained change further depends on strong support systems, including structured peer-learning

systems and collaborative spaces that enable teachers to share expertise and scale effective practices. In this process, teachers and specialists from special schools can play a critical role by transferring knowledge and strengthening the capacity of mainstream schools.

3. **Resource:** Disability-inclusive education cannot be achieved without adequate and sustained investment in both material and human resources. In many countries, funding for inclusive education relies heavily on external donors or private sources, or lacks a dedicated allocation within national education budgets. Addressing these structural resource gaps requires strong government commitment and political will to drive and maintain inclusive education reforms. This includes ensuring funding for accessible school infrastructure, teacher professional development, teaching and learning materials available in accessible formats, assistive technologies and regular access to multidisciplinary specialist support, such as psychologists, physiotherapists, sign language interpreters and speech therapists. Effective resourcing requires robust governance and policy coordination across ministries, local governments, NGOs, OPDs, teacher training institutions, development partners, community organizations and the private sector. Coordination can be achieved through mechanisms such as inter-ministerial and inter-agency committees, joint funding models and shared delivery pathways that facilitate coherent, efficient and aligned actions for delivering inclusive education. All collaboration efforts should prioritize building capacity within government bodies to ensure long-term sustainability, beyond project-based financing.

Disability-inclusive education does not end with policy reform or resource allocation. It is realized when all children – regardless of disability – are able to access, participate in and feel a sense of belonging within their schools. Achieving this requires sustained commitment, coordinated action across sectors and shared responsibility throughout education systems. It depends on recognizing diversity as a strength and embedding inclusion across policies, practices and service delivery so that all learners can thrive.

5. Annexes

Annex A. In-depth methodology description

Literature review

A targeted literature review was conducted to develop an in-depth understanding of the global landscape of disability inclusive education, without aiming to be fully exhaustive.[182] Its purpose was to contextualize and contrast the findings from the LiFE research with existing global evidence. The review focused on identifying academic publications, policy papers and technical reports addressing disability inclusive education across diverse education systems.

The review prioritized studies that examined progress and challenges in disability inclusive education across multiple thematic areas and across multiple countries rather than single country case studies, with particular attention paid to low and middle income contexts. The thematic scope covered a wide range of system level and school level dimensions, including beliefs about and perceptions of inclusive education, assistive devices and technology, teaching and learning materials, participation barriers, policy development, teacher training, Universal Design for Learning, inclusive curricula, physical accessibility, school access, data on children with disabilities, inclusive assessment, specialist support and disability screening. The search was conducted using Google Scholar, Web of Science and Scopus. Core search terms related to disability inclusive education were used both on their own and in combination with regional identifiers to ensure geographical relevance. Regional search terms included: Eastern and Southern Africa, Latin America and the Caribbean, Middle East, Northern Africa, East Asia, South Asia, West Africa, and Central Africa. This approach allowed for a more purposeful identification of region specific evidence.

To ensure relevance, the review aimed to include documents published between 2021 and 2025. However, in cases where recent literature was scarce, either for specific themes or regions, older publications were included. Approximately 10 per cent of the reviewed documents fell outside the five year window, with the oldest dating from 2010.

PISA analysis

Findings from the literature review and the LiFE project were complemented with secondary analyses of international large-scale assessment and survey data. Using mainly data from the PISA,[183] analyses were conducted on student-, school- and teacher-level data to explore the student characteristics and cognitive and non-cognitive outcomes of children with disabilities, as well as school environment, including attitudes related to disability-inclusive education.

Data referring directly to children with disabilities come from the PISA for Development (PISA-D) survey conducted in 2018 in Cambodia, Ecuador, Guatemala, Honduras, Paraguay, Senegal and Zambia. The student survey asked students whether they experienced difficulties in the following areas: seeing what is written on the board; hearing the teacher's voice; difficulty walking or using the stairs; difficulty grasping small objects; and frequent illness that prevents regular activities. Analyses in this report also used the PISA-D 2018 school and out-of-school surveys. All PISA-D 2018 analyses were performed using final student weights, meaning that school-level characteristics are assigned to each individual student attending that school and interpreted as the proportion of students who experience them, to correctly reflect the sampling design of the study.[184]

Additional findings on teachers' professional development needs are based on analyses conducted on PISA 2022 teacher-level data for low- and middle-income countries that participated in the assessment, using the teacher weights — statistical adjustments that ensure findings are representative of the broader teacher population in each participating country.[185]

The results presented in this report are based on estimates from bivariate and linear regression analyses.

