GUIDE FOR LEARNING RECOVERY AND ACCELERATION:

Using the RAPID Framework to Address COVID-19 Learning Losses and Build Forward Better

June 2022
Acknowledgments

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Design: Marianne Amkieh
The COVID-19 pandemic has caused unprecedented interruptions to schooling, and data show substantial learning losses around the world. Additionally, drop-out rates are increasing in some countries, along with early marriage, early pregnancy, child labor, and mental health issues. These effects have occurred in a context of already high learning poverty: before the pandemic, 57% of children in low-and middle-income countries were unable to read a simple text by age 10, and the rates of improvement in learning were already very slow. During the COVID-19 pandemic, after lengthy school closures and remote instruction that was less efficient than learning in schools and was provided with unequal access, the learning poverty rate could reach as high as 70%.

Future learning and decades of economic and social gains are at stake: urgent action is needed to ensure this generation of students receives an education that is at least as good as that from past and future generations.

A contextually suitable Learning Recovery Program can help recover and accelerate learning. This document introduces a framework of five policy actions to establish such a program. While the first two policy actions (i.e., reaching and keeping students in school, and assessing learning levels regularly) support an equitable recovery, including monitoring and planning, the remaining three policy actions constitute strategies to improve teaching, learning, and wellbeing. The composition of the program should be thought of as flexible—a menu of policy options—for countries to select, combine, and adapt to their context.
COVID-19 disruptions have generated learning losses around the world

Children around the world lost an enormous amount of classroom time. At the peak in April 2020, it is estimated that pandemic-related school closures disrupted education for over 1.6 billion children in 188 countries. Globally, from February 2020 until February 2022, education systems were on average fully closed for in-person schooling about 141 instructional days, with the world’s poorest children disproportionately affected.

Substantial losses in math and reading have been documented in low-, middle-, and high-income countries. Emerging evidence from countries like Brazil, Italy, Kenya, Czech Republic, Ethiopia, Pakistan, and others show stark differences in performance between current and pre-pandemic cohorts.

A recent analysis of 36 studies measuring learning loss in different countries finds that learning losses on average amount to 0.17 standard deviations, equivalent to roughly one-half year’s worth of learning.

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South Africa: grade 2 students incurred learning losses equivalent to up to 70% of a year of learning
Malawi: grade 4 students lost the equivalent to two years of learning

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ASIA
Rural Karnataka, India: only 16% of grade 3 students could perform simple subtraction in 2020, compared to nearly 24% in 2018
Cambodia: students who failed to demonstrate basic proficiency increased from 34% to 45% in the Khmer language and from 49% to 74% in mathematics

LATIN AMERICA
São Paulo, Brazil: students learned only 28% compared to if face-to-face classes had continued
Mexico: significant learning losses in basic numeracy and literacy

As schools have reopened, it has been tempting to resume business as usual, on the assumption that once children are back in classrooms their learning will soon get back on track. This would be a mistake. To avoid a permanent impact on the human capital accumulation of this generation, countries need to focus on reversing those losses and accelerating learning.

### Future learning trajectories are at risk without action

1. **Future learning trajectories are in jeopardy.** Learning losses may continue to accumulate once children are back in school. Children risk learning less every year compared to pre-pandemic cohorts.

2. Learning losses may consist of **forgone learning**, i.e., learning that did not take place due to school closures, the **forgetting** of previously acquired learning, and could also include **lost future learning**.

3. A cohesive Learning Recovery Program can lead to an accelerated learning recovery.

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Executive Summary

A RAPID Framework for Learning Recovery & Acceleration

A **contextually adapted** learning recovery program, consisting of a mix of evidence-based strategies to recover learning, can help get students back on their pre-pandemic learning trajectories.

**A**ssess learning levels regularly.
- Assess learning losses at national/sub-national level
- Prioritize numeracy, literacy, socioemotional skills
- Focus instruction on closing the gaps between desired and actual student learning in specific subjects
- Use approaches that align instruction with learning needs: targeted instruction; structured pedagogy; tutoring; self-guided learning
- Support teachers continuously: build practical pedagogical and digital skills
- Enhance learning with technology

**R**eopen schools safely and keep them open
- Reopen schools safely and keep them open
- Promote returning to the classroom through back-to-school campaigns
- Provide cash transfers to poor families
- Use early warning systems to identify at-risk students
- Use approaches that align instruction with learning needs: targeted instruction; structured pedagogy; tutoring; self-guided learning
- Support teachers continuously: build practical pedagogical and digital skills
- Enhance learning with technology

**E**nhance learning with technology
- Enhance learning with technology
- Expand instructional time

**D**evelop psychosocial health and wellbeing.
- Build teachers’ capacity to support their students’ wellbeing and identify students in need of specialized services
- Support teacher wellbeing and resilience
- Invest in students’ safety, nutrition, and access to water, sanitation, and hygiene facilities
Executive Summary

Reach every child and keep them in school

Encourage, monitor, and support return to schools

To recover learning, all children need to be back in school. Action is needed to ensure all children return and stay in school. Three buckets of actions can help: 1) reopen schools and keep them open; 2) implement early warning systems and back-to-school campaigns; and 3) provide free schooling, meals and cash transfers.

Reopening schools and keeping schools open is a pre-requisite for learning recovery. Remote learning was not as effective as in-person schooling, even in high-income countries. Learning losses were significant, and students from disadvantaged backgrounds were often disproportionately affected by learning losses, showing the importance of keeping schools open.

Back-to-school communication campaigns, both general and targeted to at-risk students, can help increase attendance or re-enrollment rates. It is important to communicate to parents that it is safe to send children back to school, as parental concerns about health risks may prevent children from returning, as well as the value of schooling and learning.

Early warning systems to identify students at risk of dropping out can help improve student retention. Drop-out is multi-causal, which why it is important to go beyond attendance and student achievement, and consider how factors like financial constraints, family situation, peers, and lack of community support affect a student’s risk of dropping out.

Involving families in children’s education. Parents and caregivers are central actors in their children’s education, especially during the early years. Family and the community around the child affect the likelihood of a child going to and staying in school. Providing parents with information on the benefits, costs and quality of education, can improve school participation. Systems should strengthen teacher-parent relationships and encourage families and communities to play an active role in children’s education.

Removing school fees, offering free school meals, or giving families cash transfers. Robust evidence from around the world shows that when financial constraints are relaxed by removing costs, school participation is likely to increase. While nearly all countries offer free primary school, fees for lower secondary school remain in 24 countries, and for upper secondary school in 40 countries.

For additional information, explore the following external resource: COVID-19 Response: Re-Enrollment, UNESCO. 2020.
Assess learning levels regularly

Understanding children’s current learning levels in the classroom and estimating learning losses at a systemic level allows teachers and policymakers alike to make informed decisions about the instructional approaches and other policy decisions needed to promote learning recovery.

Two main types of assessments for recovery:

System-level: At a national or regional level, baseline measures of learning can help policymakers understand the scale of the learning challenge, trends in learning over time, and inequalities in student learning, which can help them make informed decisions on where and how to mobilize resources to reverse learning poverty and drop-out among those most vulnerable. Estimating how much learning was lost, as well as what specific content was lost, can help the country design appropriate learning recovery strategies. Expressing learning losses as a share of a year’s worth of learning can help focus the policy conversation on the urgent need to fight learning poverty and be a critical tool to mobilize action and resources for learning recovery.

Classroom-level: In additional to system-level data, it is vital to have quality classroom-level data about the performance of students. Diagnostic and formative assessments can help teachers and school leaders adapt teaching plans and pedagogical approaches to best help students learn. Classroom assessments are critical to implement recovery strategies like targeted instruction, which groups students by their learning levels, and for monitoring the effectiveness of learning recovery interventions. Assessments can help teachers understand progress against curricular standards and provide children responsive and on-going learning support.

Illustrative Example (please note actual school closures and learning losses varied widely):
1. Students missed 1.5 years of regular schooling, which was replaced by hybrid learning
2. Hybrid learning helped mitigate the learning loss, but was less effective than regular schooling, so students only learned the equivalent of, for instance, 0.5 years of learning
3. Students are now 1 year of learning behind as they return to school
Prioritize teaching the fundamentals

The pandemic shock represents a crucial opportunity to conduct much-needed adjustment to better align curricula with pressing needs. As COVID-related education disruptions have pushed students behind their grade-appropriate learning levels, adhering inflexibly to the curriculum risks presenting students with material they are not prepared to learn. If they move through the curriculum without first mastering the key foundational concepts they need, their ability to progress on to more complex topics with adequate understanding will be jeopardized. Countries should adjust teaching plans to prioritize teaching the fundamentals in the time they have available.

Teaching plans should prioritize foundational skills and conceptual pre-requisites

**Foundational learning** refers to the key skills that are the daily gateway to subsequent learning in an expanding number of subjects and disciplines. These refer to key skills in **reading** and **mathematics**, and increasingly also critical **digital skills** and **socioemotional competencies**.

**Antecedents and pre-requisites** are content that must be learned prior to learning subsequent content in the learning series.

Determining what is foundational or ‘antecedent’ is not always easy; opinions vary, and expert judgment may be needed to come to consensus. However, common criteria used to determine priority skills and knowledge areas include:

- **Endurance**: What skills/knowledge last beyond the current grade or course, and/or are needed in graduates’ daily life?
- **Leverage**: What skills/knowledge can be used across subject areas?
- **Readiness for next level**: What skills/knowledge are antecedents/pre-requisites for later learning topics in the trajectory?

What does this look like in practice?

Several countries have adjusted their curricula in order to prioritize fundamental skills and knowledge as a learning recovery response during COVID-19. These have not taken the form of large-scale curricular reforms, but rather relatively quick curricular and instructional adaptations.

This has involved:

- Rebalancing time allocations to devote more time to foundational skills in literacy and numeracy
- Focusing on key competencies within these focus areas; streamlining duplicate content; integrating topics based on logical connections
- Publishing updated learning objectives and outcomes; and producing updated curricular documents, teacher guides, evaluation criteria, etc.
- Providing schools greater flexibility to adjust teaching plans to their students’ needs

See the cases of **Chile, Ecuador, Guyana, South Africa**, and **Vietnam**.
Increase the efficiency of instruction, including through catch-up learning

Policy options and strategies

To recover from learning losses, school systems will need to support initiatives that increase the amount of learning within classrooms, through more effective teaching practices and learner-focused recovery strategies that can help all students make gains on their learning. Improving the quality of teaching and targeting it to the level of the student are among the most crucial interventions for reversing the decline in learning progress.

Five evidence-based approaches for recovering and accelerating learning that countries can select, combine, and adapt are:

**TARGETED INSTRUCTION**

Aligns instruction to the learning levels of students by grouping them according to their level of proficiency—not their age or grade—for a dedicated time of the day. It is considered one of the most effective models for accelerating learning in low-performing students.

**STRUCTURED PEDAGOGY**

A coherent package of investments that work together to improve instruction. Key components include high-quality teaching and learning materials (i.e., teacher guides); ongoing teacher training and coaching; and continuous student assessment.

**TUTORING**

One-on-one or small-group instructional programming that supplements learning by giving students individualized attention and targeting instruction towards identified areas where students most need support or practice. Efficacy depends on group size and frequency of sessions.

**SELF-GUIDED LEARNING PROGRAMS**

Enable students to progress incrementally towards mastery of foundational skills at his or her own pace, with limited input from a teacher. The activities can be assisted by technology or be pencil-and-paper based.

**EXPANDING LEARNING TIME**

Expanding the time students spend learning is another strategy for accelerating learning. To be effective, additional time should be used for high-quality instruction, have clear learning goals, ensure high attendance (if voluntary), and be weighed against downsides such as the potential for burnout and stress.

**Country highlights**

**Brazil**: is scaling a learning recovery program that provides targeted instruction to groups of students with similar learning needs, during four, two-week periods in the school day.

**Jordan**: delivered hybrid home learning packages to children in grades 4-9 with cross-curricular material to help them review and practice key concepts at their own pace during school closures. After school reopening, they continue to be used as an instrument for learning recovery.

**Mozambique**: is strengthening learning readiness through an early-grade literacy program that provides scripted lesson plans, teacher training and coaching, and frequent assessment.
Increase the efficiency of instruction, including through catch-up learning
Supporting teachers to perform

| Support Teacher Resilience | As education systems pivoted to remote learning, many teachers experienced increased demands and heightened complexity to their jobs. Teachers need to be adequately supported so that they, in turn, can support their students and accelerate their learning. To support teacher resilience:
| | • **Check in on teachers** through mechanisms to detect and mitigate signs of burnout, including screening mechanisms, enhanced communication and guidance, and peer support groups
| | • **Enhance intrinsic motivation** by highlighting teachers’ contributions; share success stories; connecting teachers
| | • **Build teachers’ psychosocial resilience** through counseling, trainings, and other tools

| Support Teachers Instructionally | Teachers have the challenging job of teaching a generation of students who are far behind in learning compared to previous cohorts. To do so, teachers will need support to implement strategies for recovery and acceleration and to utilize assessments as a tool to inform instruction. To support teachers instructionally:
| | • **Support teachers in implementing recovery strategies** through practical training and guidance, including coaching and in some cases structured lesson plans
| | • **Equip teachers to assess students** through support to implement assessment tools accurately, record and interpret data, and use it to make instructional decisions
| | • **Prepare teachers to support students’ psychosocial wellbeing** through in-school strategies, and to identify students that require specialized support

| Support Teachers Technologically | Blended and hybrid learning is here to stay, not only as a way to prepare education systems for future shocks, but also to enhance education delivery today. To support teachers technologically:
| | • **Provide teachers with access to technology**, which requires investments in hardware and connectivity
| | • **Build teacher skills in how to use technology** to enhance educational delivery. Training should help teachers judge when technology enhances instruction and when it does not.
| | • **Help teachers use technology to remediate gaps in learning** – for instance, for implementing assessments, using peer-to-peer support groups, using self-guided learning programs, and others.
Develop psychosocial health and wellbeing

Safeguarding learning and wellbeing of children and youth requires us to invest in understanding and addressing the impacts of the COVID-19 pandemic and related disruptions on children’s mental health and psychosocial wellbeing, and other drivers of overall wellbeing including safety, nutrition, and access to water, sanitation and hygiene facilities.

1. Provide mental health and psychosocial support (MHPSS): Studies paint a worrying picture of worsening mental health issues among children and youth, including increases in depression, stress and anxiety, and behavioral problems. Interventions that have been utilized during the COVID-19 pandemic include helplines and other forms of remote psychosocial supports (telephone counseling, radio programs); psychosocial interventions in school; teacher professional development on how to provide MHPSS; and supports for teachers’ wellbeing (peer-to-peer groups; workshops).

2. Bolster school-based nutrition services and feeding programs: Children are ready to learn when they are healthy and well-nourished. During the pandemic, promising country interventions have included shifting to a school meal collection or delivery model during prolonged or intermittent school closures (Costa Rica), expanding school feeding programs to reach more children (Iran), and providing counseling on nutrition and breastfeeding through the health sector (Mongolia).

3. Safeguard student safety: Safety in learning environments is an important contributor to student, teacher, and school-level outcomes. Interventions to promote school safety include embedding school safety diagnostics and monitoring into education system’s data management practices; instituting safe, anonymous procedures for reporting incidents inside and outside of school; and running information campaigns and workshops for parents and community members.

4. Implement school-based water, sanitation and hygiene (WASH) responses: Evidence shows that increased access and use of WASH services promotes both health and educational benefits, including reducing school absenteeism and boosting students’ cognitive skills and academic performance. During COVID-19, countries have: upgraded hygiene/sanitation facilities in schools, including making them gender-friendly (Mozambique); provided materials for handwashing and sanitation to prevent the spread of COVID-19 (Ecuador), and trained teachers on sanitary hygiene practices, including strategies for teaching handwashing techniques to students (Kyrgyz Republic).

Dominican Republic: the government implemented a two-week psychological recovery program (developed by the Ministry of Education, UNICEF, and USAID) during the first days of in-person instruction following school closures during COVID-19.

Costa Rica: the Ministry of Education ensured continuity of its school feeding program during school closures by establishing collection sites where food baskets could be collected by family members.

Nagaland, India: a World Bank-supported project will address school-related gender-based violence through development of education information systems that collect gender-disaggregated data; state-wide protocols for confidential reporting of incidents; and capacity-building and engagement of teachers, parents and the wider community.

Kyrgyz Republic: the country has rehabilitated water supply systems and installed handwashing and sanitation facilities in schools, and has trained teachers on sanitary hygiene practices.
Executive Summary

Steps to establishing multi-year plans for recovering learning and building back better

Establishing a Learning Recovery Program requires strong political commitment, robust planning, and adequate public spending. It should be a multi-year and multi-phased endeavor; programs should take urgent action to address learning losses immediately, but may take multiple years to implement, as this generation needs to both recover their learning losses and improve on its pre-pandemic trajectory. During implementation, systems must have a high tolerance for failure and adjustment, given the unprecedented nature of this task. Monitoring, assessing progress, and adapting iteratively will all be critical.

1. Diagnose Learning Losses & System Capacity
   - Diagnose pre-pandemic learning goals & average attainment
   - Diagnose pandemic learning losses
   - Diagnose education system’s capacity (strengths & weaknesses) to assess what’s feasible
   - Understand policy options that could be used

2. A. Set Vision for Learning and Goals
   - Determine learning goals to respond to learning losses as well as a period to recover learning losses
   - Determine long-term learning goals and what structural reforms need to be made for the long-term (may include making permanent policies to recover pandemic learning losses)

2. B. Select, Adapt, & Develop Policies
   - Select the mix of policies and strategies to recover learning losses & build back better among those in the RAPID framework
   - Adapt the selected policies to country context
   - Develop specific implementation plans for each policy and program. Programs should be multi-year, multi-phased endeavors, including urgent initial phase.

3. Be Ready to Monitor & Adjust
   - Establish a plan to monitor implementation & early results
   - Ensure plan is adaptable, allow regular adjustments and maintain a healthy tolerance for failure
   - Engage policymakers consistently to ensure timely decision-making.

Steps 2.A. and 2.B. are Iterative: As one selects, adapts and develops policies it may be necessary to go back and readjust learning goals.
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June 2022
School disruptions, learning losses, dropouts, inequality, lack of investment, and the task ahead

Establishing a learning recovery program

Back-to-school campaigns, early warning systems, parental involvement, free schooling, meals, and cash transfers

Pre-pandemic goals and levels, national, sub-national, and classroom assessments

Focus on foundational skills, antecedents for future learning, and the science of reading

Teacher support, structured pedagogy, targeted instruction, small group tutoring, self-guided learning programs, teacher training, coaching, and support

Wellbeing and resilience, nutrition, safety, WaSH, mental health and psychosocial support

Learning recovery strategies at scale in Chile, Gujarat (India), São Paulo (Brazil), Ghana, and FCV settings
Global Context
The impact of COVID-19 on learning
COVID-19 has caused unprecedented interruptions to schooling

Children around the world have lost an enormous amount of classroom time. At the peak in April 2020, it is estimated that pandemic-related school closures disrupted education for over 1.6 billion children in 188 countries. Globally, from February 2020 until February 2022, education systems were on average fully closed for in-person schooling about 141 instructional days, with the world’s poorest children disproportionately affected.

While some countries quickly reopened schools, many kept all schools fully closed for exceptionally long periods like in South Asia, Latin America and the Caribbean, and the Middle East and North Africa. Others reopened only partially.

<table>
<thead>
<tr>
<th>Region</th>
<th>Fully Closed</th>
<th>Partially Closed</th>
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<tbody>
<tr>
<td>Global</td>
<td>282</td>
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<tr>
<td>South Asia</td>
<td>529</td>
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</tbody>
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The graph above encompasses pre-primary to upper-secondary levels. Days are counted as fully closed if 80% or more of learners in those groups are affected by school closures and counted as ‘partial’ closures if there are only regional closures, closures for certain grades, hybrid models, or when decisions are taken at a local/regional level.

Countries with low pre-pandemic learning outcomes had longer school closures

Proportion of children who can read a simple text and duration of school closures, as of 28 February 2022

There was already a learning crisis before the pandemic. Many countries that had poor learning outcomes prior to the pandemic also tended to have longer school closures (at the bottom right of the figure), and prolonged disruptions to schooling exacerbated these inequalities.

Source: "Where are we on Education Recovery?" UNICEF, UNESCO and World Bank. 2022.
Authors’ calculations using learning poverty data (reflecting late-primary level of reading) from UNESCO and the World Bank and MICS Foundational Learning Skills data (reflecting early-grade level of reading) from UNICEF Global Databases, 2011–2020, and data on school closures from the UNESCO Global Monitoring of School Closures. The size of the circle represents the 2020 estimate of the country’s population aged 10-14, retrieved from the UN Population Division.
Some data suggests drop-outs are increasing

Past crises, including Ebola, show that extended school closures can lead children to leave school due to several barriers to coming back: joining the labor force, early marriage and pregnancy, family financial constraints, and disengagement from learning. While evidence is still emerging, the mass exodus from schools we feared has not seemed to materialize – most children are returning.

However, dropout rates seem to be increasing in several low-and middle-income countries, although it varies significantly from country to country.

Older students are at higher risk of dropping out, and in some countries (e.g., Kenya and Nigeria) girls are more at risk than boys.

*The Kenya data are from a small sample in rural Western Kenya.

Learning losses have been observed around the world

Source: *Where are we on Education Recovery?* UNICEF, UNESCO and World Bank. 2022. Based on 65 studies reporting simulated (lighter shades) and actual observed (darker shades) learning losses/gains, covering a total of 104 countries and territories.
Learning losses have been observed around the world

Substantial losses in math and reading have been documented in low-, middle-, and high-income countries. Emerging evidence from countries like Brazil, Italy, Kenya, Czech Republic, Ethiopia, Pakistan, and others show stark differences in performance between current and pre-pandemic cohorts.

A recent analysis of 36 studies measuring learning loss in different countries finds that learning losses on average amount to 0.17 standard deviations, equivalent to roughly one-half year’s worth of learning.

Still, not every country is showing losses. For example, studies in Sweden, Uruguay, and Uganda show that learning remained steady or even improved in certain grades and subjects.

Yet most countries are. Among the 104 countries and territories covered by literature (simulations or actual measurements), 4 out of 5 show losses.

*It is worth noting that the studies for Uganda and Uruguay rely on a baseline measured three years before the pandemic hit; this means that they cannot show how learning changed during the pandemic specifically.


### Africa
- **South Africa:** grade 2 students incurred learning losses equivalent to up to 70% of a year of learning
- **Malawi:** grade 4 students lost the equivalent to two years of learning

### Europe
- **Netherlands:** students lost the equivalent to 20% of a school year
- **United Kingdom:** two months of learning lost in reading, among primary and secondary students

### Asia
- **Rural Karnataka, India:** only 16% of grade 3 students could perform simple subtraction in 2020, compared to nearly 24% in 2018
- **Cambodia:** students who failed to demonstrate basic proficiency increased from 34% to 45% in the Khmer language and from 49% to 74% in mathematics

### Latin America
- **São Paulo, Brazil:** students learned only 28% compared to if face-to-face classes had continued
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Gender: The crisis had gendered impacts

In many contexts, girls have taken the brunt of the negative effects of COVID-related school disruptions. Data from Nigeria, Ethiopia and Bangladesh show that boys were more likely to receive family help with schoolwork, while girls spent more on household chores than boys, detracting from the time spent on their education.

