# LASER PULSE

## Long-Term Assistance and Services for Research (LASER)

## Partners for University-Led Solutions Engine (PULSE)

# MULTI-COUNTRY STUDY ON INCLUSIVE EDUCATION (MCSIE)

### Areas of Intervention Mapping (AIM) for Inclusive Education: Cambodia

SUPPLEMENT TO AGREEMENT NO. AID-7200AA18CA00009

AOR Name: Kevin Roberts

January 10, 2023

Produced by Hayley Niad and Brent Elder from Inclusive Development Partners (IDP), and Mean Vibol Ratanak from Cambodian Disabled People's Organization (CDPO)

This publication was made possible through support provided by the Innovation, Technology and Research Hub of the U.S. Agency for International Development, through the LASER PULSE Program under the terms of Cooperative Agreement No. 7200AA18CA00009. The opinions expressed herein are those of the author(s) and do not necessarily reflect the views of the U.S. Agency for International Development.

USAID FROM THE AMERICAN PEOPLE

PURDUE UNIVERSITY

Inclusive Development Partners

UMASS BOSTON

## Contents



**About LASER PULSE**

LASER (Long-term Assistance and SErvices for Research) PULSE (Partners for University-Led Solutions Engine) is a $70M program funded through USAID's Innovation, Technology, and Research Hub, that delivers research-driven solutions to field-sourced development challenges in USAID interest countries.

A consortium led by Purdue University, with core partners Catholic Relief Services, Indiana University, Makerere University, and the University of Notre Dame, implements the LASER PULSE program through a growing network of 3.000+ researchers and development practitioners in 74 countries.

LASER PULSE collaborates with USAID missions, bureaus, and independent offices and other local stakeholders to identify research needs for critical development challenges, and funds and strengthens capacity of researcher-practitioner teams to co-design solutions that translate into policy and practice.

## ACRONYMS

| | |
|---|---|
| 3PC | Partnership Program for the Protection of Children |
| AAR-Japan | Association for Aid and Relief, Japan |
| ABC | Association of the Blind Cambodia |
| ACCESS | Australia-Cambodia Cooperation for Equitable Sustainable Services |
| ACR-Cambodia | All Children Reading-Cambodia |
| AIM | Areas of Intervention Mapping |
| CABDICO | Capacity Building for Disability Cooperation |
| CARE | Center for Adaptive and Responsive Education |
| CB-DMAT | Community-Based Developmental Milestone Assessment Tool |
| cDMAT | Cambodian Developmental Milestone Assessment Tool |
| CDMD | Cambodian Development Mission for Disability |
| CDPF | Capacity Development Partnership Fund |
| CDPO | Cambodian Disabled People's Organization |
| CFM | Child Functioning Module |
| CFS | Child-Friendly School |
| CRS | Catholic Relief Services |
| CSL | Cambodian Sign Language |
| DAC | Disability Action Council |
| DDP | Deaf Development Programme |
| DEEP | Disability Empowerment and Education Project |
| EFA | Education for All |
| EMIS | Education Management Information System |
| ESWG | Education Sector Working Group |
| FGD | Focus Group Discussion |
| FIS | Footprints International School |

| | |
|---|---|
| GPE | Global Partnership for Education |
| HHC | Hands of Hope Community |
| HI | Humanity and Inclusion |
| IDP | Inclusive Development Partners |
| IECD | Integrated Early Childhood Development |
| IPEA | Inclusive Primary Education Activity |
| KAPE | Kampuchean Action for Primary Education |
| KHEN | Khmer Nongovernmental Organization for Education |
| KII | Key Informant Interview |
| KPF | Komar Pikar Foundation |
| LASER | Long-Term Assistance and Services for Research |
| MCSIE | Multi-Country Study on Inclusive Education |
| MoEYS | Ministry of Education, Youth, and Sport |
| MoH | Ministry of Health |
| MoSVY | Ministry of Social Affairs, Veterans, and Youth Rehabilitation |
| NEP | Nongovernmental Organization Education Partnership |
| NGO | Nongovernmental Organization |
| NISE | National Institute for Special Education |
| OIC | Organization to Improve Communication |
| PRC | Physical Rehabilitation Center |
| PTTC | Provincial Teacher Training College |
| PULSE | Partners for University-Led Solutions Engine |
| RTI | Research Triangle Institute |
| SED | Special Education Department |
| TLM | Teaching and Learning Material |
| ToR | Terms of Reference |
| ToT | Training of Trainers |

| | |
|---|---|
| UDL | Universal Design for Learning |
| UNICEF | United Nations Children's Fund |
| USAID | United States Agency for International Development |
| WG | Washington Group |
| WGED | Working Group for Education and Disabilities |
| WG-SS | Washington Group Short Set |

## EXECUTIVE SUMMARY

The United States Agency for International Development (USAID) Multi-Country Study on Inclusive Education (MCSIE) evaluation team, led by Inclusive Development Partners (IDP), conducted an areas of intervention mapping (AIM) exercise in Cambodia to show where and how All Children Reading - Cambodia is interacting with the existing education system to improve educational outcomes for learners with disabilities. Desk review work beginning in 2020 and augmented by key informant interviews (KIIs) in 2021 and 2022 helped the MCSIE team focus on deepening their understanding related to (1) the screening and identification of children with disabilities, (2) teacher training models for disability-inclusive education, and (3) instructional practices supportive of inclusive education in Cambodia.

The following high-level summary covers key findings from the three domains:

1. **Screening and identification.** The proliferation of screening activities and tools helps raise awareness about children with disabilities, but tools are subject to widespread misuse. Challenges include the lack of validation of screening tools, ineffective training on the use of tools, and difficulties with fidelity of implementation. Following screening, referral services to diagnose children with disabilities are limited. In instances where screening and referral successfully lead to the diagnosis of a child with a disability, substantial breakdowns in service provision and limited access to qualified professionals undermine the utility of national screening scale-up efforts.

2. **Teacher training.** Promising practices in Cambodia include increasing the focus on inclusive education among in-service training programs and embedding a short inclusive education module into pre-service teacher education. Yet, in-service training is often too short in duration to achieve its desired impact on teacher preparedness to support inclusive education. Furthermore, there is limited measurement of the impact of teacher training on classroom-level instruction, making it challenging to understand whether training is yielding the desired effects.

3. **Instructional practices.** Positive initiatives that support inclusive education's progressive realization[1] include the development of inclusive teaching and learning materials (TLMs), support to accessible school infrastructure, and awareness-raising among communities to support the enrollment of children with and without disabilities in schools. However, children with identified disabilities are commonly educated in segregated special schools or in integrated classrooms located in general education schools but composed only of children with disabilities. General educators' lack of preparedness (in terms of resources, support, and training) to deliver

[1] This term references the concept of "progressive realization" toward the expectations of the Convention on the Rights of Persons with Disabilities (CRPD) by signatory countries. The CRPD recognizes that countries have disability rights and unique inclusive education contexts but should all be making policy changes and economic investments to progressively realize the aims of the treaty.

inclusive education is a common reason given for educating children with disabilities in non-inclusive settings.

The following key recommendations for future consideration stem from the above and other findings:

1. **Develop consensus on definitions of disability and inclusive education prior to commencing new activities.** A lack of consensus on key terms and definitions, including differences in translation between Khmer and English, may result in projects and programs that aim to support disability-inclusive education but enact this aim in conflicting and even opposing ways.

2. **Pause and reflect on the long-term consequences of school-based screening and identification of disabilities.** In addition to ethical concerns around the unreliable approaches currently used for screening and identification, given the widespread shortages of professionals to support the few children identified with disabilities, no amount of additional screening and referral activities will provide direct benefits to children with disabilities if services are not available.

3. **Scale up pre-service teacher training for inclusive education, embedding Universal Design for Learning (UDL) principles and preparing teachers to support children with "hidden" disabilities.** In addition to an existing foundation focused on preparing special educators to teach students with hearing and vision disabilities in segregated settings, UDL strategies support instruction for all children including those with "hidden" disabilities, such as learning and intellectual disabilities, and can facilitate advancements in inclusive education.

4. **Consider small-scale pilots of inclusive co-teaching classrooms in general education classrooms.** Co-teaching models, where two educators support students with and without disabilities in the same classroom, could serve as an innovative way to combine the existing integrated teacher and general education teacher workforces to support the implementation of inclusive education.

# INTRODUCTION AND PURPOSE

Promoting disability-inclusive education is a key priority area in the United States Agency for International Development (USAID) 2018 Education Policy. The policy states that "universal design principles that look at the design of policies, the allocation of resources, the training and support for teachers, the availability of support services, and the overall accessibility of learning materials, infrastructure, transportation, and assistive technologies should inform a holistic approach to educating students with disabilities and fostering learning outcomes."[2]

The USAID Multi-Country Study on Inclusive Education (MCSIE) evaluation team, led by Inclusive Development Partners (IDP), proposed an areas of intervention mapping (AIM) exercise of three USAID inclusive early grade reading activities in Cambodia, Nepal, and Malawi to show where and how each USAID activity is interacting with the existing education system to improve reading outcomes for learners with disabilities.

The purpose of this AIM report is to describe how USAID-funded activities, specifically the All Children Reading-Cambodia (ACR-Cambodia) project, align with government and donor efforts to provide inclusive education for children with disabilities. The objective of AIM is to answer the following questions about disability-inclusive education in Cambodia:

1. What other methods/models were in place prior to/during the USAID activity?
2. How does/did the method/model work (i.e., successes/challenges/barriers)?
3. Where and how do actors in each area of intervention interact with other actors in the system?
4. What do actors in each area of intervention perceive as the biggest assets and needs within the system?

