



All Children Reading – Asia
Scope of Work
Activity 4.2

Building Resilience in the Return to Learning During COVID-19: Cambodia Final Study Report

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Acronyms and Abbreviations

ACR–Asia	All Children Reading–Asia
COVID-19	coronavirus disease 2019 (SARS-CoV-2)
DOE	District Office of Education
GoC	Government of Cambodia
MOE	Municipal Office of Education
MoEYS	Ministry of Education, Youth and Sport
NGO	nongovernmental organization
POE	Provincial Office of Education
RTI	RTI International (registered trademark and trade name of Research Triangle Institute)
SMS	short message service (text messaging)
UNICEF	United Nations Children’s Fund
USAID	United States Agency for International Development

Activity Information

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Executive Summary

The COVID-19 pandemic is a disruptive event, upsetting education system procedures as well as individuals' habits and behaviors. In education, the challenge during such an event is finding ways to give students access to continued learning, no matter the change in circumstances, such as school closures. However, such events also present opportunities for beneficial decision making, because stakeholders have to push against existing norms that previously slowed positive change. The All Children Reading–Asia (ACR–Asia) Return to Learning Cambodia Case Study was designed to research the Cambodia Ministry of Education, Youth, and Sport's (MoEYS's) response to the disruption in learning created by the COVID-19 pandemic during different phases of school closure and reopening in the 2019–2020 and 2021 school years. Qualitative interview methods were used to study the education system's response, from the central ministry level down, to how school directors and teachers in schools implemented expectations communicated to them. Forty-four participants were interviewed, including central MoEYS personnel, school directors, teachers, and caregivers. Participants were asked about the phases of MoEYS response to the pandemic and what procedures, implementations, and subsequent outcomes occurred.

This study concludes that positive changes were implemented in the participating schools, making the education system and its stakeholders act and react to an education crisis in ways that would not be typical of the system functions and individual behaviors experienced in a regular school year. Fundamentally, the education system and its actors showed that during COVID-19, they were able to carry out a set of core functions (RTI International, 2018). These core systems functions were to set and communicate expectations, monitor progress, provide targeted support to facilitate students' access to continued education during school closures, and make stakeholders accountable for meeting the expectations.

During initial school closures in 2020, and with the support of donors and nongovernmental organizations (NGOs), the MoEYS demonstrated ***adaptive resilience capacity***. It pivoted from school-based instruction to online and community- or home-based instructional support; and it emphasized collaboration and coordination by school directors, teachers, caregivers, and other community members. Additionally, the MoEYS instructed schools to stress more time on task in the core subjects of Khmer language and mathematics when students were learning from home, and later, back in the classroom.

In early 2021, when schools reopened, they demonstrated ***transformative resilience capacity*** by maintaining many new communications channels that had been established between schools and caregivers. These channels evolved along with the expectations for collaboration between schools and caregivers to support children's learning. Unfortunately, in March 2021, the reclosing of schools and tightening of travel restrictions meant that the support structures and communications established during 2020, such as teachers traveling to communities, could not be maintained. Issues of inequity resulted as most learning reverted online, thereby reducing access for children without online access.

Highlighted findings include:

- **The MoEYS responded positively to dialogue with donors and NGOs**, by implementing an online learning platform, funding and distributing learning materials to caregivers through schools, and prioritizing the learning of Khmer language and mathematics.
- **Communication among stakeholders evolved.** Prior to COVID-19, most communication between caregivers and schools revolved around student attendance. During COVID-19, communications shifted to dialogue on supporting

children's learning and on the roles and expectations of the different stakeholders (e.g., caregivers, teachers) in this process.

- **Communication was most inclusive when multiple channels were used.** Teachers who were able to best support student learning used a combination of messaging, online resources, phone calls, and in-person communication to caregivers and students, with the objective of ensuring that no children lacked access to instruction. This communication was optimal when teachers gave caregivers clear directions regarding what learning resources to use and how to use them.
- The education system did an excellent job in setting, supporting, and maintaining expectations.
 - **The central MoEYS communicated expectations** for continued learning, supported schools and communities through the online learning platform, and **released funds** for schools to print hard-copy learning resources.
 - **Teachers were generally proactive in reaching their students during initial school closures**, adapting their approach to contact and support their students as necessary (online and in person).
 - **School directors generally supported teachers and held them to expectations**, to ensure that as many students as possible were able to continue their learning.
 - **Caregivers clearly understood their responsibility for their children's learning during school closures.** Some caregivers who had a higher level of education and more available time to work with their children were more successful in supporting their child's learning than others.
 - **The flexibility afforded to schools to meet expectations resulted in unique, localized solutions.** The study's respondents indicated that they used this flexibility to solve issues unique to their environment. However, it was not possible to determine whether this approach worked for all schools, or whether some schools required more direction.
- **The education system struggled to respond to tighter COVID-19 travel restrictions when schools re-closed in March 2021**, reducing access to learning for those students who in the previous year had received in-person support and whose caregivers did not own smartphones to learn online. This step back is a shame, because there were indications that in early 2021, many schools demonstrated transformative capacity regarding communications among, and expectations of, stakeholders.

This study has three main recommendations for further discussion.

1. **Further investigation is necessary whether schools and teachers respond positively to a combination of clear expectations and accountability, but with flexibility in how to meet these expectations.** At least with the schools participating in the study, there are indications that the Central MoEYS giving schools more flexibility to solve expectations (such as how to meet the learning needs of students upon return to school in September 2021) resulted in more collaboration, creativity, and local ownership. However, it is unknown that in general, schools in more challenging circumstances were able to mobilize with the flexibility given, or more direction was needed on how to achieve these expectations.

2. **The MoEYS should maintain the positive system changes that were achieved as a result of the pandemic.** The study’s findings suggest that many of those involved in educating the students changed their behaviors and actions as a result of expectations placed on them as a result of the pandemic, plus the subsequent communicated responsibility or accountability to achieve these expectations. Additionally, the support provided at many levels of the system was critical to help stakeholders meet these expectations. As one School Director said, *“Every day, I write on the blackboards of my teachers, ‘How can we support the caregivers?’”* This is a wonderful sentiment, and something that should not be a consideration only during disrupted learning as a result of a pandemic. When life in Cambodia returns to some form of “new normal,” the expectation expressed by this school director should not diminish in importance. Having the MoEYS and partners reflect on how the system responded positively and how these actions can be made permanent would be hugely beneficial. Illustrative items for consideration would be (1) a continued push by the central MoEYS regarding expectations for teaching and learning and for communications, and (2) an examination of how school directors can continue to support and hold teachers accountable for student learning, not just delivery of the curriculum.
3. **Varying the delivery approaches to learning and communication that was most effective for equitable access of student learning during school closures.** During the pandemic, the most successful schools were those that used a blended approach to reach different families (e.g., online and in person) during school closures. As Cambodian society transforms and more citizens are able to use online resources, the MoEYS needs to make sure that those without access to the internet today do not get left behind.

A limitation of this study is that the findings can be generalized only to the Kampong Thom and Battambang schools participating in the study. Although the researchers did attempt to explore variations in responses at different school sites, the author recommends making an effort to replicate the findings of this study in more rural schools.

1. Purpose of Study and Report

The purpose of this Return to Learning study was to research the Government of Cambodia's (GoC's) response to the unprecedented challenge created for continued student learning due to the COVID-19 pandemic. This report endeavors to identify key themes, and to highlight successes and lessons learned to inform later school reopenings. Consequently, this report presents findings and recommendations for policymakers, implementers, donors, and government officials to build system resilience and to plan for any future disruptions to learning. Finally, the report presents recommendations based on what was learned during the pandemic that can be applied to a post-pandemic education system.

This report reviews the results of qualitative interviews that were conducted with stakeholders, from the central MoEYS to schools and communities; and presents findings on how directions on school closures and mitigation for continued learning were implemented in schools and supported by communities.

This study and report have incorporated the United States Agency for International Development's (USAID's) resilience framework (USAID, 2019) as thematic areas to ensure a focus on instances of absorptive, adaptive, and resilience capacity by the education system and its stakeholders.

2. Study Background and Context

This section of the report provides a timeline of the GoC's response to pandemic regarding school closures and other steps to enhance the safety of the students and teachers, while attempting to provide uninterrupted learning for the students. From March 2020 through to March 2021 the GoC and MoEYS implemented different measures in response to the pandemic. These responses were implemented in phases

The GoC implemented its response by leveraging its limited public health resources to contain the disease. Lacking the resources for extensive testing of the population, compared with countries such as South Korea, Cambodia used varied strategies to control the virus, such as contact tracing in the primarily urban hot spots where cases were initially confirmed, and early lockdowns as cases increased.

