COVID-19 response – remediation

Helping students catch up on lost learning, with a focus on closing equity gaps

Version 2 as of July 2020
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Introduction

01

Context, objectives, structure of this document

The focus of this chapter is on remediation

How can this chapter be used?

Executive summary
Context, objectives, structure of this document

In the context of the Global Education Coalition, formed by UNESCO to support governments in their educational response to COVID-19, UNESCO has collaborated with partners to develop a COVID-19 Response Toolkit in Education. This toolkit contains 9 chapters, 5 of which are being developed in collaboration with McKinsey & Company – see next page for additional detail.
The focus of this chapter is on remediation

1. Remote learning strategy
   - Defining and continuously improving remote learning measures
   - Supporting key stakeholders (students, parents, teachers) for effective use of these solutions
   - Monitoring and quality assurance

2. Remote learning platforms
   - Compendium of remote learning solutions, tools, and platforms
   - Developing an evaluation framework to help identify which solutions, tools, and platforms are most relevant to the local context

3. Health, safety and resurgence protocols
   - Evaluating the trade-offs to school reopening and reclosing
   - Defining health and safety measures to put in place before and after reopening

4. Re-enrolment
   - Identifying students at risk of dropout
   - Engaging students, parents and communities to ensure all students are back to school

5. Remediation
   - Bringing students to learning competency level, and catching up lost learning deriving from school closures and pre-existing learning gaps

6. Hybrid learning
   - Defining a learning approach combining remote and in-classroom learning during school reopening and in preparation for potential resurgence

7. Recommitment and reform
   - Identifying longer-term implications of the crisis
   - Rethinking the new education system and reforming accordingly

8. Organizing for the response
   - Defining a new architecture to plan, coordinate, and manage stakeholders and external partnerships
   - Developing the required capabilities for an effective response
How can this chapter be used?

If you are a ... You can use the chapter by ...

Policy-maker or advisor

• Reading the problem statement to validate that the chapter is relevant to your context and to support a case for putting remediation strategies in place in your country
• Reviewing the framework of response to test which areas are currently covered in your response and where the gaps are
• Jumping to the relevant sections to deep dive on the specific gaps that you identified
• Testing your plan against the checklist to understand which actions can be taken to address the gaps and how to organize for remediation

Teacher or school principal

• Reading the problem statement to validate that the chapter is relevant to your country context
• Reviewing the framework of response from the perspective of the local level, focusing on strategies that can be implemented in your context and locally
• Testing your local plan against the checklist or using it for inspiration to draft your own school or class checklist, keeping in mind the guidance issued by the higher administrative levels in your country/area
• Checking additional resources in the appendix for more information

Other

• Reading the problem statement to get an overview of the topic and its importance
• Reviewing the framework of response to inform yourself about the key steps that countries take for remediation
• Looking through relevant case studies to understand how countries tactically put in place catch-up programmes

In a rush? Check out these selected pages for a quick look

1. Reading the problem statement to get an overview of the topic and its importance
2. Reviewing the framework of response to inform yourself about the key steps that countries take for remediation
3. Jumping to the relevant sections to deep dive on the specific gaps that you identified
4. Testing your local plan against the checklist to understand which actions can be taken to address the gaps and how to organize for remediation
Executive summary (1/2)

This chapter addresses how educational systems can remediate lost learning due to disruption caused by COVID-19. It includes an overview of the remediation challenge, an approach for systems to target and develop their reenrollment strategies, and a checklist of actions to take.

The problem:

- With about 1.6 billion children affected by school closures around the world, remediating learning loss due to COVID-19 will be a major challenge.
- Existing data on learning loss during long school closures shows that COVID-19 could result in students achieving only 70% of the learning gains in reading and 50% of the learning gains in mathematics (up to a full year behind in some grades) compared to a normal year. Younger grades are likely to suffer even greater losses. Even in cases where students have been able to access remote learning options (which is not universal across or within school systems), there will likely still be significant learning loss to address.

COVID-19 will exacerbate existing learning gaps both between students and between schools:

- **Gaps between students:** students who face challenges will fall further behind, especially for students whose families have faced additional challenges.
- **Gaps between schools:** teachers in systems with very large class sizes will face challenges following up with students, and schools with weak IT systems may lose time setting up platforms. In addition, gaps may widen between schools due to uneven patterns of school closures (e.g., between public and private schools or across regions in a given system).

COVID-19 will also create new gaps. Given that access to and ability to partake in remote learning depends heavily on both connectivity and a child’s home environment, some children will fall further behind.

The learning setback caused by school closures is predicted to have significant economic consequences:

- According to the World Bank, globally, a school shutdown of 5 months could generate learning losses that have a present value of US$10 trillion. By this measure, the world could stand to lose as much as 16% of the investments that governments make in this cohort of students’ basic education.