The pandemic puts girls at an increased risk of dropping out of school, child marriage, early pregnancy, being vulnerable to domestic violence and gender-based violence, and being exploited as child labor. In rural Kenya, the risk of dropping out tripled for secondary school-aged girls.

In Mexico, Pakistan and South Africa, learning losses were found to be larger among girls than boys. In Pakistan, girls were outperforming boys in Urdu language levels in 2019; in 2021, the opposite was true (see below).

Socioeconomic status: Losses were larger among students of lower SES

Across the globe, students from lower socioeconomic status (SES) families were disproportionately affected by COVID-related disruptions to education. Globally, at least 463 million children could not be reached by digital and broadcast remote learning programs amidst school closures, with three out of four unreached students coming from rural areas and/or poor households.

Ghana: the learning gap between high-SES and low-SES students widened in both literacy and math.

United Kingdom: 50% higher losses in reading for schools serving disadvantaged students

Mexico: the share of students who cannot read a simple text increased by 15 percentage points for high SES students and 25 percentage points for low SES students

Globally, at least 463 million children could not be reached by digital and broadcast remote learning programs amidst school closures, with three out of four unreached students coming from rural areas and/or poor households.
Inequality is growing in learning and beyond (cont.)

Some dimensions of inequality

Younger children: disproportionately affected
Young children and their families have been particularly vulnerable during the COVID-19 crisis. Results from Mexico and the United States show larger absolute losses for students in the earlier grades.

A survey of caregivers during COVID-19 in Pakistan found that the emotional well-being of some young children deteriorated significantly, particularly for those from poorest households and with parents also experiencing distress.

In addition, the youngest students were largely left out of countries’ policy responses, with remote learning rarely designed in a way that met their developmental needs.

Children with disabilities: often left out of country policy responses
Even before the pandemic, children with disabilities faced multiple barriers that hindered their access to schooling and learning, including the availability of resources and supports for their specific learning needs.

During COVID-19, students with disabilities were disproportionately excluded from distance learning opportunities due to the lack of distance learning modalities in inclusive formats (modalities tailored for sign language interpretation, closed captioning, and braille, among others). In fact, a global survey found that only 1 in 3 low-income countries indicated they had taken measures to support learners with disabilities.

Refugees and internally displaced children: face additional barriers in access to education and learning
Prior to the global COVID-19 pandemic, refugees and internally displaced children faced significant barriers to accessing quality education. The crisis has created additional barriers. According to UNHCR, nearly half of all refugee children are out of school.

Like the rest of the world’s children, refugees and internally displaced children are also experiencing an exacerbated learning crisis. Estimates suggest that up to 80 percent international or internal child migrants, refugees, and asylum seekers, as well as internally displaced children or returnees, are not achieving expected literacy proficiency levels.
The crisis has had detrimental impacts on children and youth beyond learning

In addition to providing education, schools promote children’s overall wellbeing, providing meals and supplements, delivering health services, and allowing children to develop socioemotional skills.

As a result of the social isolation, stress, and disruption caused by school closures, rates of anxiety and depression in children increased exponentially. Instances of violence against women and children were more likely to go unreported. Millions of children missed out on in-school meals and nutrition supplementation.

- 24 MILLION additional students may drop out of the school system* (UNESCO 2020)
- 10 MILLION more girls may marry early between 2020-2030* (UNICEF 2021)
- 34% INCREASE in depression and anxiety symptoms in children globally (UNICEF analysis based on updated GDB/IHME estimates)
- 370 MILLION children in 150 countries missed out on a daily school meal* (Borowski et al. 2021)
- 17+ TRILLION Dollars of future income lost* (Azevedo, Cloutier et al. 2021)
- 9 MILLION additional children at risk of being pushed into child labor by end of 2022* (ILO and UNICEF)

* estimations
Future learning is at risk without action

1. **Future learning trajectories are in jeopardy.** Learning losses may continue to accumulate once children are back in school. Children risk learning less every year compared to pre-pandemic cohorts.

2. Learning losses may consist of **forgone learning**, i.e., learning that did not take place due to school closures, the forgetting of previously acquired learning, and could also include lost future learning.

3. A cohesive Learning Recovery Program can lead to an **accelerated learning recovery**.

More investment is needed to recover learning

To recover and accelerate learning, more investment is needed, urgently—the status quo will not do

Change in public resources for the current school year (% of countries responding to UNICEF Pulse Survey)

- Significantly increased public resources allocated (≥5%) by the government: 12%
- Small increase in public resources allocated (<5%) by the government: 21%
- No change in public resources: 45%
- Decrease in public resources allocated by the government: 21%


- Countries allocated on average 3% of their COVID-19 stimulus packages to education. In low- and lower-middle-income countries, the allocation was less than 1%.
- Only one third of countries have increased public resources for education.
- A quarter of countries with longer school closures (>20 weeks) reported a decrease in budget.
- The share of ODA allocated to education fell from 8.8 per cent in 2019 to 5.5 per cent in 2020.
- The share of humanitarian aid given to education fell from 2.9 per cent in 2019 to 2.5 per cent in 2021.
In-person schooling should honor the commitment to quality education for all

Achieving equivalent quality in less time

Countries should ensure that pandemic-affected cohorts will experience an education that is at least as good as or better than what pre-pandemic cohorts experienced. The education received will not be identical but should be at least equivalent in quality.

How?

• Mass repetition is not contemplated: systems are not currently intending to recover learning losses solely by increasing the number of years of schooling

• Given this, equivalent quality education must be achieved in less time than for pre-pandemic cohorts: this is the central challenge of learning recovery

• Countries should adopt learning recovery programs, consisting of a contextually appropriate policy mix of evidence-based strategies aimed at addressing this challenge.

• The learning recovery programs can utilize five policy actions that, combined, bring back to and keep students in school, measure learning levels, prioritize and streamline content to be covered, increase the efficiency of instruction, including through catch-up learning, and provide psychosocial support.
RAPID Framework for Learning Recovery and Acceleration

Establishing a Learning Recovery Program using the RAPID Framework
Establishing a Learning Recovery Program

As schools reopen, it can be tempting to resume business as usual, on the assumption that once children are back in classrooms their learning will soon get back on track. This would be a mistake. To avoid a permanent impact on the human capital accumulation of this generation, countries need to focus on reversing those losses and accelerating learning.

- **A contextually adapted** learning recovery program, consisting of a mix of evidence-based strategies to recover learning, can help get students back on their pre-pandemic learning trajectories. This program may take multiple years to implement, as this generation needs to both recover their learning losses and needs to improve on its pre-pandemic trajectory, which in most cases was quite unsatisfactory.

- While learning recovery programs should be prioritized urgently and there is an extraordinary need to expand resources to this challenge, each country will need to assess which policy options are most suited to their context, considering budgetary and capacity constraints.

- Systems must have a high tolerance for failure and adjustment, given the unprecedented nature of this task. Monitoring, assessing progress, and adapting iteratively will all be critical.

- A learning recovery program must go beyond academic learning, to also support social and emotional learning and overall wellbeing, which are also essential elements to aim for when building back better.

- Evidence on post-pandemic recovery strategies is still emerging. However, previous disruptions to education and attempts to accelerate learning for students who have fallen behind offer a way forward, with promising policies for learning recovery.
Steps to establishing multi-year plans for recovering learning and building back better

1. Diagnose Learning Losses & System Capacity
   - Diagnose pre-pandemic learning goals & average attainment
   - Diagnose pandemic learning losses
   - Diagnose education system’s capacity (strengths & weaknesses) to assess what’s feasible
   - Understand policy options that could be used

2.A. Set Vision for Learning and Goals
   - Determine learning goals to respond to learning losses as well as a period to recover learning losses
   - Determine long-term learning goals and what structural reforms need to be made for the long-term (may include making permanent policies to recover pandemic learning losses)

2.B. Select, Adapt, & Develop Policies
   - Select the mix of policies and strategies to recover learning losses & build back better among those in the RAPID framework
   - Adapt the selected policies to country context
   - Develop specific implementation plans for each policy and program. Programs should be multi-year, multi-phased endeavors, including urgent initial phase.

3. Be Ready to Monitor & Adjust
   - Establish a plan to monitor implementation & early results
   - Ensure plan is adaptable, allow regular adjustments and maintain a healthy tolerance for failure
   - Engage policymakers consistently to ensure timely decision-making.

Steps 2.A. and 2.B. are iterative: As one selects, adapts, and develops policies it may be necessary to go back and readjust learning goals.
What are some key considerations in developing a Learning Recovery Program?

01 Ensure coherence in the system

Align changes throughout the curriculum, teaching and learning materials, instruction, and assessment, and ensure those changes support each other

- Utilize teaching and learning materials (e.g., textbooks) for different grades in a flexible way. For example, it may make sense to use 4th grade textbooks in the 5th grade classroom
- Adjust assessments so that they are compatible with new consolidated curricula
- Assure assessment, contents to be taught, and teaching and learning materials are aligned with what is achievable

02 Keep in mind that strategies may differ by ages and grade level

Early childhood education suffered particularly large losses; this level was the least likely to provide remote learning opportunities throughout extended school closures

Primary education will have lost more learning but have more time to recover it

Lower and upper secondary will have lost less learning but have less time to recover it
Avoid extremes: Examples of extremes are only a few hours of replacement time, or the entire remainder of the school career. A program based on a small number of years that tapers off as it consolidates a new and better system seems appropriate.

Look for natural endpoints: for instance, the start and end of school transition points (primary, lower-secondary, etc.).

Consider the science series: A typical progression for high school science (biology, chemistry) may require students to have recovered antecedents by the end of middle years

Consider the discipline: Subjects like math and reading may have more clearly defined and essential antecedents than other subjects

Consider the amount of specific content lost in determining the recovery period

Be pragmatic about the proportion of the curriculum that will be able to be covered, particularly in the first part of the recovery period

Prioritize the fundamentals but empower local actors (e.g., principals, teachers) with relevant guidance and tools so they have a certain level of freedom to adjust based on their context

Do not expect to initially exceed the previous amount and rate of learning attained for any given content. Monitor whether you are at, above, or below pre-pandemic rates of achievement. Seek to gradually attain these pre-pandemic rates, and once attained, move beyond them.
<table>
<thead>
<tr>
<th>REACH: Reach every child and keep them in school</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reopen schools safely and keep them open</td>
</tr>
<tr>
<td>Promote returning to the classroom through back-to-school campaigns</td>
</tr>
<tr>
<td>Provide cash transfers to poor families</td>
</tr>
<tr>
<td>Use early warning systems to identify at-risk students</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>ASSESS: Assess learning levels regularly</th>
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</thead>
<tbody>
<tr>
<td>Assess learning losses at national/sub-national level</td>
</tr>
<tr>
<td>Provide teachers with tools for classroom level measurement</td>
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</table>

<table>
<thead>
<tr>
<th>PRIORITIZE: Prioritize teaching the fundamentals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjust curriculum across and within subjects</td>
</tr>
<tr>
<td>Prioritize numeracy, literacy, socioemotional skills</td>
</tr>
<tr>
<td>Focus instruction on closing the gaps between desired and actual student learning in specific subjects</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>INCREASE: Increase the efficiency of instruction, including through catch-up learning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use approaches that align instruction with learning needs: targeted instruction; structured pedagogy; tutoring; self-guided learning</td>
</tr>
<tr>
<td>Support teachers continuously: build practical pedagogical and digital skills</td>
</tr>
<tr>
<td>Expand instructional time</td>
</tr>
<tr>
<td>Enhance learning with technology</td>
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<table>
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<tr>
<th>DEVELOP: Develop psychosocial health and wellbeing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Build teachers’ capacity to support their students’ wellbeing and identify students in need of specialized services</td>
</tr>
<tr>
<td>Support teacher wellbeing and resilience</td>
</tr>
<tr>
<td>Invest in students’ safety, nutrition, and access to water, sanitation, and hygiene facilities</td>
</tr>
</tbody>
</table>
Reach every child and keep them in school

Reopen schools and keep them open

Launch back-to-school campaigns to return students to classrooms

Strengthen systems to identify students at risk of dropping out

Involve parents and communities in children’s education

Consider cash transfers, free schooling, and meals to boost school participation
Encourage, monitor, and support return to schools

To recover learning, all children need to be back in school. Action is needed to ensure all children return to and stay in school. Three buckets of actions can help: 1) reopen schools and keep them open; 2) implement early warning systems and back-to-school campaigns; and 3) provide free schooling, meals and cash transfers.

Reopening schools and keeping them open is a pre-requisite for learning recovery. Remote learning was not as effective as in-person schooling, even in high-income countries. Learning losses were significant, and students from disadvantaged backgrounds were often disproportionately affected by learning losses, showing the importance of keeping schools open. Within school, access to services, supportive teaching practices, safety (especially for girls), and ensuring schools are using language children use and understand is important.

Back-to-school communication campaigns, both general and targeted to at-risk students, can help increase attendance and re-enrollment rates. It is important to communicate to parents that it is safe to send children back to school, as parental concerns about health risks may prevent children from returning, as well as the value of schooling and learning.

Early warning systems to identify students at risk of dropping out can help improve student retention. Drop-out is multi-causal, which is why it is important to go beyond attendance and student achievement, and consider how factors like financial constraints, family situation, peers, and lack of community support affect a student’s risk of dropping out.

Involving families in children’s education. Parents and caregivers are central actors in their children’s education, especially during the early years. Family and the community around the child affect the likelihood of a child going to and staying in school. Providing parents with information on the benefits, costs and quality of education, can improve school participation. Systems should strengthen teacher-parent relationships and encourage families and communities to play an active role in children’s education.

Removing school fees, offering free school meals, or giving families cash transfers. Robust evidence from around the world shows that when financial constraints are relaxed by removing costs, school participation is likely to increase. While nearly all countries offer free primary school, fees for lower secondary school remain in 24 countries, and for upper secondary school in 40 countries.
Make efforts to reach the most vulnerable children

Reaching all children and keeping them in school requires making a concerted effort to bring back and monitor the attendance of the most vulnerable students — children with disabilities, children in remote or hard-to-reach places, ethnic minorities, language minorities, and others.

Equity highlights

Contexts experiencing fragility, conflict and violence (FCV): In FCV contexts that have forcibly displaced populations, ensuring the quality education of displaced children is paramount. Temporary responses to education needs that run parallel to national systems offer only a stop gap solution; Inclusion of displaced children in national education systems is increasingly being recognized as the only sustainable solution to the refugee education crisis. It ensures the education needs of refugee children will be visible in national data systems and allows for efficient allocation of resources through long-term planning, reflecting the current proliferation in protracted refugee crises. Back-to-school and re-enrollment campaigns should create opportunities to introduce displaced students to the education system. Additionally, inclusive early warning systems require that displaced children be visible in national data systems.

Re-enrollment campaigns with a focus on girls: Disaggregated data on children returning to school by gender, location, disability, or belonging to a disadvantaged group will help countries target outreach to students in rural or hard-to-reach areas, disadvantaged students, ethnic or language minority students, and girls, to reduce drop-out among vulnerable groups. Education projects addressing COVID-19 recovery in Bangladesh, Benin, Ethiopia, Ghana, Pakistan and Uganda include advocacy campaigns for girls’ re-enrollment — some with a specific focus on pregnant girls. In Tanzania, the government recently adopted new measures to ensure that pregnancy and motherhood are not grounds for expulsion in government schools and will establish a monitoring system to track girls’ return to public schools.

A special focus on children with disabilities: A recent World Bank publication discusses the many challenges children with disabilities face in returning to school: access to and costs of transportation to school; fear of parents of their children contracting COVID-19 (due to their increased health risk); lack of remote educational opportunities during school closures (disengagement from learning), and others. In Kenya, the Ministry of Education and UNICEF worked to ensure that digital learning content during school closures was accessible to children with disabilities. Since school reopening, they have launched a back-to-school campaign that specifically aims to bring children with disabilities back into classrooms through targeted outreach.
Back-to-school campaigns, early warning systems, and family involvement

Re-enrollment campaigns are important to get families to send their children back to school, and early warning systems can help identify children at risk of dropping out before they do.

Re-enrollment campaign in Ghana

Ghana conducted a successful back-to-school campaign, managing to get nearly 100% re-enrollment. Taskforces made up of government stakeholders, CSOs, and the media assigned to each district carried out back-to-school campaigns through different means, including radio, TV, and community events. Special efforts were made to target girls.

Early warning system in Guatemala

In Guatemala, a cost-effective early warning system implemented at scale successfully reduced drop-outs in the transition from primary to secondary school by 4% for below US$3 per student.

Components included short training on actionable strategies to prevent drop-out for principals and sixth grade teachers (including information on available scholarships) and the importance of helping families fill out administrative forms. The program helped school staff identify students at risk by using a simple algorithm to create school-specific lists, and school principals were sent monthly reminders to keep the issue top-of-mind and motivate action.
Back-to-school campaigns, early warning systems, and family involvement (cont.)

Family and community involvement in children’s education matters too, especially in the early years. Parents, caregivers, and the community around the child affect school participation, and can offer continuity of learning.

Providing information to parents and children on the returns to education, the quality and costs of local schools, or on available scholarships or grants has increased attendance and learning in various countries, including Peru, Madagascar and the Dominican Republic. Such cost-effective interventions have been ranked as a “great buy” in education by the Global Education Evidence Advisory Panel. In the COVID-19 context, it is important to also convey to parents, families, and communities that it is safe for children to return to school.

Strengthening parent-teacher-school relationships can help the continuity of learning, even if schools are and will remain crucial to ensure all children have access to quality learning resources and instruction.

Encouraging parents to take an active role in children’s education, especially in the early years, can help prepare children for school and bring about lasting benefits. Emerging evidence from low-income countries suggests programs targeting parents to engage in early childhood stimulation and play can generate benefits that last into adulthood.
Free schooling, school meals, and cash transfers

School participation in low- and middle-income countries is cost sensitive: reducing costs by removing school fees, offering free school meals, or giving families cash transfers can increase school participation. Naturally, these policies require sizeable investments, but are still cost-effective, given the significant return on investment. One study estimated the cost-benefit ratio of school feeding programs in fourteen low- and middle-income countries was between 7 and 35.

Free schooling improved enrollment in Sierra Leone

The 2014 Ebola outbreak resulted in 8 months of school closures in Sierra Leone. Once schools reopened in 2015, some areas experienced a lag in the number of children returning. The Free Quality School Education policy was introduced in 2018, which includes free admission and tuition to all children in government-approved schools and money for books. The government boosted re-enrollment and increased access to schooling, enabling an additional 800,000 children to be enrolled. This policy was accompanied by a sizeable increase in education spending from 15% of the government budget, to 22%. The government also invested in data-driven monitoring systems with school-level data to help track student enrollment and retention, and to target outreach to at risk students. Read more here: Getting all children to school: the story of Sierra Leone.

For an excellent discussion on the merits of free schooling and school meal policies, explore Schooling for All: Feasible Strategies to Achieve Universal Education by the Center for Global Development.
Cash transfers to increase school enrollment in Mexico, Brazil, and Malawi

Some programs tie cash support to families to a condition of school enrollment, which has proved effective in large-scale programs in Mexico and Brazil. In Malawi, an unconditional cash transfer increased school participation as well, but the participation increased more for the families who received the transfer conditional on school enrollment. Cash transfers do not necessarily have to be significant to be effective – a monthly conditional cash transfer of $5 was equally effective as one of $10 in the Malawi intervention.

Cash transfers as a crisis response in Lebanon

In Lebanon, a cash transfer program will provide approximately 680,000 individuals with a monthly transfer of US$20 per household member, in addition to a flat amount of US$25 per household. The program will dedicate $23 million to cover the direct schooling costs of youth aged 13-18 at risk of dropping out as a result of the ongoing crisis.
Assess learning levels regularly

Establish pre-pandemic learning goals and levels

Assess learning nationally and sub-nationally

Produce disaggregated learning data in order to understand who needs most support and where

Provide tools and training for teachers to continuously assess learning at the classroom level
Summary: What are key steps for determining learning levels?

1. Begin with a review of both intended learning outcomes (grade-level expectations) and pre-pandemic attained outcomes
2. Identify essential content by subject and grade which students “cannot miss”
3. Apply assessments without delay and as the situations permits to understand current learning levels
4. Quantify learning loss both as a share of a school year and as a set of specific content deficits or content insufficiently learned
5. Consider both average learning losses and changes to the distribution (range), as shares below proficiency
6. Identify the key “losses” (specific content deficits) that are essential to recover and what fraction of a school year they comprise
7. Measure learning levels regularly – it is necessary for evaluating the effectiveness of instruction and informing future actions
Two main types of assessments for recovery: system-level and classroom-level

### A - Understand learning losses at the system level

<table>
<thead>
<tr>
<th>Type of Assessment</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large-scale assessments</td>
<td>Monitor learning trends at a system level and provide information to policymakers on overall performance and factors contributing to it</td>
</tr>
<tr>
<td>High-stakes examinations</td>
<td>Select or certify students as they move from one level of the system to the next (or into the workforce)</td>
</tr>
</tbody>
</table>

### B - Understanding learning levels at the classroom level

<table>
<thead>
<tr>
<th>Type of Assessment</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diagnostic classroom assessments</td>
<td>Usually take place before instruction to determine alignment of knowledge/skills to expectations</td>
</tr>
<tr>
<td>Formative classroom assessments</td>
<td>Provide ongoing feedback to teachers and students and monitor progress; administered as part of daily practice</td>
</tr>
<tr>
<td>Summative classroom assessments</td>
<td>Tend to happen at the end of the curriculum unit to establish whether learning goals were achieved</td>
</tr>
</tbody>
</table>

Where capacity is low, prioritize supporting teachers in assessing foundational learning at the classroom level.
To assess learning losses, a clear picture is needed of what learning should have been achieved, had education not been interrupted. Both the intended learning outcomes and the average learning outcomes attained historically (per subject, per grade) should be reviewed (see graphic).

**Intended learning outcomes**: This refers to what students should know and be able to do per subject, per grade. They are grade-level expectations that define what it means to be ‘X amount below’ grade level.

**Average attained learning outcomes (historically)**: This refers to what students were able to do, per subject, per grade, i.e., grade-level realities that show what the system achieved before the pandemic.

**Prioritizing foundational learning**: Particular care should be given to understanding expected and attained learning outcomes in foundational literacy and numeracy: foundational learning supports future learning.