Because testing for COVID-19 has never been extensive in Cambodia, it is reasonable to presume that the actual number of cases and deaths due to COVID-19 is much higher than reported. For example, the first confirmed case of local transmission was not reported until November 29, 2020. Before this date, all reported cases were from individuals who had entered the country from elsewhere.

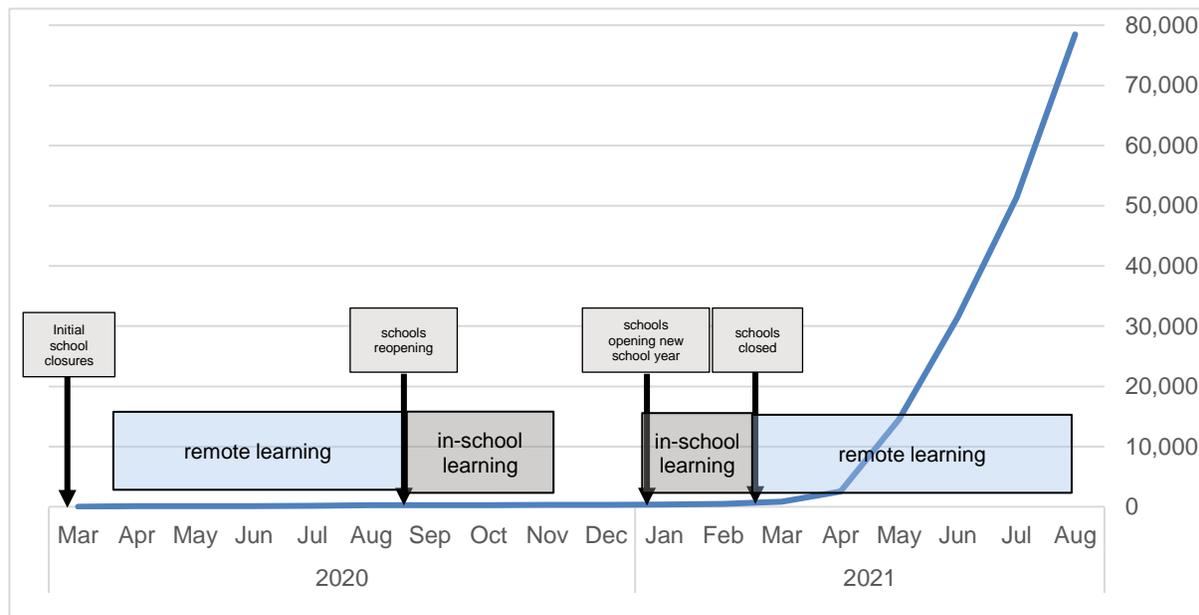
2.1 Timeline of COVID-19 Response by the Cambodian Government

Directions to schools during the different phases of schools closures and reopening were communicated from central MoEYS. WhatsApp was used as the official communication channel, but these directives were also communicated through Facebook and the media.

The MoEYS implemented different stages of school closures and reopening aligned with GoC directives on the response to the COVID-19 cases (*Exhibit 1*).

The first detected case of COVID-19 in Cambodia was found on March 7, 2020. On March 14, the MoEYS announced that it would shut down all schools in Phnom Penh, followed by an announcement on March 16 that education institutions countrywide would close.

Exhibit 1: Cumulative numbers of COVID-19 cases, mapped to school calendars (2019–2020 and 2020–2021)



(Microsoft, 2020)

In April of 2020, the MoEYS instructed schools to support remote learning of students in the communities. To support remote learning MoEYS produced worksheets and released funds such that schools could print the worksheets for the students. Schools were instructed to reach students and caregivers through multiple approaches including Facebook, WhatsApp, SMS, and in-person by teachers travelling out to students in their communities. Caregivers were expected to work with their children on the worksheets and teachers were expected to support this process. Additionally, the MoEYS produced video lessons and made them available online through its Facebook and YouTube channels and its e-learning website (<https://elearning.moeys.gov.kh/>). These lessons were developed initially for grades 9 through 12 but were expanded over time to include all grades, including preprimary. Overall, 1,200 online learning videos were created gradually between April 2020 and April 2021 exclusively for Khmer language and mathematics in grades 1–3. This remote learning continued through August.

MoEYS released a Standard Operating Procedure on August 4 directing provinces, districts, and schools regarding how to provide an improved safe, inclusive, comfortable, and friendly learning environment. Then, on August 26, the government announced that all schools would reopen on September 7. Dr. Hang Chuon Naron, the Education Minister, added conditions, including that the number of children in a classroom could not be more than 20, and that body temperatures must be checked upon entry. Additionally, students should attend school only two or three days a week, completing their studies at home the rest of the

week. MoEYS gave schools and teachers flexibility to meet the learning needs of the students provided they instructed the students for a total of sixteen hours of Khmer language and nine hours of mathematics.

Because local transmission of COVID-19 continued to escalate, the MoEYS changed the dates of the academic year to help increase the potential for more student learning. All public schools were instructed to complete the 2019–2020 academic year by November 20, 2020, with the new academic year to start January 11, 2021, rather than November 1, 2020. Schools were then instructed to re-close on March 21, 2021 as confirmed COVID-19 cases started to spike. Learning reverted to remote as it had in March 2020. However, due to the greater number of COVID-19 cases, travel around Cambodia was restricted and teachers were not permitted to travel to communities to work with students directly.

2.2 Provinces of Interest for Study

This study collected data from the central MoEYS, but also in two provinces: Kampong Thom and Battambang. These provinces were selected for this study because they also had received interventions under the All Children Reading – Cambodia program. The USAID program is implemented by an NGO consortium, led by RTI International. This intervention, before COVID-19, provided teacher activity guides, supplementary materials, training for teachers of early grade reading and mathematics, and intensive coaching from NGOs. Battambang Province does not receive the same level of support from All Children Reading - Cambodia as Kampong Thom; however, some teachers did give feedback that they received some NGO support, as highlighted later.

These two provinces offer an important contrast for this study: Battambang was subject to the GoC’s response to the COVID-19 pandemic, whereas All Children Reading - Cambodia was able to mobilize more quickly and earlier in response to school closures.

To help respond to the disruption to the school year, All Children Reading - Cambodia helped make sure that student books and supplemental reading materials were taken home. The program developed home learning workbooks, aligned to the curriculum, to provide students opportunities to practice and give caregivers a tool to track their child’s progress at home. Teachers were encouraged and supported to reach out to their students’ families using social media and phone calls. Learning resources were also made available over the All Children Reading - Cambodia Facebook page.

The materials made available in the ACR-supported provinces were not supplied elsewhere, including in Battambang, where instead, the MoEYS produced video lessons that were broadcast on television and streamed online. Through teachers, the MoEYS also delivered worksheets for students to complete at home, available as printed sheets or virtually.

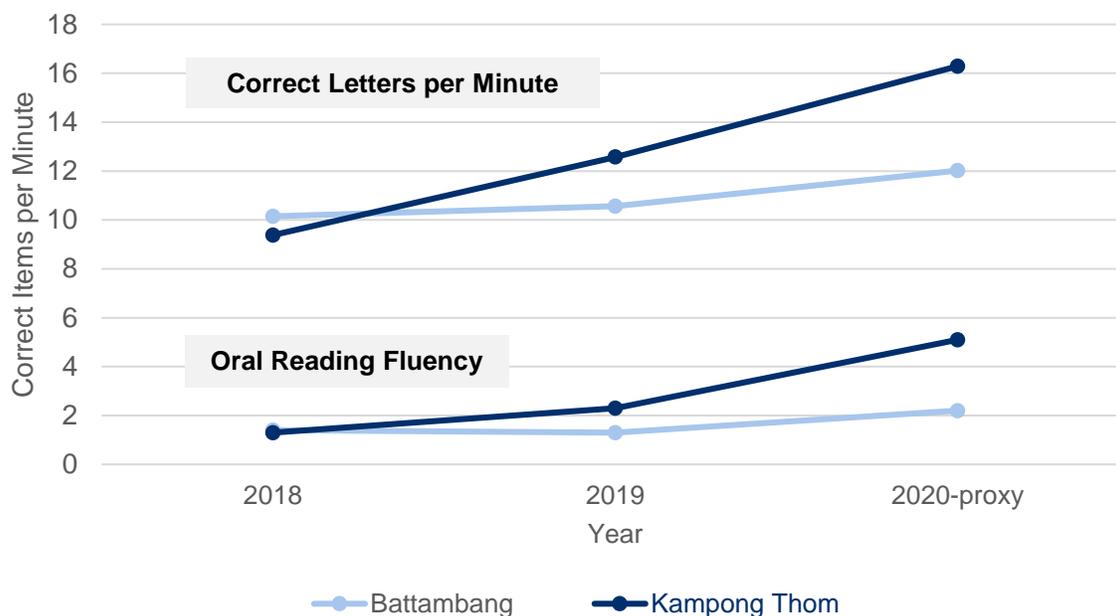
In both Kampong Thom and Battambang, teachers visited homes and conducted small learning groups at the community level beginning with and throughout the initial school closures starting in March 2020.