This mapping captures what is currently in place by examining the existing inclusive education efforts related to MCSIE's evaluation topics: (1) screening and identification of children with disabilities, (2) teacher training models for disability-inclusive education, and (3) instructional practices supportive of inclusive education in Cambodia.

AIM findings are meant to:

- assist USAID to determine how their education activities in Cambodia fit into and contribute to strengthening existing inclusive education efforts in the country;
- provide all education stakeholders with actionable recommendations for future programming in Cambodia related to screening and identification, inclusive education teacher training, and instructional practices; and
- draw attention to the areas in which there is under-investment or limited coordination between actors involved in promoting inclusive education.

[2] USAID. (2018, November). *USAID education policy*. p. 30.
https://www.usaid.gov/sites/default/files/documents/1865/2018_Education_Policy_FINAL_WEB.pdf

## METHODS

Our MCSIE research team began conducting a desk review for the AIM in 2020 and ultimately reviewed over 75 reports, evaluations, grey literature, and other documents. The team produced a matrix of major activities related to the areas of intervention that included all available data collected by MCSIE previously (i.e., the MCSIE Literature Review) and new data collected for AIM specifically. Further to this, the MCSIE team attempted to conduct some remote key informant interviews (KIIs) in 2021 but encountered difficulties with stakeholder responsiveness from a distance. Thus, data collection was delayed until in-person KIIs could be conducted in April 2022. IDP evaluators, in collaboration with local data collection partner Cambodian Disabled People's Organization (CDPO), conducted a total of 8 KIIs and 10 focus group discussions (FGDs) both virtually and face-to-face with relevant stakeholders (see Annex A). In addition, researchers reviewed evaluation reports, work products, project descriptions, and other documents related to inclusive education in Cambodia (see Annex B for a full document list). Annex A shows a breakdown of study participants by gender; however, gender as a theme did not feature in literature or data collection findings, and is not highlighted in this analysis.

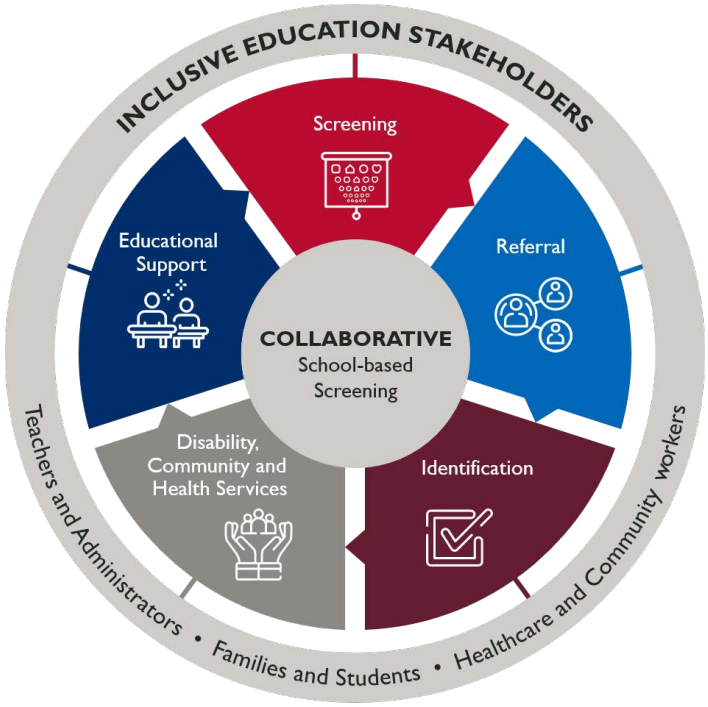
## FINDINGS

### AREA ONE: SCREENING AND IDENTIFICATION

Screening and identifying learners with disabilities is a fairly new activity in the inclusive education sector in Cambodia. While an early checklist for disability identification was produced in 2008, most efforts reviewed began over the past five years. To this effect, evaluators examined prior and existing efforts to screen and identify children with disabilities that have taken place in Cambodia within the past five years, apart from the ACR-Cambodia activity. This includes investigating how screening data has been used and how these activities connect to referrals to medical and non-medical disability support services. Ultimately, this review demonstrated that there is a large commitment to identifying children with disabilities in Cambodia with the intent to better support them. However, the findings are similar to ACR-Cambodia's screening activities: several breakdowns in the screening-feedback loop exist nationally in relation to the screening and identification of children with disabilities.

The below image of the feedback loop shows how screening is intended to trigger a process of referral, disability identification, and services that lead to the provision of educational supports for learners with disabilities in the classroom; however, this process is subject to a number of breakdowns (see Figure 1, as well as additional information in Annex D).

Figure 1. The Screening -Feedback Loop




**Finding 1: A proliferation of screening activities and tools have been developed in Cambodia to identify learners with various disabilities. While this has raised awareness about the inclusion of learners with disabilities, the misuse of tools is widespread**. Screening and identification tools require a rigorous process of testing and validation to ensure they are appropriately measuring and capturing the intended population.[3] KIIs with various nongovernmental organizations (NGOs) in Cambodia suggest that non-validated tools are being used for screening and identification. These tools are described in further detail in Table 1 below.

- **The implementation of screening activities has raised awareness about learners with disabilities and the need for services and program supports for learners with disabilities.** Government and NGO respondents have noted that the proliferation of screening tools in Cambodia has helped to build awareness of the need for service-provision for learners once they have been identified.

- **Positive screening practices, which include rigorous training and validated tools, do exist in country, but are limited in scope and scale.** One noteworthy example is the Cambodian Developmental Milestone Assessment Tool (cDMAT) in use by the Integrated Early Childhood Development Activity (IECD) project and Safe Haven for children ages 0–6 years.

[3] Pagel, R., & Maxson, L. (2020, November). *Collecting data on disability prevalence in education programs.* USAID. https://www.edulinks.org/sites/default/files/media/file/HowToNote_DisabilityData_Nov20.pdf

The cDMAT has been validated by qualified medical professionals and is only used after a rigorous training process. Other organizations have historically used qualified technicians to conduct ear and eye health screenings, including Krousar Thmey and the Fred Hollows Foundation.

- **The government does not standardize screening tools in use.** NGO respondents each attributed the development of their own screening tools or practices as an attempt to support the government in scaling its systemic screening and referral processes (detailed in Table 1). Yet, the Special Education Department (SED) has limited funding or technical capacity to oversee these scaled efforts in the education sector (the same was described of the Ministry of Social Affairs, Veterans, and Youth Rehabilitation [MoSVY] for disability screening in the wider social protection sector). Despite the fact that disability is measured differently in each tool, the SED indicated it is amenable to NGOs using different tools as long as NGOs report the data to the SED so the SED can house it in a central location. As one NGO respondent stated, "You have your own tool, we have our own tool. […] We need a main player to coordinate these efforts."

- **Prevalence tools [4] are being used inaccurately and outside of their intended purposes.** Census-type tools such as the Washington Group Short Set (WG-SS) on Functioning are being used not just for screening but, in some cases, for diagnostic purposes outside the scope of their intended use. Such tool misuse raises ethical concerns, including the possible mislabeling or misdiagnosing of learners with and without disabilities, which can cause more harm than benefit.[5]

- **Checklists and screening tools may conflate disability categories with medical conditions or be built on a misunderstanding of the types of disabilities.** For example, the Guideline for Screening Children with Disabilities at Preschool checklist for intellectual disability includes one indicator regarding children having seizures, despite the fact that 75 percent of people with epilepsy do not have an intellectual disability.[6] In another example, the

[4] Ibid

[5] Hayes, A. M., Dombrowski, E., Shefcyk, A., & Bulat, J. (2021, April). *Learning disabilities screening and evaluation guide for low-and middle-income countries*. RTI Press. https://www.rti.org/rti-press-publication/learning-disabilities-screening/fulltext.pdf

[6] Shankar, R., Rowe, C., Van Hoorn, A., Henley, W., Laugharne, R., Cox, D., Pande, R., Roy, A., & Sandar, J. W. (2018). Under representation of people with epilepsy and intellectual disability in research. *PLoS ONE, 13*(6), e0198261. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6013187/pdf/pone.0198261.pdf

SED indicated that it groups learning disabilities among the intellectual disability category when collecting national data on children with disabilities.

**Finding 2: Although many NGOs are committed to identifying children with disabilities, projects cite a lack of fidelity in implementation as a significant barrier for accurately capturing those children with disabilities on both screening and census tools, suggesting significant underrepresentation of children with disabilities in the current data**. More intensive training for staff and more project oversight is needed to ensure success, which may require extending project timelines and budgets to adequately address these needs.

- **Concerns were raised related to the fidelity of implementing screening and census tools.** In 2019, ACR-Cambodia reported that its teacher-led hearing and vision screening pilot may have captured fewer learners with possible disabilities than were likely present in the student population (34 of 5,494 students screened) in part due to trained teachers not implementing the screening methodology as fully intended.[7] One NGO respondent raised similar concerns regarding the administration of the WG-SS questions in the national census in Cambodia (which is intended to generate prevalence data and not for screening); enumerators have been observed to skip the census's WG-SS questions entirely on the grounds that enumerators felt they could determine whether respondents had a disability by merely looking at them. This will miss many respondents whose functional limitations cannot be seen and any number of other household members who are not visible during the door-to-door survey. The same NGO respondent observed that some enumerators stopped asking the WG-SS questions once they received answers from 50 people, potentially assuming that disability was unlikely to appear in the broader population.