Many countries had learning gaps prior to the pandemic – students were, on average, not attaining the intended learning outcomes. In addition, many countries are observing learning losses during the pandemic, with learning outcomes attained in the pandemic trailing historical averages.
Determine the approximate overall extent of learning losses. Pandemic-affected cohorts will have failed to gain specific knowledge of specific topics, much of which is antecedent or pre-requisite to future learning. Estimating *how much learning was lost*, as well as *what specific content was lost* will help the country design appropriate learning recovery strategies.

**1. Lost learning as an overall grade measure**

Students missed 1.5 years of regular school...but achieved 0.5 years of math learning through distance/hybrid learning*...so are 1 year or grade level behind

**MATH**

That 1 year of lost learning is a line segment equal to 1/13 of math vector

**2. Lost learning as specific set of content deficits**

For instance, students who were in third grade at the beginning of the pandemic were not able to master *multiplication*

*A recent analysis of 36 studies finds that learning losses amount, on average, to 0.17 of a standard deviation, equivalent to roughly a one-half year’s worth of learning.*
Understanding results: What specific content has not been mastered when a cohort is half a grade level behind?

Reading example: In first grade, when students are generally expected to learn roughly 26 letters of the alphabet (in alphabetic languages), being a half grade level behind might mean they only know 13 or so letters. If students start second grade with the curricular expectation that they do know all letters, they won’t learn as easily without remedial support.

Math example: Students may be able to add and subtract fractions but unable to multiply or divide them. Grade level expectations state they should be able to do all 4 operations; therefore, they may be about half a year behind.
Many systems had a majority of students below grade level proficiency pre-crisis. Consider the graph in the following slide showing the estimated level of student achievement for a sample of students in Delhi, India, according to a computer-assisted learning program. The results from the diagnostic shows a large gap between grade level expectations and attainment, which widens in the later grades. There is also a wide dispersion of students within the same grade.

Try to establish previous trends in the spread of learning outcomes, then consider the effect of the pandemic.

1. What share of students were regularly below proficiency pre-pandemic?
2. How far below proficiency were those who fell below?
3. Has the spread of learning outcomes worsened since the start of the pandemic?
4. Who is falling behind?
Assessing students’ learning levels is critical to find out not just how many students are falling behind, but also whom. Vulnerable students, including children with disabilities, children in remote or hard-to-reach places, ethnic minorities, and language minorities may have been more impacted by learning losses, and may need additional resources devoted to them to recover learning.

Large-scale assessments should be able to produce disaggregated data that allows officials to understand the specific learning needs of vulnerable groups.

Classroom assessment

Understanding learning levels: How can classroom assessments guide recovery strategies, and what options exist?

Students will return or have returned to classrooms with very different levels of knowledge and skills (and the spread of these will be wider than before).

- Classroom assessments are a flexible tool that, when implemented effectively, provide teachers and students relevant, opportune information to adjust teaching and learning.
- Classroom assessments will enable teachers to meet students at their individual level and provide personalized instruction.
- Assessment should happen continuously: teachers need a set of activities that allow them to continuously know a student’s learning levels, determine progress towards learning goals and provide timely feedback.
- **Example:** In Gujarat, India, education officials have used their weekly formative assessment tool, the **Periodic Assessment Test (PAT)** as well as the state-wide diagnostic tool, **Nidan Kasoti**, to inform instruction, including targeted instruction.

Some examples of existing learning assessments in early grades (classroom and system based):

- Annual Status of Education Report (ASER) & Early Years ASER
- Service Delivery Indicators (SDI) Learning Assessment
- Early Grade Reading Assessment (EGRA)
- Early Grade Mathematics Reading Assessment (EGMA)
- Foundational Learning Module (FLM) included in the Multiple Indicator Cluster Survey (MICS)
- Assessment for Minimum Proficiency Levels (AMPL) by UNESCO Institute of Statistics
- Other PAL network assessment tools (Uwezo, MIA in Mexico, LEARNigeria, TPC Mozambique)
Practical considerations for learning assessments: when available data is limited and capacity is low

Reality check:

- Not all systems have clearly articulated learning goals/objectives per subject, per grade in curricular documents.
- Not all systems have data available on past attainment per subject, per grade.
- Not all systems have capacity to assess learning for every subject and grade and at system level.

Setting priorities:

- **Countries should prioritize assessing foundational learning** (like basic numeracy and literacy). Other content in early grades should be prioritized second, and transitional grades on key subjects (mathematics, language and science) should be prioritized third.
- **Simple diagnostic classroom assessments** (i.e., adapted versions of existing tools) that can help teachers to determine current student learning levels so they can adjust their instruction appropriately should be prioritized over large-scale assessments.
- Some systems will have teachers capable to develop/adapt their own classroom assessments, others will have to develop/adapt the assessments more centrally (at the national, state or district level depending on capacity or strengths) and share detailed instructions to the teachers on how to administer them and use the results to adjust their instruction.
- **Diagnostic classroom assessments should aim to test content not just from the target grade but also from at least one (or more) grade below**, so they are better able to capture where returning students are given the likelihood of important learning losses.
- **Systems could choose to aggregate classroom learning assessment data at some level (e.g., school, district, or municipality) simply to get a crude sense of learning levels** rather than to get detailed knowledge of specific content mastery that is highly comparable.
# How have countries approached student assessment during COVID-19?

## Large-scale assessments

**Guanajuato, Mexico:** In November 2021, the State of Guanajuato in Mexico administered a large-scale assessment to more than 600,000 students across upper primary and secondary education. **RIMA** measures learning levels in math and literacy as well as socioemotional competencies. First applied in March 2020, shortly before school closed due to the pandemic, RIMA’s results are being utilized to measure learning losses during the period of school closures, assess how these learning losses differ for different demographic groups, and identify specific content areas where students require support.

**Chile:** The Ministry of Education developed a new formative assessment, **Diagnóstico Integral de los Aprendizajes**, to which schools can voluntarily adhere. It is designed to be applied three times a year and provide both schools and national education officials with detailed information on student’ academic and socioemotional competencies. The March/April 2021 application reached 81% of students nationally and found that none of the participating classes (between upper primary and lower secondary) scored higher than 60% on the assessment for Reading, or 47% for math.

**Kenya:** In September 2020, one week after Kenya partially reopened its schools to grades 4, 8 and 12, the national examinations council implemented a national assessment that was downloaded, printed, and administered by school heads, scored by teachers (who uploaded results to the council’s portal) and analyzed. Once schools fully reopened in July 2021, the same procedure was applied to all other grades. The purpose was to help teachers understand students’ learning status and support the development of mitigation plans.

## Classroom assessments

**Digital platforms (Gujarat, India):** Pre-pandemic, the government introduced Periodic Assessment Tests (PAT), formative weekly classroom assessments for each subject, linked to time-tables and mapped to learning outcomes. The use of PAT allows for monitoring of student learning outcomes and adapting learning to students’ levels. During the pandemic, PAT results were used to personalize remote education to the level of each student.

**Social Media (Nigeria)**

In Nigeria, teachers using the EdoBEST@Home remote learning application could share automated formative assessments in the form of quizzes with their students through WhatsApp and text messages (Munoz-Najar & Oviawe, 2020).
Prioritize teaching the fundamentals

Prioritize foundational learning and prerequisites for future learning, including literacy, numeracy, and socioemotional skills

Dedicate additional time to the fundamental competencies of foundational learning

Ensure time spent on foundational literacy follows the science of reading
The Challenge

- The pandemic shock represents a crucial opportunity to conduct much-needed adjustment to better align curricula with pressing needs.
- As COVID-related education disruptions have pushed students behind their grade-appropriate learning levels, adhering inflexibly to the curriculum risks presenting students with material they are not prepared to learn. If they move through the curriculum without first mastering the key foundational concepts they need, their ability to progress on to more complex topics with adequate understanding will be jeopardized.
- Countries should adjust teaching plans to prioritize teaching the fundamentals in the time they have available.

Teaching plans should prioritize foundational skills and conceptual pre-requisites

**Foundational learning** refers to the key skills in reading and math, usually obtained in the first years of primary school, that are the daily gateway to subsequent learning in an expanding number of subjects and disciplines, as well as socioemotional skills.

**Antecedents and pre-requisites** are content that must be learned prior to learning subsequent content in the learning series.

Determining an antecedent or pre-requisite is not always easy. Opinions vary and expert judgment may be needed to come to consensus.

<table>
<thead>
<tr>
<th>Skills/Knowledge</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>What skills/knowledge are antecedents/pre-requisites for later learning topics in the trajectory?</td>
<td>Learners need to understand subtraction and how to subtract in order to learn long division</td>
</tr>
<tr>
<td>What skills/knowledge can be used across subject areas?</td>
<td>Understanding informational texts, creating graphs and interpreting data, may help in a subject like social studies</td>
</tr>
<tr>
<td>What skills/knowledge are most critical for graduates’ daily life?</td>
<td>Reading comprehension, mathematics, critical thinking</td>
</tr>
</tbody>
</table>
This could mean re-balancing time allocations to devote more
time to foundational skills in literacy and numeracy, at least for a
period of time:

Most countries have responded to limited instructional time by devoting more time to priority subjects, usually language and
mathematics. For example, in Chile, all schools have been instructed to dedicate the same amount of time to language and literacy
and mathematics as in the pre-pandemic curriculum, while they have also been granted flexibility to reduce content in other subjects.
In Pakistan, their condensed curriculum focused on language, mathematics, and science.

This could mean focusing on key competencies within these areas:

For most countries, focusing on core subjects is not enough; they must prioritize fundamental skills and competencies. For example,
in South Africa’s mathematics primary curriculum, the government prioritized counting, ordering, representing, and place value;
performing all operations with whole numbers; common and decimal fractions; and number sentences, among other skills. This
approach implies that some other topics, such as data handling, were omitted from the condensed curriculum.

Does this work? The case of Tanzania’s 3R Curriculum Reform

Before 2015, the curriculum for grades 1 and 2 was ‘overloaded
with subjects’ (9 subjects). The 3R Curriculum reform for grades
1-2 focused on the 3Rs: Reading, wRiting, and aRithmetic. 80%
of instructional time was devoted to foundational literacy
and numeracy (with built-in readings about other subjects
into literacy lessons). Additionally, the reform stipulated there
would be no more teaching in English or in English.

According to a study by Mbiti and Rodriguez-Segura, as a result of
the reform the time spent on Kiswahili and Math went from 6.2 hours
per week to 8.6 hours—a 39% increase. However, implementation
varied; 4 in 10 teachers did not have textbooks that reflected the 3R
curricular changes. The authors find the curriculum reform led to
significant positive effects in Math and Kiswahili, where no subgroup
was ‘driving’ all effects and with no negative effects among high-
performing students.

The use of time spent on literacy instruction should follow the Science of Reading

Research shows that the amount of time that students spend receiving literacy instruction is a major determinant of reading proficiency. When adjusting curricula, it is important to allocate sufficient time to literacy instruction and to increase it as needed to make up for lost time.

Research from high-income countries shows that students need at least 90 minutes of uninterrupted, systematic reading instruction each day to become strong readers. Over the course of a three-year early-grade instruction plan, this translates to approximately 600 hours of instructional: 90 minutes a day for 135 (average school days spent on literacy instruction) for three years.

The amounts of time needed for reading may differ across languages, depending on the level of complexity and depth of its writing/spelling system. For instance, research from China shows children receive 9 hours of Chinese instruction per week (almost 2 hours daily in a 5-day school week). It is critical for curricular teams to take into account research on the minimum amounts of instruction needed for their language. Additionally, researchers agree that it is essential that schools maximize, within their available resources, the amounts of time to be devoted to learning instruction.

The division of time among reading 'subskills' is as important as the total amount of instruction time. Learning to read depends on a multiplicity of skills and abilities, all of which must be taught. When making decisions about instructional time, it is not enough to dedicate sufficient total time, but it is also necessary to divide that time productively among this multiplicity of skills. This can help prevent teachers from concentrating too much time on some factors and too little on others.

For more information on the different subskills of learning to read and suggested scope and sequence of reading instruction, see our World Bank resources below:

- How Do Children Learn to Read? Toward Evidence Aligned Lesson Planning
- How to Provide Effective Reading Instruction
01 Build teams to guide the prioritization process

Establish curricular teams for each subject

- These should be composed of several distinguished content/teaching experts; school thought leaders; distinguished policymakers
- They should be ready to work intensively over a short period at first – producing materials such as updated subject- and grade-specific learning objectives, teaching guides, and other curricular documents
- Be aware the system (and special interests) may resist the streamlining in settings where there is misalignment between the curriculum and the de facto typical achievement. Do not lose this crucial opportunity to consolidate the curriculum now, and truly empower responsible committees.

02 Understand content progressions

- Establish/review the fundamental multi-year learning trajectory per subject.
- Review progressions of topics and consider how learning builds toward graduation in each subject
- Review time allocations per topic per theme for balance and relevance

Math

Language

Science
03 Keep in mind subjects and grades differ in the way later learning builds on earlier learning

Math, Early Grade Reading, Foreign Language: arguably the subjects where early learning can least be skipped because of its relevance to later learning.

Science: builds on concepts through repetition with increasing complexity in normal curricula.

Other subjects (physical education, art, music, history/social studies, health, ethics): are much more idiosyncratic in the extent to which learning should follow a strict sequence.

Even within subjects, these characteristics may change by grade or education level.

Ex: 9th grade language/literature is likely to build much less on 8th grade language/literature than how 2nd grade reading progress builds so much on 1st grade reading progress.

04 Keep in mind practical considerations

Ensure the financial (e.g. guarantee proper resources), technical (e.g. engage experts), political (e.g. identify consolidation champions) and organizational (e.g. convene key stakeholders) support needed to develop and implement a prioritized curriculum.

Provide clear guidance to teachers in the form of training on the prioritized curriculum.

Match textbooks, and teaching and learning materials with specific learning expectations: for instance, use 4th grade math textbooks in 5th grade if that grade is covering 4th grade math.

Adjust the contents of learning assessments accordingly to ensure they are aligned to what is being taught now.
Consider the role of social and emotional learning (SEL) in the classroom

A vast global literature suggests that social and emotional skills are associated with a host of positive life outcomes. In the academic realm, social and emotional skills positively predict academic achievement, emotions and attitudes (including reduced learning anxiety) and educational attainment, in part by enabling students to set and work towards their academic goals and more adeptly overcome difficulties. Interventions to foster socioemotional skills development have been shown to enhance educational outcomes in studies from Zambia, India, Switzerland and others.

Social and emotional learning can take place in the classroom through different means:

1. Fostering a supportive classroom environment that helps students feel emotionally safe, motivated and challenged; or
2. Introducing explicit SEL instruction; or
3. Integrating SEL competencies into academic instruction. This means weaving academic learning with opportunities to practice and reflect on SEL competencies; this can happen in virtually any school subject (from language and math to art and ethics)

How can curricula promote social and emotional learning (SEL)?

The Collaborative for Academic, Social and Emotional Learning (CASEL) recommends three ways to do so:

- **Align academic and SEL goals and objectives**: Identify places where SEL competencies can be embedded in academic content standards.
- **Fostering academic mindsets**: Introduce guidelines for teachers to communicate high expectations for students; adopt culturally responsive practices; and frame mistakes as another part of learning.
- **Promote interactive pedagogy**: Promote instructional practices that create opportunities to practice SEL skills, with two being class discussion and cooperative learning in small groups.
Country Examples

Part 1 Curriculum Prioritization

South Africa Curricular Recovery Plan (2020-Present)

In 2020, South Africa introduced a three-year Curriculum Recovery Plan to make up for lost time due to COVID-19. As part of this plan, from 2021, schools are implementing recovery Annual Teaching Plans (ATPs) in all Grades, R-12. “The basis of the recovery ATPs, is the trimmed curriculum; but now includes the learning losses to be recovered in each grade, based on the learning losses in the previous grade.” The recovery ATPs focus mainly on core and fundamental content knowledge, skills, and attitudes required in each grade and subject. The plan also includes changes to assessment, by incorporating ‘assessment for learning’ as a teaching strategy. According to reports, this involves more continuous diagnostic assessment and adjustments to assessment weightings in Grades 4-11.

Chile – Curricular Prioritization (2020-Present)

In 2020, the Ministry of Education introduced curricular prioritization as a tool for schools to address the challenges posed by the COVID-19 pandemic. Their framework uses three criteria for curricular contents: (1) balance between the objectives from each of the curricular areas; (2) coherence in learning, including a “progression in the cycle that facilitates learning,” and (3) the content is essential to continue instruction in the following year. The Ministry explains that it is not mandatory (the official curriculum remains in effect) and should “not be understood as a new curriculum or curriculum adjustment.” Instead, it is a “support tool” due to the temporarily restrictions caused by the pandemic. The Ministry made available the following tools: Didactic Guides on Curricular Prioritization for every subject; lists of prioritized Learning Objectives per grade/subject; guides on Learning Objective Progressions per subject, etc. The Prioritized Curriculum is in use until the end of 2022 (extended from the end of 2021). New guidelines have been issued for 2021-22.

Equity highlights

Historically, the curricula in many countries have been designed for the few rather than the many. Work from rural India shows that the average rate of learning in each school year is significantly less than the rate of progress required to keep pace with the syllabus, meaning that the average rural public school student falls further behind grade-appropriate standards each year, with inequality in learning outcomes by socio-economic status increasing throughout primary school. Curricular prioritization can help keep students on track, especially important for disadvantaged students that are more likely to fall behind.
Country Examples

Part 1 Curriculum Prioritization

Ecuador’s Prioritized Curriculum (2022-23 school year)

For the 2022-23 school year, Ecuador unveiled a prioritized curriculum that emphasizes skills in four areas: communications, mathematics, digital, and socioemotional. Updated learning objectives and evaluation criteria have been published. Schools are granted the flexibility and autonomy to adopt the prioritized curriculum in a way that best fits the needs of their student community.

Vietnam – 2021

In October 2021, the Ministry of Education released detailed guidance on curriculum implementation that encourages schools to adjust teaching plans to their specific needs, in large part by focusing instruction on the most important material. For each content area, the guidelines define expected learning outcomes and suggests how to consolidate and focus teaching and assessment from the official curriculum. Suggestions for focused teaching include having students read before class (there is an explicit expectation that children complete reading assignments as self-study before class); having teachers select among the lessons that cover the same content/skills; and streamlining duplicate content within and between subjects. There is also guidance on how teachers can work with parents to help children learn; for instance, parents are encouraged to help students practice reading and spelling skills at home.

Guyana 2021 Curricular Consolidation (2021-Present)

In August 2021, ahead of school reopening in September, Guyana unveiled a new consolidated curriculum that would “tightly” or “streamline” the existing national curriculum. It was created for four core subject areas – math, language, science and social studies, for grades 1-9. In the consolidation process, some topics were integrated based on logical connections. Duplication of content areas was also assessed to determine what could be omitted without it detrimentally affecting students. It will be implemented for 4 years based on assessments of its success and the rate at which students catch up.
Country Examples

Part 2 Social and Emotional Learning

Explicit instruction

North Macedonia – Nationwide field experiment on ‘grit’

**Intervention:** A nationwide field experiment that tested the impacts of an intervention that cultivated grit through a curriculum of five consecutive lessons, delivered weekly for 1 hour. The curriculum had two parts: (1) teaching “deliberate practice”; 2) motivating students to do (exert effort in) deliberate practice.

**Results:** Students exposed to the intervention reported improvements in self-regulation, and the ‘perseverance of effort’ facet of grit. Among disadvantaged students, the intervention had positive impacts on grade point averages—with gains sustaining one year post-treatment.

Peru, South Africa, Indonesia – Growth mindset interventions

A series of interventions in different countries has tested the impacts of school interventions that teach students that with effort and practice, anyone can improve their intelligence.

**Peru:** A 90-minute in-school session led to a small improvement in math test scores and educational expectations, with large and sustained scores among students outside the capital city.

**Indonesia:** Two 40-minute class sessions that combined print material with discussions led to an increase in test scores in math, English and science; higher impact in lower-income areas.

**South Africa:** Five 30-minute sessions featuring videos and reflection led to 11% and 17% increase in math grades in the current and following year.
## Country Examples

### Part 2 Social and Emotional Learning (cont.)

#### Integrated instruction

**Guyana 2018 Curriculum Reforms**

| Context: By 2018, two of the constraints hindering education progress in Guyana were poor teaching practices and an outdated curriculum, which had not been cohesively reviewed for 20 years. |
| Reform: The Ministry of Education piloted a new grade 1 and 2 curriculum that included a shift to student-centered pedagogies, under the WB’s Guyana Education Sector Improvement Project. |
| Results: Analyses conducted with the WB’s Teach tool showed a three-fold increase (6.9% to 23%) in the percentage of teachers meeting minimum quality teaching standards. |

#### 4R Socioemotional and Literacy Curriculum Intervention (New York City)

| Intervention: The 4Rs program (Reading, Writing, Respect, and Resolution) is a school-based intervention in literacy development and SEL that integrates socioemotional development into the language arts curriculum for children in grades K-5. It uses high-quality literature to help students gain skills and understanding in areas of handling anger, listening, assertiveness, cooperation, etc. |
| Results: In a two-year experimental intervention, children in the intervention schools showed improvements in several socioemotional domains (based on self- and teacher- reports); there were effects on math and reading development for those identified by teachers at baseline as being at highest behavioral risk. |
Resources for Curricular Prioritization and Adjustment

- COVID-19 Pathways for the Return to Learning: Guidance on Condensing a Curriculum (AEWG)
- Global Proficiency Framework (USAID, UIS, FCDO, Bill & Melinda Gates Foundation, ACER, World Bank)
- Webinar - Making up for Lost Learning Time: Accelerating Instruction using EAB’s Curriculum Prioritization Tool (EAB)
- Webinar [Spanish]: La priorización curricular en el contexto de la respuesta al COVID-19 (UNESCO)

Introduce Social-Emotional Competencies

- Step-by-step toolkit promoting social and emotional learning (SEL) in children and teens (World Bank)
- Everyday Anxiety Strategies for Educators (EASE) (British Columbia)

Providing clear guidelines on how to teach the curriculum

- Effectiveness of Teachers’ Guides in the Global South (RTI)
- Resources for Teaching and Learning Early Grade Reading (USAID)
- Teachers’ Guide Diagnostic Tool Manual (World Bank)
Increase the efficiency of instruction, including through catch-up learning

Employ evidence-based pedagogical approaches like structured pedagogy or targeted instruction for all students

Consider small-group tutoring and self-guided learning for prioritized students

Expand instructional time

Support teachers instructionally, technologically, and in terms of resilience

GUIDE FOR LEARNING RECOVERY AND ACCELERATION  JUNE 2022
A. Evidence based instructional approaches

- Strategies at scale for all students
- Strategies for prioritized students

B. Support teacher performance

- Support teacher resilience
- Support teachers instructionally
- Support teachers technologically

C. Extend instructional time

- Adapt academic calendar
- Summer school
- Extend school day
A. Evidence-based instructional approaches

Strategies at scale for all students

- Targeted instruction
- Structured pedagogy

Strategies for prioritized students

- Small-group tutoring
- Self-guided learning

Highlighted resources:

COVID-19 Response – Remediation: Helping students catch up on lost learning, with a focus on closing equity gaps (UNESCO)
Recovering Lost Learning: What can be done quickly and at scale? (UNESCO)
Supporting learning recovery one year into COVID-19: the Global Education Coalition in action (UNESCO)
Strategies for improving efficiency of instruction at scale for all students:

01 Structured pedagogy

02 Targeted instruction
Structured Pedagogy: What is it?

Structured pedagogy is broadly defined as a ‘specifically designed, coherent package of investments that work together to improve classroom teaching’ (RTI, 2021). Structured pedagogy programs usually adopt a holistic approach to deliver an established curriculum with a strong focus on teaching and learning that includes three key components:

1. Providing high-quality teaching and learning materials including scripted lesson plans (in physical or digital tablet form), student activity books, and other supplemental materials;
2. Initial intensive teacher training as well as regular training and coaching;
3. Ongoing assessments of students to generate feedback loops.