Annex B. In-depth description of country-level report methodology

The LiFE country-level research followed a mixed-methods approach, organized into three main stages: 1) Policy and landscape analysis; 2) Secondary data analysis; and 3) In-depth research. This annex provides further detail on the methodology used during the in-depth research stage, which combined both quantitative and qualitative data collection. It is worth noting that there were some methodological differences across countries. For instance, Niger was the only country where the in-depth research phase was not implemented, due to limitations in primary data collection between July and December 2023. Nepal followed a distinct methodology: rather than assessing the status of disability-inclusive education systems, the research focused on identifying, understanding and scaling up good practices in disability-inclusive education across four provinces.

Despite these differences, the research across the seven countries aimed to provide key insights to advance disability-inclusive education. In the countries where in-depth research was undertaken, full research ethics protocols were submitted to an Institutional Review Board (IRB) prior to data collection. This ensured that ethical standards were upheld throughout all stages of the research, including data collection, data management and analysis. These measures safeguarded confidentiality, anonymity, and the protection and well-being of all participating

children. Informed consent was obtained from all adult participants. For children, age-appropriate assent forms were used alongside informed consent from their parents or guardians. In each country, a referral pathway and reporting mechanism for potential cases of abuse were identified in advance. All data collectors were trained and fully aware of the procedures to follow if any safeguarding concern emerged during the research.

It is important to clarify that the in-depth research included all types of schools to ensure a comprehensive understanding of the learning experiences of children with disabilities within each national context. Please refer to country-level reports for more details.

Quantitative research

Digital surveys were used for the quantitative research component. These surveys were developed and administered via an online platform targeting teachers, head teachers and district officials (*Table B1*). In some countries, additional questionnaires were included to better capture the broader educational landscape. Schools were randomly selected in each country, and surveys were distributed to staff. Participants provided informed consent through the platform before proceeding with the survey.

Table B1. Number of surveyed participants by country and participant type

Country	Teachers	Head teachers	District officials
Cambodia	2,895	918	391
Djibouti	723	145	9
Kyrgyzstan	1,464	343	438
Mozambique	254	357	68
Nepal	339	191	N/A
Paraguay	13,874	3,145	1,555

Qualitative research

Qualitative data were collected across selected regions in each country, in collaboration with ministries of education, to capture perspectives from both urban and rural contexts aligned with national priorities. Data collection included semi-structured interviews with in-school and out-of-school children with disabilities, their parents or caregivers and teachers, as well as focus group discussions (FDGs) with children without disabilities and their parents across pre-primary, primary and secondary education levels (*Table B2*). Most children sampled were between 10 and 16 years old, and accommodations, such as sign language interpreters, were provided to ensure accessibility. Across countries, sampling followed consistent criteria to ensure diversity, including age, gender, type of disability, geographic location and school type.

Table B2. Number of interviews and FGDs across all countries

Country	Interviews	FGDs
Cambodia	60	7
Djibouti	58	14
Kyrgyzstan	99	15
Mozambique	150	18
Nepal	75	60
Paraguay	108	12

Country-level reports can be accessed directly through the links below:

- **Cambodia:** Paving the pathway: inclusive education for children with disabilities in Cambodia
- **Djibouti:** Education without barriers: Improving access to education for children with disabilities in Djibouti
- **Kyrgyzstan:** Paving the pathway for inclusive education for children with disabilities in Kyrgyzstan
- **Mozambique:** Paving the pathway for disability-inclusive education in Mozambique
- **Nepal:** Learning is for everyone: Paving the pathway for inclusive education for children with disabilities in Nepal
- **Paraguay:** Learning is For Everyone: Research on inclusive education for children with disabilities in Paraguay

Annex C. How to conduct research with children with disabilities to guarantee their full participation

The LiFE research analysed education systems through a disability-inclusive lens, placing particular emphasis on understanding and amplifying the voices and experiences of children with disabilities. This annex explains how this commitment was embedded throughout every stage of the research process, outlining the strategies used to ensure the meaningful participation and representation of children with disabilities.