- **Tools are not capturing the expected prevalence of disability that may exist when compared to global prevalence rates.** KIIs with Research Triangle Institute (RTI) International's newer IECD activity staff suggest a similar challenge with the under-identification of children with possible developmental delays when using the Community-Based Developmental Milestone Assessment Tool (CB-DMAT). Two recent pilots identified only 41 out of 2,260 children screened (1.8 percent), a number lower than expected considering that the pilot intended to target families of children with suspected disabilities. Collectively, KIIs with staff familiar with various screening and census activities uncovered a variety of possible contributors to the pervasive low identification rates, including enumerators who do not implement the tool as intended, enumerators who forego asking questions or complete tools

[7] RTI International. (2019, Jan, 19). *USAID/Cambodia - All Children Learning: Hearing and vision disability screening report.* USAID. https://ierc-publicfiles.s3.amazonaws.com/public/resources/Cambodia%20Screening%20Report_Approved.pdf

using their own opinions based on observations, respondents who are not comfortable being completely honest with screening questions, enumerators who are not completely comfortable asking disability-related questions to respondents, and the likelihood that persons with disabilities are not accessing or participating in the very screening activities intended to identify their needs.

- **Even when a validated tool has been administered by trained staff for its intended use, NGO respondents noted challenges with accurately capturing persons with possible disabilities compared to global estimates of disability prevalence** , suggesting that there are many more persons with disabilities in Cambodia whose needs are still not known. Providers do not know the reasons for the low prevalence rates when valid screening and identification practices are used, but NGO respondents raised the possibility of families reluctant to bring their children to be screened or subsequently labeled with a disability.

**Promising Screening and Identification Practices: Safe Haven**

Safe Haven is an NGO based in Siem Reap and is run by both Cambodian and American staff. The organization provides social work, physical therapy, nursing, and other support services to children with disabilities in Cambodia.

Safe Haven serves as a model for promising practices related to disability identification and follow-up support in Cambodia in that Safe Haven insists on strong standards of quality assurance and training, even if such supports must be personally furnished from inside the organization. Safe Haven staff, both involved in the validation of the cDMAT tool and in the organization's leadership, have trained their interventionists on the tool's use. Safe Haven takes nearly a year to ensure its new staff are trained in the appropriate use of the tool as a diagnostic resource.

In Cambodia, NGO respondents also reported that some professional training programs do not focus on disability at all. In Safe Haven's experience recruiting social workers, nurses, and physical therapists, they found that these professionals received little prior training on disability in their degree programs before joining Safe Haven. Therefore, Safe Haven depends on providing their own intensive in-house training programs, supplemented by international short-term experts, to fill this gap in all the areas of expertise they offer.

**Finding 3: Following screening and referral, all implementing partners noted significant breakdowns or gaps in subsequent diagnosis and service provision, suggesting that a focus on screening and identification may not yield the ultimate goal of providing learners with the supports and services needed for successful inclusion in school.** Government and NGO respondents cited limited resources as a contributing factor, including a lack of trained service providers, extensive waitlists and limited capacity to meet the demand, and services being unavailable for those living in rural regions. Projects attempt to recruit service staff to "fill the gap," but these attempts also encounter the same systemic barriers noted above and lack sustainability.

- **"Referral comes with risk."** One NGO respondent synthesized clearly that screening creates a demand for identification and services that cannot always be met. Another NGO respondent stated, "When we screen children, we need to provide interventions, otherwise it's not fair to do the screening." Access to medical professionals capable of identifying or diagnosing learners with disabilities is extremely limited, and even if identification does take place, access to the follow-up services required—including both medical and non-medical supports—is lacking.

- **A limited number of organizations and service providers exist across the country.** Even if a child's disability has been appropriately diagnosed, as one NGO respondent put it, "There's a lot of ethical challenges around screening for children with disabilities in a context where there are no available services." Respondents reported very few pediatric facilities are equipped to diagnose children with disabilities in Cambodia, rehabilitation and therapeutic services are concentrated in major cities, and for many typical Cambodians living in rural areas, no therapeutic supports are available within a reasonable distance from their homes. Safe Haven, an organization based in Siem Reap providing a variety of services to children with disabilities, consistently has a waitlist and is only able to serve a core caseload of 150 children at any given time. In effect, this means that those children who are identified with a possible disability during the initial screening and referral processes described above may not receive resources or support for their disabilities. This is particularly pronounced for children who may require ongoing services, such as physiotherapy or speech and language therapy, as opposed to one-time supports.

- **There is limited training and poor retention of qualified professionals.** Classes for training new professionals are often very limited in their capacity. For example, an NGO staff member studied in a professional training program for prosthesis in Cambodia that can only train four new professionals each year. According to NGOs, even trainees who pass through programs and receive training on disability are challenging to recruit and retain. In part, these challenges exist because of economic reasons: qualified professionals enter private practice or move overseas because they can earn more competitive salaries than in NGO or government positions in Cambodia. It can also be attributed to the challenges with morale or supportive working environment in some government or NGO placements. One NGO project, for example, has recently advertised on four occasions for a qualified physiotherapist with no success.

- **The quality of available referral services varies** . A variety of local and international NGOs, and some segregated schools, have attempted to fill gaps in service provision by hiring their own therapists. For example, the Australia-Cambodia Cooperation for Equitable

Sustainable Services (ACCESS) project is currently attempting to provide technical assistance in managing the country's 11 physical rehabilitation centers (PRCs), including handing over these centers from international NGOs to the Government of Cambodia and helping to produce guidelines for managing the PRCs. Where such efforts have functioned as a stand-in for government-led service provision, NGO respondents reported that the sustainability and quality within government services has lagged. Systemic constraints persist around the access to qualified specialists, particularly in government-run facilities, including local health centers and PRCs. NGO respondents reported that such facilities commonly lack access to monetary resources, training, or qualified therapists and are further limited by a lack of government standards, management, or oversight.

Table 1. Summary of Screening Tools in Cambodia

| Tool | Type of Tool | Validation[8] | Screening Administered By | Organizations Involved | Known Use |
|---|---|---|---|---|---|
| Checklist for Identification of Children with Disabilities (2008) | Prevalence; used as screening | None known | School-level staff with parents as respondents | Ministry of Education, Youth, and Sport (MoEYS) | Used by the Association for Aid and Relief, Japan (AAR-Japan) in Kandal Province to screen for hearing, vision, speech, motor, intellectual "impairment," mental difficulties, and "other diseases" |
| Physical Screening Tools for Newborns; Children 1 Month–5 Years | Diagnostic | Piloted but not validated | Medical professionals, commune health center staff | Endorsed by the Ministry of Health (MoH)<br>Co-developed by GIZ and Humanity and Inclusion (HI) | Part of the minimum package of activities in all the health centers nationally; part of the pre-service curriculum for nurses, midwifes, and pediatricians |
| Cambodian Developmental Milestone Assessment Tool (cDMAT) (2018) | Diagnostic | Yes, detailed validation study in Cambodia | Medical professionals, social workers | Developed by Angkor Hospital for Children with support from GIZ | Used by Safe Haven with focus in Siem Reap to assess for developmental delays |
| Community-Based Developmental Milestone Assessment Tool (CB-DMAT) (2018), ages 6 months–6 years | Screening | Yes, detailed validation study in Cambodia | Community health workers | Developed by Angkor Hospital for Children with support from GIZ | Used by IECD in collaboration with MoSVY in Preah Vihear and Kampong Thom provinces |

8 When the validity of a new or adapted screening tool is being established, the outcomes yielded by that screening tool are initially inspected to see whether they correspond to what is regarded as a definitive indicator (i.e., a "gold standard" diagnostic test) of the same target condition to determine if the screening tool is measuring what it is supposed to measure. Generally, it is important to assess a screening tool's sensitivity (e.g., the ability of a test to correctly identify children with disabilities) as well as a tool's specificity (e.g., the ability of a test to correctly identify children without disabilities). This establishes a tool's validity. See American Educational Research Association, American Psychological Association, & National Council on Measurement in Education (Eds.). (2014). *Standards for educational and psychological testing*. American Educational Research Association.

| | | | | | |
|---|---|---|---|---|---|
| Washington Group Short Set (WG-SS) | Prevalence; used as screening/diagnostic | Validated internationally | Teachers as proxy respondents for students (Save the Children), NGO workers in door-to-door survey (ChildFund) | International tool used by Save the Children and ChildFund (Disability Empowerment and Education Project [DEEP]) | Used by Save the Children since 2017 (e.g., in Kampong Chhnang Province); used by DEEP project (ChildFund, CDPO, Khmer NGO for Education [KHEN]) since 2020 in Battambang Province |
| Guideline for Screening Children with Disabilities at Preschool (2019) | Screening | None known | School-level staff, commune health center staff with children as respondents | Endorsed by MoEYS<br>Developed by Catholic Relief Services (CRS) | Used by CRS in Takeo and Kampot to screen for hearing, vision, intellectual, motor, and speech "impairment" |
| Tumbling E Chart | Vision Screening | Validated internationally | School-level staff, commune health center staff with children as respondents | International tool | Used by Fred Hollows Foundation in schools with referral to eye care specialists in Kandal, Kampong Chhnang, and Preah Sihanouk provinces |
| LEA Chart[9] | Vision screening | Validated internationally | School-level staff | International tool | Used by ACR-Cambodia in Kampong Thom screening activities and by Fred Hollows with pre-literate children |
| Ministry of Social Affairs, Veterans, and Youth Rehabilitation's (MoSVY) Disability Identification System (2021) | Prevalence; used as screening | None known | Village and commune chiefs, community health workers | MoSVY with support from the United Nations Children's Fund[10] (UNICEF) | Short questionnaire completed by local authorities to support national education management information system (EMIS) data and disability identification card issuance |

9 As a part of its screening pilot, the ACR-Cambodia activity also used a simple hearing test to assess whether learners could hear noises made by a tester standing behind them. As this approach has not been continued elsewhere and is no longer in use, it has not been listed in the table.