Structured pedagogy has proven to be one of the most effective interventions to improve student learning in early grades in low and lower-middle income countries at scale. In many countries, teachers’ content knowledge and pedagogical skills often fall short due to insufficient pre-service preparation and practice. Structured pedagogy mitigates the skill gaps by providing detailed guidance on teaching specific content and training on how to carry out instructional activities. Following the best practices promoted in lesson plans, teachers would improve the quality of their instruction, ideally without compromising their agency.

An increasing number of developing countries have adopted structured pedagogy in early grades and many of them have demonstrated encouragingly positive effects on student performance (Kim, Lee and Zuilkowski, 2020; Graham and Kelly 2020; Fazzio et al., 2021). The impacts of these programs have been largely felt in early literacy and numeracy skills. In addition, studies in The Gambia and Guinea-Bissau, among others, demonstrate that in areas where teaching and learning levels are extremely low, these programs can be dramatically effective.

While structured pedagogy programs are effective and have been shown to work at scale, they can be time-intensive to set up; it takes time and resources to devise new teaching/learning materials and teacher support programs and put them in place.
What are different components of structured pedagogy plans?

- **Teaching and learning materials (TLM):** This entails high-quality, scientifically valid materials for teachers and learners that provide detailed lesson plans and strategies. TLMs for teachers should be appropriate for teachers’ lived realities (e.g., multilingual or large classrooms), and embed formative assessment practices. TLMs for children should be attractive, easy to understand (including being written in a language children understand), aligned with teacher materials, and available 1:1 (UNICEF 2020). **Structured lesson plans** allow teachers to differentiate classroom activities for the varying skill levels.

- **Curriculum, scope, and sequencing:** The process of examining the existing curriculum and deciding on a scope and sequence should precede the creation of any teaching and learning materials. Begin by learning the context (understanding the curriculum); make decisions about which proficiencies to address, grades to cover; create a scope and sequence for teaching (including pacing across and within domains) (RTI 2021).

- **Teacher professional development:** Catalyzes all other components of a structured pedagogy program. TPD entails (1) high-quality, expert-led teacher training that is short, intense, skills-oriented, and practical; (2) in-school support through head teachers or supervisors; (3) professional coaching; and peer mentoring within and across schools (UNICEF 2020).

- **Formative Assessment:** This entails establishing tools and teacher practices for reliable and low-effort formative assessments. Formative assessment practices need to be embedded into teacher training and TLMs to ensure consistency and ease of use, as well as into teacher performance planning and review (UNICEF 2020).
Evidence on the impacts of different program designs:
A number of evaluations have sought to understand the impact of programs with different combinations of program components, to see which ‘ingredients’ have the largest impacts on student learning. For instance, in the study of the PRIMR project in Kenya, researchers found that adding textbooks to teacher training and coaching improved learning, but the biggest additional impact came from adding teacher guides with lesson plans (Piper et al., 2018).

In an RCT in Mongolia, a study found that providing books or providing training (separately) did not provide meaningful impacts, but in combination have substantial impacts (Fuje and Tandon 2018).

In South Africa, the Early Grade Reading Study (EGRS) assessed three intervention models: one with centralized teacher training, one with on-site coaching, and another with a parental intervention. The intervention that involved coaching had the highest returns, more than twice the impact of the other two interventions (Department of Basic Education, South Africa).

What are examples of structured pedagogy programs?

Kenya: Tusome (“Let’s Read” in Kiswahili)

Tusome is a flagship partnership between USAID and the Kenyan Ministry of Education. Tusome focuses on four key interventions: enhancing classroom instruction, improving access to learning materials, expanding instructional support and supervision, and collaborating with key system-level literacy actors.

Results: Students made substantial gains in English (proportion of non-readers fell from 38-12%) and Kiswahili (proportion of non-readers fell from 43% to 19%).

Burundi, Ethiopia, Kenya, Malawi, Mozambique, Rwanda, South Africa, Uganda, Zambia Literacy Boost

This program, led by World Vision and Save the Children, helps improve students’ learning outcomes by providing literacy programs with three components: (1) reading assessments at baseline and end-line to address needs and track progress; (2) teacher training that incorporates key skills; and (3) mobilizing parents through out-of-school literacy materials.

In Malawi, an evaluation of the program showed 27% gains in single-word reading for the poorest quintile of learners.

Other programs:

- **Pakistan Reading Project** (2013-19): supports provincial/ regional departments to improve reading in grades 1 & 2
- **Lecture Pour Tous, Senegal** (2016-21): A scalable national reading program in grades 1-3 under USAID
- **Lesson Study (Zambia)** (2005-2015): A peer-to-peer collaborative learning practice for teachers supported by JICA
- **EGRS (South Africa)** (2015-21): A related series of large-scale evaluations to identify what works to improve teaching/learning reading
- **Northern Education Initiative Plus (NEI Plus)** (2015-Present): a systemic and holistic reform in the teaching of reading in Hausa and the transition to English in first to third primary grades
- **Scaling Quality Literacy Programs Across India (SERI)** (2015-2020): early-grade literacy programs that has benefited over 300,000 children across 4 states in India
**What are design principles of effective programs?**

**Keep the program simple:** A key metric that determines how effective a structured pedagogy program will be is the proportion of teachers that implement it daily. Ineffective programs are those that ask teachers to carry out too many new instructional practices or which the teachers perceive to be too complicated. Design to reduce instructional complexity and the number of guides/books utilized.

**Respond to policy opportunities:** Find strategic opportunities to fit programs within the policy environment and hence align with incentives. Examples are curricular reforms, revised standards for evaluating teachers, new school calendars, etc.

**Design a program with multiple touchpoints:** RTI (2021) recommends that teachers should have frequent opportunities to interact with coaches, trainers and other teachers; more frequent but shorter touchpoints are preferred over fewer and longer trainings.

**Design for iterations:** A program design should plan for and build in time to adapt—including improving the design of books, structure of teacher training, etc. For example, with teacher training, expect to respond to classroom feedback and modify pace and content accordingly.

**Design for scale:** Interventions should be designed with the objective of covering all relevant populations. In some cases, a short pilot (or first phase) must be used to test design elements. However, after two years of extended school closures in many countries, the time available for pilots should be short, and many adaptations should happen as countries learn through implementation.

*Source: RTI (2021).* [Designing an Effective Structured Pedagogy Program](#).
### Differentiated Approaches: How might structured pedagogy be different under different circumstances?

<table>
<thead>
<tr>
<th>Type of context</th>
<th>Mechanism, considerations for implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low capacity (limited ability of the government to achieve complex policy interventions requiring higher levels of pedagogical knowledge and skills as well as a functioning and interconnected system to plan, deliver, monitor and adjust such interventions)</td>
<td>The largest learning gains are often seen in contexts where teachers’ content knowledge and pedagogical skills falls short due to insufficient pre-service preparation and practice. Structured pedagogy mitigates the skill gaps by providing detailed guidance on teaching specific content and training on how to carry out instructional activities.</td>
</tr>
<tr>
<td>Medium-to-high capacity (greater ability of the government to achieve complex policy interventions requiring higher levels of pedagogical knowledge and skills as well as a functioning and interconnected system to plan, deliver, monitor and adjust such interventions)</td>
<td>The level of teacher preparation may determine aspects of program design, for instance, the level of scripting that may be appropriate in teacher lesson plans and opportunities within them for teachers to create new or add to activities in creative ways.</td>
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### Applicability to education level

<table>
<thead>
<tr>
<th>Education level</th>
<th>Consideration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary</td>
<td>The bulk of the evidence on the impact of structured pedagogy programs has focused on fundamental early grade literacy and numeracy skills.</td>
</tr>
<tr>
<td>Secondary</td>
<td>Structured pedagogy has generally not been used in secondary education.</td>
</tr>
</tbody>
</table>

### Time horizon of intervention: Should this be a pandemic response approach to respond to the pandemic (short-term) or something that systems turn to for the long-haul (long-term)? How would this matter in terms of design and implementation characteristics?

<table>
<thead>
<tr>
<th>Time horizon</th>
<th>Consideration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short-term</td>
<td>The relatively solid cost-effectiveness of structured pedagogy programs makes them both a short- and long-term strategy. In the short-term, programs that tackle the early primary grades should be prioritized.</td>
</tr>
<tr>
<td>Long-term</td>
<td>In the long-term, programs in primary focused on language and math can remain, and a broader set of programs focused on other grades and subjects could be developed.</td>
</tr>
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</table>

### Severity of pandemic shocks to education system: How would design and implementation characteristics differ depending on this variable?

<table>
<thead>
<tr>
<th>Severity of pandemic shocks</th>
<th>Consideration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Severe disruption (e.g., many months of closed schools; inability to have physical contact with many areas in the country, etc.)</td>
<td>To the extent that it is feasible, a streamlined and less intensive adaptation of the structured content may be needed in places with severe disruptions as there may be an urgency to supporting students</td>
</tr>
<tr>
<td>Light to moderate disruption</td>
<td>A more in-depth contextualization and adaptation of the program and materials may be warranted</td>
</tr>
</tbody>
</table>
What is structured pedagogy? The basics

- Structured Pedagogy: For real-time equitable improvements in learning outcomes (UNICEF)
- Promoting Successful Literacy Acquisition through Structured Pedagogy (USAID)

How to implement structured pedagogy programs

- How-to series on structured pedagogy (RTI). Units include:
  - Government leadership and program adoption
  - Designing an effective structured pedagogy program
  - Curriculum and Scope and Sequence Development for Literacy and Numeracy
  - Teaching and Learning Materials Development
- Teacher’s guides: for guidance on how to assess and improve the quality of teacher’s guides see World Bank toolkit (Manual, Summary Slides, Scoresheet, and blog)

What is the evidence on the effectiveness of structured pedagogy?

Effectiveness of teachers’ guides in the Global South (Piper et al.)
Identifying the essential ingredients to literacy and numeracy: TPD and coaching, textbooks and guides (Piper et al.)

Examples of international partner organizations implementing structured pedagogy programs

- International Rescue Committee (E.g.: Pakistan Reading Project)
- RTI International (E.g.: Tusome ‘Let’s Read’, Kenya)
- Save the Children (E.g.: Literacy Boost)
- World Bank (E.g.: Improving Learning and Empowering Girls in Mozambique)
- World Vision (E.g.: Literacy Boost)
- Creative Associates (E.g.: Northern Education Initiative Plus in Nigeria)
- FHI 360 (E.g.: USAID Partnership for Education: Learning in Ghana)
- Room to Read (E.g.: Scaling Early Reading Intervention in India)

Are they cost-effective?

A comparison of the cost-effectiveness of over educational 150 interventions across 46 countries finds that improved pedagogy in the form of structured lesson plans (with linked student materials, teacher professional development and monitoring) are the third most cost-effective type of educational intervention, as measured by the gains in learning-adjusted years of schooling per $100.

What are lessons for scaling up?

Scaling up successfully: Lessons from Kenya’s Tusome national literacy program (Piper et al.)
Targeted Instruction

What is it?

An evidence-based approach to improving students’ foundational skills by providing instruction that is appropriate to the learning levels of each child.

**Fundamental principle:** requires the repeated application of a 3-step cycle of assessing student learning levels, grouping them by their level of proficiency (rather than their age, grade, or an arbitrary criteria), and pitching instruction at the group level.

Basic model:

The approach typically begins by conducting a brief assessment of language or math proficiency with each child to understand their current learning level.

Then, students are grouped based on the level scored in the assessment. The grouping can happen between students of the same classroom or across classrooms. Sessions can take place during a specific period of the school day (e.g., 90-minute session), in after-school sessions, or during vacation breaks.

Teachers or facilitators need to be trained to deliver instruction that is targeted or tailored and designed to help students move quickly through these level-based groups.

Equity highlight

Some evidence suggests adjusting instruction to the level of the student can be particularly effective for students who are behind in learning. Evidence from India suggests that students with initially low results advanced significantly more in math than their peers while enrolled in a program targeting instruction to student’s level using computer-adaptive software.
Cultivating children’s learning requires instruction to be aligned with their current learning levels. Why?

A. Human learning is cumulative. A foundation of prior knowledge in long-term memory enables children to use their working memory to build new knowledge on top of this foundation.

B. Children learn best when presented with instruction that is suitably demanding: not too difficult and not too easy but extending students’ capabilities. Lev Vygotsky’s (1896-1934) seminal work on child learning introduced the concept of the ‘zone of proximal development’—the range of tasks a child can perform with assistance but not independently. He argued that children should be given tasks in their ZPD—just beyond their level of independent capability.

C. Evidence shows there are detrimental effects to asking students to complete a learning task for which they lack sufficient prior learning. Three things may happen:
   - They will fail to complete the task
   - They will complete the task superficially, but will remember the new content inaccurately
   - They will complete the task superficially, but will not remember any of the new content

D. In the same way, multiple studies show the benefits of aligning instruction with current learning levels.

Studies show that in mixed-ability classrooms where differentiated instruction methods are employed (which includes homogenous grouping; tiered assignment and tiered assessment), students make better learning progress than in classrooms where differentiated instruction is not used (Valiandes 2015).
Targeted Instruction

Basic Principles

- **Set clear learning goals** that are coherent with children’s current learning levels. Additionally, clearly articulate the learning goals to be achieved in a specified time duration. The task is not about covering a pre-determined curriculum (which in many countries is unrealistic) but to ensure that all students learn.

- **Use assessments to understand learning levels**: Targeted instruction programs and interventions depend on the use of assessments to understand ‘baseline’ levels and to inform instruction and organization of groups for learning.

- **Align instruction** to be coherent with current learning levels and to the targeted learning progress.

- **Provide effective support to teachers and instructors.** Ongoing teacher training and mentoring should: a) ensure that teachers and instructors are delivering instruction with program fidelity; b) provide teachers with continuous feedback for improvement; and c) inform further training or possible modifications to a program.

- **Tracking progress periodically.** Conduct assessments periodically throughout the duration of an intervention.
Typology of Models

A. Embedded during the school day (whole day or during a dedicated period of the day)

Schools typically dedicate between 1-2 hours of the school day to instruction based on proficiency grouping. Instruction is generally delivered by schoolteachers.

<table>
<thead>
<tr>
<th>Example</th>
<th>Structure</th>
<th>Who delivers instruction?</th>
<th>Results (if available)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Haryana, India Pratham pilot (2012-13)</td>
<td>During an additional hour of formal schooling, grades 3-5 were reorganized by proficiency</td>
<td>Created a system of academic leaders within the government that were trained by Pratham leaders; these subsequently trained teachers.</td>
<td>Gains in language ability by 0.15 standard deviations</td>
</tr>
<tr>
<td>Cote D’Ivoire (2018-Present)</td>
<td>90 minutes a day, 5 days a week</td>
<td>MoE national trainers (trained by Pratham) trained school heads/pedagogical advisors, who then trained teachers.</td>
<td>The proportion of students who could read at least a paragraph increased by 18%; the proportion who could do subtraction increased by 26%.</td>
</tr>
<tr>
<td>Escuela Nueva (Colombia + applied in 15+ countries)</td>
<td>Entire day</td>
<td>Groups of students work at their own pace with the help of special textbooks and workbooks (guides). The schoolteacher is a facilitator, visiting each table and helping the students with readings and discussions.</td>
<td>The school performance of students in Escuela Nueva model is higher than that of conventional school students. One study finds that EN students scored 10.5-23.2 points higher on SABER test than students in conventional schools.</td>
</tr>
<tr>
<td>Catch-up, Zambia, Ministry of General Education, VVOB, J-PAL, UNICEF (2017-2021)</td>
<td>1 hour each day during two school terms, 250,000 students in grades 3-5 in one-fifth of its primary schools were regrouped based on performance.</td>
<td>Delivered by schoolteachers receiving training, mentoring, and coaching. Literacy focus only in the first term, mix of numeracy and literacy second term.</td>
<td>In 2019, the share of pupils who could read a simple story in one province increased from 25% to 41%.</td>
</tr>
<tr>
<td>Nepal (2021-22) pilot</td>
<td>The pilot will be implemented for 2 to 3 hours each day for 10 weeks.</td>
<td>In two thirds of selected schools, instruction will be delivered through community schoolteachers, trained by a small team composed of government mentors and Pratham mentors.</td>
<td></td>
</tr>
</tbody>
</table>
Typology of Models

B. Learning Camp model (during school year or summer)

Targeted instruction activities take place in intensive periods throughout the school year or the summer. Specific duration and frequency varies. In ‘Teaching at the Right Level’ interventions, these camps tend to be led by NGO staff or volunteers rather than schoolteachers.

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<th>Example</th>
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<th>Who delivers instruction?</th>
<th>Results (if available)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brazil (2021-Present); Brasil Na Escola</td>
<td>Targeted instruction through grouping is implemented in four, 2-week camps where activities happen for 1.5 hours each day</td>
<td>In the program Brasil na Escola, schools will be able to hire local monitors using federal funds.</td>
<td>No results yet. This project is currently in its pilot stage in Brasilia with plans to make it available to all schools with at least 70% vulnerable students.</td>
</tr>
<tr>
<td>Botswana (2017-Present)</td>
<td>The intervention runs for 30 days for 1-2 hours a day and is implemented with Standards 3-5</td>
<td>Two models: direct-delivery model with independently hired facilitators; and government-led delivery model</td>
<td>80% of students have gained numeracy skills, and the percentage of students learning division jumped from just 7% to 52%.</td>
</tr>
<tr>
<td>Uttar Pradesh (2013-14); Pratham pilot</td>
<td>&quot;Camp&quot; rounds occurred during the school year and lasted 40 days (either four 10-day rounds, or two 20-day rounds); for 1.5 hours each day. These were supplemented by 10-day burst of &quot;summer camp.&quot;</td>
<td>The camps were led by Pratham volunteers, who were monitored by Pratham staff.</td>
<td>Test scores increased 0.61-0.70 standard deviations in both math and language</td>
</tr>
<tr>
<td>Bihar, India (June 2008); pilot by Pratham &amp; J-PAL</td>
<td>This intervention intended to provide remedial education to academically weak children in Grade 3-5 through a 1-month summer camp</td>
<td>It was delivered by government schoolteachers in school buildings</td>
<td>Bihar summer camp increased language scores by 0.09 SD and math scores by 0.07 SD. But exposure to camps was limited: only 23% of children in treatment villages attended the camps</td>
</tr>
<tr>
<td>Eastern Province, Zambia (2016); pilot by Pratham &amp; J-PAL</td>
<td>Intensive one-month boot camp regrouping grade 3-5, 20 days, for 3 hours per day (a total of 30 hours for literacy and 30 for numeracy)</td>
<td>Delivered by schoolteachers</td>
<td>Piloted two types of models: boot camp and embedded during the school day. Decided to scale the latter. Overall pilot results were strong: the share of children who could not read a letter fell from 33% to 8% and the share with basic proficiency increased from 34% to 52%.</td>
</tr>
</tbody>
</table>
What countries have adopted targeted instruction as a measure to recover learning during COVID-19?

**Brazil:** Through the federal government’s Brasil Na Escola program, the targeted instruction pilot *Acompanhamento Personalizado de Aprendizagem* devotes 1½ hours of the school day during two-week intensive periods (carried out 4 times a year) to regrouping students based on their learning levels and implementing instruction at their level. The program makes use of a specially designed diagnostic assessment and structured learning exercises. Classes will be led by trained ‘monitors’ (which can be teachers or trained university students or volunteers; however, they discourage teachers from the same school from serving as monitors given tendency to follow their usual methods). The pilot aims to expand to all Brasil Na Escola schools (those with at least 70% vulnerable students), although the teaching resources and assessment platform are available to all, as of March 2022.

Learn more through the Ministry of Education’s video series on APA:
- [Frequently Asked Questions about the Program](#) [Portuguese]
- [Re-grouping students](#) [Portuguese]
- [Monitoring students](#) [Portuguese]

**Cambodia:** the Ministry of Education and local NGO partners developed a program that dedicates twelve hours per month to addressing learning gaps through targeted exercises. They developed "remedial learning packages" that begin with a diagnostic assessment of knowledge gaps around 5 core competencies in Khmer and Math each, and then guide teachers to group students by proficiency and implement active student exercises at different levels of difficulty (3 days a month for 4 hours each day).

Learn more [here](#) and [here](#).

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What countries have adopted targeted instruction as a measure to recover learning during COVID-19? (cont).

**Ghana**: The Ministry of Education, with support from the World Bank, rolled out a targeted instruction intervention in over 10,000 basic (kindergarten, primary, and lower secondary) schools across the country. The intervention (which had been planned pre-COVID) dedicates 3 days a week (2 hours a day) across English and Math to targeted instruction, regrouping students according to their proficiency levels. New assessment instruments were produced, as well as extensive materials which differentiated by learning groups (beginners, intermediate and proficient). This followed a period of training on targeted instruction that was conducted for over 70,000 teachers nationally between December 2020 and February 2021.

**Nepal**: The Ministry of Education in collaboration with the World Bank and Pratham is piloting a Teaching at the Right Level (TaRL) intervention to fast-track learning recovery in Nepal. The pilot is targeting 2,500 primary school children (grade 4-5) from 64 schools across three local governments. The intervention design includes TaRL implementation through community schoolteachers in 44 schools and implementation through trained NGO facilitators in 20 schools. The model involves implementing targeted instruction for 2-3 hours each day for ten weeks. With technical support from Pratham, the program is using a version of ASER student assessments tailored to the Nepali context.

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How to Implement Targeted Instruction

- **Teaching at the Right Level toolkit** (FLN Hub): [About TaRL](#); **Classroom Methodology**: Mentoring & Review
- **Teaching at the Right Level Webinar Series** (TaRL)
- **Dynamically re-group based on formative assessment** (Unlocking Time)
- **Flexible grouping as a differentiated instruction strategy** (Teach Hub)

Lessons learned for implementation and scaling:

- **Embedding Innovation in State Systems: Lessons from Pratham in India** (RISE Working paper)
- **Improving children’s reading and math at large scale in Côte d’Ivoire** (Brookings)
- **From Proof of Concept to Scalable Policies: Challenges and Solutions, with an Application** (American Economic Association) evaluates strategies used to integrate targeted instruction into primary schools in India

### Assessments

**ASER Assessment Tools** have been used in targeted instruction interventions in several programs across regions. They are available online in English and 16 Indian languages.