Sampling process

Different participants were included in the qualitative component of the study to enable triangulation of information. A key priority was to secure the participation of a significant number of children with disabilities in each country. Furthermore, efforts were made to ensure representation across different types of disabilities, gender balance, and rural and urban contexts. Nonetheless, some limitations were encountered – for example, in certain countries, specific types of disabilities were more prevalent in schools than others. To address this, interviews were also conducted with children out of school.

Research ethical guidelines

Ethical standards were strictly followed, with particular attention to safeguarding children's safety and comfort throughout their participation. This involved establishing in advance referral pathways for child abuse cases and providing comprehensive training to data collectors to handle such situations appropriately, ensuring both the child's protection and the timely referral of cases for necessary support.

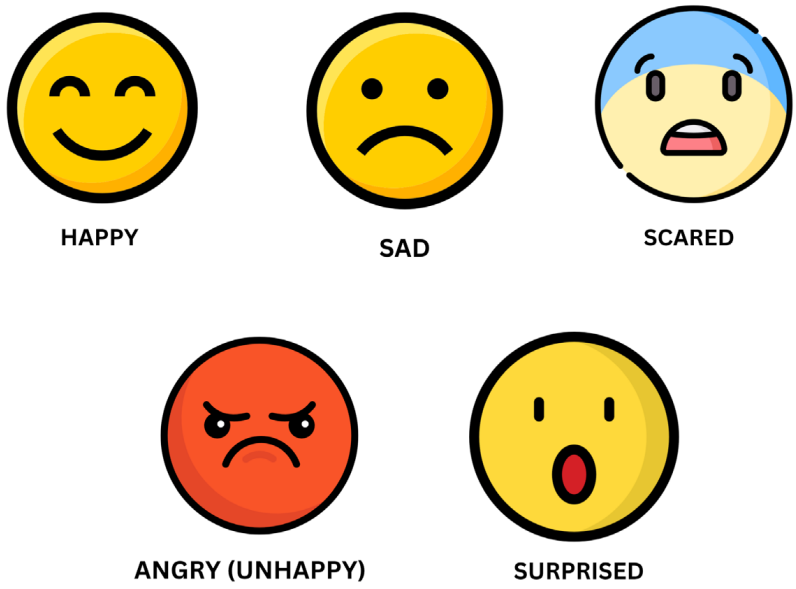
Children, both with and without disabilities, were given information about their participation in a child friendly and accessible format. In addition to obtaining informed consent from their caregivers, informed assent was obtained directly from children. The assent form was designed to be child friendly, explaining clearly and concisely what participation involved. The signature space was adapted to be more accessible, summarizing the actions children were agreeing to in short sentences accompanied by images.

Beyond modifications to the assent form itself, accommodations were applied during the assent process. These included reading the form aloud for children with visual disabilities and offering verbal assent when necessary.

Data-collection tools

Interviews were the sole instrument used to collect data from children with disabilities. The interview guides were carefully adapted to be accessible and child friendly. This included designing short questions and using simple, clear language to avoid confusion or unnecessary difficulty. When relevant, questions were supported with visual aids – for example, images representing emotions were added to questions about feelings (*see Figure B1*).

Figure B1. Example of visual support included in interview guides for children with disabilities