10 UNICEF. (2021). *Country office annual report: Cambodia.* UNICEF. https://www.unicef.org/media/115856/file/Cambodia-2021-COAR.pdf

| | | | | | |
|---|---|---|---|---|---|
| Primary and Secondary School-Level Screening Tool (2022) | Screening | N/A | School-level staff, potentially parents/guardians | "Minimum standards" for screening under development in collaboration with SED, UNICEF, and RTI | Completion anticipated September 2022 |

## AREA TWO: TEACHER TRAINING

The earliest known teacher training for disability-inclusion in Cambodia began in the 1990s as a grassroot effort led by organizations operating segregated schools, such as Krousar Thmey.[11] In the 2000s, teacher training expanded to address inclusive education in general education schools in line with Education for All's (EFA's) goals and pursuit of a child-friendly school (CFS) model.[12] According to MCSIE's AIM mapping, at least 20 different organizations have supported teacher training for inclusive education in Cambodia in the past 10 years, a figure consistent with previous mapping exercises.[13] This includes international NGOs with Cambodia offices, locally-led Cambodian NGOs, colleges and universities, government actors, and international donor-funded projects. MCSIE's inquiry of teacher training for inclusive education has revealed the following findings.

**Finding 1: Greater attention to supporting learners with disabilities in both pre-service and in-service training programs is increasing teachers' exposure to principles of inclusive education in Cambodia.** This includes standalone inclusive education modules at pre-service and in-service levels, pre-service teacher training for special educators focused on specific disability categories, and NGO-led projects that embed broad advocacy messages for inclusion.

- **Stakeholders report an increased focus on inclusive education among those delivering in-service training.** Whether inclusive principles are embedded in broader education training or delivered as discrete modules, stakeholders have described an active landscape for teacher training on inclusion in Cambodia. ACR-Cambodia aimed to ensure that its teacher training program embedded principles of inclusive education into its general training as did Save the Children in its current practices. Other NGOs have also provided standalone training to teachers on issues of inclusive education, for example, ongoing training led by CRS, AAR-Japan, and ChildFund's DEEP project. UNICEF has also supported SED staff and provincial trainers to deliver the MoEYS's 28-hour inclusive education training program, which UNICEF reports reached approximately 10 percent of primary and pre-school teachers in seven provinces over the past three years. Some NGOs, such as Aide et Action, take a blended

11 Neang, P. (2019). *Kingdom of Cambodia: The process of special school transfer.* PowerPoint presentation.

12 Kalyanpur, M. (2011). Paradigm and paradox: Education for All and the inclusion of children with disabilities in Cambodia International Journal of Inclusive Education, *15*(10). 1053-1071. https://doi.org/10.1080/13603116.2011.555069

13 NGO Education Partnership. (2017). *Rapid mapping of NGOs working in education for children with disabilities.* http://memlib.nepcambodia.org/libraries?page=3

approach by delivering the MoEYS's 28-hour course alongside broader messaging on educational inclusion for all learners.

- **Expansion of inclusive e ducation within pre -service training programs increases future teachers' exposure to inclusion principles.** The 28-hour training package mentioned above is also used in slightly different formats at pre-service levels, including one package for pre-primary teachers, one for primary school teachers, and one for secondary school teachers. UNICEF is actively involved in supporting the MoEYS to roll out these pre-service packages at all grade levels across all 18 provincial teacher training colleges (PTTCs) nationally, the progress for which is currently most advanced at the primary school pre-service level. UNICEF is also supporting a twin-track approach to teacher training through continued support to the National Institute for Special Education (NISE) and special schools with the Special Diploma on Deaf Education and the Special Diploma on Blind Education, along with current support to the development of a one-year pre-service training curriculum for teachers of students with intellectual disability and autism.[14] These students are generally educated in segregated special schools or "integrated" classes separate from general education in public schools, and it is unclear that any plans are underway to ensure newly trained teachers work in inclusive settings.

**Finding 2: Understanding or measuring the impact of training programs for inclusive education is challenging, and many training programs may be too brief in nature to achieve the desired impact.** Kalyanpur (2011) described that inclusive education trainings in Cambodia:

> Usually consist of a workshop between two and five days long, on a variety of topics, of which the most predominant is the component of effective teaching and learning, which rarely, if ever, contain a practical component, and there is little follow-up to ensure implementation of teachers' learning. […] When training is provided through international technical assistance, in most cases, it involves western models that are often quite inappropriate to the context and, compounded by the language barrier, end up being rather ineffective. (p. 1063)

Eleven years after Kalyanpur's (2011) publication, interviews and document reviews for this study suggest that in-service trainings continue to largely be between two and five days long,[15] and many organizations struggle to quantify or measure the impact of these trainings on inclusive teaching

[14] We briefly discussed with UNICEF a possible unintended consequence of this training program: it will likely reinforce the segregation of students with intellectual disability in classrooms led by teachers who attend this pre-service training, since there are no known plans for this training to target general education teachers.

[15] We uncovered that the longest duration of in-service training on disability inclusion was 10 days per year and was delivered through AAR-Japan to teachers in the Kandal Province pilot activities.

practices. This was similarly observed in the MCSIE's interim report for ACR-Cambodia,[16] where evaluators noted that a 90-minute training session on inclusive education was brief in nature and that ACR-Cambodia collected but did not systematically review data on trained teachers' inclusive practices in the classroom.

- **Teachers with access to only brief training on inclusive education are less confident, not more confid ent, to deliver inclusion.** A 2015 survey revealed that Cambodian teachers who had access to training on inclusive education were no more likely to support learners with disabilities accessing an inclusive education than teachers who did not have access to training.[17] The study's authors postulated that this was, in part, linked to the diffusion of key messages using cascade training models and that the purpose and methods of inclusive education were not being clearly conveyed in the first instance. CRS gleaned a similar finding in its 2022 baseline study of a pilot project aimed to support young children with disabilities: trained teachers expressed support for inclusive home-based learning but lacked confidence in implementing inclusive teaching strategies in their own classrooms.[18] A third instance of this finding has been gleaned from forthcoming MCSIE analysis of pre-post surveys conducted with ACR-Cambodia teachers without prior disability experience; these teachers felt less prepared than before to teach learners with disabilities after a project workshop. In each of these examples, training may have been long enough to impress upon teachers the importance of inclusive education, but too short to develop the skills and strategies needed to implement inclusion in practice.

- **There is limited measurement of the impact of teacher training for inclusive education.** Every organization interviewed for the AIM agreed that teachers need more training on how to deliver inclusive education, but what "more training" means may be guided in part by what has or has not worked in context. For example, a 2017 external evaluation of Organization to Improve Communication (OIC) Cambodia's three-day training program for 180 teachers to support students with communication difficulties revealed that 86 percent of teachers did not feel the training was relevant to them.[19] One factor that contributed to these

[16] The MCSIE Cambodia Interim Report is available at https://www.edu-links.org/resources/learning-multi-country-study-inclusive-education

[17] Kuroda, K., Kartika, D., & Kitamura, Y. (2017). Implications for teacher training and support for inclusive education in Cambodia: An empirical case study in a developing country. *JICA Research Institute.* https://www.jica.go.jp/jica- ri/publication/workingpaper/wp_148.html

[18] Allen, B. S., Kinmai, P., & Sotheany, S. (2022).*Project baseline report for strengthening and scaling caregiver-led learning support for children with disabilities.* Catholic Relief Services.

[19] Bryce, R., Posnett, M., & Viriya, Y. (2017).*Independent evaluation report– Inclusive education for students with communication difficulties: Teacher training project 2016.* OIC Cambodia.

results was the suggested use of tools lacking appropriateness to local context, such as individualized education plans. Access to this type of teacher feedback serves a critical role in ensuring that future training efforts are useful. In our interviews, one major organization involved in teacher training for inclusion was unable to share any information about the impact of training on student learning outcomes or instructional quality, although it has planned to conduct an assessment in late 2022. Another organization neither described any known results of its teacher training on inclusive education, nor any plans to measure the impact of this training in the future. Save the Children, another organization involved in expanding teacher training for inclusion, has indicated its intentions to be more deliberate with upcoming program evaluations to better understand their projects' impacts on learners with disabilities, a reflection on the need for more evidence nationally.

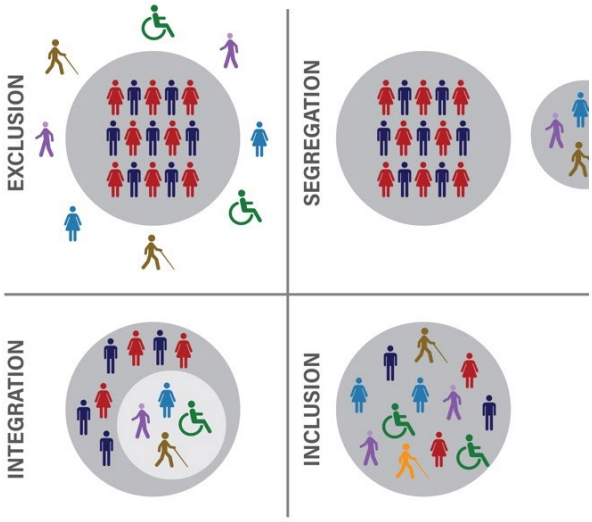
**Finding 3: The content of teacher training is often focused on defining categories or severity of disability rather than instructional approaches supportive of inclusive teaching.** Some NGO staff described training content that focuses on general awareness-raising for inclusion and the use of TLMs to support inclusive pedagogy. Other NGOs, on the other hand, continue to embed training that focuses on recognizing different categories of disability, such as intellectual disability, with accompanying strategies specific to those disability categories. This approach is also reflected in the SED's own 28-hour training manual, which does provide some general inclusion strategies, but then proceeds to provide guidance specific to both identifying and teaching to different disabilities. One NGO respondent clarified that its training was on inclusive education for students with perceived mild to moderate disability, but "for the severe, we do not work with them." However, some interview respondents, including those from the Inclusive Primary Education Activity (IPEA), a follow-on activity from ACR-Cambodia, have indicated their intentions to embed more UDL principles within future teacher training activities, an approach that may help to support inclusion in contexts where teachers are unable to identify specific disabilities.