2.3 ACR–Cambodia – Learning-Loss Study

As noted above, in January 2021, All Children Reading - Cambodia conducted an evaluation to study the learning-loss of the school closures (report in process) and general disruptions to learning due to the COVID-19 pandemic. The program had previously conducted a baseline evaluation in 2018 and a midterm evaluation in 2019. Although it was natural to

conclude that school closures inevitably would result in losses in early grade literacy, on average, performance actually improved between 2019 and 2020 (*Exhibit 2*).

Exhibit 2: Average student learning outcomes, grade 1, by province



Both Kampong Thom (ACR–Cambodia supported) and Battambang (comparison group) improved their learning outcomes; however, Kampong Thom improved at a greater rate than Battambang.

As is explained later in detail, schools for this Return to Learning study were selected from those that participated in the learning-loss study, based on their average learning gains to ensure variation in potential responses.

3. Study Design

3.1 Theoretical Framework

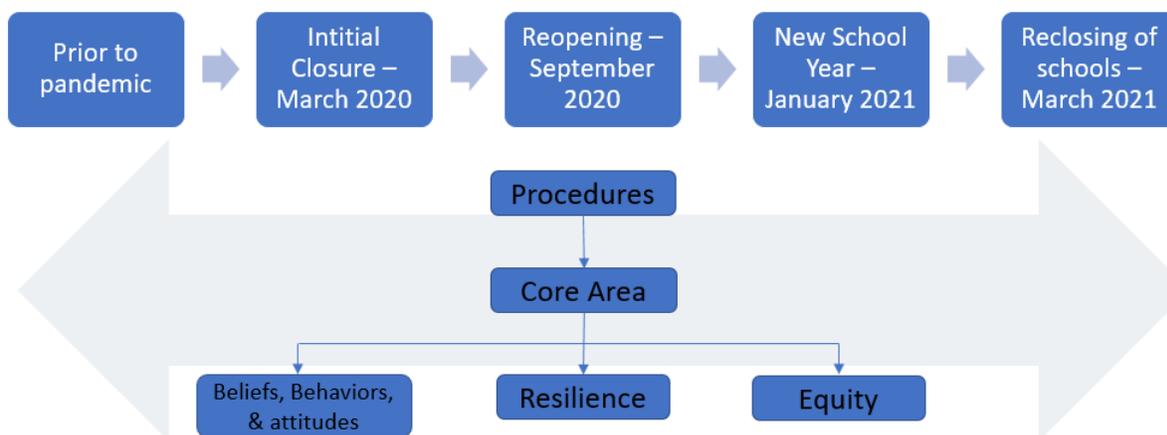
The theoretical framework was built by applying key thematic areas to the phases of the GoC’s response (see *Exhibit 3*):

Exhibit 3: Phases of response by the Cambodian government



The study's theoretical framework (see **Exhibit 4**) show the nested thematic areas of research.

Exhibit 4: Theoretical framework



The first two themes, **Procedures** and **Core Area**, address what the action was and in what area of education the action was, respectively. The final three themes (Beliefs, Behaviors, and Attitudes; Resilience; and Equity) are nested inside the Procedures and Core Area themes.

By applying the themes across the phases, we can also look for commonalities (such as categories of resistance) that exist across the phases. The themes are described as follows:

Procedures

- **Planning** – the process by which the Cambodian government planned for the return to learning during the different phases of response to COVID-19
- **Outcomes** – the consequences—positive or negative, intended or unintended—that were observed as a result of decisions made during planning for the return to learning
- **Implementation** – the process by which Cambodia returned to learning during COVID-19

Core Area

- **Teaching, learning, and assessment** – the core responsibilities of the education system and its stakeholders: DOE and POE officials, head teachers, teachers, caregivers
- **Teacher support (professional)** – how teachers were supported via the educational system to adapt curriculum delivery during each phase
- **Roles and responsibilities** – how stakeholder roles and responsibilities changed or stayed the same due to the pandemic
- **Communities and families** – how the roles and expectations for families and communities to support student learning changed during the pandemic and how communities and families responded to these changes

- **Communication systems** – the following were considered:
 - Who communicated, and when did they communicate (within the government system)
 - What communication channels were employed
 - What was communicated (e.g., expectations versus recommendations)

Resilience

Adopting the USAID framework for resilience in education (USAID, 2019) adds a critical lens to the theoretical framework as education systems and individuals respond to the pandemic crisis. We focused on the three resilience capacities, looking for evidence to categorize institutions, individuals, or groups of individuals:

- **Absorptive resilience capacity** – the ability of institutions (e.g., education systems, schools), individuals (e.g., head teachers, teachers, caregivers), and groups of individuals (e.g., communities, households) to leverage and employ existing resources, communication channels, knowledge, policies, and regulations to mitigate the negative impact of disruptive events
- **Adaptive resilience capacity** – the ability to make deliberate changes in response to the negative impact of disruptive events
- **Transformative resilience capacity** – the ability to add procedures, policies, knowledge, or communication channels to attempt to permanently address vulnerabilities to future shocks and stressors
(USAID 2019)

Equity

- **Social and emotional learning** – how much consideration and response were allotted to the emotional challenges that students faced during the pandemic
- **Inclusion** – whether education of sufficient quality was equitably available to students during the pandemic restrictions

Behavioral

Individuals respond to disruptive events based on two main factors: the individual’s existing beliefs, attitudes, and socioeconomic characteristics prior to the event, and environmental influences (Rogers, 2003; Kahneman, 2011). Additionally, disruptive events or major life events such as the pandemic can often upset the social order, creating opportunities, new norms, and new behaviors (Schäfer, Jaeger-Erben, and Bamberg, 2012). While it is important to examine the actions of individuals, it is equally important to determine why they acted or behaved a certain way. The bullets below are illustrative of behavioral considerations. However, the framework is not limited to these considerations.

- **Social norms** are “...*unwritten rules of beliefs, attitudes, and behaviors*” (McLeod, 2008) that facilitate good or bad decision-making. Within an education system, social norms will vary depending on the environment that the individual inhabits. Different schools and communities will have both different and similar social norms.
- **Self-efficacy** refers to how much an individual believes they can implement the necessary steps of performance (Bandura, 1997).

- **Resistance** refers to the extent an individual pushes against a change in process. Risk and fear of failure can often be attributed to this behavior.
- **Collaboration** is a critical function not just to solve problems, but also to share problems. The social aspect of collaboration is important as we recognize peer influence and pressure to push against inertia (Thaler and Sunstein, 2009).

These themes underpinned both the development of the interview instruments and the approach to data collection, but we were also prepared to take a deductive approach to the data collection and analysis, developing new thematic areas. This flexibility was deemed important to account for much of the unknown response to disruption in schools.

3.2 Research Questions

The research questions were developed by inquiring about Procedures first. This approach yielded a clear picture of what occurred during the pandemic (planning, implementation, and outcomes) and the educational context in which the procedure took place (Core Area). This study also attempted to answer the “why” aspect in more depth by using the final three thematic areas of the theoretical framework (Beliefs, Behaviors, and Attitudes; Resilience; and Equity).

1. **Planning:** What was the process by which the Cambodian government planned for the return to learning during the different phases of response to COVID-19?
 - a. What policies and plans existed or were developed to support the return to learning?
 - b. What were key triggers or decision points during planning of the return to learning, and what factors contributed to the decisions made?
 - c. Who was involved in decision making, and how were decisions made about the return to learning across the education continuum (preprimary, primary, secondary, tertiary, nonformal, technical training)?
2. **Implementation:** What was the process by which Cambodia returned to learning during COVID-19?
 - a. How did Cambodia adapt its education system processes to maintain students’ access to equitable instructional time?
 - b. What were the key challenges and opportunities that emerged to ensuring a safe, equitable, and inclusive return to learning?
3. **Outcomes:** Retrospectively, what consequences—positive or negative, intended or unintended—resulted from the decisions made during the planning for the return to learning?

3.3 Methodology

As indicated, this research was designed to be a case study of the Cambodia MoEYS’s response to the COVID-19 pandemic. Consequently, the theoretical framework shows how we investigated this event by identifying different thematic areas that interacted with each other. In addition to those set areas of inquiry, we also took a deductive approach to analysis—that is, we developed new thematic areas as appropriate, provided that they supported the research questions.