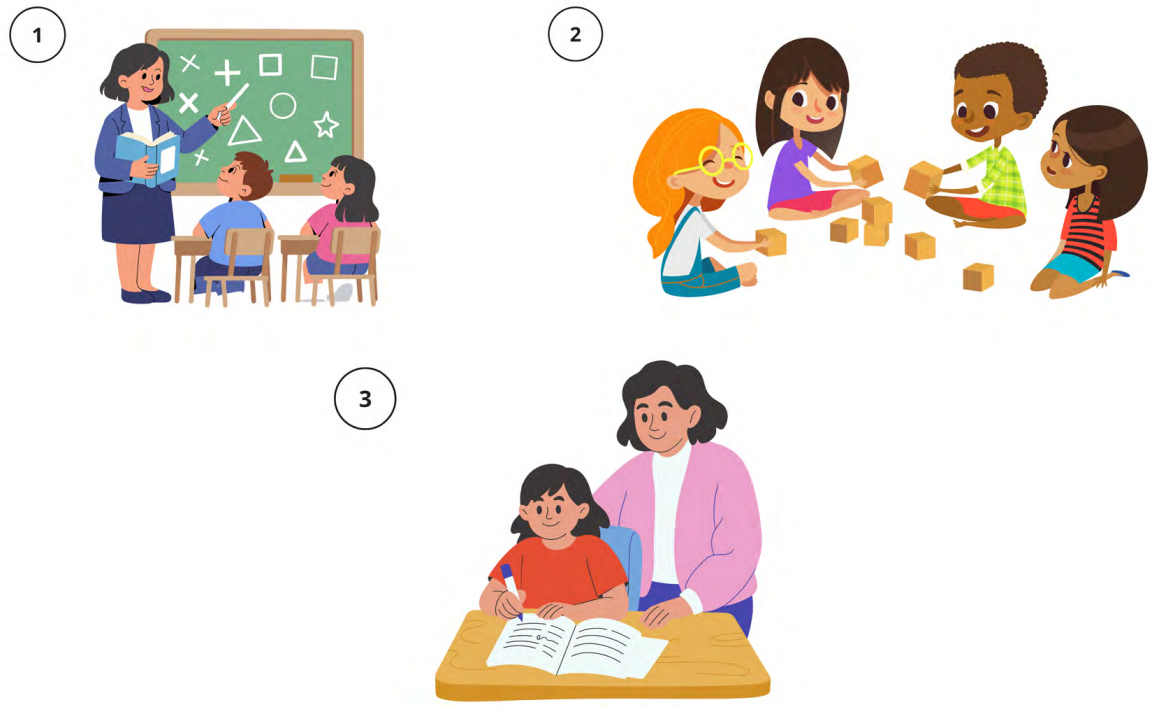


Source: icons by Freepik and Nurlaili from Flaticon (www.flaticon.com)

To make the interviews more engaging and easier to follow, vignettes were incorporated. These consisted of short, context specific stories and questions related to the stories. The stories were adapted to ensure all children would understand them, using familiar concepts and language. Enumerators were trained to confirm that children had understood the story before asking questions. Each story was accompanied by illustrative images (*see Figure B2*).

Figure B2. Example of vignette accompanied by illustrative images

Claudia is a fourth-grade teacher. She is kind, fun and gets along well with all the students. This week in maths class, Claudia will teach her students addition. She has prepared different activities and brought various materials, including some wooden blocks for group activities and games. Before starting the activities, Claudia explains what addition is with the use of pictures and videos and then asks the students questions to make sure they understand. Claudia notices that one student, Paola, is having difficulty with the topic, so she approaches her and provides support. [POINT TO IMAGES WHILE READING THE TEXT]