## AREA THREE: INSTRUCTION

The educational placement of learners with disabilities in Cambodia must be understood against the backdrop of the education system in Cambodia more broadly. The destruction of much of the population and infrastructure under the Khmer Rouge regime from 1975–1979 decimated the education system and its qualified professionals, necessitating a complete rebuilding over the past decades. Against this challenging context emerged some of the earliest efforts to educate children with disabilities in Cambodian society. In the 1990s, NGOs began establishing a small number of segregated schools for people with specific disabilities. This included the five schools run by Krousar Thmey, which served as

the foremost effort to provide education for people with vision or hearing disabilities (the first school was established in 1994); the Lavalla School for students with physical disabilities; and the Rabbit School for children with intellectual disability.[20] Supported by funding from international partners, such as UNICEF, MoEYS then developed an initial model for inclusive education in nine primary schools with inspiration from a successful Laotian approach that ran from 1993–2009.[21] Presently, NGO and government actors alike recognize the pervasive need for more resources and support to the instruction of children with disabilities in Cambodia. Yet, promising practices related to inclusive teaching practices can serve as bright spots for future scale up, which are shared further below. In Cambodia, efforts are underway to promote inclusive education, yet many students with disabilities currently receive instruction in segregated or integrated settings as shown in Figure 2.

Figure 2. Educational Experiences for Students with Disabilities




**Finding 1: Instructional placements are moving in an inclusive direction yet are still highly segregated.** NGO and government-supported instructional placements span from totally segregated special schools including a few with boarding facilities, integrated classes, and some support to inclusive educational settings.

Currently, the SED directly oversees 11 integrated classrooms, yet the vast majority of integrated classes are donor-supported, such as those run by the Rabbit School for approximately 500 students with intellectual disability. While these classes are described as "integrated," in practice, they are actually

[20] Kalyanpur, M. (2016). *Inclusive education policies and practicesin the context of international development: Lessons from Cambodia.* https://www.waxmann.com/index.php?eID=download&id_artikel=ART102019&uid=frei; Neang, P. (2019). *Kingdom of Cambodia: The process of special school transfer*. PowerPoint presentation.

[21] Kalyanpur, M. (2011). Paradigm and paradox: Education for All and the inclusion of children with disabilities in Cambodia. *International Journal of Inclusive Education, 15*(10), 1053–71. https://doi.org/10.1080/13603116.2011.555069; Neang, P. (2019). *Kingdom of Cambodia: The process of special school transfer.* PowerPoint presentation.

classes composed only of children with disabilities but physically located in or near general education schools.

Segregated schools include those run and funded by the government through the leadership of NISE (formerly overseen by Krousar Thmey) and special schools that are privately funded, such as the Lavalla School, Footprints International School's (FIS) Center for Adaptive and Responsive Education (CARE) Program, or the Rabbit School. Some segregated schools and integrated classes attempt to provide support to children to transition into general education classrooms for half days or whole days or provide a foundational or remedial education to students prior to transitioning full time into general education schools (e.g., NISE, the Rabbit School, Epic Arts, and the Lavalla School). Yet, it is challenging to quantify just how many learners with disabilities have been successfully supported to transition to fully inclusive classrooms and what educational outcomes they have achieved.[22] There is also an absence of data to measure how many classrooms are actually delivering an inclusive education to learners with disabilities by providing appropriate supports[23] versus how many classrooms merely place learners with disabilities in general education classrooms without providing any supports.

**Finding 2: Some organizations support disability-inclusive instructional practices, but limited oversight and monitoring presents challenges to the fidelity of implementation.**[24] In terms of instructional practices supporting children with disabilities to learn in general education settings, one area of focus is providing teachers with TLMs that can support students with and without identified disabilities. Such efforts have been vast and have included the use of low-cost materials in inclusive schools, development of sensory and easy-read stories, adaptation of materials into braille, provision of educational games and large print books, and the establishment of one resource room that offers adaptive and supplementary materials to an integrated school. These activities have been led by ACR-Cambodia, AAR-Japan, CRS, Save the Children, and Aide et Action, among others. However, there are challenges with the fidelity of implementation, in that NGO reports reviewed by MCSIE evaluators focused more on inputs in terms of numbers of teachers trained and number of materials provided, versus outputs or outcomes, such as measures of student retention or achievement.[25]

One noteworthy area of development in instructional practices includes the recent and ongoing multi-stakeholder efforts to produce resources for students who are deaf or hard of hearing. Collaboration among many NGOs and government actors (NISE, the Deaf Development Program [DDP], Krousar

22 The NISE special schools do collect data on their students, but national data on the transition to inclusion from segregated or integrated schools is not known to exist.

23 Hayes and Bulat (2018) explained that Krousar Thmey schools (now NISE) provided training to general educators supporting students with disabilities to transition from special schools. However, in practice, students who are deaf did not have access to a full-time CSL interpreter during their participation in general education classes.

24 This AIM study did not include direct observations in classrooms supporting children with disabilities, but KIIs with various stakeholders described the resources and support provided to schools.

25 The ACR-Cambodia activity attempted to collect larger scale student achievement data, including among children with disabilities, but these efforts were hampered by the COVID-19 pandemic.

Thmey, Save the Children, ACR-Cambodia, etc.) has helped to produce a variety of instructional materials and videos in Cambodian Sign Language (CSL). These not only assisted students to access remote educational materials during the COVID-19 pandemic but have also helped to create a database of resources available to people who are deaf or hard of hearing nationally. Again, however, there is no known data that measures the impact of CSL materials on student learning outcomes, and data was harder to collect during the two school years impacted by the COVID-19 pandemic.

It is important to note that NGO and government support directly to learners with disabilities in fully inclusive classrooms appears to be the least-resourced area as compared to segregated or integrated education. Beyond NGO-funded pilot projects that deliver resource-intensive supports to learners with disabilities in select schools, it is unclear whether any data is being systematically collected on the number of inclusive classrooms that exist in Cambodia, and the absence of consensus on what a truly inclusive classroom encompasses (integration versus inclusion) could hinder any data collection efforts.

**Finding 3: There are several reported systemic barriers to realizing inclusive education practices in Cambodia.** They are, as described by government and NGO respondents, as follows:

- Classroom teachers working in inclusive schools lack the training, resources, or supports they need to implement inclusion effectively, which is commonly used as a rationale for continuing segregated and integrated educational systems. No evidence of UDL approaches were found outside of the ACR-Cambodia activity. The CRS early childhood package is using child-centered strategies in their manual, but impact of this approach is unknown.

- Some advocates for learners with disabilities, especially those with significant support needs such as intellectual disability, have flagged serious safety and child welfare concerns for those children who are at risk of exploitation and abuse and unable to communicate their needs, including reports from one respondent of pervasive sexual abuse. From this perspective, a safe and supportive school environment, even if segregated, is viewed as a higher-order priority than promoting inclusion in schools unprepared to guarantee children's welfare.

- There are institutional challenges to scaling up the teaching workforce for disability-inclusion, including procedural challenges in transitioning the salaries of "integrated" classroom teachers from NGO-funded payrolls to government payrolls. Multiple NGOs have described funding salaries for integrated class teachers in initial stages but described struggling to secure the government's commitment to continue funding these teachers' salaries beyond the donor's lifetime.

- One NGO respondent cited that the government's disinterest in inclusive classrooms is a reason they established an integrated class as an alternative to their original plans of supporting inclusive education.

- As with other areas of intervention, there are continued concerns around sustainability in inclusive teaching; one NGO respondent stated, "When you look at the schools, when NGOs withdraw from projects there is nothing remaining. […] When they leave, there is no more inclusion."

**Finding 4: A variety of wrap-around and related support services help to bolster the success of education for children with disabilities.** Many services and supports have emerged from grassroots efforts to help create enabling environments for children with disabilities, even if not yet fully inclusive. While fragmented in terms of geographic reach and scale, they offer bright spots against which further progress can be made. Examples include:

- Support to out-of-school children and the provision of pathways for enrollment, including Aide et Action's Cambodian Consortium of Out of School Children that aims to enroll over 100,000 marginalized children through school enrollment campaigns, scholarships, school mapping, and other strategies. Epic Arts plans to begin implementing a mobile classroom in 2022 to reach children with disabilities in remote areas. Door-to-door campaigns to locate out-of-school children and support their enrollment have also been explored by AAR-Japan in Kandal and ChildFund in Battambang (in collaboration with KHEN and CDPO). Other efforts were intensified during COVID-related school closures, such as UNICEF's support in providing remedial education resources for learners with disabilities.

- Caregiver engagement and awareness-raising efforts that help to provide resources, training, and support to caregivers of children with disabilities to support their children's education at home and encourage continued school enrollment. Examples include CRS's project focused on strengthening and scaling caregiver-led learning support for children with disabilities and ChildFund's DEEP project in Battambang Province.

- Infrastructure improvements to make school environments physically accessible, such as NGO-funded projects that make accessible toilets, add ramps and handrails, or make playground equipment adaptive and inclusive.

- Enrichment, job training, and non-formal education programs for children with disabilities, such as Epic Arts' music, dance, and skill development programs in Kampot Province or Komar Pikar Foundation's (KPF) life skills activities.

## ADDITIONAL SYSTEM KEY THEME: STAKEHOLDER COLLABORATION

Whether related to screening and identification, training, or instruction as described above, stakeholder collaboration emerged as a major theme across all activities. The following are the core findings related to stakeholder collaboration.