Without drastic remedial action, the world could thus face a substantial setback to the goal of halving the percentage of learning poor — and be unable to meet the SDG4 goal by 2030.
Executive summary (2/2)

The response

To address this critical challenge, school systems can take four tactical and iterative steps: understand and envision, decide and design, enable and execute, and monitor and adjust.

1. Envision and understand

The toolkit lays out archetypes of school systems based on these two factors. Along these two dimensions (extent and distribution of remediation needs), school systems need to accurately understand the challenge facing their student populations and set a clear objective to define success clearly before planning their remediation efforts. Part of this diagnosis is to align on both the extent of learning loss and its distribution, and assess the needs of the student population, focusing both on academic needs and socio-emotional needs through a series of specific assessments and metrics based on what is available. Data on preexisting gaps in learning can also help develop this understanding.

2. Decide and design

Once the vision is set and the needs are identified and measured, the system can choose the remediation approach and decide on channels of delivery for the strategy. There are 3 key levers: additional time, dedicated attention, and compressed content. The mix of approaches adopted will depend on the challenge facing the system (the archetype described above), taking into account feasibility and impact. Once these strategies are identified, school systems can agree on channels of delivery (e.g., the mix of remote and in-person learning).

3. Enable and execute

Any remediation approach will involve significant inputs, including budget, infrastructure, human resources, and curriculum and materials. Once the requirements are identified, school systems can consider ways to bridge the gap between what they have and what they need.

4. Monitor and adjust

Systems need to constantly monitor and evaluate the implementation of the remediation plan. This can include tools to monitor both the process of rolling out the approach (e.g., how the plan is being managed and received by students) and the outcomes (e.g., how are different groups of students progressing? Is the plan remediating the gaps that were identified?). This monitoring will need to be based on a mix of existing data and assessment systems and potentially new approaches tailored to this specific context. Based on data collected through monitoring and evaluation, school systems can adjust the strategy to meet their vision and target.
UNESCO, in collaboration with McKinsey and Company

Introduction | The problem | The response | The checklist | Case studies | Appendix

The problem
Why it is important

→ Definition of remediation

→ Observations of summer learning loss and other crises show that the need for remediation may be significant

→ The learning setback caused by school closures is predicted to have significant economic consequences that only drastic remedial action can curb

→ Countries may need to remediate learning losses created or exacerbated by COVID-19 and be prepared to overcome the implementation challenges

READ MORE

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Definition of remediation

The ongoing effort to support students in catching up on lost learning through a variety of means, including additional teaching time, focused content, and specific pedagogy (e.g., compressed learning, accelerated learning)
Observations of summer learning loss and other crises show that the need for remediation may be significant

Based on summer learning loss data and data from previous crises, COVID-19 could generate high learning loss in the longer term

Preliminary COVID-19 estimates suggest students may return in fall 2020 with roughly:

- 70% of the learning gains in reading relative to a typical school year\(^1\)
- 50% of the learning gains in mathematics, and in some grades, nearly a full year behind normal conditions\(^1\)

In addition, school closures may cause as much as a 25% increase in the share of lower secondary-aged children who are below the minimum level of proficiency\(^5\)

Data from other crises shows that learning loss may last far beyond the current school year:

- Pakistan earthquake in 2005: while students missed three months of school, four years after the earthquake, they were the learning equivalent of 1.5 years behind\(^2\)
- Hurricane Katrina in 2005: while having missing between 6-12 months of schooling, students came back on average 2 years below grade level\(^3\)

Younger grades are likely to suffer even higher losses\(^1\)

Even in cases where students have full access to remote learning, there will still be significant learning loss\(^4\)

The longer the school interruption, the larger the learning loss…. after safety, there must be a focus on the learning recovery process – from assessing learning outcomes during school closures, ensuring their socio-emotional well-being and taking measures to address disparities through remedial approaches…\(^1\)

The learning setback caused by school closures is predicted to have significant economic consequences that only drastic remedial action can curb.

Globally, a school shutdown of five months could generate learning losses that have a present value of US$10 trillion.

By this measure, the world could stand to lose as much as 16% of the investments that governments make in this cohort of students’ basic education.

Without drastic remedial action, the world could thus face a substantial setback to the goal of halving the percentage of learning poor — and be unable to meet the goal by 2030.