**Organizations with experience in program implementation**

- **Pratham & J-PAL**
- **Côte d’Ivoire** - [Programme d’Enseignement Ciblé](#)
- **Botswana** – [Teaching at the Right Level](#)
- **Fundación Escuela Nueva**
- **Vietnam Escuela Nueva project**
- **Escuela Nueva Activa in Colombia**
- **CAEd**
- **Brazil** - [Acompanhamento Personalizado das Aprendizagens](#)
- **VVOB**
- **Cambodia GPE Covid-19**
Differentiated Approaches: How might targeted instruction be different under different circumstances?

<table>
<thead>
<tr>
<th>Type of context</th>
<th>Mechanism, considerations for implementation</th>
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<tbody>
<tr>
<td>Low capacity (limited ability of the government to achieve complex policy interventions requiring higher levels of pedagogical knowledge and skills as well as a functioning and interconnected system to plan, deliver, monitor and adjust such interventions)</td>
<td>Implementation will require closer monitoring and mentorship (e.g., more frequent visits to schools) given the general tendency of teachers to revert to their usual teaching style, as shown in several studies. Program design may prioritize certain schools (lowest performing schools) or, within schools, only students in a bottom percentile of performance distribution, due to resource and capacity constraints.</td>
</tr>
<tr>
<td>Medium-to-high capacity (greater ability of the government to achieve complex policy interventions requiring higher levels of pedagogical knowledge and skills as well as a functioning and interconnected system to plan, deliver, monitor and adjust such interventions)</td>
<td>These countries may be better able to integrate/mainstream targeted instruction into education delivery across more schools, more grades, and offer it to all students. These countries are more likely to have pre-existing diagnostic and formative classroom assessment instruments they can utilize for grouping students and targeting instruction.</td>
</tr>
</tbody>
</table>

Applicability to education level

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Primary</td>
<td>Most interventions and evaluations of targeted instruction have focused on primary education, and even more so in grades 3 to 5. Therefore, it is easier to find and adapt existing materials for their application in this education level and these grades (assessment instruments; learning activities; teacher guides).</td>
</tr>
<tr>
<td>Secondary</td>
<td>Interventions may be combined with other efforts to mitigate dropout in secondary education, and potentially targeted towards students that have been identified as at-risk. There is limited rigorous evidence on targeted instruction in low- and middle-income countries. Yet, the principles appear promising and there are rigorous studies of targeted instruction interventions in the field now, which will shed light on generalizability to this level.</td>
</tr>
</tbody>
</table>

Time horizon of intervention: Should this be a pandemic response approach to respond to the pandemic (short-term) or something that systems turn to for the long-haul (long-term)? How would this matter in terms of design and implementation characteristics?

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<tbody>
<tr>
<td>Short-term</td>
<td>In the short-term, interventions may wish to use a model where instruction is delivered through hired tutors or volunteers from a technical partner/NGO, given the amount of time involved in teacher training.</td>
</tr>
<tr>
<td>Long-term</td>
<td>In the long-term, a cadre of trained government mentors, supervisors, and trainers should train teachers so that they can then use targeted instruction pedagogies.</td>
</tr>
</tbody>
</table>

Severity of pandemic shocks to education system: How would design and implementation characteristics differ depending on this variable?

<table>
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<tr>
<td>Severe disruption (e.g. many months of closed schools; inability to have physical contact with many areas in the country, etc.)</td>
<td>To the extent is feasible, countries could consider the 'learning camp' model, whereby students receive intensive targeted instruction in shortened time periods, and which has been shown to improve learning levels and reduce disparities in shorter time frames.</td>
</tr>
<tr>
<td>Light to moderate disruption</td>
<td>Countries could focus on adding a targeted instruction program during specific periods of the school day.</td>
</tr>
</tbody>
</table>
While small-group tutoring and self-guided learning programs are interventions that can be offered to all students, given their higher costs, a more cost-effective approach may involve prioritizing students with the largest learning needs over others. In recent months, countries have utilized different criteria (income levels or academic performance) to determine which students are selected to participate in tutoring interventions, or in some cases which schools are eligible for such interventions.
Tutoring: What is it?

Tutoring is one-on-one or small-group instructional programming by teachers, paraprofessionals, volunteers, or parents. There is strong evidence that tutoring can substantially increase student achievement, especially among low-achieving students.

**Fundamental principle:**
Tutoring gives students individualized attention that they would be unlikely to receive in a class full of students.

**Basic model:**
- A tutor, which can be a teacher, a university student, or volunteer, meets regularly (1-3 times weekly) with a small group of students (1-4) during or after school hours, as a complement to classroom instruction.
- The tutor targets instruction toward identified areas in one or more subjects that the student needs support in, and can cover material from class or help on homework assignments.

**Caveats:**
- The efficacy of this approach depends critically on group size and the frequency of sessions.
- The stark budget realities of most education systems make scaling up tutoring programs a challenge, but it can be used to prioritize the most vulnerable students.
**Tutoring: Basic Principles**

- **Effective tutoring programs are high in dosage**, with 3 or more sessions weekly or intensive, week-long, small-group programs. A review of almost 200 rigorous studies found that high-dosage tutoring is one of the few school-based interventions with demonstrated large positive effects on both math and reading achievement (Harris, 2008).

- **Tutors can be teachers, higher education students, or volunteers**, but they need training and support

- **Small group tutoring is most effective**. Tutors can effectively instruct up to 3-4 students at a time

- **Effective programs include assessments and aligns with the curriculum** to reinforce classroom instruction

- **Tutoring can be delivered effectively via various modalities**, including in-person and remote options

- **Tutoring can benefit students at all ages and levels**, but especially for early-grade reading and upper-grade math and for students who have fallen behind

- **Tutoring should be scheduled during the school day when feasible**, as programs integrated in the school day show the best results

A review of almost 200 rigorous studies found that high-dosage tutoring is one of the few school-based interventions with demonstrated large positive effects on both math and reading achievement (Fryer 2016).

High-dosage tutoring has shown the most promise

Teacher, paraprofessional or trained volunteer

1-2 students

At least three times a week for 50 hours a semester

Embedded in school day. Sessions are focused on students’ academic needs
## Best practices for structuring effective tutoring

<table>
<thead>
<tr>
<th>Question</th>
<th>Best practice</th>
<th>Considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td>How often should sessions be scheduled?</td>
<td>3+ sessions per week</td>
<td>Week-long, intensive tutoring programs during academic breaks can be an alternative</td>
</tr>
<tr>
<td>How long should the sessions be?</td>
<td>30-60 min</td>
<td>Younger students may benefit from shorter but more frequent sessions</td>
</tr>
<tr>
<td>At what time should sessions be scheduled?</td>
<td>During school day</td>
<td>Tutoring interventions conducted during the school day tend to result in greater learning gains than those that are after-school or during the summer</td>
</tr>
<tr>
<td>What is the optimal group size?</td>
<td>1-4</td>
<td>Larger groups turn tutoring into small group instruction, which is less personalized and requires a different skillset</td>
</tr>
<tr>
<td>Who can be effective as a tutor?</td>
<td>Teacher, paraprofessional, or trained volunteer</td>
<td>Ensuring students have a consistent tutor over time may facilitate positive tutor-student relationships and a stronger understanding of students’ learning needs</td>
</tr>
<tr>
<td>For which grade levels is tutoring suitable?</td>
<td>All levels, but especially students who have fallen behind</td>
<td>Tutoring works for all levels, but the best evidence on tutoring is available for early grade reading and upper-grade math</td>
</tr>
</tbody>
</table>
## Creative innovations from the COVID pandemic: low-tech models of remote tutoring

<table>
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<tr>
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<th>Structure</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Limiting learning loss using low-tech in Botswana, implemented by Botswana Ministry of Basic Education and Young Love (Angrist, Matsheng &amp; Bergman, 2021)</td>
<td>SMS text messages with “problems of the week”, and direct phone calls with instruction (15-20 minutes) plus the SMS to 4,500 families with primary-school-aged children across nearly all regions of Botswana. Remote assessment using adapted ASER.</td>
<td>Young Love’s staff, one of Botswana’s largest NGOs</td>
<td>0.12 SD gains in math from phone call and SMS intervention. No effects from SMS-only treatment arm.</td>
</tr>
<tr>
<td>Telementoring in Bangladesh, implemented by Global Development and Research Initiative (Hassan, Islam, Siddique &amp; Wong 2021)</td>
<td>Telementoring in English and math during school closures to 814 primary students and their mothers, sampled across 200 villages, via basic feature mobile phones. The intervention lasted 13 weeks. The weekly support to each child lasted about 30 minutes per session.</td>
<td>Delivered by volunteers that were university students</td>
<td>English language improved by 0.66 SD and math by 0.56 SD. Spillover: 0.62 SD in Bangla literacy, and 0.50 SD in general knowledge. Simultaneous improvement in parental involvement.</td>
</tr>
</tbody>
</table>
# Differentiated Approaches: How might tutoring be different under different circumstances?

<table>
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<tr>
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<th>Mechanism, considerations for implementation</th>
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<tbody>
<tr>
<td>Low capacity (limited ability of the government to achieve complex policy interventions requiring higher levels of pedagogical knowledge and skills as well as a functioning and interconnected system to plan, deliver, monitor and adjust such interventions)</td>
<td>Consider low-tech mechanisms such as phone calls (combined with text messages); Phone charges should be covered as part of programs</td>
</tr>
<tr>
<td>Medium-to-high capacity (greater ability of the government to achieve complex policy interventions requiring higher levels of pedagogical knowledge and skills as well as a functioning and interconnected system to plan, deliver, monitor and adjust such interventions)</td>
<td>Countries are in a better position to implement virtual tutoring;</td>
</tr>
<tr>
<td>Applicability to education level</td>
<td></td>
</tr>
<tr>
<td>Primary</td>
<td>Interventions at this level may require more parental engagement and supervision</td>
</tr>
<tr>
<td>Secondary</td>
<td>Interventions at this level may require less parental engagement and supervision</td>
</tr>
<tr>
<td><strong>Time horizon of intervention:</strong> Should this be a pandemic response approach to respond to the pandemic (short-term) or something that systems turn to for the long-haul (long-term)? How would this matter in terms of design and implementation characteristics?</td>
<td></td>
</tr>
<tr>
<td>Short-term</td>
<td>Remote tutoring as an immediate response focuses on catching up students with fundamental knowledge and skills they need for subsequent learning</td>
</tr>
<tr>
<td>Long-term</td>
<td>In the long term, in-person tutoring options may be more appropriate as schools return to fully in-person instruction. Tutoring focuses less on remediation or catch-up of &quot;lost learning&quot;, and more on helping particular students who need additional support</td>
</tr>
<tr>
<td><strong>Severity of pandemic shocks to education system:</strong> How would design and implementation characteristics differ depending on this variable?</td>
<td></td>
</tr>
<tr>
<td>Light to moderate disruption</td>
<td>Tutoring may be utilized for a shorter timeframe as students catch up on learning; Tutoring programs may be less intensive and can be conducted in groups.</td>
</tr>
<tr>
<td>Severe disruption (e.g. many months of closed schools; inability to have physical contact with many areas in the country, etc.)</td>
<td>Tutoring may become a medium- or long-term intervention. Mechanisms may require 1-1 tutoring or smaller groups, as students require more personalized support Tutoring programs may be more intensive (greater frequency and duration)</td>
</tr>
</tbody>
</table>
Self-guided learning programs

Self-guided learning programs enables students to progress incrementally towards mastery of foundational skills. Self-guided learning activities can be used with limited teacher input and guidance. The activities can be pencil-and-paper based, or in systems where the adequate technology is available in schools or homes, remediation can occur through technology-supported self-guided learning programs. Such programs aim to provide effective and customized learning paths to engage each student, providing personalization at scale.

**Fundamental principle:**
Learning where the learner is not reliant on the input from a teacher or their peers to achieve learning outcomes, which allows the learner to engage with learning at his/her own pace.

**Basic model:**
- Technology-supported instruction can illustrate a concept through interactive animation, sound, and demonstration, followed by opportunities for students to complete tasks and solve problems at their own pace while providing immediate feedback.
- Such programs can be utilized in school with limited teacher supervision, or for learning outside of school in blended or remote models of instruction.

**Caveats:**
- Computer-assisted programs requires enabling conditions to be in place, like access to devices and connectivity, digital skills among teachers, students, and staff. These enabling conditions may take years of investment to achieve, which is why pencil-and-paper based version may be more suitable for certain low-income contexts.

**Equity highlight**
Self-guided learning programs can support inclusivity. In Ghana, schools deployed pre-loaded content tablets to 3,000 students with special learning needs nationally. The tablets are pre-loaded with digital versions of the curriculum, are suited to the needs of children with hearing or visual impairments and allow for self-paced learning.
Basic principles

- Technology supported self-guided learning may be most beneficial in closing educational gaps for lower attaining students, potentially including those returning to school after an absence.

- Technology can deliver students personalized and adaptive content that adjust to their learning needs and has shown to be cost-effective and scalable.

- Self-guided learning can be delivered effectively via various modalities, including pencil-and-paper or technology-supported options.

- The use of technology-supported self-guided learning requires a series of enablers, such as infrastructure and teacher readiness, to use and adapt this alternative pedagogy in the classroom.

- Implementing self-guided learning programs takes time: for programs implemented at scale, like PAM in Uruguay, it may take years to show results from the investment.

- Self-guided learning requires additional support, including institutional support and technical assistance.


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Jordan

In Jordan, Learning Bridges is a national blended learning program that enabled almost 500,000 students to recover and accelerate their learning during COVID-19 school closures. Every child in Grades 4 to 9 receives a printed activity pack every week with activities based on core curricula; each pack has its own QR code linking to additional online resources. Each pack also came with guidance on how parents could support.

The packs are designed to help students recover lost learning from the previous year and accelerate learning in the current one by working at their own pace to complete activities. The activities follow a cross-curricular approach that links core outcomes in the subjects of Arabic, English, Math and Science.

Looking Forward: Learning Bridges continues to be used in schools as a blended learning resource for recovery. In partnership with UNICEF, the government is in the process of establishing Learning Bridges Clubs to create links between schools and the community. Read the impact study here.

Cambodia

In Cambodia, Home Learning Packages helped bridge the transition between home learning and full-time education for grade 1 and 2 students. 750,000 packages were distributed across Cambodia in October 2021 at a time when students were spending around half of their study time in schools, and half at home. The packages include age-appropriate books and self-study materials to improve reading, writing and math, all complementing the curriculum. They also include information on how parents can support their children's education.

UNICEF Cambodia/2021/Antoine Raa
### Other examples and evidence

<table>
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<tr>
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<th>Structure</th>
<th>Who delivers instruction?</th>
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<tr>
<td>Computer-assisted self-guided learning at a national scale with Plataforma Adaptativa de Matemática (PAM) in Uruguay, implemented by Plan Ceibal</td>
<td>A digital online tool for students and teachers. Content has been adapted to the national curriculum. Adapts content to skill level and provides immediate personalized feedback</td>
<td>Available to teachers across the education system, teachers can choose whether to adopt PAM</td>
<td>Primary students using PAM saw a positive effect of 0.2 SD in math test scores. Impact increases as socioeconomic status of students decreases. (<a href="#">Perera &amp; Aboal 2019</a>)</td>
</tr>
<tr>
<td>Adaptive computer-assisted remediation pilot program in Ecuador, implemented by the Secretariat of Higher Education, Science, and Technology (SENESCYT)</td>
<td>The 4-month pilot in 2021 included 39 technical and technological institutes and more than 4,700 first-year students</td>
<td>The program was introduced in over 240 different classes and delivered with the support of 136 teachers</td>
<td>Knowledge of the students’ mathematical curricula improved between 8-10% per month, (equivalent to two full years of schooling), after using the platform for 16 consecutive weeks</td>
</tr>
<tr>
<td>Paper-and-pencil based self-guided learning in Bangladesh, implemented by BRAC</td>
<td>An individualized, paper-and-pencil self-learning program. Students complete a diagnostic test, then worksheets of gradually increasing difficulty based on progress. Intervention lasted 8 months</td>
<td>Implemented in BRAC primary schools, delivered by BRAC teachers</td>
<td>Substantial improvements in math test scores and self-esteem. Long-term impact: improved math scores on national-level exams compared to the baseline test scores (<a href="#">Sawada et al. 2021</a>)</td>
</tr>
</tbody>
</table>
Differentiated Approaches: How might self-guided learning be different under different circumstances?

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<th>Type of context</th>
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<tr>
<td>Low capacity (limited ability of the government to achieve complex policy interventions requiring higher levels of pedagogical knowledge and skills, an adequate digital infrastructure, as well as a functioning and interconnected system to plan, deliver, monitor and adjust such interventions)</td>
<td>Countries without the necessary enabling conditions should consider pencil-and-paper based models. For technology-supported models, ensure minimum infrastructure: electricity + connectivity + devices; consider programs that can be applied offline. Given inadequate access to computers, consider programs delivered through mobile phones; will likely utilize or adapt existing programs rather than developing ‘from scratch’</td>
</tr>
<tr>
<td>Medium-to-high capacity (greater ability of the government to achieve complex policy interventions requiring higher levels of pedagogical knowledge and skills, an adequate digital infrastructure, as well as a functioning and interconnected system to plan, deliver, monitor and adjust such interventions)</td>
<td>Countries that have the minimum infrastructure required may be better equipped to implement computer-assisted, adaptive instruction; continue to bolster EdTech infrastructure and connectivity. Consider ways to incorporate these programs into long-term strategies; exploit aggregate data on learning achievement to inform decision-making and resource allocation</td>
</tr>
</tbody>
</table>

Applicability to education level

<table>
<thead>
<tr>
<th>Education level</th>
<th>Considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary</td>
<td>Might require more teacher supervision; teachers might need to rotate in the classroom in order to provide support to students while using these programs</td>
</tr>
<tr>
<td>Secondary</td>
<td>Students might be able to work with less teacher engagement. This also makes it more feasible to implement programs remotely (at home)</td>
</tr>
</tbody>
</table>

Time horizon of intervention: Should this be a pandemic response approach to respond to the pandemic (short-term) or something that systems turn to for the long-haul (long-term)? How would this matter in terms of design and implementation characteristics?

<table>
<thead>
<tr>
<th>Time horizon</th>
<th>Considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short-term</td>
<td>For short-term interventions, countries without the necessary enabling conditions should consider pencil-and-paper based implementation models</td>
</tr>
<tr>
<td>Long-term</td>
<td>For long-term interventions, countries should focus on investing in necessary enabling conditions like access to connectivity, devices, digital skills for students and teachers</td>
</tr>
</tbody>
</table>

Severity of pandemic shocks to education system: How would design and implementation characteristics differ depending on this variable?

<table>
<thead>
<tr>
<th>Severity</th>
<th>Considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Severe disruption (e.g. many months of closed schools; inability to have physical contact with many areas in the country, etc.)</td>
<td>With severe disruptions, self-guided learning programs may need to start students at a very basic level, offer students higher levels of support, and offer self-guided learning resources in higher dosage</td>
</tr>
<tr>
<td>Light to moderate disruption</td>
<td>With light to moderate disruptions, self-guided learning programs can start students at a higher level, offer students moderate levels of support, and offer self-guided learning resources in low-dosage</td>
</tr>
</tbody>
</table>
Examples of computer-assisted self-guided learning software:

- **Mindspark** – See impact evaluation of its use in an after-school program in India (2018)
- **Imagine Worldwide** – See impact evaluation of the use of the software in Malawi public schools (2020)
- **Think!Think!** – See impact evaluation of its use in Cambodia (2021)
- **Kolibri** (formerly KA Lite). – See impact evaluation of the use of KA Lite in public schools in El Salvador (2020)
- **Can’t Wait to Learn** by War Child Holland – See impact evaluation of its use in Sudan (2020)

Additional information (cont.)

Caveats and considerations for implementation:

What are the enabling conditions needed to establishing self-guided learning systems?
Read about our 5 Enabling Conditions for Establishing an Adaptive Learning System.
- Most adaptive systems are proprietary and require high upfront costs to develop or adapt.
- Regardless of whether a government adapts or develops a system from scratch, adaptive systems must be mapped to the curriculum.
- Adaptive systems require a robust digital infrastructure to ensure widespread adoption.
- Adaptive systems must include training for teachers to be deployed effectively.
- In addition to teacher training, adaptive systems must effectively engage students.

Read about the six pillars of EdTech Readiness for deploying digital learning solutions (World Bank).

What lessons have been learned about applying computer-assisted self-guided learning programs?
- Listen to our Podcast: Mitigating Learning Losses and Accelerating Learning through Adaptive Learning: Lessons from Ecuador and the Dominican Republic (World Bank)

What are drawbacks to using these programs?
- Many programs are available only for contexts with high access to digital devices and Internet connectivity
- Relatively advanced digital skills required from both students and teachers
- Read more about advantages vs. disadvantages in our guidance note on Remote Learning During COVID-19 (pg. 48).

Read more in the World Bank’s forthcoming Knowledge Pack on Adaptive Learning Programs.
Extending Instructional Time

- **Ensure additional instructional time is used for high-quality learning** that contributes to learning goals, is aligned with what occurs during the regular instructional time and has clear learning expectations. This study on the impact of time spent on instruction on achievement levels in PISA finds that it is “likely that the magnitude of any causal link between achievement and instruction time depends upon the quality of instruction, the classroom environment, and the rate at which students translate classroom time into added knowledge.”

- **Ensure adaptations are inclusive of the range of learners who need to catch up** by consulting with learners, caregivers, and communities. The schedule or calendar should meet the needs of all learners, not further marginalize some learners. Similarly, if expanding the school day to include supplemental or enrichment activities, schools should consider the times of the day when students of different ages do best with “core” instruction.

- **Develop mechanisms that ensure high attendance**. The effectiveness of programs is directly tied to student attendance. If offering extended instruction opportunities that are voluntary (after-school programs; summer school), incorporate strong incentives for attendance. Programs that operate outside of the typical academic year/day should consider the time of day and time of year for extended instructional time.

- **Keep in mind possible effects of certain arrangements on student and teacher wellbeing**. The benefits of expanded learning time for accelerating learning must be weighed against potential downsides, such as potential burnout and stress, particularly in the case of longer school days.

- **Allocate sufficient financing and personnel** for making adaptations. Changes to the calendar and schedule and integration of distance learning are resource intensive.

- **Communicate** with learners, educators, caregivers, and communities about adaptations to instructional time. Maintain consistent messaging with caregivers and communities about the benefits of expanded learning time.
Models and examples:

**Modify the school calendar**

**Kenya**: In 2020, Kenya announced a two-year accelerated “crash program” that adds a fourth term to the tradition three in the school year by shortening school holidays. The normal school calendar will resume in 2023.

**Mexico**: The 2021-22 school calendar adds an additional 10 days to the calendar to address learning losses, by shortening holidays. The school terms runs from August 30, 2021, to July 28, 2022.