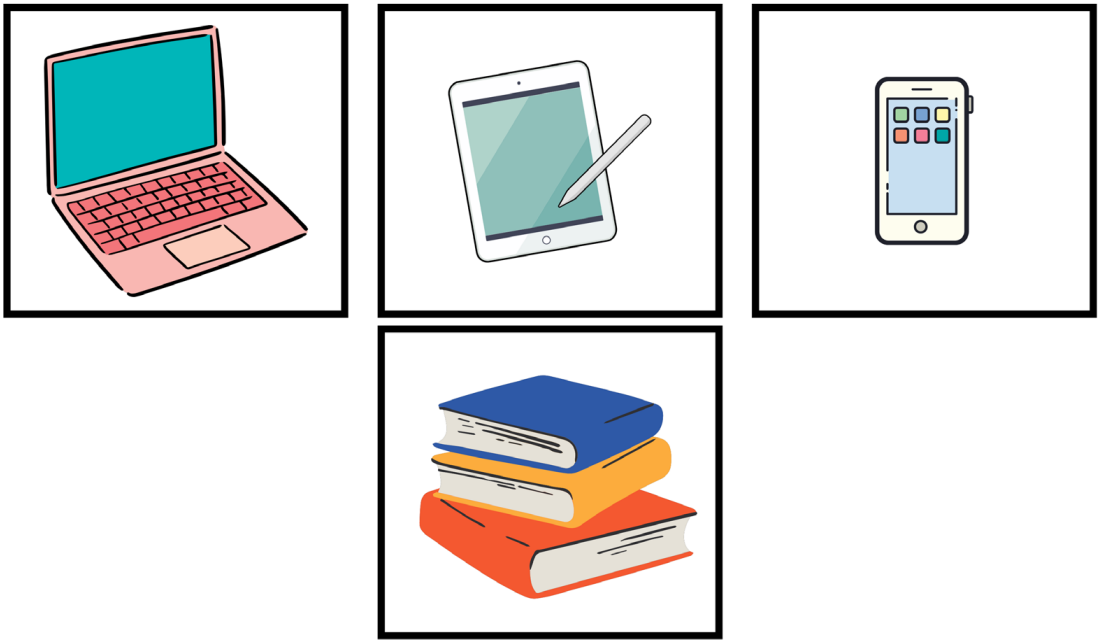


Source: images by Danny and foxyimage, Pro Content via Canva (www.canva.com)

For children with visual disabilities, concepts were simplified to ensure clarity and accessibility. In some cases, adjustments were made following the pilot phase. Piloting was therefore crucial to guarantee accessibility, as interviews were tested with children with different types of disabilities.

For example, piloting revealed the need for additional support for children with intellectual disabilities. As a result, a simplified version of the interview guide was developed for use when necessary. This version included only one or two questions per key topic, accompanied by visual aids (*see Figure B3*).

Figure B3. Example of question included in the simplified version of the interview guide



Source: images by ourlifelooklikeballoon, June Design, icons8, and Kenji from Sketchify Education, via Canva (www.canva.com)

Time considerations were central to the design of the interview guides. To prevent children becoming tired or losing concentration, interviews were limited to a maximum of 30 minutes. Accordingly, the guides focused on a small number of questions for each key research topic: teaching and learning materials, teacher–student interactions, supports provided by schools and students' aspirations.

Data collection

During interviews with children with disabilities, accommodations were provided to ensure their full participation and comfort. These supports were offered only when needed and, whenever possible, were prepared in advance to guarantee timely assistance.

Accommodations included sign language interpreters for children with hearing disabilities and the support of teachers or parents/caregivers, particularly for children with intellectual disabilities. In many cases, interpreters were teachers from the same school, which helped students feel more at ease. Their role was limited to translating questions and participants' answers. For children with intellectual disabilities, teachers and parents/caregivers offered both emotional support and clarification, rephrasing questions in ways that were easier for the children to understand. In a few cases – mostly interviews with children out of school – parents or caregivers were present to provide emotional support.

As mentioned, a simplified interview guide with visual supports was also prepared for children with intellectual disabilities, to be used when necessary. This was not applied universally but only when it helped children better grasp the questions.

Additionally, enumerators paused interviews whenever they noticed children showing signs of fatigue or loss of concentration. These short breaks often involved inviting children to stretch before continuing. In cases where fatigue or disengagement persisted, enumerators ended the interview early, prioritizing the child's comfort.

Analysis and report writing

How data is analysed and presented is a key aspect of ensuring that children's voices remain at the centre of the research. The qualitative data was analysed using qualitative analysis software, with codes drawn from the study's key themes. Importantly, these codes were framed from the children's perspective – considering the supports provided to them, their experiences in school, their likes and dislikes, their interactions, and the ways in which they learn. When writing the report, emphasis was placed on adopting a child centred perspective, highlighting the barriers they face, the needs they express and the support required for their full participation and learning. To capture and reflect their voices, quotes from children with disabilities were prioritized as illustrative examples.