3.4 Selection of Participants

For school selection, we used the average learning gains by school from the 2021 All Children Reading - Cambodia learning-loss study, and where school performance was consistent, we classified schools as “high performing” or “low performing.” Once they were classified, we presented school names to POEs and DOEs to assist in contacting school directors to obtain the necessary permissions to conduct interviews. Eight schools were selected and overall, 44 participants were interviewed (*Exhibit 5*).

Exhibit 5: Final sample of interviewees

Participant	Battambang participants	Kampong Thom participants	Total number of participants
Central MoEYS Personnel			10
Provincial Education Officer	1	1	2
District Education Officer	1	1	2
School director	4	3	7
Teacher	6	6	12
Caregiver	4	3	7
NGO personnel	2	2	4
Total		44	

3.5 Ethical Considerations

During interviews with participants, we informed them that they would not be at risk from this research. Fundamentally, this meant that interviewees would not be identifiable from publicly available reporting or data. The risk of identification was more salient for individuals at the central, provincial, and district levels, because only single participants from offices or departments were interviewed and therefore it would be possible to identify them based on their recollection of information. Consequently, this report does not identify either the role or the central MoEYS department, province, or district where a given participant was located. By contrast, because multiple participants were interviewed at the school and community levels, we identify their province to distinguish whether they were receiving support from the USAID Cambodia program or not.

3.6 Data Collection

Data were collected in April and May of 2021. Varied qualitative data collection methods (such as focus groups) were not an option due to the March 2021 government lockdown. Consequently, we planned to collect data based on the only available mode of interview: Zoom and WhatsApp calls over the phone or computer. All interviews were limited to one hour to limit participant fatigue and inconvenience.

Arranging interviews with the study participants in schools and communities took longer than arranging interviews with central, provincial, and district-level participants. Taking into the consideration the logistics and time, it was decided to interview candidates starting at the central level, followed by provincial, then district, and finally the school and community level. All interviews at the school and community level were arranged through the DOEs, which contacted the directors of the selected schools.

First, the study team trained a consultant located in Phnom Penh on the aims of the study, the theoretical framework, and the linkages to the survey instruments. Next, the consultant conducted two preliminary interviews with a central-level government official and a schoolteacher to pilot test the administration of the instruments and their content. After the pilot survey, the interviewer received additional support and training. (Note that Section 3.7 below addresses instrument development and revision.)

All interviews were conducted in Khmer. A translator was contracted to create English transcriptions of all the interviews for text analysis by the RTI research team. The principal investigator and interviewer reviewed the first English transcription from the pilot interviews for accuracy. Adjustments were made to the translating and transcribing process to ensure that the English translations accurately represented the Khmer interviews.

3.7 Survey Instruments

As explained above, after the instruments were created, they were piloted with two respondents. We reviewed the pilot survey results and made changes to the instruments as follows:

- The length of the instruments was reduced, to mitigate interviewee fatigue.
- The questions were made less general and more context and content specific.

The instruments were sequenced according to the phases of government response during the pandemic, and questions were added that aligned to the thematic areas. Primary and secondary questions were developed according to the theoretical framework's thematic areas. The intention was to have the interviewer ask the primary question, but to have flexibility on the secondary question, which was there as a probe for further information rather than being a required question to ask.

The first instrument developed was the teacher tool (see **Annex**). All other instruments were adapted from the teacher instrument.

3.8 Data Analysis

The interviewer reviewed the English transcriptions for reliability, comparing the transcription to the audio of the interview. Text analysis was conducted on the English transcripts using Nvivo. The analysis was disaggregated according to participant (e.g., teacher, head teacher, central MoEYS personnel). Coding was aligned to the theoretical framework thematic areas (Exhibit 4) and other thematic areas added from the deductive analysis approach. Additional thematic areas are discussed in detail in **Section 5** of this study report.

3.9 Limitations of Study

The research team had to make a few adaptations to the study based on challenging circumstances; these necessary changes, however, were also expected to have an impact on the results.

- **Distance interviewing.** In-depth interviews were conducted virtually, rather than in person. At times, bandwidth was poor, particularly when we were interviewing school or community participants. Some interviews had multiple dropped connections. These factors degraded the conditions for the in-depth interviews as well as possibly affecting data quality.

- **Single method.** Ideally, multiple qualitative data collection techniques—such as focus groups and observations—would have been deployed. These different methods of data collection can create opportunities to obtain different insights compared with just in-person interviews.
- **Individual recall.** The limitation of in-person interviews is the dependency on participants being able to correctly recall events accurately that may have occurred months prior. It has been shown in multiple studies that recall can change over time, and many people struggle to accurately convey facts of prior events (Rogers, 2003). Although some degree of confirmation was available (e.g., we could examine some written communications), we could only confirm exact events and actions through cross-referencing details related by different participants.
- **School selection challenges.** Although we presented the POEs with lists of desired schools from which we would interview participants, one POE selected only high-performing urban schools for conducting interviews. This situation reduced the level of variation in the responses. It is the opinion of the author that the school selection in this province (Battambang), and therefore the responses obtained, are biased toward schools and communities that were more active in supporting the continued learning of the students during the pandemic and school closures.

4. Findings

4.1 Situation Before the COVID-19 Pandemic

By definition, change is always measured relative to some status that preceded the event for which we are trying to determine the impact. Our framework includes measures from our thematic areas prior to the COVID-19 pandemic and the Government of Cambodia’s response. These data serve as a baseline of “business as usual.”

All teachers reported a standard practice of setting up communication channels with caregivers before the start of any new school year. The priority communication and engagement with caregivers at the start of the year was to encourage and remind caregivers about the importance of their child attending school. Phone numbers would be collected or verified at the start of the year, because telephone contact was the main source of communication between the school, the teacher, and the caregivers. During the year, much of the communication between the teacher and caregivers was achieved through the student record book. The teacher might add comments to the student record book, which the child would then take home for the caregiver to read. The interviewed teachers commented that there was communication on only two topics: if the child had been absent and if the child was struggling. Teachers also would arrange to meet with caregivers if necessary, and mostly used the phone or student record book to request a meeting. Some teachers in urban areas set up WhatsApp groups and/or Facebook pages by which to communicate with all the caregivers. These teachers from the urban areas acknowledged that there were always a few caregivers who lacked technology to join these groups, so the teacher would communicate with them by phone or the student book.

These teachers felt that caregivers also had a responsibility to teach reading to their children through practice at home, following the teachers’ instructions. However, they believed that most caregivers relied on school attendance alone for their children’s learning, which is common in many education systems. Caregivers’ responses to teacher requests for

involvement in their child’s learning were mixed; the primary reasons given for lack of caregiver engagement were the level of literacy of the caregiver, the self-efficacy of the caregiver (they did not believe they could teach their child), and caregivers prioritizing spending time with their child to practice reading.

Most of the teachers gave standard responses regarding roles and responsibilities; a teacher teaches, a student is attentive and learns, and a caregiver supports this process with supplemental reading support at home. A couple of the teachers from Battambang commented on student-centered learning, as well as targeted or differentiated support by grouping by mixed ability (group learning) or moving weaker children nearer to the teacher.

The school directors interviewed reported various communication methods to highlight the start of a school year and to emphasize the importance of children attending school. For example, some schools in urban areas relied more on online communication channels such as Facebook and WhatsApp, while schools in rural areas were more inclined to collect and use phone numbers for SMS messaging or to engage with community leaders such as village chiefs to help focus on the new school year. Finally, meetings and/or information sessions were held for caregivers in the school.

Teachers in Kampong Thom reported having interactions with an NGO through All Children Reading –Cambodia to support preparation work at the start of the school year.

4.2 Situation After Initial Closure – March 2020

School directors received communications that schools were to close on March 16, 2020. This information was officially channeled through either the District Office of Education or the Municipal Office of Education, using an MoEYS communications cascade that started at the central level (*Exhibit 6*).

Exhibit 6: MoEYS cascade communications system using WhatsApp

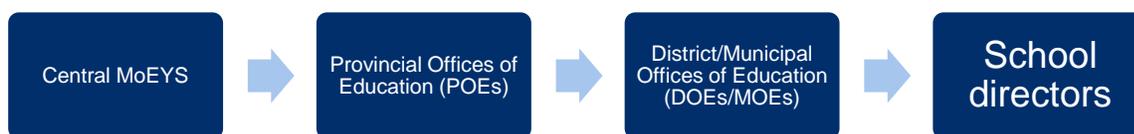


Exhibit 6 shows the role that POEs, DOEs, and MOEs played in the official lines of MoEYS communication, but most school directors said they first heard the information through the MoEYS Facebook page and other media or social media channels. Outside this communications cascade, there is no indication that POEs, DOEs, or MOEs played any other role in supporting the study schools during the pandemic.