**Finding 1: The SED serves as an essential convenor but lacks internal capacity and depends on significant NGO support to implement core priorities.** Most NGO respondents noted that the SED, as a newly established department in the MoEYS, serves as a key advocate for inclusion yet requires significant capacity strengthening and resourcing support. As a result, various organizations and projects attempt to fill the gaps not currently met through government implementation, such as the 46 NGO partners referenced by the SED as active collaborators. NGO respondents noted that the SED is very open to collaboration but also observed a tendency for many different activities of a similar nature to operate in parallel (such as screening and teacher training activities) that are run by different NGOs operating across different provinces. The result is a patchwork of projects and activities that lack clear pathways for sustainability or scalability. As one respondent explained, "It seems like working in parallel rather than coming on board to work together. At the end of the day, it's just there, but not in the system." The same respondent explained that the SED is willing to coordinate with NGO partners, but the strategies to unite these NGOs across the country together and harmonize implementation still require improvement.

**Finding 2: Various action groups exist to support stakeholder collaboration, information sharing, and national advocacy for disability-inclusive education.** Established in 2015, the most active action group related to disability-inclusive education is the Working Group for Education and Disabilities (WGED). WGED is run under the NGO Education Partnership (NEP), convening regular meetings between NGOs, OPDs, the SED, NISE, and the MoEYS in general. This includes an annual National Forum on Inclusive Education to raise awareness and share lessons learned related to inclusive education in Cambodia. A 2021 Terms of Reference (ToR) document noted 23 active WGED members from 22 different organizations.[26] NEP is also represented in the Education Sector Working Group (ESWG) that focuses on high-level dialogues on policy, strategy, and assistance to the government in education, although this is not inclusion-specific. In other sectors, advocacy groups such as the Partnership Program for the Protection of Children (3PC) addresses issues of child protection, including issues related to children with disabilities. Formerly, the Disability Action Council (DAC) also convened working groups that are currently inactive. Collectively, these entities help to facilitate cross-stakeholder collaboration on issues that support children with disabilities.

## RECOMMENDATIONS

Following the analysis of above trends and themes related to inclusive education in Cambodia, the MCSIE team has furnished the following recommendations for USAID and others interested in supporting disability-inclusive education in Cambodia.

**Recommendation 1: Develop consensus on definitions of disability and inclusive education prior to commencing new activities.** As discussed in the ACR-Cambodia interim report, MCSIE evaluators have observed that one reason there are divergent approaches to promoting disability-inclusive education in Cambodia is that actors define key terms and objectives differently. For example, projects promoting embedded inclusive approaches consistent with UDL for students in general education schools target children with both identified and unidentified disabilities, such as learning

[26] NGO Education Partnership. (2021, Sept. 8). *WGED: ToR and governance structure. https://* nepcambodia.org/2021/09/08/working-group-on-inclusive-education-wged/

disabilities (e.g., ACR-Cambodia); however, the SED does not recognize learning disabilities as a distinct category of support need and conflates the term with intellectual disability. The same has been observed in defining inclusive education: some actors view this as educating learners with disabilities in any setting, while others view inclusive education as educating learners with disabilities in general education schools with appropriate supports.[27] A lack of consensus on key terms may result in projects and programs that aim to support disability-inclusive education but enact this aim in conflicting and even opposing ways, undermining the collective national efforts instead of bolstering them. In the future, developing definition consensus should consider both the Khmer and foreign (i.e., English) language translations of terms, as MCSIE evaluators have observed that definitions agreed upon in one language do not uniformly translate to another.

**Recommendation 2: Pause and reflect on the long-term consequences of school-based screening and identification of disabilities.** Widespread efforts to screen and identify children with disabilities in Cambodian schools are linked with a desire among government and NGOs to generate more accurate national data and to furnish children with the supports they need to help them to succeed in school. Yet in practice, the above review has indicated that neither aim is being achieved with quality or fidelity (particularly in schools, as opposed to the use of health professionals), and a significant duty of care arises for those children who are identified with a disability but lack access to follow-up support services needed. There is also the misuse of census-level prevalence tools like the Washington Group questions with identification and diagnostic tools. One approach might be to focus on strengthening national health systems that support and provide services for children with disabilities, including basic hearing and vision screenings in community clinics, along with the expanding and systematizing of training and retention systems for qualified professionals, including allied health providers to provide follow-up supports (speech, occupational, and physical therapists, social workers, etc.). Given the widespread shortage of such professionals to support the few children already identified in the system, no amount of additional screening and referral activities will provide direct benefits to children with disabilities if they are not accompanied by any available services.

**Recommendation 3: Scale up pre-service teacher training for inclusive education, embedding UDL principles and preparing teachers to support all learners including those with "hidden" disabilities.** As profiled in this review, in-service training programs are generally too short and too surface-level to be linked with any concrete impact on the inclusion of children with disabilities in general education classrooms. On the other hand, pre-service training affords an opportunity to deepen teachers' knowledge and practice over a greater period of time prior to their employment in schools. At the pre-service level, MCSIE evaluators have also observed inclusive education training modules that are highly focused on specific categories of disability (i.e., the anatomy of

[27] One resource that may assist in developing a shared understanding of inclusive education is the International Disability Alliance's guidance on inclusive education: "In an inclusive education system, all learners with and without disabilities learn together with their peers in schools and classes in their local community schools. They all receive the support they need, from preschool to tertiary and vocational education, in inclusive and accessible schools that are responsive to cultural and community values, evidence and best practices, and individual preferences." More information: https://www.internationaldisabilityalliance.org/sites/default/files/ida_ie_flagship_report_english_29.06.2020.pdf

the eye and medical factors that can cause blindness) as opposed to inclusive instructional strategies consistent with UDL approaches for all students (i.e., presenting information in multiple ways to support diverse learning styles). There are also specific training programs for special educators focusing on skill development in using CSL and braille, which are essential to ensuring a workforce capable of serving students who are deaf or hard of hearing and who are blind or have low vision. Yet, there is scope for more pre-service training among general educators to teach students currently in general education settings who have unidentified disabilities like learning disabilities, speech or communication disabilities, and intellectual disability. Developing a shared definition of disability-inclusive education that includes these "hidden" disabilities and recognizes inclusive education (with appropriate supports) as an ultimate aim for most learners with disabilities can help guide the development of additional or revised pre-service curricula which will then prepare teachers to support all students.

**Recommendation 4: Consider small-scale pilots of inclusive co-teaching classrooms in general education classrooms.** NGOs and government stakeholders have built a small but sizeable workforce of teachers who work exclusively with children with disabilities in integrated classrooms, which in practice are often segregated classrooms co-located in general education school buildings. In many cases, these integrated class teachers are working with as few as five learners with disabilities, and learners with disabilities experience no opportunities to study alongside their peers without disabilities. This presents an opportunity to pilot co-teaching models in general education schools where a general and special educator can support students without disabilities and those with disabilities in a single classroom by delivering the services and supports necessary to ensure inclusion. Such a plan could be bolstered by an initial analysis of systemic strengths and gaps in expertise and resourcing, to identify what supports will be needed to enact this plan. For example, while some training and ongoing support would be required (gaps), the staffing resources (strengths) to enable a two-teacher classroom are already available within existing systems and could promote the progressive realization of inclusive education.[28]

## ANNEX A. DATA SOURCES

The MCSIE team began remote data collection for AIM in 2020 and attempted some remote interviews in 2021 but ultimately opted to delay completion of data collection until in-person visits could be completed in 2022 following the removal of COVID-related travel restrictions.

Table 2. KII and FGD Information

| Organization | Date of Meeting | Mode of Meeting | Male # | Female # |
|---|---|---|---|---|
| Safe Haven | April 16, 2021 | Zoom | | 1 |
| Footprints International School (FIS) CARE Program | April 19, 2021 | Zoom | 1 | |

[28] IDP recognizes that the definition of inclusive education for children who are deaf or hard of hearing differs from other populations, as such individuals require access to a sign-language-rich environment. However, it is unclear why, for example, five children with intellectual disability currently accessing a segregated education could not benefit from the inclusive co-teaching model described above.

| | | | | |
|---|---|---|---|---|
| Humanity and Inclusion (HI) | May 12, 2021 | Zoom | | 2 |
| Fred Hollows | April 19, 2022 | In-person | 1 | |
| USAID Integrated Early Childhood Development – RTI | April 20, 2022 | In-person | 2 | |
| AAR-Japan | April 21, 2022 | In-person | 1 | 1 |
| Safe Haven | April 21, 2022 | Zoom | | 2 |
| Save the Children | April 25, 2022 | In-person | 2 | 1 |
| Special Education Department (SED) | April 26, 2022 | In-person | 1 | |
| Lavalla School | April 26, 2022 | In-person | | 2 |
| Catholic Relief Services (CRS) | April 26, 2022 | Zoom | 2 | 1 |
| UNICEF | April 27, 2022 | Zoom | 2 | |
| Epic Arts | April 28, 2022 | Zoom | | 1 |
| Access | April 28, 2022 | Zoom | | 1 |
| USAID Inclusive Primary Education Activity (IPEA) – RTI | April 28, 2022 | In-person | 1 | |
| Rabbit School | April 29, 2022 | In-person | 1 | |
| Aide et Action | April 29, 2022 | Zoom | 1 | |
| NISE | May 6, 2022 | Zoom | | 1 |
| ChildFund | May 12, 2022 | Zoom | 2 | |
| | **Total** | | 17 | 13 |

## ANNEX B. DOCUMENTS REVIEWED

Aide et Action. (2019, June 2). *Inclusive education for children with disabilities and ethnic minority children.* https://seac.aide-et-action.org/project/inclusive-education-for-children-with-disabilities-and-ethnic-minority-children/

Allen, B., Kinmal, P., & Sotheany, S. (2022). *Project baseline report for strengthening and scaling caregiver-led learning support for children with disabilities.* Catholic Relief Services.