List of Acronyms

CFM	Child Functioning Module
CRPD	Convention on the Rights of Persons with Disabilities
CwD	Children with Disabilities
EMIS	Education Management and Information System
ESA	Education Sector Analysis
FGD	Focus Group Discussion
LiFE	Learning is For Everyone
LMICs	Low- and Middle-Income Countries
MICS	Multiple Indicator Cluster Survey
NGO	Non-Governmental Organization
OECD	Organization for Economic Co-operation and Development
OPDs	Organizations of Persons with Disabilities
PISA	Programme for International Student Assessment
PISA-D	Programme for International Student Assessment for Development
SEA-PLM	Southeast Asia Primary Learning Metrics
TALIS	Teaching and Learning International Survey
TLMs	Teaching and Learning Materials
UDL	Universal Design for Learning
UN	United Nations
WASH	Water, Sanitation and Hygiene

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Acknowledgements

The development of this report was led by Ursula Hinostroza Castillo, Stefania Vindrola, Ghalia Ghawi and Hélène Guillou.

The "Learning is For Everyone" (LiFE) research was developed in close collaboration with key stakeholders, whose engagement was central to ensuring the research reflected real needs and supported meaningful change in education systems. It was made possible thanks to the commitment of many individuals in ministries of education and within UNICEF, including the following:

- Cambodia: Ministry of Education, Youth and Sport, and UNICEF Cambodia
- Djibouti: Ministry of National Education and Professional Training, and UNICEF Djibouti
- Kyrgyzstan: Ministry of Education, and UNICEF Kyrgyzstan
- Mozambique: Ministry of Education and Culture, and UNICEF Mozambique
- Nepal: Center for Education and Human Resource Development (CEHRD), and UNICEF Nepal
- Paraguay: Ministry of Education and Science, and UNICEF Paraguay

The LiFE research would not be possible without the dedication and support of many individuals, including Thomas Godfrey-Faussett, Bella Baghdasaryan, Meri Poghosyan, Svetlana Poleschuk, Kebakaone Marumo, Rafaela Arnold, Anindita Nugroho, Amparo Barrera, and Kevin Clidoro.

Special thanks go to Ghalia Ghawi, who oversaw the conception, design and implementation of the research.

This report has greatly benefited from the guidance, input and feedback of the team at UNICEF Office of Strategy and Evidence (OSE) – Innocenti, including Linda Jones (Chief of Education), Thomas Dreesen (Education Manager), Ramya Subrahmanian (Deputy Director, a. i.) and Bo Viktor Nylund (OSE Director, a.i.). The authors would also like to extend their thanks to Tomoko Shibuya (Senior Adviser Education) for her review and inputs, as well as Matt Brossard (former UNICEF Innocenti Education Chief) for his support in shaping the conception and design of the project.

The conceptualization of the report and its contents were peer-reviewed within UNICEF by members of the LiFE Technical Working Committee, who provided insightful direction, comments and inputs: Aferdita Spahiu, Arpana Pandey, Asma Maladwala, Linda Jonsson, Mita Gupta, Nora Shabani, Tania Gonzales Veiga, Veronicah Wangui and Yetneberesh Nigussie Molla.

The report has benefited from the valuable feedback of external peer-reviewers, including Diane Richler (International Disability Alliance), Jessica Boyd (Teach For All), Julia De Kadt and Veronica Stapleton (Sightsavers), Lindsay Jones, Jennifer Levine, Jenna Gravel (CAST), and Rosalin Abigail Kyere-Nartey (Africa Dyslexia Organization).

The authors express their immense gratitude to all the schools, head teachers, teachers, parents and children who shared their experiences with the research team. Their voices are at the heart of this research.

The views expressed herein do not necessarily represent those of the donors or their respective Boards. Additionally, the findings, interpretations and conclusions expressed in this report are those of the authors and do not necessarily reflect the views of UNICEF.

Layout design: Afternorth
Copy editing: Accuracy Matters

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Published by
UNICEF Office of Strategy and Evidence – Innocenti
Via degli Alfani, 58
50121, Florence, Italy

Email: innocenti@unicef.org
Web: unicef.org/innocenti | data.unicef.org
Social media: @UNICEFInnocenti on Bluesky, Instagram, LinkedIn, and YouTube

Suggested citation
Ursula Hinostroza Castillo, Vindrola, S., Ghawi, G., Guillou, H., *Learning is For Everyone: Paving the pathway for inclusive education for children with disabilities*, UNICEF Innocenti, Florence, June 2026.

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