It is unclear what levels of preparation schools had made for potential closures. Some school directors related only the challenge and confusion of the sudden school closures, while other school directors said they had started the process of collecting more contact information from caregivers who had access to smartphones.

Teachers from both provinces said they received clear communications regarding school closures and their new responsibilities. After a delay, worksheets were sent electronically to school directors and funding was wired to pay for printing the worksheets as needed. Teachers reported receiving correct information most commonly from their school director, a

good indication that the intended MoEYS communication channels were effective. The day of school closures, the teachers met with the caregivers at the school and informed them of the school closure. They collected phone numbers and Facebook information (where available) from caregivers, informing them that they would be in contact in a few days.

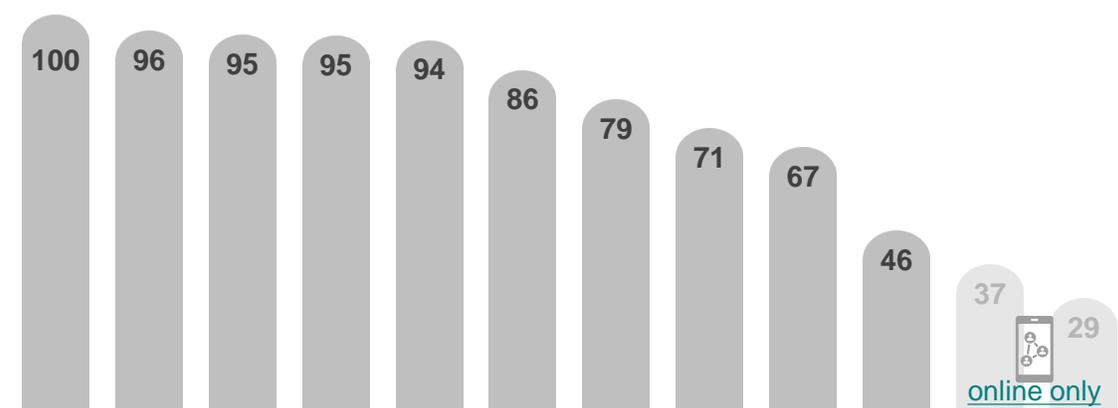
At the end of April, schools received communications to divide students into groups for teaching online and in the community. Any teacher who was uncertain regarding what to do reported having found support, either from the school director, from a colleague, or from an NGO assigned by All Children Reading - Cambodia. Every teacher from Kampong Thom who was interviewed proceeded to follow these directives, visiting groups or individual students about one to three times per week. These teachers were willing to adapt to reach their students; the aim was always to reach as many students as possible using varied communication channels, leaving no stone unturned. One school director expressed this point well:

“Usually, the information from the ministry, the province, or the district, did not meet fully the needs of the school. So, we had to be creative so that the school could operate well; we would have meetings with our teachers to discuss further ideas.”

This reflection by the school director represents the actions of most of the schools in this study; they identified the need for adaptive resilience to support their school community and to meet the expectations of continued learning for as many students as possible. The eight school directors interviewed unanimously reported meeting with teachers to support them and organize how the teachers would ensure access to learning for their students. Most (although not all) school directors clearly understood that a single approach to communication and learning would not be sufficient. If a teacher was hesitant to find a solution to reach their students during the school closures, the majority of the school directors reported working with the teacher to find a solution to the problem.

Teachers from Battambang followed the MoEYS directive of online or distance learning. Teachers used varied approaches to continue student learning. Some teachers went to villages and households to instruct students, and some teachers used Facebook for distance learning. Interestingly, a few teachers opted both to use online learning and to visit students in their villages. They took this step when it became evident that some students did not have the technology or the caregiver support to learn online. The teachers who visited students or those who used visits and online learning “lost” the smallest percentage of student contact at this stage, generally about two students per class (**Exhibit 7**). These student losses were mostly attributed to students either relocating or working. Those teachers who used online learning more exclusively had very mixed results regarding retained students (see Exhibit 7, student retention rates of 37% and 29%). Teachers located in urban areas had a good deal of success with online learning, and they worked with caregivers and students to improve their technology literacy to learn online. However, teachers who attempted online learning in rural areas had very mixed results in reaching students, thereby creating equity issues. Note that this particular analysis is limited to the teachers participating in the study. However, in the majority of the schools in the study, the efforts to mitigate equity issues seem to have been somewhat effective (**Exhibit 7**), where seven out of the twelve teachers reported reaching at least 71% of their students.

Exhibit 7: Teacher-reported percentages of students retained during initial closure (n = 12)



None of the interviewees reported issues with funds not being available for printing worksheets for students, other than funds sometimes being released late. One school reported using funds left over after printing worksheets for school improvements, claiming that the caregivers were pleased with the results.

The online learning options seemed to work optimally when caregivers were being directed by teachers. Some teachers reported communicating with caregivers through WhatsApp Messenger or Facebook, directing them to have their child watch a given learning video and then complete the aligned assignments. Caregivers reported that teachers who used this approach made it easier for caregivers to organize and support their child's learning. Caregivers commented on the different solutions that teachers found to meet their child's continued learning. One caregiver was particularly effusive about the efforts of the teachers to meet their child's learning needs:

"I admired the efforts of the teachers. Sometimes when they could not contact us, they came directly to our household. They tried their best in order to help teach the children even though they could not study 100% but at least some."

Although this opinion was not unanimous, this type of effort was described by many caregivers participating in the study, summarized by one who stated: *"We had to try our best to help our children."* However, caregivers also offered many observations of other families in their community not surveyed of being less active in supporting their children's learning:

"The school has prepared nearly 99 or 100% already to help the children, but it depended nearly wholly on the parents themselves whether they were willing to help the children learn or not."

However, it is unclear what constraints different caregivers faced in meeting their children's learning needs. Being "willing" generally has a reason behind it such as caregivers working long hours, or just not having a level of education capable of supporting their child.

4.3 Schools Reopening – September 2020

When the schools reopened, they were directed to have students attend school for three days a week, and to emphasize teaching Khmer language and mathematics. To mitigate the threat of COVID-19, class sizes were restricted to a maximum of 20. These measures were designed to minimize close physical interactions among students while maximizing attention to the two core subjects. Including learning at home two days per week, the learning time for Khmer language was 16 hours; for mathematics, it was nine hours.

Critically, the central MoEYS set expectations regarding outcomes, but did not set expectations regarding how teachers should accomplish teaching and learning in the classroom. Judging from the responses of school directors and teachers during this study, however, there was little doubt that these directions that permitted flexibility for student learning were clear. Teachers decided to collaborate and receive support from multiple stakeholders, including colleagues, the school director, and—in Kampong Thom—an All Children Reading –Cambodia NGO. However, based on the participating schools, it is hard to determine whether all teachers and schools leveraged this flexibility to good effect. Depending on individual schools, how these directions were implemented varied. For example, a school grade with 40 students or less could teach in two shifts of 20 students or less. For class sizes over 40, especially because young children had to also learn at home for two days per week, it was difficult to achieve the desired hours of instructional time.

The blended learning seems to have been confusing for caregivers, who indicated that it took a while for them to understand this shift system of three days a week in school and two days at home. Caregivers were also disappointed that their children had to be at home for two days a week, still learning with them. However, they also mentioned their clear relief that classes were going to recommence and the excitement they saw from their children.

Teachers described how students were assessed for their literacy progress upon their return to the classroom. Teachers were able to state whether their students had made expected progress or not. The reflection by teachers on the results of student progress in early literacy were mixed. Some claimed that there was no learning loss; others claimed that all the students had learning loss; still others claimed that learning loss was limited to those students who did not study during initial school closures. Teachers had assessed their students using either tools provided to them or tools that they created themselves. These teachers did not doubt their ability to benchmark their students' expected literacy progress. The teachers described how they responded to the results of the assessments. Teachers reported one or more of the following solutions:

- Providing more catch-up learning opportunities for students who were struggling, either by allowing more time for in-class learning, or by providing worksheets to take home paired with communication with caregivers.
- Rearranging classrooms so struggling students could sit next to students who were progressing well and collaborate with them.
- Dividing classes into two ability groups to differentiate support.

The above examples of adaptive resilience demonstrate how many existing system norms potentially were being shifted. Teachers' responses were very much framed around differentiated student learning, rather than content delivery. Although reality might have varied from what the teachers described, the fact that they could even describe the importance of differentiated learning and meeting student needs is an important reflection. Note that many, but not all, teachers in the study mentioned adaptations to mitigate the disparities in student progress in Khmer language literacy.

Teachers in Kampot Thom reported receiving support from the USAID All Children Reading - Cambodia NGO partner, whose advisors would make sure the students were being assessed and gauge whether the teacher needed assistance in adapting teaching and learning materials to students' needs. Quite a few teachers reported this assistance as being very helpful.