American Educational Research Association, American Psychological Association, & National Council on Measurement in Education (Eds.). (2014). *Standards for educational and psychological testing.* American Educational Research Association.

Association for Aid and Relief, Japan. (2017). *Activity report for the year of 2017.* http://www.aarjapan.gr.jp/English/

Association for Aid and Relief, Japan. (2018). *Activity report for the year of 2018.*

Association for Aid and Relief, Japan. (2019). *Activity report for the year of 2019.*

Association for Aid and Relief, Japan. (2020). *Activity report for the year of 2020.*

Association for Aid and Relief, Japan. (n.d.). *Cambodia projects and activities.* https://www.aarjapan.gr.jp/English/activity/Cambodia/

Bailey, S., & Nguon, S. K. (2014). *Situation analysis for disability-inclusive governance and community development in Cambodia.* https://www.dfat.gov.au/sites/default/files/cambodia-disability-inclusive-governance-community-development-sit-analysis.pdf

Baker-Munton, Claire. (2019, March 21). *Special education needs. Invisible children.* https://southeastasiaglobe.com/special-educational-needs-cambodias-invisible-children/

Ball, J., & Smith, M. (2019). *Independent evaluation of multilingual education national action plan in Cambodia (July 2018–February 2019).* https://www.unicef.org/cambodia/media/1061/file/2019-Cambodia%20MENAP-Evaluation%20Report-Volume-I.pdf%20.pdf

Brouillette, R. (2014). *Save the Children – Cambodia manual for screening Cambodian children for disabilities.*

Bryce, R., Posnett, M., & Viriya, Y. (2017). *Independent evaluation report inclusive education for students with communication difficulties: Teacher training project 2016.* OIC Cambodia.

Burnett, A., Paudel, P., Massie, J., Kong, N., Kunthea, E., Thomas, V., Frucke, T., & Lee, L. (2021). Parents' willingness to pay for children's spectacles in Cambodia. *BMJ Open Ophthalmology, 6*(1), e000654.

Cambodian Development Mission for Disability (CDMD). (n.d.). *Inclusive Education Project.* http://www.cdmdcambodia.org/mother-s-mobile-clinic/

Caritas. (2019). *Annual report 2019.* https://www.caritascambodia.org/index.php/publication/annual-report/17-publication/449-annual-report-fy2019

Catholic Relief Services. (n.d.). *Cambodian Minster of Education endorses disability screening tool and toys and games manual for nationwide use.* https://www.crs.org/media-center/news-release/cambodian-minister-education-endorses-disability-screening-tool-and-toys

Catholic Relief Services Cambodia. (2014). *Mid-term review report social care and inclusive education for children with disabilities in Cambodia.*

ChildFund Cambodia. (n.d.). *Term of Reference. The baseline survey for Disability Empowerment and Education Project-DEEP (KH10-001) in Samlout and Rukhak Kiri district, Battambang Province, Cambodia.*

Epic Arts. (2017). *2017 review and annual report.* http://epicarts.org.uk/wp-content/uploads/2018/07/Epic-Arts-Annual-Report-2017.pdf

Evans, P., Shah, S., Huebner, A., Sivasubramaniam, S., Vuthey, Ch., Sambath, K., Haurisa, L., & Borun, Y. (2014). A population-based study on the prevalence of impairment and disability among Cambodian children. *Disability, CBR, and Inclusive Development (DCID), 25*(2), 1–20. http://dcidj.org/article/view/188

Footprints International School (n.d.) *Footprints International School CARE program.* https://footprintsschool.edu.kh/teaching-learning/fis-care/

Global Partnership for Education. (2018). *Disability and inclusive education: A stocktake of education sector plans and GPE-funded grants.* https://www.globalpartnership.org/sites/default/files/2018-07-gpe-disability-working-paper.pdf

Global Partnership for Education. (2018). *GPE in action.*

Global Partnership for Education. (2020). *Proposal Global Partnership for Education (GPE) COVID-19 accelerated funding for Cambodia.*

Hang, P., Khorn, D., Prigent, S., & Yuth, K. (2017). *Research Report 'I'm learning!' pilot in Cambodian primary schools (2013–2017): Community-based monitoring and connection to educational praxis Cambodia Research Team Kampuchean Action for Primary Education (KAPE).*

Hang, P., Khorn, D., Prigent, S., & Yuth, K. (2018). The impact of holistic educational programs on quality and learning outcomes in Cambodia. *Journal of Modern Education Review.*

Hayes, A. M., & Bulat, J. (2018). *Cambodia situational analysis of the education of children with disabilities in Cambodia report.* https://ierc-publicfiles.s3.amazonaws.com/public/resources/ACR-Cambodia_Final%20Cambodia%20Disabilty%20Situation%20Analysis%20Report.pdf

Hayes, A. M., Dombrowski, E., Shefcyk, A., & Bulat, J. (2021, April). *Learning disabilities screening and evaluation guide for low- and middle-income countries*. RTI Press. https://www.rti.org/rti-press-publication/learning-disabilities-screening/fulltext.pdf

Heam, H. (2019). *Report dissemination workshop on child development milestone assessment and stimulation tools.*

International Disability Alliance. (2020, March). *What an inclusive, equitable, quality education means to us.* https://www.internationaldisabilityalliance.org/sites/default/files/ida_ie_flagship_report_english_29.06.2020.pdf

Kalyanpur, M. (2011). Paradigm and paradox: Education for All and the inclusion of children with disabilities in Cambodia. *International Journal of Inclusive Education, 15*(10), 1053–1071. https://doi.org/10.1080/13603116.2011.555069

Kalyanpur, M. (2016). *Inclusive education policies and practices in the context of international development: Lessons from Cambodia.* https://www.waxmann.com/index.php?eID=download&id_artikel=ART102019&uid=frei

Kampuchean Action for Primary Education. (2019). *Annual report 2019.* http://www.kapekh.org/files/report_file/116-en.pdf

Khmer NGO for Education. (n.d.). *Inclusive education project.* https://www.khencambodia.org/inclusive-project.html

King, J. A., King, M. J., Edwards, N., Hair, S. A., Cheang, S., Pearson, A., & Coelho, S. (2018). Addressing transport safety and accessibility for people with a disability in developing countries: A formative evaluation of the Journey Access Tool in Cambodia. *Global Health Action, 11*(1), 1. https://doi.org/10.1080/16549716.2018.1538658

Kingdom of Cambodia. (2018). *Policy on inclusive education.* Not available online.

Kingdom of Cambodia. (2019a). *Action plan on inclusive education: 2019–2023.* Not available online.

Kingdom of Cambodia. (2019b). *Education strategic plan 2019–2023.* https://www.globalpartnership.org/sites/default/files/document/file/2019-10-education_sector_plan-cambodia.pdf

Kingdom of Cambodia. (2019c). *Guideline for screening children with disabilities at preschool.*

Kingdom of Cambodia. (2019d). *Toys and games prototypes for preschool teachers.*

Kingdom of Cambodia (2021). *Report on 9th national forum on inclusive education theme: Capacity building of teachers to teach persons with special needs in all education institutions.*

Krousar Thmey. (2017). *Terms of Reference. Call for tenders Krousar Thmey consultancy for video product ASL project.* https://www.krousar-thmey.org/wp-content/uploads/2017/06/Call-for-tenders-KROUSAR-THMEY-Consultancy-for-video-production-ASLC-project-Final-V2.pdf

Krousar Thmey. (2019). *Rapport annuel 2019.* https://www.krousar-thmey.org/wp-content/uploads/2020/06/Rapport-Annuel-2019.pdf

Krousar Thmey. (n.d.). *Words and pictures application*. https://www.krousar-thmey.org/en/signs/

Kuroda, K., Kartika, D., & Kitamura, Y. (2017). *Implications for teacher training and support for inclusive education in Cambodia: An empirical case study in a developing country.* JICA Research Institute. https://www.jica.go.jp/jica-ri/publication/workingpaper/wp_148.html

Lewis, I., Kaplan, I., & Little, D. (2011). *Inclusive education: Manual for teacher trainers.* Handicap International/EENET. http://www.hiproweb.org/fileadmin/cdroms/Inclusive_Education2014/CambodiaEENETHIIEManual2011.pdf

Lunsford, M., Say, S., & Shahkhalili. (2018). *Inclusion and quality in Islamic schools, Buddhist monastic schools, floating schools.*

Marist Solidarity Cambodia. (2020). *Lavalla School.* http://www.maristsolidaritycambodia.org/our-projects/lavalla-school

Ministry of Health. (2017a). *Physical screening for newborns (0–28 days) national protocol.*

Ministry of Health. (2017b). *Physical screening for young children (1 month–5 years) national protocol.*

Ministry of Health. (2017c). *Referral pathways for positively physically screened children for referral hospital medical doctors.*

Ministry of Health. (2017d). *ToT training for physical screening for newborns (0–28 days) and young children (1 month–5 years) national protocol.*

Neang, P. (2019). *Kingdom of Cambodia: The process of special school transfer.* PowerPoint presentation.

NGO Education Partnership. (2017). *Rapid mapping of NGOs working in education for children with disabilities.* http://memlib.nepcambodia.org/libraries?page=3

NGO Education Partnership. (2021). *WGED: ToR and governance structure draft on September 08, 2021.* https://nepcambodia.org/2021/09/08/working-group-on-inclusive-education-wged/

Ngoun, C., Stoey, L. S., van't Ende, K., & Kumar, V. (2012). Creating a Cambodia-specific developmental milestone screening tool—A pilot study. *Early Human Development, 88*(6), 379–385. https://doi.org/10.1016/j.earlhumdev.2011.09.014

OIC Cambodia. (2017). *Independent evaluation report: Inclusive education for students with communication difficulties: Teacher training project 2016.* http://docplayer.net/53829983-Independent-evaluation-report.html

Pagel, R., & Maxson, L. (2020, November). *Collecting data on disability prevalence in education programs.* USAID.