**Summer School**

**Philippines**: Summer schooling was offered in 2020 to students who had received a grade lower than 75% in the previous school year.

**Madagascar**: The government scaled up in 2020 an existing two-month summer ‘catchup’ program for students who reintegrate into school after having left the system.

**USA**: The Summer Learning and Enrichment Collaborative (2021) provides $1.2B for states to use on educational summer programming.

**South Africa**: In 2022, the Democratic Alliance party is petitioning educational authorities to extend the school day by 1 hour to make up for lost time.
What evidence do we have that extending instructional time improves learning?

**Extending the school day:**
- LAC: A review of 15 studies measuring the effects of longer school days in Latin America and the Caribbean found positive impacts across a range of outcome variables, including gains in student learning, although with considerable heterogeneity across programs.
- Colombia: Cohorts that switched from a half school day to a full school day have test scores that are about one tenth of a standard deviation higher than cohorts with half school days; impacts are largest among poorest schools and those in rural areas.
- USA: A systematic review of the research finds that extending school time can be effective at supporting school learning, particularly when considerations are made for how time is used.

**Extending the school year:**
- Indonesia: This study finds that a longer school year decreases the probability of grade repetition and increases educational attainment; it also increases the probability of working in formal sector and earning higher wages later in life.
- Denmark: A large-scale study found that increasing the total weekly instruction time by 15% (as a result of increasing the number of language lessons by 25%) increased student learning.

How can countries extend the amount of time spent in school?

- Strategies to Solve Unfinished Learning: Expanded Learning Time (Education Trust) – 2021
- Adjusting Your School Calendar for COVID-19 Response (TEA) – 2020
- Restarting and Reinventing School – Priority 7: Provide Expanded Learning Time (Learning Policy Institute) - 2020
How to implement learning recovery programs?
Supporting teachers

Teachers are the single most important school-based determinant of student learning, and consequently at the heart of the response to recover learning losses and build back better.

A. Principles to support teacher performance

1) Support teacher resilience
2) Support teachers instructionally
3) Support teachers technologically

For more background, please refer to:
World Bank (2020). Three Principles to Support Teacher Effectiveness During COVID-19
Support Teacher Resilience

Why? The pandemic has caused a great deal of stress and anxiety, and teachers have been under added pressure. As education systems pivoted to remote learning, many teachers experienced increased demands and heightened complexity to their jobs. As schools have reopened or are reopening, teachers are working with many children suffering from mental health issues and will be far behind in learning. This means teachers need to be adequately and regularly supported so that they, in turn, can support their students and accelerate learning.

To support teacher resilience:

- **Check in on teachers.** School leaders need to check-in on teachers to detect burnout, especially in the light of learning recovery measures like a revised curriculum, new learning assessments, new pedagogies and technologies. At the system level, relevant ministries can help school leaders to complete check-ins by offering guidance on appropriate screening questions to detect burn-out. District and sector officials also play an important role in monitoring signs of teacher burnout and identifying methods of mitigating it.

- **Enhance intrinsic motivation.** Highlight teachers’ importance and contributions, share success stories and tips through effective channels, connect teachers in a network. Stir Education partners with government to boost the intrinsic motivation of teachers in India and Uganda, through peer networks, action and feedback, and reflection.

- **Limit burnout.** Enhanced communication, guidance, and support from school management can help teachers cope with changes. Structured peer-support groups are low-cost and can help teachers deal with changes as recent evidence from the Democratic Republic of Congo suggests.

- **Build teachers’ psycho-social resilience.** Offer counselling to support teachers’ psycho-social wellbeing, empower teachers with tools to handle emergencies, and motivate improvements in teacher presence and effectiveness. HealthyMinds@Work in Mexico is a pilot program that helps teachers cultivate their psycho-social well-being.
Support Teachers Instructionally

Why? As children have returned to school, many are far behind in learning compared to previous cohorts. Teachers have the difficult job of providing equivalent quality of education in less time. To do so, teachers will need support to implement strategies for learning recovery and acceleration, such as structured pedagogy and targeted instruction. Given that understanding students’ learning levels is an important component of learning recovery programs, teachers need support in applying learning assessments and making use of their results to inform instruction. To support teachers instructionally:

Immediate actions for learning recovery:

• **Prepare teachers to promote the psycho-social wellbeing of their students.** Teachers need to be able to establish a positive climate environment where students feel safe and comfortable, and where mutual trust can grow. Additionally, teachers need support in identifying students struggling with poor mental health and/or at risk of dropping out, and employing strategies to help those students, or to refer them to additional support resources when appropriate. Easy-to-use tools and reminders can help teachers keep student wellbeing top of mind.

• **Equip teachers to assess students.** Teachers will need support on assessing students accurately, recording testing information, and using it to help students progress. These FLN Hub tools on formative assessment in reading and numeracy can help teachers build capacity. In Indonesia, the national assessment agency provides diagnostic assessment tools in local languages for core subjects and guidelines for teachers to score and interpret results.

• **Ensure teachers are on board with prioritizing the fundamentals.** If learning recovery responses involve prioritizing the curriculum to allocate more time to foundational skills, teachers must receive timely communications around how any curricular adjustments will affect their instruction.

• **Support teachers in implementing strategies to recover and accelerate learning.** Teachers need practical training and guidance on how to implement strategies like targeted instruction, which requires grouping students by level of learning. In systems with teachers with relatively low levels of preparation more structured guidance is recommended, e.g., like structured lesson plans, which has proven effective in Kenya.
Support Teachers Instructionally (cont.)

Long-term actions to sustain change

Offer evidence-based teacher professional development (TPD) to improve the teaching practices of current teachers.
- Programs tailored to teachers’ needs, using practical pedagogy, focusing on a set of skills and are ongoing are most likely to be effective.
- Programs that have a specific subject focus, incorporate lesson enactment, include initial face-to-face components, and link participation to career incentives tend to show higher student learning gains (Evans et al. 2022)
- Coaching programs with regular follow-up and feedback have been effective in providing teachers with continuous support in various contexts. For example, a program featuring frequent monitoring and coaching support to teachers improved student outcomes in the Gambia.
- Other examples of successful teacher professional development programs with coaching components include Tusome Early Grade Reading Activity in Kenya, the Northern Education Initiative Plus in Nigeria, Un Buen Comienzo in Chile, and Acompañamiento Pedagógico Multigrado in Peru.
- More examples of well-designed programs can be found in the Coach Repository of In-Service TPD Programs, a global public good that provides education stakeholders with access to a database of in-service K-12 teacher professional development programs.

Make teaching attractive and strengthen pre-service training to improve the teaching quality of incoming teachers.
- Attract the best into teaching. COVID-19 has made teaching even less attractive than before, and many countries are struggling with teacher shortages.
- To improve teacher quality, countries must make teaching more attractive, by offering more competitive salaries, attractive career paths and clear career progression, better systems of accountability, well-defined teacher standards, and effective school governance. Refer to UNESCO’s Teacher Policy Development Guide.
- Prepare teachers for their role in the classroom by offering pre-service training with strong practicum components.
Support Teachers Technologically

Why? As schools closed and education systems shifted to remote education, teachers’ lack of access to technology and technological skills became a barrier to effective remote learning in many countries. Blended and hybrid learning are here to stay to prepare education systems for the next shock, but also to enhance education delivery. These investments are also very much part of building forward better.

To support teachers technologically:

• **Provide teachers with access to technology.** Teachers should have access to broadcast and digital technology, which requires investments in hardware and connectivity.

• **Help teachers judge when technology enhances instruction – and when it does not.** Technology can be used to enhance instruction but should always be used with a clear purpose, rather than for its own sake. Sometimes, less is more when it comes to technology.

• **Build teacher skills in how to use technology.** Training on how to use technology to enhance educational delivery is essential. In addition to ensuring students and teachers have access to hardware and software, Plan Ceibal in Uruguay has helped teachers build digital skills.

• **Encourage teachers’ frequent use of technology.** To build teachers digital skills over time and prepare them for future shocks, encourage the use of technology for tasks like assessments, report cards, and in communication with parents and students or one another. In Turkey, Kenya, and South Africa, platforms like Whatsapp and Facebook have been used to facilitate teacher peer support. This guide for teachers provides resources on use of technology in various aspects of their work including formative assessment.

• **Help teachers use technology effectively to remediate gaps in learning.** School systems should help teachers use technology effectively to remediate gaps in learning and to enhance the ability to cover new material.

For more resources that offer guidance on investments in technology, explore Education Technology for Effective Teachers.
How to support teachers to use technology

Technology can be leveraged to enhance TPD access, participation, engagement, and application of new skills in the classroom. As education systems emerge from the crisis, they need to invest in practical ways to improve and support TPD. There is growing interest among policymakers in providing remote and alternative support options to teachers.

Principles for blended or remote TPD

- **Technology should be an enabler, not a driver of TPD.** Technology should only be used to improve outcomes of interest. It is a means to an end, rather than an end in itself.

- **Design with the user in mind.** Consider if low-tech and offline options may suit the context over high-tech online solutions.

- **Rely on existing technology.** For instance, if smart phones are widely used, but tablets and computers are scarce, consider delivering blended/remote TPD via smart phones, like OneSky for All Children, that offers training to home-based caregivers in Vietnam, China, and Mongolia.

- **Give teachers flexibility.** A multi-modal TPD delivery can help teachers in varying settings find a solution that works for them, like Global School Leaders, who combined in-person, online learning modules, WhatsApp, and phone calls to deliver training to all principals and school leaders.

- **Train teachers in how to use technology.** Teachers need time and training to build digital skills, including digital pedagogical skills. Tutorials, dedicated training time and support troubleshooting tech challenges can facilitate teachers’ technology use.

For background and details, please refer to the following blog: How to Enhance Teacher Professional Development Through Technology: Takeaways from Innovations Across the Globe
## Interventions to support teachers at scale using technology

<table>
<thead>
<tr>
<th>Example</th>
<th>Structure</th>
<th>How is technology leveraged?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mentoring program and skills upgrading in Punjab, Pakistan</td>
<td>Mentors visit teachers regularly and observe classroom practice using a tool based on <em>Teach</em>—a free classroom observation tool produced by the World Bank—and provide tailored feedback on instructional practice. Teachers have access to a video-based mobile course to upgrade their skills.</td>
<td>Technology is used to complement in-person components of the mentoring program. Teachers can practice independently in-between mentoring visits, using the ITSP application on their phones.</td>
</tr>
<tr>
<td>Remote TPD with NGO “<em>Tu Clase, Tu Pais</em>”, applied in seven Latin American countries</td>
<td>Localized and collaborative TPD through a virtual platform, with practical training that helps teachers improve their practices at the classroom level. Varied content, including a focus on technology in education and teaching 21st century skills.</td>
<td>TPD solutions are adjusted to low-tech and low-resources environments. All resources are designed to function offline so that all teachers have access to the content, no matter their level of connectivity.</td>
</tr>
</tbody>
</table>
Behavioral insights can help teachers make a change

Focusing on policy alone is not enough to assess whether an intervention would work to accelerate learning recovery. Countries should also consider the human factor when designing and implementing teacher policies. To support teachers to continuously improve their performance, behavioral insights can help in policy design.

When designing and implementing teacher policies and programs, the intended changes should be:

**Clear**
Teachers must know exactly what is expected of them. For example, if a country plans to implement structured pedagogy, scripting out the critical steps in user-friendly lesson plans can help make the action clear for teachers, and increase the likelihood of a successful program.

**Doable**
Often, teachers are asked to make big, transformative changes in a short timeframe. However, when teachers are overwhelmed, the intervention may not work. Focus on a set of specific actions, breaking the intended changes into sustained and manageable actions for teachers.

**Rewarding**
Consider how to make the change rewarding for teachers, as behavior change comes easier when an action is associated with a reward. Rewards could be financial or non-financial, like teachers seeing tangible student progress after introducing new learning resources or establishing a good relationship with a pedagogical coach. The sooner the reward comes after the intended change, the better.

Read more about behavioral insights applied to teacher interventions in the forthcoming (2022) World Bank publication *Global Report on Teachers: from rote learning to effective teaching*
Additional Resources

Cross-Cutting Support for Teachers:
Supporting Teachers in Back-to-School Efforts: A Toolkit for School Leaders (International Taskforce for Teachers for Education 2030)
Ready to Come Back: Teacher Preparedness Training Package (UNICEF)
Three Principles to Support Teacher Effectiveness during COVID-19 (World Bank)
Coach initiative focused on improving teacher professional development (Overview document and introductory blogpost) (World Bank)
Teach suite of open-access classroom observation tools (Website and introductory blogpost) (World Bank)
Supporting Teachers in the Age of the Pandemic (World Bank)

Supporting Teacher Resilience:
Supporting teachers and education personnel during times of crisis (UNESCO)
Teachers’ well-being: A framework for data collection and analysis (OECD)
Improving Teacher Awareness and Well-Being through CARE (Mindfulness)
Teacher Wellbeing Resources Mapping and Gap Analysis (INEE)

Support Teachers Instructionally:
Coach tools and resources: guidance on how to design, implement and evaluate effective in-service TPD programs (World Bank)
Evidence-based principles of teacher professional development [webinar] (World Bank)
Engaging teachers in remote professional development (ASCD)
Effective Professional Development Guidance Note (Education Endowment Foundation)
Classroom formative assessment sample: The Do-It-Yourself ASER Tool (FLN Hub)

Support Teachers Technologically:
Ensuring Effective Distance Learning During COVID-19 Instruction (UNESCO)
Resources on implementing remote and blended learning techniques (Wiley; Wiley)
How Learning Continued during the COVID-19 Pandemic: Global Lessons from Initiatives to Support Learners and Teachers (World Bank)
Lessons from Remote Learning During the COVID-19 Pandemic (UNICEF Innocenti)
Guidance on Key Principles for Investing in Technology for Effective Teachers (World Bank)
Curated resources on use of technology to support learning from (FLN Hub)
## Differentiated approaches: How might teacher support vary under different circumstances?

<table>
<thead>
<tr>
<th>Type of context</th>
<th>Mechanism, considerations for implementation</th>
</tr>
</thead>
</table>
| Low capacity (limited ability of the government to achieve complex policy interventions requiring higher levels of pedagogical knowledge and skills as well as a functioning and interconnected system to plan, deliver, monitor and adjust such interventions) | • Provide tightly structured and effective pedagogy through proven lesson plans and detailed teacher guides  
• Offer practical, skills-based, on-site teacher training and focus TPD on structured pedagogy and delivering instruction  
• If TPD is remote, focus on low-tech options  
• Promote use of basic, in-class techniques to check for understanding and targeted instruction  
• Offer teachers ready-made assessments to help them assess students on core content and skills. |
| Medium-to-high capacity (greater ability of the government to achieve complex policy interventions requiring higher levels of pedagogical knowledge and skills as well as a functioning and interconnected system to plan, deliver, monitor and adjust such interventions) | • Provide greater autonomy in lesson content and structure  
• Introduce classroom observation tools and coaching programs for teachers  
• Institute an array of remediation techniques tailored to student needs  
• Empower and increase school leaders’ abilities to guide professional development  
• Use assessment data to adjust teaching to individual student levels |

### Time horizon of intervention: Should this be a pandemic response approach to respond to the pandemic (short-term) or something that systems turn to for the long-haul (long-term)? How would this matter in terms of design and implementation characteristics?

<table>
<thead>
<tr>
<th>Time horizon</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short-term</td>
<td>Short, just-in-time, and blended TPD to support pressing learning needs, such as training on how to assess students and develop pedagogical strategies to focus on remedial education</td>
</tr>
<tr>
<td>Long-term</td>
<td>Building the foundations of a high-quality TPD system, including a coaching program</td>
</tr>
</tbody>
</table>

### Severity of pandemic shocks to education system: How would design and implementation characteristics differ depending on this variable?

<table>
<thead>
<tr>
<th>Severity of disruption</th>
<th>Characteristics</th>
</tr>
</thead>
</table>
| Severe disruption (e.g., many months of closed schools; inability to have physical contact with many areas in the country, etc.) | • Prioritizing teachers’ mental health is especially important after long disruptions  
• Substantial TPD of longer duration once school reopens likely necessary  
• Peer-to-peer working groups can foster collaboration and support |
| Light to moderate disruption | Shorter initial TPD may be more suitable |
Differentiated approaches: How might teacher support vary under different circumstances? (cont.)

In FCV contexts with forcibly displaced persons, forcibly displaced children should be integrated into host country national education systems and be able to benefit from access to all levels of education, including the post-primary level. These children are likely to have been out of school for extended periods and are likely to require remedial support in foundational mathematics and literacy, intensive language learning when the local or academic languages are new, support to adapt to a new curriculum, and other remedial measures.

Displaced teachers can be invaluable to the successful integration process of forcibly displaced children and can help fill in key resource gaps where there is a shortage of teachers in the host community. Leveraging these teachers within camps or host communities to provide additional teaching support (through targeted instruction, tutoring, social and emotional learning, etc.) can be particularly useful in complementing classroom instruction or remote learning. However, they often face legal restrictions to employment and are rarely included or transitioned into national systems; for instance, refugees who are qualified teachers rarely have their qualifications recognized in host countries. Improving data on refugee teachers and recognizing their qualifications would allow host systems to absorb additional refugee students more rapidly.

Costs of different instructional approaches for learning recovery and acceleration

An ideal analysis would utilize the same units of measurement to compare cost (e.g., cost per student per year) and cost-effectiveness (e.g., change in Learning Adjusted Years of Schooling or LAYS; standard deviations of learning per US$100; or cost per standard deviation of learning). In the absence of such estimates, the sources below can help education officials get a sense of the costs of the four main types of pedagogical interventions presented in this document. The recent analysis of the cost-effectiveness of over 150 education interventions finds that targeted instruction and structured pedagogy are among the three most cost-effective educational approaches.

**Targeted Instruction**

<table>
<thead>
<tr>
<th>Program</th>
<th>Information on per-student costs or cost-effectiveness</th>
<th>Information on impacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Partial-day tracking intervention (Ghana)</td>
<td>US$10.65 per student</td>
<td>The interventions increased student learning by about 0.15SD, and about 0.45SD when adjusting for imperfect implementation.</td>
</tr>
<tr>
<td>Teaching at the Right Level for 50% of students (Ghana)</td>
<td>65 GHS (around US$11) in 2020</td>
<td>If children are exposed to TaRL for three years this improvement would be worth 1.5% of earnings over their lives. The total social benefits are 717M GHS (around US$90M) in today’s money (2020)</td>
</tr>
</tbody>
</table>

**Structured pedagogy**

<table>
<thead>
<tr>
<th>Program</th>
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<th>Information on impacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading Booster Programme (Papua New Guinea)</td>
<td>US$60 per student</td>
<td>Impact on learning of third-grade students ranged from 0.6 to 0.7 SD.</td>
</tr>
<tr>
<td>Combined intervention with improved pedagogy, parateachers, and targeted instruction (Gambia)</td>
<td>US$241.59 per student annually 4 LAYS per US$100</td>
<td>After three academic years, Gambian children receiving the intervention scored 46 percentage points (3.2 SD) better on a combined literacy and numeracy test than control children</td>
</tr>
<tr>
<td>The Kenya Primary Math and Reading Initiative was a randomized controlled trial that compared three treatment groups with specific ingredients and a control group</td>
<td>For every US$100 spent on the PD, coaching, books, and teachers’ guide treatment group, an additional 14.7 students were able to read at the English benchmark and 14.7 students at the Kiswahili benchmark.</td>
<td>Average effect sizes for the teacher PD, coaching, books, and teachers’ guide treatment group ranged from 0.38 to 0.56 SD for mathematics, which are moderate effects; and from 0.73 to 1.29 SD for English and Kiswahili, which are moderate to large average effect sizes.</td>
</tr>
</tbody>
</table>
Costs of different instructional approaches for learning recovery and acceleration (cont.)

### Self-guided learning

<table>
<thead>
<tr>
<th>Program</th>
<th>Information on per-student costs</th>
<th>Information on impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mindspark (India):</td>
<td>US$15 per student per month, but can be under US$2 per student per month if scaled</td>
<td>Students offered a voucher scored 0.37 SDs higher in math, improving by over twice as much as students in the comparison group, and scored 0.23 SD higher in Hindi, improving by 2.4 times as much as students in the comparison group.</td>
</tr>
<tr>
<td>Self-learning at the right level</td>
<td>US$113-124 per student for an 8-month intervention (US$14-15.5 per month)</td>
<td>After eight months of the intervention, significant and robust improvements in students’ cognitive abilities were measured by two mathematics tests. The magnitude of the effect size range from 0.501 to 1.212 SD.</td>
</tr>
<tr>
<td>(Kumon method of learning) (Bangladesh)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Computer-assisted learning program by Pratham (India):</td>
<td>US$15.18 per student per year</td>
<td>The computer-assisted learning increased math scores by 0.35 SD the first year, and 0.47 SD the second. One year later, treatment students still outperformed control students (0.1 SD).</td>
</tr>
<tr>
<td>Programa Adaptativo de Matemática (Uruguay):</td>
<td>US$1.5 per student per year</td>
<td>The results show a positive effect of 0.2 SD on mathematics test scores.</td>
</tr>
</tbody>
</table>

### Tutoring

<table>
<thead>
<tr>
<th>Program</th>
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<th>Information on impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tutoring Online Program (Italy)</td>
<td>50 euro (around US$52) per student, covering organizational and pedagogical support.</td>
<td>The program substantially increased students’ academic performance (by 0.26 SD on average).</td>
</tr>
<tr>
<td>Balsakhi Remedial Tutoring</td>
<td>The Balsakhi program cost approximately US$2.25 per child per year. The main cost of the program was the tutors’ relatively small salaries (US$10-15 per month).</td>
<td>In this pilot, researchers estimated an attractive cost-effectiveness of about US$0.67 per SD increase in test scores.</td>
</tr>
<tr>
<td>(Vavodara and Mumbai, India)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Remote low-tech SMS tutoring (Botswana)</td>
<td>The phone and SMS intervention is highly cost-effective with 0.63 to 0.89 SD learning gains per US$100. This equates to US$5 per child in the SMS group and US$19 per child in the phone and SMS group.</td>
<td>This randomized trial of low-technology interventions – SMS messages and phone calls – with parents to support their child improves learning by 0.12 SD</td>
</tr>
</tbody>
</table>

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**Mindspark (India):** Information on per-student costs is US$15 per student per month, but can be under US$2 per student per month if scaled. Students offered a voucher scored 0.37 SDs higher in math, improving by over twice as much as students in the comparison group, and scored 0.23 SD higher in Hindi, improving by 2.4 times as much as students in the comparison group.

**Self-learning at the right level (Kumon method of learning) (Bangladesh):** Information on per-student costs is US$113-124 per student for an 8-month intervention (US$14-15.5 per month). After eight months of the intervention, significant and robust improvements in students’ cognitive abilities were measured by two mathematics tests. The magnitude of the effect size range from 0.501 to 1.212 SD.