Countries may need to remediate learning losses created or exacerbated by COVID-19 and be prepared to overcome the implementation challenges

COVID-19 has exacerbated existing gaps …

Gaps between students

- Students with difficulties or disabilities may fall further behind
- Students in struggling families may have schooling deprioritized

Gaps between schools

- Teachers with many students will have trouble following up
- Schools with weak IT systems or infrastructures (e.g., learning supplies or qualified teachers) may lose time setting up platforms
- Gaps may widen between schools due to uneven school closures

… and created new, emerging gaps

Access to remote learning is not equitable

- Students and schools without reliable access to internet, electricity, digital tools, or reliable mail will be disadvantaged
- Differences in remote learning abilities between areas will create new inequities

The quality and efficacy of remote learning may not be comparable to in-person learning

- Risk of a slide in learning is potentially comparable to the "summer slide"¹ (learning loss that occurs during summer months)

Yet, remediation presents implementation challenges

- The needs for remediation are not uniform across geographies and can differ within schools and between students
- Remediation solutions may involve significant investment from school systems (e.g., additional teachers)
- Effective remediation may include continuous assessment, monitoring, and adjustment, which can cause strain on schools
- Teachers will face the challenge of covering new material and catching up on learning gaps due to COVID-19

Notes:

- Evidence from research indicates that effectiveness of different remediation strategies may vary. Latest evidence should be sought when selecting strategies
- The examples presented in the case studies are indicative and were effective in the context in which they were implemented. When applying them in another context, relevance and potential effectiveness can be assessed prior to implementation

03

The response
Framework and practices

Remediation involves a three-step approach supported by continuous monitoring and adjustment

- Envision and Understand
- Decide and Design
- Enable and Execute
- Monitor and Adjust

CLICK EACH TOPIC TO VIEW CONTENT
Remediation involves a three-step approach supported by continuous monitoring and adjustment

01 Envision and Understand: set a vision and determine remediation needs

1A Define a vision of success for remediation and consider trade-offs (including helping students catch up on lost learning due to COVID-19 vs. taking into account previous gaps)

1B Determine which aspects contribute to remediation needs (including extent of learning loss and distribution of learning loss)

1C Assess academic and socioemotional needs for remediation and determine archetype

02 Decide and Design: choose a remediation strategy

2A Choose a strategy using the 3 levers of remediation (more time, dedicated attention, and compressed content), taking into account feasibility and impact

2B Agree on channels of delivery for the strategy (e.g., remote vs. in-person, teachers vs. additional tutors)

03 Enable and Execute: prepare for delivery and execute

3A Identify the budget, infrastructure, human capital, and curriculum required to implement remediation strategy

3B Consider strategies to address capacity gaps (e.g., a hiring campaign for teachers)

04 Monitor and Adjust: track progress through continuous assessment and adjust the plan

4A Monitor progress for the impact of catch-up programmes on student progression and the process of implementation with specific metrics and KPIs

4B Adjust the catch-up programme’s rollout and content based on the metrics monitored
Remediation involves a three-step approach supported by continuous monitoring and adjustment

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1A Countries can set the vision of the plan to guide the remediation effort

Agree on a guiding vision, building on the on-the-ground reality and taking into account trade-offs
“For our country, we aim that all students catch up on any lost learning due to COVID-19”

Align on a definition of success
“Success will be achieved if each cohort performs within a 5% margin of last year’s results on the summative test”

Make your vision time bound
“We want to roll out our programme in three months and will test student progress at the end of the fall term”

The vision may be set by the body in charge of governance and decision-making for the response.
See “Chapter 9: Organizing for the response” for additional detail.
1A When setting a vision, leaders can balance trade-offs within remediation

**Speed**
Rolling out remediation quickly

**COVID-19-specific**
Limiting the scope of the remediation strategy to mitigate gaps created by COVID-19

**Targeted**
Targeting specific student segments that are most at risk of learning loss (e.g., students with disabilities, students from low-income families, girls)

**Core**
Changing the core curricula to include remediation

**Longevity**
Planning remediation strategies for the long term so that they are relevant to other crises

**Structural**
Designing a strategy to cover all gaps, even those prior to COVID-19

**Universal**
Generalizing remediation initiatives to the entire student population to ensure engagement across student segments

**Comple-mentary**
Creating a complementary remediation programme in parallel to the core curricula (e.g., summer school)
Although the remediation strategy is not meant to solve all challenges related to school systems, countries can aim to close the gaps between current and expected learning across the student population and beyond COVID-19.
1B 2 aspects can help illustrate what the needs for remediation are

**Extent of learning loss**
Represents the extent of learning loss due to COVID-19 (e.g., lost contact hours, student–teacher interaction, and curriculum coverage)

- Significant learning loss due to COVID-19
- Limited learning loss due to COVID-19

**Distribution of learning loss**
Represents “horizontal” differences in learning due to unequal access and quality

- Limited inequality between students
- Significant inequality between students

Learning loss can be mapped on a matrix of needs

- Extent
  - Significant learning loss with limited inequality
  - Significant learning loss with significant inequality

- Distribution
  - Limited learning loss with limited inequality
  - Limited learning loss with significant inequality

Source: UNESCO

UNESCO, in collaboration with McKinsey and Company
1C Before choosing remediation interventions, countries can assess the needs in the system...