Rabbit School. (2019). *Where all children can learn and grow.* https://static1.squarespace.com/static/5940eb9a414fb5787b3436ac/t/5e3b6dc09f9dc6477d2197b4/1580953042761/Activities+flyer+2019.pdf

RTI International. (2018). *Cambodia situational analysis of the education of children with disabilities in Cambodia report.*

RTI International. (2019, Jan. 19). *USAID/Cambodia – All Children Learning: Hearing and vision disability screening report.* USAID. https://ierc-publicfiles.s3.amazonaws.com / public/resources/Cambodia%20Screening%20Report_Approved.pdf

RTI International. (2020a). *USAID/Cambodia—Integrated early childhood development activity FY2020 Q4 & annual report.*

RTI International. (2020b). *USAID/Cambodia—Integrated early childhood development activity FY2020 Q2 & annual report.*

Ryall, C., & Zook, L. (2018). *I'm Learning Cambodia country report.*

Safe Haven. (2018). *Safe Haven medical outreach report 2018.* https://safehavenkhmer.org/wp-content/uploads/2020/04/Safe-Haven-Annual-Report-2018.pdf

Save the Children. (2017). *Inclusive education for all.* https://cambodia.savethechildren.net/sites/cambodia.savethechildren.net/files/library/Brochure_A5_IKEA_2017_LR.pdf

Save the Children. (2019). *Mainstreaming inclusive education: Sharing good practices.*

Save the Children. (n.d.). *Policy brief 2 basic education.*

Save the Children. (n.d.). *Save the Children: Preparing for and responding to Covid-19 in Cambodia.*

Savi, K. (2019). *Government, NGO launch disabled children teaching manual.* https://www.phnompenhpost.com/national/government-ngo-launch-disabled-children-teaching-manual

Shankar, R., Rowe, C., Van Hoorn, A., Henley, W., Laugharne, R., Cox, D., Pande, R., Roy, A., & Sandar, J. W. (2018). Under representation of people with epilepsy and intellectual disability in research. *PLoS ONE, 13*(6), e0198261. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6013187/pdf/pone.0198261.pdf

Simala, P. (2020, April 27). *Krousar Thmey empowering children with hearing issues.* https://www.phnompenhpost.com/lifestyle-around-ngos/krousar-thmey-empowering-children-hearing-issues

Šiška, J., Pather, S., & Sumnikova, P. (2013). *Manual on inclusive education tutors in Cambodia*. Czech Republic: Caritas Czech Republic. Not available online.

STEPCam. (2020). *Second annual report: STEPCam Strengthening teacher education programmes in Cambodia.*

Thomas, P. (2002). *Inclusive education training in Cambodia.* Disability Action Council.

UNICEF. (2021). *Country office annual report: Cambodia.* UNICEF. https://www.unicef.org/media/115856/file/Cambodia-2021-COAR.pdf

UNICEF Cambodia. (2020). *Education Capacity Development Partnership Fund (CDPF) Phase III.*

United Nations Development Program. (2021). *Request for proposal provision of creating an accessible app for NDSP2 monitoring & evaluation system and disability information referral system.*

Universalia Management Group. (2019). *Summative GPE country program evaluation batch 5, country 14: Kingdom of Cambodia.*

USAID. (2018, November). *USAID education policy.* p. 30. https://www.usaid.gov/sites/default/files/documents/1865/2018_Education_Policy_FINAL_WEB.pdf

USAID. (2019). *Hearing and vision disability screening report.* https://ierc-publicfiles.s3.amazonaws.com/public/resources/Cambodia%20Screening%20Report_Approved.pdf

Vanzen, I. (2019). *STEPCAM: A blueprint for early grade learning in Cambodia.* https://www.globalpartnership.org/blog/stepcam-blueprint-early-grade-learning-cambodia

Vichheka, S. (2016). *Rapid mapping of NGOs working in education for children with disabilities.* http://memlib.nepcambodia.org/libraries?page=3

Volunteer Service Overseas. (2010). *Reaching the unreached: Bridging the social divide in Cambodia through inclusive education.* http://www.unescobkk.org/fileadmin/user_upload/apeid/Conference/12thConference/paper/2D1.pdf

Volunteer Service Overseas. (n.d.). *Reaching the unreached bridging the social divide in Cambodia through inclusive education.*

World Health Organization. (2019). *UNICEF/WG Child Functioning Module (CFM).* WHO Family of International Classifications. https://www.whofic.nl/en/unicefwg-child-functioning-module-cfm

World Bank. (2014). *International Development Association project appraisal document on a Global Partnership for Education grant.* https://www.globalpartnership.org/sites/default/files/2014-03-world-bank-cambodia-pad.pdf

## ANNEX C. ORGANIZATIONS REVIEWED

The MCSIE team reviewed secondary source data, websites, and other information from the following organizations and activities:

1. 3PC
2. AAR-Japan
3. Aide et Action
4. Angkor Hospital for Children's Development
5. Association of the Blind Cambodia (ABC)
6. AusAID / Department of Foreign Affairs (DFAT)
7. Cambodian Children's Trust
8. Cambodian Development Mission for Disability (CDMD)
9. Cambodia Disabled People's Organization (CDPO)
10. Cambodian Ministry of Education, Youth and Sport (MoEYS)
11. Capacity Building for Disability Cooperation (CABDICO)
12. Caritas Cambodia
13. Catholic Relief Services (CRS)
14. Centre for Adaptive and Responsive Education (CARE)
15. ChildFund Cambodia
16. Children in Families
17. Damnok Toek
18. Deaf Development Programme (DDP)
19. Disability Action Council (DAC)
20. Epic Arts
21. Fred Hollows Foundation
22. Global Partnership for Education (GPE)
23. Hands of Hope Community (HHC)
24. Humanity and Inclusion (HI, formerly Handicap International)
25. Kampuchea Action to Promote Education (KAPE)
26. Khmer NGO for Education (KHEN)
27. Komar Pikar Foundation (KPF)
28. Komar Rikreay Cambodia
29. Lavalla School
30. Light for the World
31. National Institute for Special Education (NISE)
32. NGO Education Partnership (NEP)
33. NEP's Working Group on Education and Disability
34. OIC Cambodia
35. Opérations Enfants du Cambodge
36. Paññāsāstra University of Cambodia
37. Rabbit School
38. RTI International (IECD, IPEA, and ACR-Cambodia)
39. Safe Haven Medical Outreach
40. Save the Children
41. USAID

42. UNICEF
43. Volunteer Services Overseas (VSO)
44. World Bank

# ANNEX D. SCREENING FEEDBACK LOOP BREAKDOWN AND ACTIONS

| | POTENTIAL BREAKDOWNS | EDUCATION PROGRAM ACTIONS |
|---|---|---|
| Screening | Established tools may not be available. | Allocate sufficient time and resources to test and validate a new tool prior to use. |
| | Prevalence tools may be used inaccurately and outside of intended purpose, raising ethical concerns and the potential for mislabeling or misdiagnosis of students. | Ensure tools have fit for purpose; only use them for their intended purpose or validate tools when changes are made. |
| | Parents may be hesitant to disclose a child's disability status because of stigma and fear that education will be negatively impacted. | Focus on awareness, sensitization and services/ supports for teachers to build an inclusive ethos. Consider the power relation between schools and families when selecting screening data collectors. |
| | Teachers may have multiple priorities competing with and impeding quality of screening activities. | Utilize community resources such as disability and health workers to conduct screening in schools. |
| Referral | There may be limited awareness of existing medical services for identification/diagnosis of disability. | Map existing disability support services at project start up, including medical services for identification and intervention. Ensure schools and local communities are aware of these services and can convey resources to parents and families. |
| | Medical services may be distant from local communities or not available at all. Families may be unable to afford transportation. | Provide stipends for parents to cover transportation and/ or medical costs.<br>Partner with community organizations to support travel to medical appointments. |
| Identification | Identification may be hampered by limited qualified staff or challenges in retaining specialists. | Partner with national and local-level health and government sectors and institutions of higher education to identify human resource needs and train specialists. |
| | Parents may be unable to afford medical appointments. | Provide stipends for parents.<br>Work with local government offices and medical clinics to increase services and reduce cost. |
| Disability, Community and Health Services | Access to services may be hampered by long waitlists, limited resources for services, or limited availability of services in rural areas | Engage disabled persons organizations (DPOs) as expert sources of information on what services may exist and how to obtain them. Include services in mapping exercises.<br>Partner with service providers to work with families and children. |
| Educational Support | Screening and identification data may be misused to refer students out to special schools instead of using the information to provide education support in the mainstream inclusive education setting. | Use a whole school approach to programming that promotes inclusive education and the value of all learners having access to education in their local communities in alignment with the Convention on the Rights of Persons with Disabilities (CRPD).<br>Do not screen if the risk for segregation is high. |
| | Teachers and school administrators may overemphasize screening and identification rather than ensuring classroom practice is broadly inclusive and universally designed for the inclusion of all children. | Promote a whole school approach to inclusive education based on Universal Design for Learning. Encourage schools and teachers to move forward with inclusive practices even if screening breakdowns occur. Raise awareness of disability diversity, move away from labels and focus on inclusive pedagogy. Inclusive teaching benefits all! |

*Indicates areas where the health sector and other partners can be called upon to support education programs.*