**Computer-assisted learning program by Pratham (India):** Information on per-student costs is US$15.18 per student per year. The computer-assisted learning increased math scores by 0.35 SD the first year, and 0.47 SD the second. One year later, treatment students still outperformed control students (0.1 SD).

**Programa Adaptativo de Matemática (Uruguay):** Information on per-student costs is US$1.5 per student per year. The results show a positive effect of 0.2 SD on mathematics test scores.

**Tutoring Online Program (Italy):** Information on per-student costs is 50 euro (around US$52) per student, covering organizational and pedagogical support. The program substantially increased students’ academic performance (by 0.26 SD on average).

**Balsakhi Remedial Tutoring (Vavodara and Mumbai, India):** Information on cost-effectiveness is the Balsakhi program cost approximately US$2.25 per child per year. The main cost of the program was the tutors’ relatively small salaries (US$10-15 per month). In this pilot, researchers estimated an attractive cost-effectiveness of about US$0.67 per SD increase in test scores.

**Remote low-tech SMS tutoring (Botswana):** Information on cost-effectiveness is the phone and SMS intervention is highly cost-effective with 0.63 to 0.89 SD learning gains per US$100. This equates to US$5 per child in the SMS group and US$19 per child in the phone and SMS group. This randomized trial of low-technology interventions – SMS messages and phone calls – with parents to support their child improves learning by 0.12 SD.
Develop psychological health and wellbeing

Build the capacity of the teaching workforce to deliver support to students, while addressing teachers’ own mental health and wellbeing

Prioritize communication, including community messaging about COVID-19 and mental health

Ensure equitable coverage of school-based feeding & nutrition programs and water, sanitary, and hygiene (WASH) facilities

Promote student safety in schools and at home
Safeguarding learning and wellbeing of children and youth requires us to invest in understanding and addressing the impacts of the COVID-19 pandemic and related disruptions on children's mental health and psychosocial wellbeing. Studies paint a worrying picture of worsening mental health issues among children and youth, including increases in depression; stress and anxiety; behavioral problems such as anger, negativity, irritability and inattention; alcohol and substance abuse; and lifestyle changes (less exercise, disrupted sleep) among other issues (UNICEF, 2021; Wagner, 2020). The negative impact of the pandemic on their mental health and psychosocial well-being is linked to a number of factors and experiences, including among them: isolation as a result of social distancing and uncertainty caused by the pandemic; experience or witnessing violence; death and illness among family members; concerns for family income and health, and others.

Teachers have also experienced increased stress as a result of their own personal experiences, uncertainty surrounding school closures and, for many, a lack of familiarity with distance education/remote learning. While there is limited available research, there is some evidence showing a large portion of teachers suffered from symptoms of anxiety, stress, and depression when schools reopened which could be due to many factors including the new measures they have had to adopt without the necessary support and a heavy workload in many instances combined with the stress of carrying out family care duties. This can lead to burnout – which can result in absenteeism and even lead some teachers to leave their jobs (Pellerone, 2021).
Addressing the mental health and psychosocial needs of children and youth and supporting their wellbeing is important in and of itself, but is also critical to ensuring that they can learn. A growing body of evidence shows that mental health is strongly related to academic performance (Murphy et al. 2015; Agnafors et al. 2021; Bas 2020); with research showing poor mental health negatively impacting a child’s ability to concentrate and learn. Poor mental health can also be associated with aggressive and other disruptive behaviors which can negatively impact the learning environment and the amount of learning in the classroom (NBER 2016). Further, mental health problems increase the risk of repeating a grade as well as dropping out of school (Schulte-Korne 2016).

Research shows that school-based mental health programs can be effective, including in helping improve students’ academic outcomes (Guzmán et al., 2015). Further, teachers can be trained in providing psychosocial support and communications activities can raise community awareness of the intersection between COVID-19 and mental health. It is important to note that programs should also protect the mental health and wellbeing of teachers and other staff through institutional responses such as individual support, peer support groups, and other interventions, which should be budgeted for (UNICEF 2021). Teachers can also be an important resource – being trained on psychological first aid, protecting children from gender-based violence (GBV) (including sexual exploitation and abuse and sexual harassment) and reporting, and referrals (UNICEF 2020).
Schools have also proven to be invaluable platforms for the delivery of essential services, such as school meals, and estimates from 2020 suggest 39 billion in-school meals have been missed during school closures by the 370 million children who were benefiting from school feeding programs pre-COVID (WFP & UNICEF 2021). Research has shown that school feeding programs can increase beneficial health outcomes, such as a reduction in anemia (Aldeman et al. 2019), but can also increase learning and cognitive abilities (UNESCO and Pôle de Dakar 2013), with most benefits accruing to girls as well as children living in poverty (Gelli et al. 2019). School feeding programs should be a priority for education systems as schools re-open, but alternative distance modalities also exist, such as take-home rations, cash transfers, and home deliveries (WFP & UNICEF 2021). Children in their first 8,000 days of life are most susceptible to long-term cognitive and health consequences due to malnutrition, and should be identified and targeted immediately for adapted school feeding programs (WFP & UNICEF 2021).

The COVID-19 pandemic has also shed light on the importance of adequate school-based water, sanitary, and hygiene (WASH) facilities and services to ensure student safety, prevent further COVID-19 infection and transmission, and support girls’ attendance. Sufficient school WASH facilities have proven to reduce school absences due to illnesses (Trinies et al. 2016) and increase cognitive performance by preventing dehydration (Bar-David et al. 2009). Additionally, the introduction of WASH in schools is associated with improved girls’ attendance (UNICEF, 2019). However, a recent systematic review of school-based WASH facilities across low- and middle-income countries found a lack of adequate WASH conditions and menstrual hygiene management requirements (Poague et al. 2022).

Broadly defined to include Safe Learning Facilities, School Disaster Management, Risk Reduction & Resilience Education, and School-Related Gender-Based Violence Prevention, measures to increase school safety must also be priority for Ministries of Education, especially considering climate change and rising rates of violence since the onset of the COVID-19 pandemic. Evidence shows that unsafe learning environments can negatively impact student learning (Kibriya et al. 2018), can reduce student enrollment and attendance, and dramatically reduce life-time earnings (Wodon et al. 2021).
Introduction (4/4)

Equity highlight

The pandemic has exacerbated existing risks – while compounding and having particularly serious consequences for children and youth who are already vulnerable.

- For instance, children already exposed to violence or living in protracted settings of conflict or displacement are likely to be at higher risk of poor mental health during the pandemic, particularly if access to other essential services is also constrained (UNICEF 2020).

- Women and girls are at higher risk of gender-based violence and significant increases have been observed in the prevalence of violence experienced by women and girls during the pandemic. Girls are at higher risk of child marriage and unwanted pregnancy, and are more likely to have to take on household responsibilities, leaving little time for other activities.

- Children with disabilities are also more likely to be negatively impacted due to increased isolation, lack of access to remote learning opportunities, among other reasons.

- Finally, children with pre-existing mental health issues are likely to experience exacerbated symptoms while at the same time are less likely to have access to support or needed services.
Here the composite term ‘mental health and psychosocial support’ (MHPSS) “refers to any type of local or outside support that aims to protect or promote psychosocial wellbeing or prevent or treat mental disorders.” (see IASC Guidelines on MHPSS in Emergency Settings 2007). These interventions can be implemented in programs for education, protection, or health and nutrition and MHPSS covers a wide range of issues including emotional distress, common and severe mental disorders, alcohol and substance abuse, and intellectual or developmental disabilities.

There are some key considerations and actions for providing MHPSS, with implications for the education sector, among them (adapted from IASC 2020):

- **Understanding MHPSS needs and available resources**: It is important to understand culturally-specific MHPSS issues, needs, and capacity gaps. A mapping of structures and services across sectors – including child protection, health, education, and other systems can be useful in organizing resources and using them efficiently.

- **Promoting a whole-of-society approach**: Many sectors can incorporate MHPSS in their work (in program design and implementation), with attention to stigma issues and promoting confidentiality. Multi-sectoral coordination mechanisms should be strengthened. In the case of education, for example, the referral systems for children should be reviewed and strengthened.

- **Prioritizing mental health/psychosocial wellbeing in regular school instruction**: Within the education sector, mental health can and should be embedded into instruction, such as through group-wide check-ins (opportunities to express emotions); opportunities for mindfulness and reflection (breathing exercises, spending time outdoors). See this UNESCO guidance note for schools on some of these strategies.
Mental Health and Psychosocial Support: Key Considerations (2/2)

- **Building workforce capacity to provide MHPSS**: Greater investment is needed in capacity-building and training for those who provide such services across sectors, including teachers – as they can be an important resource in providing MHPSS. This also requires addressing and providing support to address the psychosocial needs of teachers.

- **Support provision of MHPSS with consideration for the needs and constraints faced by vulnerable groups**: MHPSS should be adapted and accessible to vulnerable groups the population, including children with disabilities and those from minority economic groups.

- **Prioritizing communication, including community messaging about COVID-19 and mental health**: Communications campaigns should share positive mental health messages in a way that combats stigma; raises awareness about available mental health resources; and provides accurate and reliable information about COVID-19. Communication can, for example, include providing parents information on what types of support are provided by the school.

- **Assessing impact and reach of activities**: It is important to establish monitoring, evaluation, and accountability mechanisms. These systems can be used to assess the impact of MHPSS activities, capture lessons learned, and to adjust activities accordingly.

- **Investing in strengthening systems for the long-run**: Efforts should focus on strengthening long-term mental health and social welfare structures, such as, by improving cross-sectoral collaboration to provide MHPSS. Strengthening the capacity of teachers to respond to MHPSS needs can be instrumental for responding during COVID-19 but also for future emergencies.
Helplines and other remote psychological support

Telephone hotlines can serve as an effective tool to support people in the community who feel worried or distressed when hotline staff/volunteers can be trained and supervised in MHPSS (e.g., Psychological First Aid) and have current information about the COVID-19 outbreak to avoid undue harm to callers. Other platforms (e.g., WhatsApp) and forms of technology can be used to set up support groups and/or maintain social support, especially for those in isolation.

- **India**: Under the Manodarpan initiative, the MoE launched a toll-free national helpline where students can call to seek counseling support, and a web portal with an interactive chat system that students can use to receive support from trained first responders.

- **Ecuador**: Teachers and school counselors received training, mobile devices (tablets and cellphones), and data plans, provided with support from UNICEF, to make telephone calls for psychosocial support during school closures.

- **Jamaica**: The MoE deployed a tele-counselling service in collaboration with the Child Guidance Clinic and supported by UNICEF. Thirty-six psychosocial helplines were made available for parents throughout the country through its National Parenting Support Commission.

- **Liberia**: The MoE, with the support of Read Liberia, developed a series of 30-minute radio lessons covering key components of early grade literacy and language arts instruction building on existing materials - and then wove into these opportunities for students to reflect on their feelings and find productive ways to deal with them. These lessons were aired by the MoE on national and local radio programs across the country.

- **Belize**: The MoE and UNICEF produced a TV and radio programme called “In It Together” which in was led by children for children. In addition to promoting their education while offering help to relieve stress.

- **Dominican Republic**: The “Contigo” Family Hotline (Linea Familiar Contigo), created with support from UNICEF, is a tool for psychosocial support for children, adolescents, and their families which aims to mitigate the mental health impacts of the pandemic. This free hotline is offered via landline, WhatsApp calls, WhatsApp chats, web chat, and videocalls.
A growing body of evidence shows that teachers can be trained to provide MHPSS. Teachers can also play an important role in children’s transition back to the classroom. The following are examples of efforts to train teachers to provide this support:

- **Chile**: The Government held remote workshops with over 8,000 teachers to teach techniques for ‘psychological first aid’ for students needing psychosocial support upon school reopening.

- **Dominican Republic**: The Government trained over 90,000 teachers and 92% of its school counselors to implement a two-week psychological recovery program (developed by the Ministry of Education, UNICEF, and USAID) that was implemented during the first days of in-person instruction following school closures.

- **Sierra Leone**: As part of the GPE-funded Free Education (FREE) Project, psychosocial support was provided for students and teachers when school reopened. The government developed school safety protocols and psychosocial support guidelines (originally developed in the context of the Ebola epidemic and adapted for COVID-19) for primary and secondary schools. Teachers, inspectors, and education officers were trained to provide such support to students.

- **Mozambique**: In order to strengthen basic knowledge and capacities of frontline educators and teachers, 7,600 primary school teachers were trained using an MHPSS training manual developed with the support of UNICEF and other partners. These efforts were recently scaled up to reach 83,000 primary school teachers in six provinces. The MoE, with the support of UNICEF, has integrated this manual into on-the-job teacher training.

- **Belize**: The Belize MoE’s Continuous Professional Development department incorporated COVID-19 related issues into its courses to strengthen teachers’ capacity to respond to mental health and psychosocial needs. These courses (which included pedagogical and technical training), had 3,000 teachers registered for participation. The psychosocial related content of training included topics like "Thriving in uncertain times: Making your well-being a priority."
Trinidad and Tobago: In response to COVID-19, the Student Support Services Division rolled out a psychosocial plan which placed students into three main categories based on the severity of their academic, social, and emotional needs with services ranging from developmental assessments to e-counselling. Psychoeducation sessions were incorporated into the daily virtual class schedules and counsellors delivered a “comprehensive” Guidance and Counselling Programme, with each student benefitting from one or more interactive sessions with the guidance counsellor within every eight-day cycle. E-parent education sessions were provided while individual/group counselling and ongoing consultations and support with parents, principals, and teachers were also prescribed in the guiding framework.

Philippines: The Department of Education (DepEd) is piloting a School Mental Health Model, which will help ‘elevate awareness of learners and personnel on mental health programs and services’ through modules and a screening tool to identify and give psychosocial support and services for individuals at risk. Additionally, the DepEd, with UNICEF support, is integrating child protection into the Learning Continuity Plan including through training teachers and identifying specific actions to further strengthen collaboration between social welfare and education authorities to improve case management and strengthen coordinated actions for out-of-school children.

Kenya: The Government launched the Kenya Mental Health Action Plan 2021-2025 which provides a framework for the country’s mental health policy actions over the next five years. The plan seeks to de-centralize mental health services and programs to primary health care at the community level. The plan includes, among others, the development of a Mental Health School Program that integrates health issues into existing school health policies and activities.

Eswatini: The MoE, with the support of UNICEF, is providing MHPSS services. Mental health guidance is part of a package of trainings that teachers receive. Teachers have learned how to engage with children on issues such as school reopening and COVID-19. At each school, trained focal points are available to provide basic psychosocial support and counselling to children.

Jamaica: The MoE has taken steps to mainstreaming MHPSS throughout the system, having developed a “System of Care”, with the support of UNICEF, to help children who are at risk for, or are experiencing, emotional, and behavioral challenges. Regional Student Support Teams develop intervention plans and collaborate with general counsellors or teachers for implementation, management, evaluations, and referrals of students. During COVID-19, Jamaica has been able to use and build on this system – implementing sub-national plans and mandating schools to develop their own psychosocial response plan.
There is limited information available on the psychosocial support being provided to teachers, though there are some recently developed tools including UNICEF’s *Ready to Come Back: A teacher preparedness training package*, which includes a module dedicated to teacher wellbeing that addresses the stress that teachers are facing with the pandemic. There are exercises which help teachers recognize and cope with stressors and to engage in self-care. Some initiatives to support teachers’ well-being include:

- **Myanmar:** Teachers were supported through interactive digital modules focusing on teacher wellbeing (building on Save the Children’s *Learning and Wellbeing in Emergencies Resource Kit*) delivered through platforms via smart phones. Some schools conducted face-to-face peer learning sessions, but most conducted these through other group apps (Facebook messenger or Viber groups), which were supervised and supported by cluster heads and project staff.

- **Lebanon and Iraq:** WhatsApp groups have been set up which have allowed teachers to share their concerns, tips, and tools.

Programs in contexts with fragility, conflict and violence (FCV) (pre-COVID):

**Afghanistan and Palestine:** The Better Learning Program (funded by the Norwegian Refugee Council) integrates psychosocial support with classroom instruction. Activities involve relaxation techniques, risk awareness and preparedness, and play opportunities. In Afghanistan, a study found (1) a reduction in nightmares, distressing emotions, and physical illness, (2) an increase in interest in attending school and completing homework, and (3) an increased sense of safety. In Palestine, the program also contributed to an improvement in a number of indicators of wellbeing.
Nutrition

School-Based Nutrition Services and Feeding Programs

Children are ready to learn when they are healthy and well-nourished. At the peak of school closures, estimates suggest that 370 million children in 150 countries lost access to school meals. However, only 45% of countries have stated taking additional measures to ensure that students' nutritional needs are met. There is robust evidence to support the importance of school-based nutritional services, including recent research from South Africa that concluded school feeding programs had positive impacts on short-term measures of student success, such as reduced illness, increased school attendance, and increased academic achievement. Additional evidence from Liberia also indicates school-based feeding programs reduce the likelihood that students will be subject to child labor, an increasing concern during the COVID-19 pandemic in which 9 million additional children are projected to be at risk of child labor by the end of 2022.

• Costa Rica: Even prior to the pandemic, the Costa Rican government provided a school feeding program to 96% of its public-school centers via the Programa de Alimentación y Nutrición del Escolar y del Adolescente (PANEA) program, with 40% of schools providing its students two or more PANEA meals per day. In its response to COVID-19, the Costa Rican government opted to keep school canteens open during school closures to continue to support the most marginalized families. However, in efforts to maintain more effective safety measures during food distributions, the government shifted to establishing "collection sites" where healthy, perishable and non-perishable food baskets could be collected by family members. At a cost of US$40 per food basket, students were provided food that was meant to last a total of 22 days.

• Iraq: Intermittent school closures in Iraq have deprived children of healthy school meals, with 75% of instructional days being delivered online or through only remote modalities. To continue to support the health of vulnerable children and their families, Iraqi education scouts distributed food packages to poor and vulnerable families when schools were closed. As schools readied themselves to open to in-person learning again, the World Food Programme (WFP) and the Iraqi Ministry of Education announced on the International Day of Education, 2022, that school openings would coincide with an expansion of the School Feeding Program, an initiative fully funded by the Government of Iraq. With technical support offered by WFP, the government was able to expand the program into 13 governorates in 2022 so far and plans to reach 3.6 million children by 2025.

• Mongolia: In response to the COVID-19 pandemic's closure of schools, UNICEF supported Mongolia's Ministry of Education, Culture, and Science to conduct a rapid assessment of the nutritional status of children from a sampling of early childhood learning centers. Results indicated that 26% of children were at medium-to-high risk of food insecurity, prompting the Mongolian government, with support from UNICEF, SIDA, World Vision, and Child Fund Korea, to distribute food packages, including age-appropriate learning materials and hygiene supplies, to early childhood learning centers across five districts. Subsequent support from UNICEF is now being leveraged to support parents of young children with information regarding breastfeeding and nutrition via a "Training of Trainers" model.
Water, Sanitation & Hygiene (WASH)

School-Based Water, Sanitary, and Hygiene Responses

Worldwide, schools are centers for communities, where children can be expected to spend at least half of their day. The COVID-19 pandemic has increased the attention to and need to ensure all schools are equipped with (and properly using) cleanly water, sanitary and hygiene (WASH) facilities and services. WASH services have become increasingly important in providing safe learning environments and to prevent COVID-19 infection and the spread of other WASH-related diseases. Evidence has shown that increased access and use of WASH services promotes both health and educational benefits such as (1) reducing school absenteeism, (2) boosting student’s cognitive skills and academic performance, and (3) promoting a culture and environment that supports safe and healthy menstrual hygiene management for girls.

• Mozambique: Returning to in-person learning in Mozambique has proven difficult, with over 60% of schools not meeting standard WASH requirements. Such lacking facilities disproportionately affects girls, who face greater menstrual-induced school absenteeism and dropouts when not provided access to menstrual hygiene facilities and gender-separate bathrooms. The World Bank is currently supporting the Government of Mozambique with a project that jointly seeks to improve girls’ retention in upper primary and lower secondary grades. In efforts to do so, all upgraded schools under the project will have WASH facilities constructed and/or rehabilitated, with explicit intention to ensure new sanitation facilities will be gender-friendly and support the management of menstrual hygiene.

• Ecuador: In June of 2020, Ecuador conducted a nationwide assessment of the provision and status of school-based WASH services, such as access to water, toilets and handwashing facilities, and the conditions and cleanliness of such facilities. Results were used to develop provincial maps to identify and target infrastructural rehabilitation interventions for schools that did not meet national WASH standards. With support from UNICEF, a WASH response supported the return of over 12,000 children across 118 rural schools in Ecuador to in-person learning, due to donations of refillable hand-washing basins, soap and alcohol gels, signage to promote hand-washing, water jerry cans, water purification tablets, and the refurbishment of sanitary facilities in schools.

• Kyrgyz Republic: Prior to the pandemic, the Kyrgyz Republic maintained a rural Water Supply and Sanitation Monitoring system that has been used to inform the government and development partners of existing needs and coordinate WASH. During the pandemic, efforts to gather and monitor school WASH data have increased under the World Bank’s Sustainable Rural Water Supply and Sanitation Development Project, supporting targeted efforts to rehabilitate water supply systems and handwashing and sanitation facilities in schools. Teachers have also received trainings on sanitary hygiene practices and interactive instructional strategies for teaching handwashing techniques to students. Initial feedback from local governments and schools that WASH response efforts have strengthened hygiene practices at school and at home, and the inclusive design of sanitary facilities have benefited both girls and children with disabilities.
Safety

Measures to promote safety

The Inter-agency Network for Education in Emergencies (INEE) outlined a Comprehensive School Safety Framework in 2017 that sought to address three pillars of school safety: Safe Learning Facilities, School Disaster Management, and Risk Reduction & Resilience Education. Today, climate change poses increased risks towards students' access to learning, with studies of disaster trends and the likely consequences of climate change suggesting that each year 175 million children are likely to be affected by natural hazard related disasters alone. However, in light of rising rates of domestic, child, and intimate partner violence during extended stay-at-home orders and school closures during the COVID-19 pandemic, more attention also needs to be directed towards efforts in reducing violence, both in and out of school settings. Not only is access to safe education a fundamental right, but unsafe learning environments have negative effects on learning outcomes, can push students out of school, and dramatically reduce life-time earnings.

- **Jordan**: Jordan will be one of the first nations globally to conduct a country diagnostic on school-based violence prevention, partnering with UNICEF on the "Diagnostic Study of National Efforts to Prevent and Respond to Violence in Schools in Jordan". Jordan has been a leader in school-based violence prevention since the 1990's, with its school-based "Ma'An" program cutting both school-based verbal and physical violence in half. Jordan has pledged to pursue recommendations emerging from the diagnostic, including (1) reviewing the curriculum to ensure values of respect, tolerance and acceptance are promoted, (2) institutionalizing the work of safe school environment councils, and (3) implementing a child protection curriculum into teacher training programs, among others.