Students being at home two days a week in some ways posed new challenges, although they were previously at home full time. Some caregivers responded well and created a structured home environment where the child could learn, while other caregivers struggled with the demands on their time and attention. Some of these caregivers expressed disappointment and frustration with students not being back at school full time.

Finally, most respondents agreed that the central MoEYS had stepped forward to communicate with schools about conditions and supplies to minimize the COVID-19 threat, such as handwashing stations and students spread apart in classrooms.

4.4 New School Year – January 2021

As noted earlier, after a brief end-of-year closure in November 2020, schools reopened again on January 11, 2021. Central MoEYS communicated expectations for the early grades was a continued focus on teaching Khmer language and mathematics. Teachers and school directors said that they generally felt the instructions were clear and they understood them. Initially, students were back in the classroom full time, although this arrangement was later changed back to three days a week. The majority of school and community interviewees expressed having sensed relief at the opportunity to go back to business as usual. However, many other individuals discussed how behaviors and routines had changed due to the disruptive events of 2020. Illustratively, there was no one particular response that most or all of the respondents regarded as being a new action. This lack of convergence reflects the flexibility that the central MoEYS had granted to the schools; expectations and resources were provided, but schools were given latitude to meet expectations. Again, these results cannot be generalized to all of Cambodia's schools. Some of the enhancements implemented by schools included:

- *In some cases, communications to and expectations of caregivers evolved.* Before the pandemic, schools' and teachers' communications largely addressed school openings and student attendance. In many instances, these messages evolved to highlight expectations regarding caregivers' role in their children's learning. Some caregivers and teachers said this was a permanent change, while other caregivers easily slipped back to their prior position and said they would not play a role in their child's education other than ensuring attendance. In these instances, caregivers commented that they felt unable to support their child's learning due to level of education or lack of self-belief that they could do it.
- *New channels of communication remained.* Many teachers who reported starting new lines of communication with caregivers discussed how they maintained these new channels in 2021. The two main channels mentioned were Facebook and WhatsApp, where teachers created new groups of caregivers based on the student enrollment in the new school year. However, there were still two barriers to these lines of communication being fully effective: caregivers who could use online resources but were reluctant to engage, and caregivers who had only basic SMS-type phones.

- *Some stakeholders reported having learned to access and engage more successfully with technology.* Some older teachers in particular either reflected themselves or were observed being reluctant to engage with new modes of technology, particularly smartphones, during 2020. Consequently, they were not able to deliver worksheets electronically. In 2021, as a consequence of the needs during the school closures, more teachers and caregivers purchased smartphones and maintained them into 2021.
- *Some teachers leveraged teaching and learning resources to better meet the needs of their students.* During the pandemic, teachers were presented with new resources, such as student formative assessments and worksheets. Many teachers continued to use these resources given to them in 2021 to either supplement or replace existing materials as needed. Importantly, teachers emphasized that this adaptation always centered on meeting the learning needs of the students. Two teachers reported creating their own new teaching and learning resources.
- *Some teachers reported using differentiated instruction as a permanent change to their classroom teaching approach.* While not the majority, a few teachers continued administering formative assessments as a path to providing differentiated learning support for students, after having first implemented these assessments during the school reopening in September 2020.
- *Teachers and caregivers reported that students were ready to focus on learning.* Possibly because of concerns about learning loss and caregiver fatigue during school closures, the respondents both observed and reported positive anticipation regarding students returning to school. Consequently, a few teachers reported students being happy to be back in school and more focused.

These examples are clear instances of **transformative resilience capacity**: schools and teachers adopting changes to communications, expectations, and teaching and learning.

Additionally, some teachers in Kampong Thom mentioned receiving and being appreciative of support from NGOs working under USAID All Children Reading - Cambodia. Teachers described this support as really focused on communication of expectations; then making sure teachers were clear about how to go about assessing their students to then be able to provide remedial support of Khmer language and mathematics.

4.5 Reclosing of Schools – March 2021

As with March 2020, schools closed in March 2021 and learning reverted to remote methods. However, a new parameter was the increased restrictions on travel and movement enacted by the GoC due to increased COVID-19 infection rates. Consequently, teachers were not able to travel out to communities and households where their students resided, as they had done during the original closures in 2020. Most teachers commented that the online and phone communications were a lot easier because these channels had already been set up. However, only teachers in more urban areas related that these modes of communication were successful, due to the high level of engagement of caregivers online. Teachers who had previously relied on a blended approach of communication and interaction with caregivers and students struggled at this point. They commented on their frustration that they were not able to implement the approach of visiting their students in their communities as they had done in 2020. Additionally, as noted above, those teachers having to reach out to caregivers through simple SMS messaging were not able to send worksheets electronically. Consequently, the inequities in student access to resources

widened based on teacher and caregiver access, engagement, and use of technology. The transformational resilience from 2020 existed only for caregivers and teachers who adopted technology as a result of the school closures.

A few teachers and school directors said they had printed hard copies of the worksheets and asked a caregiver or student to collect these worksheets for themselves and to deliver copies to other students in their village. This method was also used for delivering completed worksheets to teachers for marking. However, they also commented that many other caregivers and teachers were unwilling to use this type of arrangement due to COVID-19 travel restrictions. Schools in urban areas, where more caregivers were online and teachers were confidently using technology, were obviously able to work with more students and caregivers at home, keeping many more of the practices developed in 2020. Regarding maintaining expectations and support, one school director said,

“I told the teacher to ask the caregiver to record the activity of their children reading and send it back to the teacher, and the teacher send it to me. That way, I could help to monitor and check for whether the caregivers paid more attention to their children learning or not. So, if we make comparison, this year we have more involvement from the caregivers.”

Caregivers who were able and willing to navigate online learning reported that procedures were better than in 2020. They commented that teachers had clearly learned what worked best; clear communications and daily routines of learning became very familiar. As one school director commented,

“This year we... just communicated with the caregivers through the [social] media, Messenger, Facebook, or Telegram. Even now, still a few caregivers did not join the groups even though they had smartphones.”

Consequently, there was adaptive resilience in instances where online learning was easier to facilitate. Had the school-closure conditions been the same as in March 2020, it is likely that schools and their communities would have demonstrated transformative resilience capacity; many participants in the study reported procedures and interactions that had changed by the time schools reopened in January 2021. The most challenging issue arising from the travel restrictions was equity of access to continued learning for students; the digital divide clearly distinguished between students who could continue their studies and those who found it challenging. This was evident when participants were asked about the difference between first phase of school closures in March 2020 when teachers could travel to communities to support student learning and March 2021 when they could not travel, and were mostly limited to online and phone communication.

5. Conclusions and Recommendations

5.1 Conclusions

As noted in the introductory section of this report, the researchers who conducted the Cambodia learning-loss study in January 2021 expected to find some degree of average learning loss due to learning disruptions and an education system that lacked mechanisms to adapt to challenging circumstances. However, instead, the study reported an average gain in learning in Kampot Thom greater than the previous year (**Exhibit 2**), the first year of the implementation of the All Children Reading - Cambodia program. Additionally, the control group from the January 2021 study—a sample of schools from Battambang that

were not receiving support from All Children Reading - Cambodia—also experienced gains, albeit much smaller, in learning outcomes from the prior year.

It is important to reemphasize the limitations of this study. The research team’s school-level interviews were limited to 12 teachers and eight school directors in eight schools. Moreover, although the intention had been to select four high-performing and four low-performing schools by which to conduct qualitative interviews, due to nonconforming input from one DOE, we were able to conduct interviews only in six high-performing and two-low performing schools. Readers should take care to not to generalize the findings from this report to all schools in Battambang and Kampong Thom. This report paints a picture of some very encouraging findings, but it is uncertain how consistently these findings would be observed in rural areas of the two provinces.

One aspect of the theoretical framework was to analyze the response of the MoEYS according to the USAID resilience framework (USAID, 2019). Most education systems worldwide did not have absorptive resilience capacity to respond to school closures due to the pandemic, in the form of leveraging existing resources and systems capacity to minimize the negative impact of the disruptive event. Cambodia’s MoEYS was no different. However, it did exhibit adaptive resilience capacity to respond to the event by directing schools to move to remote learning during initial school closures in 2020, providing access to the some educational resources through multiple communication channels—online and in person in the communities.

However, for this approach to be effective, additional frameworks came into play that the author had not considered at the study design stage. The first of these is the system’s response. That is, a key aspect of institutional capacity is setting and communicating expectations, monitoring and holding schools accountable, and intervening to support students and schools when needed (Bruns, 2018). Not all of this framework was applicable to every level of the education system, but some key components were in play. Specifically:

- During initial closures in March 2020, the central MoEYS **set clear expectations** that schools should reach out to all students and adapt means of communication and delivery of learning to ensure that the outreach was done. Additionally, MoEYS instructed schools to **pare down the curriculum** to deliver just instruction on Khmer language and mathematics in the early grades, to maximize possible time on task for these core subject areas.
- The central MoEYS **supported** these expectations by delivering teaching and learning resources (online, worksheets) and funds to print hard-copy worksheets.
- School directors performed two functions: **supporting** teachers and holding them **accountable** to meet MoEYS expectations.

Although the POEs, DOEs, and MOEs played a role in the communications chain from the central MoEYS through to the schools, there was no indication during the interviews that these regional offices served any other function during school closures and subsequent reopening. However, because every solution to continued learning during the pandemic depended on environmental conditions within the schools and communities, it is not clear how these offices could have gotten further involved. It is possible that the regional offices could have held schools accountable to meet the central MoEYS expectations, but it seems that the school directors were already performing this function. The role the POEs, DOEs, and MOEs could have performed was to connect those “bright spot” schools exhibiting resilience with those less active in responding to the challenging circumstances, creating peer pressure and support for all the schools to learn and move forward together. As it is

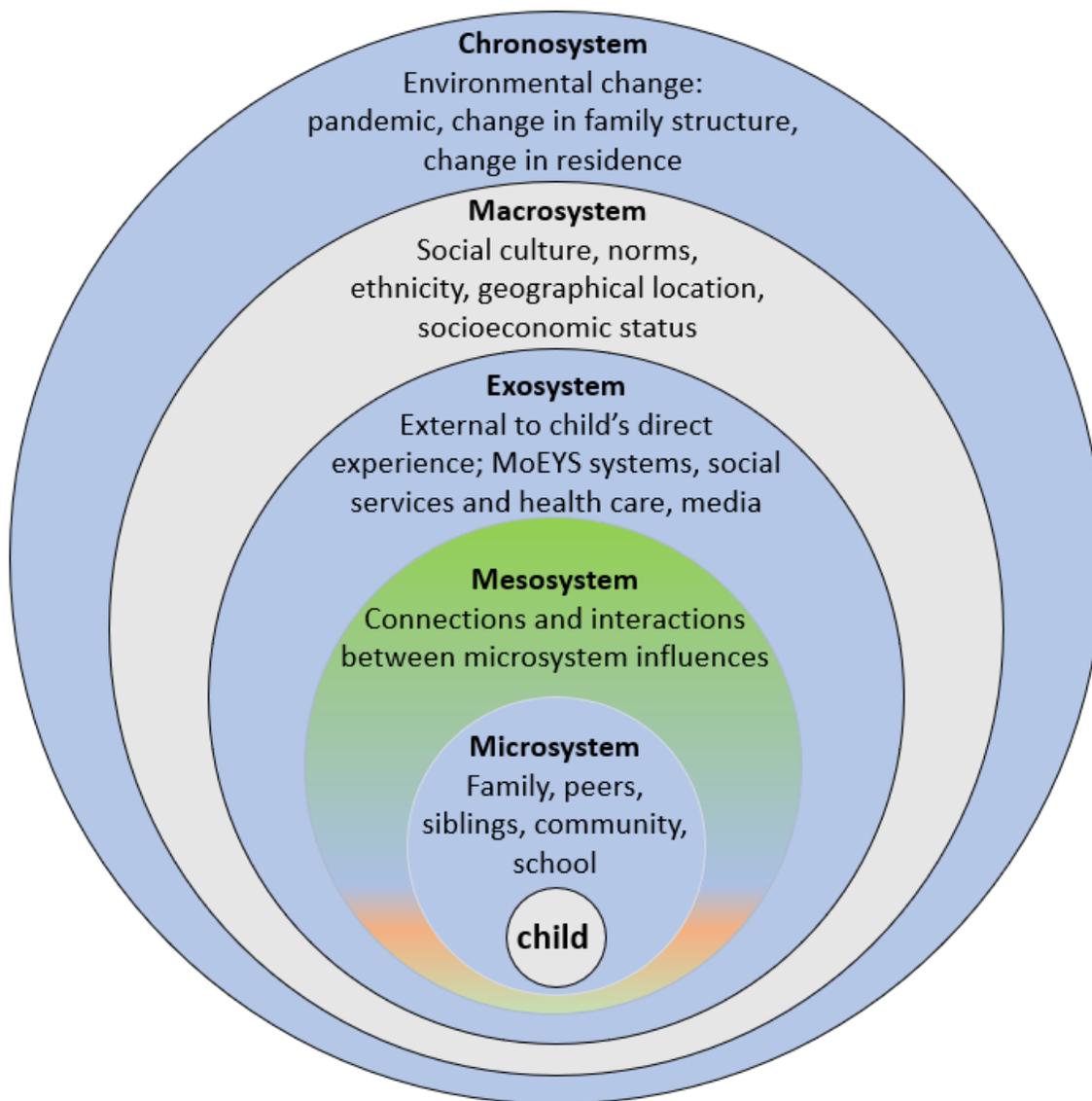
with educational reform (Fullan 2006), response to the pandemic should have been about moving the whole system, rather than letting individual schools figure it out.

In summary, in the education system in Cambodia, the central MoEYS set expectations and provided support, and schools figured out how to solve the problem. School directors played a key role in this process, with teachers describing how school directors held teachers accountable for the central MoEYS expectation of continuing to deliver instruction during school closures and reopening in 2020, but also supported teachers to adapt where necessary. This emphasis on flexibility was especially true during the initial school closures, when the school directors encouraged teachers to use multiple communications channels to reach out to caregivers and students.

The responses of participants in this study also clearly indicated that the communication between schools and caregivers was significantly enhanced as a result of the change in circumstance due to the pandemic and school closures. Prior to the pandemic, most communications from schools to communities focused on attendance, which is understandable. However, during the pandemic and school closures, attention shifted to schools communicating to caregivers how they were expected to play a role in their children's learning. Caregiver participants in the study clearly stated how the expectations for their role had changed, and teachers said they had clearly expressed these expectations to caregivers. The response to these expectations, as previously discussed, was mixed.

This point leads us to a second research framework previously not considered for this study's theoretical framework, namely Bronfenbrenner's Ecological Systems Theory, which was introduced in 1979. This theory views child development as a system of interrelationships affected by different environments. Changes in this ecological system can have a profound effect on a child's development (**Exhibit 8**).

Exhibit 8: Bronfenbrenner's Ecological Systems Theory



(adapted from Bronfenbrenner, 1979)

It is reasonable to hypothesize that for many students, every ring of influence represented in this model changed in some capacity. The outside ring of influence (chronosystem) changed due to the pandemic, causing a ripple effect on the other rings of influence. The exosystem, describing indirect influences on the child, would be represented by the central MoEYS, releasing communications on how the child's learning would change during the pandemic, in addition to relatively quickly providing resources to support these changes. Those in direct contact and having the most influence on the children from the microsystem remained the same. However, the mesosystem, which describes the connections and interactions among caregivers, teachers, and community members, changed for many children. Increased communications that centered on student learning and the expectation of collective responsibility for student learning seem to have created significant changes in the

macrosystem—a shifting of normative behavior from the original expectation that teachers taught and parents mostly ensured that their child attended school. The result for many children was changes in the mesosystem: a change in behaviors and interactions of those who directly influenced them. The challenge is this; will these normative behaviors be sustained post-pandemic or will behaviors revert to the pre-pandemic? In other words, are these behaviors possibly a situation of transformative resilience and can be sustained? What can be done to sustain them?

Although the 2020 pandemic response can be mostly framed as adaptive resilience, the teachers gave plenty of examples of how the new school year presented opportunities for transformative resilience—that is, using what worked during 2020 and keeping those habits, behaviors, or procedures to enhance communications and learning. These transformations were clearly very different and unique to individual schools. MoEYS set the expectations, but it was also clear that schools should have flexibility to solve challenges of school closures and reopening in a local context. It is a little unclear, however, whether this flexibility created a sense of local ownership to solve the problems encountered, or whether the pandemic shifted social norms, thereby shifting habits, behaviors, and actions. Since this study collected data in April 2021, the school closures have continued. It is not known how long-term closures impact resilience through fatigue and other factors.

5.2 Recommendations

The following three key recommendations emerged from the analysis of the qualitative data.