- **South Sudan**: In October 2021, South Sudan announced an inter-governmental political commitment to enhancing school safety for both students and teachers, launching the 'Safe School Declaration' guidelines to protect schools from military use during and after armed conflicts. Since the beginning of the conflict to date, 293 incidents of attacks on schools or protected persons or of military use of schools were reported across the country, cumulatively affecting more than 90,000 children. Denoting schools as "Zones of Peace", the country has pursued increased collaboration and funding to implement measures towards greater school safety for both security and non-security actors. Some proposed activities include risk-mapping, risk-reduction plans, the formation and training of children's clubs, community outreach, and legal reviews.

- **Nagaland, India**: A World Bank-supported project in Nagaland, India will address School-Related Gender-Based Violence (SRGBV) through a multi-pronged approach that includes the development of (1) education information systems that collect gender-disaggregated data, (2) state-wide protocols for safe and confidential reporting of incidents in coordination with relevant stakeholders and service providers, and (3) capacity building and engagement of teachers, partners, and the wider community. In order to develop school as safe spaces, the project will also enable reporting of incidents related to abuse and/or SRGBV through an internet-based anonymous reporting system. SRGBV preventive practices will also be embedded in school safety audit tools.
## Resources

### For policymakers: Cross-Sectoral MHPSS Strategies during COVID-19

- Responding to the Mental Health and Psychological Impact of COVID-19 on children/families ([UNICEF](https://www.unicef.org))
- Interim Briefing Note – Addressing Mental Health and Psychosocial Aspects of COVID-19 Outbreak ([IASC](https://www.unocha.org))
- Operational Considerations for Multisectoral Mental Health and Psychosocial Support Programmes during the COVID-19 Pandemic ([IASC](https://www.unocha.org))

### For schools and teachers:

- Psychosocial Support (PSS) and Wellbeing SMS Guide and Training [3.5 hr. teacher training course] ([Oxfam](https://www.oxfam.org))
- Psychological First Aid for Children, Adolescents, and Families Experiencing Trauma – A Guide for First Responders ([UNICEF](https://www.unicef.org))
- Facilitator’s Manual for Psychosocial Support Activities in Child-Friendly Spaces, Communities & Schools ([UNICEF](https://www.unicef.org))
- My Hero is You 2021: How kids can cope with COVID-19 ([IASC 2021](https://www.unocha.org)); this can be accompanied by ‘Actions for Heroes: A guide for heart-to-heart chats with children to accompany reading of My Hero is You’ ([IASC 2021](https://www.unocha.org))

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To see other compilations of resources and guidance notes on this topic, see the [MHPSS COVID-19 Toolkit](https://www.inee.org) produced by the Mental Health and Psychosocial Support Network; and the [collection of MHPSS resources](https://www.unicef.org) by the Inter-Agency Network for Education in Emergencies (INEE)
Country Cases: Promising Approaches at-Scale

What learning recovery strategies are countries adopting?

How to differentiate learning recovery strategies based on country capacity

Case studies from Chile, Gujarat (India), São Paolo (Brazil), Ghana, and various Fragility, Conflict and Violence (FCV) settings
In March 2022, a joint UNICEF, UNESCO and World Bank report provided an update on what countries are doing in terms of policies and initiatives for education recovery. Around 90 countries responded that they are implementing specific programs to mitigate learning losses. The figure illustrates what share of those 90 countries are implementing specific learning recovery strategies, and at what scale (i.e., nationwide, partial, small-scale). It is concerning that so few countries are implementing large-scale programs in such a learning crisis, particularly the crucial pedagogical interventions, like supporting teachers to adjust instruction.

![Share of countries implementing learning recovery strategies, by scale of initiative](chart.png)

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Nationwide</th>
<th>Partial (regional/sub-national level)</th>
<th>Small scale (pilot at school level)</th>
<th>Measure not being implemented</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measure children's learning</td>
<td>34</td>
<td>25</td>
<td>22</td>
<td>18</td>
</tr>
<tr>
<td>Prioritize the curriculum</td>
<td>48</td>
<td>18</td>
<td>34</td>
<td></td>
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<tr>
<td>Increased instruction time</td>
<td>26</td>
<td>12</td>
<td>23</td>
<td>39</td>
</tr>
<tr>
<td>Support teachers to adjust instruction to student level</td>
<td>27</td>
<td>37</td>
<td>36</td>
<td></td>
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<tr>
<td>Catch-up programmes</td>
<td>14</td>
<td>23</td>
<td>24</td>
<td>38</td>
</tr>
<tr>
<td>Tutoring schemes</td>
<td>7</td>
<td>8</td>
<td>22</td>
<td>63</td>
</tr>
<tr>
<td>Self-guided learning programs</td>
<td>11</td>
<td>10</td>
<td>24</td>
<td>54</td>
</tr>
</tbody>
</table>

How might the learning recovery program look differently for countries depending on their capacity?

<table>
<thead>
<tr>
<th>Component</th>
<th>Low-capacity countries</th>
<th>Medium- to high-capacity countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assess learning levels regularly</td>
<td>Prioritize assessing foundational learning; prioritize providing classroom assessment tools to teachers so they can know where their students’ learning levels are (over implementing system-level assessments). Also, countries may choose to administer an existing, pre-COVID developed test without any modifications, or even make some decisions based on previous rounds of these assessments. They can also devise mechanisms to aggregate data from diagnostic classroom assessments to gain a system-level understanding of learning levels even if it's quite crude.</td>
<td>In addition to classroom level assessments, implement system-level assessments that can help identify the specific content deficits of a cohort of students. These assessments should cover all grades and subjects that are possible.</td>
</tr>
<tr>
<td>Prioritize teaching the fundamentals</td>
<td>Countries should adjust curricula within and across subjects in order to prioritize foundational learning and skills which are antecedents to further learning. Lower-capacity countries can adopt a top-down approach where schools and teachers are provided with clear guidelines and materials prepared from responsible committees (with broad representation and some level of consultation) on the content that should be covered.</td>
<td>Countries should adjust curricula within and across subjects in order to prioritize foundational learning and skills which are antecedents to further learning. Although guidelines and materials prepared from responsible committees (with broad representation and some level of consultation) should be provided in a top-down approach, some higher capacity countries may be able to provide a certain degree of curricular flexibility to schools, particularly in identifying areas where students may need extra support.</td>
</tr>
<tr>
<td>Expanding instructional time</td>
<td>Low-capacity countries need to devote extra effort to ensuring that activities carried out during additional instructional time are aligned with what occurs during the regular instructional time and contribute to overall learning goals. Also, the extra burden of additional instruction on families and other stakeholders should be reduced or compensated for as much as possible. Countries should assess what type of additional instruction is easier to provide and less disruptive.</td>
<td>Where there is more capacity, it may be easier for the public education system to set up additional instructional time while guaranteeing there is alignment to regular instructional time and contributions to learning goals. Also, countries should assess what type of additional instruction is easier to provide and less disruptive.</td>
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<tr>
<td>Teacher support</td>
<td>Provide tightly structured and effective pedagogy through proven lesson plans and detailed teacher guides. Offer practical, skills-based, on-site teacher training and focus TPD on structured pedagogy and delivering instruction. If TPD is remote, focus on low-tech options. Offer teachers ready-made assessments to help them assess students on core content and skills.</td>
<td>Provide somewhat greater autonomy in lesson content and structure. Consider using classroom observation tools and coaching programs for teachers. Empower and increase school leaders’ abilities to guide professional development. Use assessment data to adjust teaching to individual student learning levels.</td>
</tr>
</tbody>
</table>
## How might the learning recovery program look differently for countries depending on their capacity? (cont.)

<table>
<thead>
<tr>
<th>Component</th>
<th>Low-capacity countries</th>
<th>Medium- to high-capacity countries</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Structured pedagogy</strong> The largest learning gains are often seen in contexts where teachers’ content knowledge and pedagogical skills are weakest. Lower capacity may necessitate a greater level of scripting in lesson guides, more intensive coaching, training and/or monitoring, etc. Systems may also benefit from working with a technical partner to build capacity.</td>
<td>Higher levels of teacher preparation may determine aspects of program design, for instance, opportunities for lower level of scripting in teacher lesson plans and opportunities within them for teachers to create new or add to activities.</td>
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<td><strong>Targeted instruction</strong> Implementation will require closer monitoring and mentorship (e.g., more frequent visits to schools) given the general tendency of teachers to revert to their usual teaching style, as shown in several studies. Program design may prioritize certain schools or students with highest-need due to resource and capacity constraints</td>
<td>These countries may be better able to integrate/mainstream targeted instruction into education delivery across more schools, more grades, and offer it to all students. These countries are more likely to have pre-existing diagnostic and formative classroom assessment instruments they can utilize for grouping students and targeting instruction</td>
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<td></td>
<td><strong>Tutoring</strong> Low-capacity countries may only be able to offer in-person tutoring to a targeted group of students who are most in need of it, given cost and capacity constraints. While the evidence base is more limited for low-tech tutoring mechanisms, these countries may also consider such approaches as phone calls (combined with text messages); phone charges should be covered as part of programs.</td>
<td>Higher capacity countries can consider more widely available in-person tutoring programs. Higher capacity countries are also likely in a better position to implement virtual tutoring, ideally via videoconference-type technology.</td>
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<td></td>
<td><strong>Self-guided learning</strong> Countries without the necessary enabling conditions should consider pencil-and-paper based models. For technology-supported models, consider relying fully on existing technology (e.g., computers already in schools) and be wary of new major investments. Ensure the minimum infrastructure of electricity, connectivity, and devices is in place for technology-supported models. Consider programs that can work offline and consider utilizing or adapting existing programs rather than developing ‘from scratch.’</td>
<td>Countries that have the minimum infrastructure required may be better equipped to implement computer-assisted, adaptive instruction; continue to bolster EdTech infrastructure and connectivity. Consider ways to incorporate these programs into long-term strategies; exploit aggregate data on learning achievement to inform decision-making and resource allocation</td>
</tr>
</tbody>
</table>

**Pedagogical strategies**

Rapid Framework

- **Reach Every Child and Keep Them in School**
- **Assess Learning Levels Regularly**
- **Prioritize Teaching The Fundamentals**
- **Increase the Efficiency of Instruction, Including Through Catch-Up Learning**
- **Develop Psychosocial, Health and Wellbeing**

**Country Cases**

**Global Context**

**Guide for Learning Recovery and Acceleration June 2022**
This section will include **country examples** of approaches that are:

- **Promising**: Although they have not been evaluated for impact, these interventions are aligned with the evidence on what works to improve learning
- **Integrated**: Coordinated approaches to learning recovery spanning multiple interventions
- **At-scale**: These interventions have been made available at scale, with all the risks that this entails

**Featured education systems:**
(1) Chile
(2) Gujarat, India
(3) São Paolo, Brazil
(4) Ghana
(5) Fragility, Violence and Conflict (FCV) settings
Chile offers an example of a country that adopted a multi-faceted approach to learning continuity and recovery during the COVID-19 pandemic. This slide discusses some of the policy instruments Chile has employed during the pandemic, while the next slide discusses the country’s participatory approach to developing a 4-year national learning recovery strategy.

### Multiple policies employed

#### Assessment of Learning and Socioemotional Wellbeing

In 2020, Chile’s national assessment agency produced a new set of student assessment tools available for school leaders and teachers during the pandemic. The assessments and supporting materials (video tutorials, administration protocols, etc.) were created for formative purposes to guide remote learning; schools receive results immediately. The set of tools include assessments for reading and math, and a socioemotional questionnaire to measure socioemotional wellbeing and skills. In an application of the tools in May 2021 that reached 1.8M students, the MoE provided summary diagnostic reports to all schools and also aggregated the national-level data to understand learning levels across the country after a year of using the consolidated curriculum (see below). Results showed alarmingly low levels of learning during the year of school closures.

#### Curricular Prioritization:

In 2020, the National Council of Education approved a Prioritized Curriculum for all schools. The curriculum is based on four principals: (1) it determines the fundamental learning objectives that students must master at every grade level; (2) it gives schools flexibility on how to implement the curriculum according to their own methodologies; (3) it represents a medium-term approach; and (4) it does not replace the official curriculum. As was explained in our section on Curriculum Reform, the Ministry of Education produced a number of resources (e.g., updated guides, learning objectives and assessments for each grade and subject). The curriculum’s validity period was extended to the end of 2022.

#### Increasing the efficiency of instruction: Pedagogies for Recovery

In 2021, the Ministry of Education launched Escuelas Arriba, a national program that helps schools implement a pedagogical approach that promotes mastery of key prior concepts needed for grade-level learning. For each Learning Objective, the three-part methodology consists of a catch-up or ‘leveling’ phase, a phase where new content is learned, and a formative assessment; the results determine if the class continues learning or returns to the catch-up phase. In 2022, the program was expanded.
Chile has adopted a unique approach to developing a national learning recovery strategy to span the next few years. In 2021 Chile launched an initiative, "Together, Chile Recovers and Learns" (Juntos, Chile se Recupera y Aprende), that seeks to bring together different voices from the education community to produce a holistic learning recovery plan for the next four years that will complement and strengthen the initiatives the MoE has put forth to date. The process involved three elements:

• **Citizen consultation:** During the month of August 2021, all Chilean adults were able to give feedback on current Ministry initiatives and propose new interventions. This garnered over 14,000 responses.

• **Town halls:** For one week, over 300 townhall meetings were held throughout the country that brought together representatives from schools (directors, teachers, and students); they were held both virtually and in person.

• **Expert roundtables:** Brought together 64 experts to analyze the results from the citizen consultation and town halls.

Based on inputs from this process, in December 2021 the MoE publicly presented 20 policy proposals. They include advancing with a second phase of curricular prioritization and promoting curricular flexibility in early grades.
Gujarat, India

Learning Continuity Through Multimodal Approach

The government rolled out multi-modal remote learning, which included virtual Teams classrooms, broadcasting of live and recorded classes over television, radio and other platforms, virtual textbooks and audio-visual content library via scanning QR-codes, WhatsApp and Facebook Groups for dissemination of links, learning materials, guidance, and assessments.

Challenge: a remote learning access mapping exercise found 25-30% of students lacked access to remote learning devices

Strategies for students without remote learning devices:
- Provision of textbooks, worksheets, test booklets
- Teachers interact with parents / guardians, older siblings, or volunteers and provide guidance to help children learn
- Pairing of students with and without devices, promotion of peer-learning
- Tablet / mobile based offline learning
- Home visits provided by teachers & field staff
- Access to online classes at Citizen Service Centres (CSCs)
- Mobile Learning Vehicles

Gujarat education in numbers

5th LARGEST STATE IN INDIA
54,000 SCHOOLS
400,000 TEACHERS
11.5M STUDENTS

The Gujarat COVID-19 education response was rapid, and remote learning delivery multimodal. Access was tracked, and course adjusted to ensure learning for all students.
**Gujarat, India (cont.)**

### Ongoing actions to accelerate learning recovery:

- **Assessing learning:** Pre-pandemic, the government introduced *Periodic Assessment Tests (PAT)*, formative weekly tests for each subject linked to time-tables and mapped to learning outcomes. In 2020, the government also introduced *centralized learning assessments* across grades 3-12. The data from these centralized assessments is used to track the academic progress of every child in the State and ensure children achieve grade appropriate learning outcomes.

- **Targeted instruction:** The use of PAT allows for monitoring of student learning outcomes and adapting learning to students' levels. During the pandemic, PAT results have been used to circulate material and personalize remote education to the level of each student.

- **Psycho-social support:** The government rolled out a program in which students were provided with daily education material including stories, songs, physical and mental activities, shared through WhatsApp.

- **Inclusive education:** Disability-friendly content has been disseminated through several channels during the pandemic to ensure learning for students with disabilities.

- **Parent engagement:** COVID risk outreach campaign to 17 million parents through various channels (jingles, videos, posters, calls from teachers, etc.)

- **Remedial learning programs:** In July 2021, the *Gyansetu remedial programme* was launched to provide grade level learning support to the students of grades 2-10, in Gujarati, English, and Mathematics. It included a class readiness program for grade 1. Each grade workbook included content mapped to learning outcomes and class readiness competencies. Gyansetu video content was developed. The program included capacity building for teachers on how to use the material.

- **Syllabus rationalization:** Plans are in place to consolidate the syllabus

- **Revision of academic calendar** to lengthen the school year to align with *Right To Education* standards of 200 days for grades 1-5, and 220 for grades 6-8.
São Paulo, Brazil

Using Targeted Instruction to Build Foundational Skills

Assessing learning levels

Through measuring learning levels once schools re-opened and comparing them to 2019 national exam (SAEB) results, the São Paulo state government observed large learning losses in Math and Portuguese. Students in grade 5 in 2021 were showing learning levels in line with grade 5 students 10 and 14 years back in Math and Portuguese, respectively.

Ongoing projects and programs for learning recovery:

The São Paulo state government is helping students catch-up through a mix of programs, combining approaches like targeted instruction, extended instructional time, small-group teaching, self-guided learning, and a focus on foundational skills. The state is strengthening existing programs that work well and introducing new ones to accelerate learning recovery, while measuring and tracking learning progress to ensure no child is left behind.

Launched in 2019

1) Recovery and Deepening Program (PRA): A set of actions to improve the learning levels of all students in primary and secondary education during the regular class period. Includes curriculum adjustments, teacher training, evaluation, new instructional materials, the use of technology, and monitoring.

2) Reinforcement and Recovery Project (RRP): Additional support strategy that allows additional teachers to be assigned to classes to support learning recovery, with a focus on the students who need it most.

Launched in 2021

1) Intensive Recovery Project (IRP): Additional catch-up opportunities during vacation periods (January and July) for students who need it.

2) Beyond School (for upper classes): Two extra classes per week with teachers tending to small groups of students (in person or remotely) and guidance for carrying out self-guided learning activities on digital learning platforms.
How is the government supporting schools in implementing these initiatives?

**Educational resources:** The schools can use a suite of available assessment tools to diagnose students learning levels and group them accordingly. A combination of digital and printed materials have been curated for the purpose, and teachers trained on how to use them.

**Flexibility:** Schools are given flexibility to combine and implement these programs in a way that suits their context.

**Training and support:** In addition to initial training before project launch, teachers will receive ongoing training during the implementation phase in 2022, 5 times on-site plus remotely on a weekly basis. Schools receive general, pedagogical, management, and monitoring support throughout implementation.

**Status:** To date, the programs have been applied in 26 state or municipal schools in 5 regional school divisions, benefitting more than 7,000 students in grades 3-6. The program will scale during 2022, to all 91 regional school divisions in the state.

**Results:** The early results are promising: performance inequality between pilot schools and regular schools dropped by half after the implementation of the pilot program.
Ghana

Learning Recovery with a Focus on Inclusion

Successful back-to-school campaign, with a focus on girls:

The Ministry of Education launched a back-to-school campaign which was broadcasted on TV and radio in English and selected local languages in June 2020 (during partial school re-openings) reinforced in January 2021 when schools fully reopened. The 2021 ‘Back to School campaign’ created a Regional Advocacy Taskforce to undertake public awareness programs in various communities; members included government representatives, CSO’s, religious leaders, and the media, who visited all the districts in the country. Largely as a result of the back-to-school campaigns, 98% of students returned to school in January 2021.

Efforts focused particularly on ensuring the return to school of girls, including girls who became pregnant during the school closure. For instance, UNICEF helped train 524 national cadres of trainers who, in turn, trained over 260,000 people in providing messages on preventing pregnancy among schoolgirls and ensuring adolescent mothers returned to school.

Digital Learning:

To help mitigate learning losses during school closures, as well as once schools had reopened, digital learning resources were developed and made available to all schools through the Edmodo LMS. All TV and radio lessons (1,600) are also available online.

Targeted instruction:

The Ministry of Education, with support from the World Bank, rolled out a targeted instruction intervention, rapid student assessment, and remedial education program in over 10,000 basic (kindergarten, primary and lower secondary) schools across the country. The intervention (which had been planned pre-COVID) dedicated 3 days a week (2 hours a day) across English and Math to targeted instruction. New assessment instruments were produced, as well as extensive materials which differentiated by learning groups (beginners, intermediate, and proficient). This followed a period of training on targeted instruction that was conducted for over 70,000 teachers nationally between December 2020 and February 2021.
Learning Recovery Period During Reopening:

Upon school re-openings in January 2021, and following an extended period of school closures, the Ghana Education Service directed teachers in all schools to dedicate the first eight to twelve weeks of school to learning recovery and review of concepts taught in the previous academic years through remedial instruction. Teachers in all schools began by assessing all learners to ascertain their levels of knowledge, using the assessments developed for the Targeted Instruction intervention. The current curriculum was therefore adapted and prioritized to include learnings lost.

Self-learning study tablets support inclusivity:

Schools deployed pre-loaded content tablets to 3,000 students with special learning needs nationally. The tablets are pre-loaded with digital versions of the curriculum, are suited to the needs of children with hearing or visual impairments, and allow for self-paced learning.
Fragility, conflict, and violence (FCV) settings

75 million children aged 3 to 18 live in countries facing war and violence. Children living in fragile, conflict-affected settings are twice as likely to be out of school compared to countries without conflict. Despite many countries’ struggles with security, compounded by the challenges of a health emergency, effective learning must be prioritized. This section spotlights interventions promoting learning in FCV contexts.

Recovering Learning under Challenging Circumstances

**Central African Republic**: The Ministry of National Education, with technical support and funding from the World Bank, is implementing an Alternative Learning Program (ALP) to offer second chance education for out-of-school children aged 9 to 16. The six-year primary education curriculum has been condensed to be carried out in three years. In addition to the curriculum, teachers’ guides have been developed, classrooms rehabilitated and equipped to accommodate children outside of school, and teachers recruited and trained to deliver the curriculum. While the evidence of the effectiveness of ALPs is emerging, the effectiveness of teachers’ guides is well-documented. The pilot enrolled nearly 1,000 out-of-school children in Bangui. The current scale-up phase aims to enroll 5,000 out-of-school children in three other prefectures in the country.

**Ethiopia**: For over a decade, Geneva Global and civil society organizations have operated Speed School programs: an alternative education model that covers the first three years of primary school in just ten months, giving out-of-school children the skills needed to rejoin formal schooling. In June 2021, the Ministry of Education instated a new unit devoted entirely to the nationwide implementation of the Speed School program, aiming to reach the country’s 2M out-of-school primary-aged children. The program has been found to improve academic achievement and retention.

**Democratic Republic of the Congo**: Following school reopening, the Democratic Republic of the Congo (DRC) with support from UNICEF, provided almost 30,000 girls in Kwilu and Tanganyika provinces with inclusive gender-responsive formal and non-formal education programs focused on enrollment and retention. Additionally, 15,000 teachers from 2,500 schools across the country have been trained in providing psychosocial support to students in the classroom. UNICEF is also working with the Government of DRC to implement a new multi-year resilience program (funded by Education Cannot Wait) that will, among other goals, support student enrollment and retention through a multi-sectoral approach to nutrition and wellbeing that tackles some of the underlying issues that lead to dropout.