1. **Initiate research to determine whether schools and teachers respond positively to a combination of set expectations but flexibility in terms of how to meet these expectations.** The teachers who participated in the study demonstrated impressive adaptive resilience in describing how they met the learning needs of their students. It is unclear, however, whether their resilience stemmed from a combination of expectations and flexibility to solve the problem, or was a product of normative behaviors having shifted as a result of the pandemic. The cause of the change aside, teacher responses hinted at collaboration, learning, problem solving, and local ownership of decision making, all of which are critical components of change theory and school improvement (Fullan 2006).
2. **Engage the MoEYS and partners to reflect upon and identify positive system changes and deliberately maintain them after the pandemic disruptions, through policy and implementation.** There is a clear opportunity to understand what changed for the good during the pandemic (e.g., communicating differently, setting expectations, holding stakeholders to these expectations, and supporting schools through resourcing) and to maintain these aspects of a functioning education system.

The USAID All Children Reading - Cambodia learning-loss study suggested that learning outcomes improved during the pandemic at a greater rate than during a normal school year. The response by all stakeholders during the pandemic was based on a sense of urgency due to the risk of interrupted student learning. Thus, they collectively impelled systems responses and individual actions and behaviors atypical of a school year. The COVID-19 pandemic created this urgency and sense of risk of learning loss. However, the low learning outcomes in a typical year indicate that barriers to student learning are not just something to consider during a pandemic. Therefore, it seems reasonable that the system should continue, with a

sense of urgency, to set and support expectations regarding the levels of support to provide to young learners, holding stakeholders accountable along the way.

3. **During future disruptions to learning, continue to focus on equity by varying the delivery approaches for learning and communication.** During the pandemic, the most successful schools were those that used a blended approach to reach different families (e.g., online and in person). As Cambodian society transforms and more citizens are able to use online resources, the MoEYS needs to make sure that those without access to the internet today do not get left behind.

Annex: Instruments

The teacher instrument is included below.

Return to Learning – Teacher Interview Script

Note: Not all questions will be asked to all respondents based on their position and experience. Additional clarification questions may be added as well as questions to explore additional lines of inquiry as they arise.

Hello, my name is _____ from RTI International and I am here to learn more about the continuation of learning during the COVID-19 Pandemic and subsequent return to schooling. Thank you for taking the time to talk with me today. We'd like to get your views about responses to the closing of schools, learning during school closures and when and how schools returned.

- Your name will NOT be mentioned anywhere in the data or findings.
- Your participation is very important, but you do not have to participate if you do not wish to.
- If you agree to participate, I will ask you some questions.
- We will be taking notes and recording the audio from this interview.
- We believe there is no risk to you in participating in this research.
- You will not personally benefit from participating in this interview, but we believe the research could potentially improve how education stakeholders respond to crises.
- Are you willing to participate? Once again, you do not have to participate if you do not wish to. Once we begin, if you would rather not answer a question, that's all right. Can we get started?

Participant provided consent: YES NO

Teacher Background Information	
Age of teacher	
Gender of teacher	
Grade currently teaching	
How many years have you taught overall?	
How many years have you taught grades 1-3?	
How many years have you taught in this school?	

Prior to Closure – Business as Usual – Essential Considerations

- What were the teacher’s belief, habits, and classroom practices prior to the pandemic?
- What professional support did teachers receive? Was this support sufficient?
- How did teachers communicate with parents? What did they communicate?

Question	Theme	Initial Question	Secondary Question
1.	Communications systems: bureaucratic response	Prior to COVID-19, what communication did you receive regarding your role and responsibilities for student learning? (e.g., POE, DOE, school director)	Do you feel this communication met your needs? Please explain.
2.	Communications / community engagement / families and pupils	Prior to COVID-19, how did you communicate with parents and community members?	What means of communication did you use, how did you use it (messaging, information, in-person, etc.)?
3.	Professional support to teachers	Prior to COVID-19, what professional support did you receive regarding your classroom instruction?	Who provided this support, and did it meet your needs? Explain why?
4.	Teaching, learning, and assessment	What do you believe are the roles and responsibilities of teachers, students, parents, and community for reading? Please consider assessment and monitoring of learning, what you did if students were struggling, etc.	In a normal year, were you able to differentiate instructional support to your students? How? Were you able to assess and monitor individual student learning of reading? How?

Initial Closure – March 2020 – Essential Considerations:

- How was the education system response implemented by schools?
- Did this response provide appropriate and timely guidance/support to schools to be able to support distance learning?
- Did the teacher change their approach to support individual student learning?
- Did the teacher change their approach to communication with families/parents?

Question	Theme	Initial Question	Secondary Question
5.	Communications systems: bureaucratic response	During initial closure of the school in March 2020, what communication did you receive regarding expectations of how you should continue to support your students' learning?	Was the communication clear and could you act on it? Why or why not?
6.	Communications / community engagement / families and pupils	How did you communicate to students and families during lockdown?	How did you communicate differently to students and families during lockdown? Were you able to communicate with most of your students and their families about supporting reading learning? Why or why not?
7.	Professional support to teachers	During initial school closures, what support did you receive that helped you continue to support student learning?	Did you receive worksheets and assessments either as paper copies or electronic and were you able to deliver these resources to families?

8.	Teaching, learning, and assessment	During distance learning, were you concerned that some or all of your students were not learning? Were you able to support students? Why or why not?	What aspects of distance learning went well? What aspects frustrated you? What do you think could have been done differently?
Reopening – September 2020 – Essential Considerations <ul style="list-style-type: none"> - How did teachers use the flexibility afforded to them to meet student Khmer language reading needs (16 hours/week)? - How did teachers communicate with parents and students differently? - Did teachers change their practice in any way to help students “catch-up”? (individual learning, assessment, etc.) - Did teachers receive support to plan for reopening? 			
Question	Theme	Initial Question	Secondary Question
9.	Communications systems: bureaucratic response	During reopening did you receive clear communication about what you were meant to do regarding reading and mathematics learning upon school reopening? What were the directions and who did you receive them from?	
10.	Communications / community engagement / families and pupils	During reopening, how did you communicate with parents?	Was this communication different from how you would communicate with parents during a regular school year? How?
11.	Professional support to teachers	During reopening, what support did you receive that helped you continue to support student learning? Who did you receive that support from?	Was the support sufficient? Why?

12.	Teaching, learning, and assessment	How did you assess the level of reading skill development of your students? If yes, what was the level of learning loss (or not) of your students?	Were you able to use these findings to adapt either whole class or individual learning? How?
13.	Teaching, learning, and assessment	<i>MoEYS directive stipulated that students should learn 16 hours of Khmer language a week during reopening.</i> How did you use this classroom time to meet student needs? What adaptations	Do you think that the guidelines were sufficient for you to be able to meet the learning needs of your students? Would more or less guidance have been useful? Explain.
14.	Teaching, learning, and assessment	Given the short amount of time back at school, do you feel the students “caught-up” with their expected reading levels as you’d see in a normal school year? Explain.	
New School Year – January 2021 – The New Normal – Essential Considerations <ul style="list-style-type: none"> - What is the “new normal”? What changes have schools, teachers, and parents made to supporting learning? - Have schools and teachers made changes in preparation for potential school closures? - Are schools prepared to support students who are behind in their learning due to “learning loss”? - From all the challenges of 2020, what was learned and what has changed in habits, practices, and beliefs? 			
Question	Theme	Initial Question	Secondary Question
15.	Communications / community engagement / families and pupils	Compared with a normal school year, did you communicate differently with parents? Did parents communicate differently with you?	Did this communication as a response from the pandemic change expectations for student learning support for yourself or the parents?

16.	Communications systems: bureaucratic response	During reopening did you receive clear communication about what you were meant to do regarding reading and mathematics learning upon school reopening in Jan 2021? What were the directions and who did you receive them from?	
17.	Professional support to teachers	For the new school year, what support did you receive that helped you continue to support student learning? Who did you receive that support from?	Was the support sufficient? Why?
18.	Teaching, learning, and assessment	Compared with a normal school year, did any of your teaching practices (classroom instruction, assessment, communication with parents) change as a result of the pandemic? How?	Are any of the changes you had to make in 2020 now permanent changes in how you teach?

Reclosing of Schools – March 2021 – Essential Considerations

- Did teachers respond differently from the March 2020 school closings? Did they learn and adapt how they were going to support student learning (assessment, individual and classroom instruction)?
- Did teachers communicate differently with parents compared with a year ago?
- Does the teacher think the education system was better prepared for this new school closures?

	Theme	Initial Question	Secondary Question
19.	Communications / community engagement / families and pupils	Compared with the school closings in 2020, did any of your communication to parents change?	Why? What did you learn from 2020?
20.	Communications systems: bureaucratic response	What communication was received regarding school closures and from whom? (central ministry, POE, DOE, , head teacher)	Was support given outside of notification of schools closing?
21.	Resilience	Are you, the school, and parents better prepared than in March 2020? How and why?	Who is responsible for this improved response? How was this preparation achieved?

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