How can needs be assessed?

- Needs can be **assessed directly or indirectly** in a way to minimize student stress
- Assessments will ensure that remediation programmes are fully targeted and tailored, and based on needs

When can needs be assessed?

- Assessments can be rolled out when this can be done both **safely and reliably**
- Depending on the means needed for rollout (e.g., remote vs. in-person), **assessments may be implemented at different points in time**, and formative assessments can be used to understand the learning trajectories

To assess the need for remediation, countries need not wait until they can conduct **direct assessments** (e.g., national sit-down exams) but leverage **data that they already have** or that is **easily accessible** through proxies (e.g., sample assessment). The **process is iterative** and new information from assessments can help to **improve and tailor the remediation strategies in place** as it comes in.
While assessment is critical to understanding what students need to catch up on and how, extensive testing could impact well-being and potentially increase socio-emotional needs.

To balance the need for assessment and the importance of reconnecting with students, teachers can consider several tips and strategies:

- **Mix one on one assessment with sit-down tests**
  For example: reading progress might be assessed by teachers taking 1-on-1 time with students and asking them to read through a text while an aide supervises a broader math assessment for the class.

- **Start to address socio-emotional needs upfront before conducting assessments**
  For example: take the 1st day(s) back to class for “sharing time,” where students can talk in small groups about the experience of school closures in the last months and how they are feeling.

- **Encourage self assessment**
  For example: have the students self-assess if they feel they need to catch up and in which subjects; lay out what leaning goals they have for this school period, and outline how teachers can best help them achieve it.

- **Communicate expectations clearly and avoiding stigmatizing language**
  For example: assessments can be framed clearly as a method to better understand and support students in the key areas (rather than identifying gaps in learning).
1C The extent and distribution of learning loss can be measured by the same direct or indirect assessments

There are two aspects that help illustrate remediation needs

**Extent of learning loss** – level of learning loss due to COVID-19 across students

**Distribution of learning loss** – level of inequality between students

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Countries can use the same assessments and metrics to measure them

<table>
<thead>
<tr>
<th>Direct</th>
<th>Example metric</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assessment</td>
<td></td>
</tr>
<tr>
<td>Academic needs</td>
<td>% of students who pass</td>
</tr>
<tr>
<td>Recent formative or summative assessments (e.g., data from mid-term or final tests)</td>
<td>No. of students who took the test</td>
</tr>
<tr>
<td></td>
<td>Average or median grade</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Indirect</th>
<th>Example metric</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assessment</td>
<td></td>
</tr>
<tr>
<td>Academic needs</td>
<td>% of parents who believe their child is behind</td>
</tr>
<tr>
<td>Surveys of parents/teachers</td>
<td>% of classes attended or homework completed</td>
</tr>
<tr>
<td>Absenteeism (e.g., level of engagement)</td>
<td>% of students who passed prior to COVID-19</td>
</tr>
<tr>
<td>Baseline formative or summative assessments</td>
<td>% of students who passed prior to COVID-19</td>
</tr>
<tr>
<td>National (PNEA) or international testing (PISA, PIRLS, TIMMS)</td>
<td></td>
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</tbody>
</table>

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| Socio-emotional needs | | |
|-----------------------|------------------|
| Surveys of students’ personal, social, and digital skills | % of students experiencing increased difficulty with resolving conflicts |

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**Key consideration**

- The two key aspects are **interrelated** and it will be **important to have some understanding of both to assess needs**.
- However, given time-sensitive planning, countries may make initial decisions based on **data that they already have or that is easily accessible through proxies to avoid any delays**.
- Countries can consider assessing a **representative sample of the student population and designing an assessment for teachers** to conduct at the class level.
- **The school system at the local level** will be **best placed** to assess learning loss and learning gaps (e.g., teachers and school principals).
1C Both academic and socio-emotional needs can be assessed

Academic assessment

What are academic needs?
Academic needs include all skills that revolve around a school curriculum, which can be classified as:
- Direct measures of learning
- Indirect measures of learning

Which dimensions can be assessed?
Direct measures of learning include dimensions such as:
- Embedded assessments (e.g., exams, papers, quizzes)
- Class attendance
- Homework completion

Indirect measures of learning include dimensions such as:
- Level and quality of participation in classes
- Assessment of curriculum understanding (e.g., by surveys, interviews, focus groups)

Non-academic assessment

What are non-academic needs?
Non-academic needs include all skills that are indirectly taught through education (e.g., decision-making, problem-solving, conflict management) which can be classified as:
- Personal skills
- Socio-emotional skills
- Digital skills
- Mental health needs

Which dimensions can be assessed?
Personal skills include dimensions such as:
- Ability to work autonomously
- Comfort with decision-making
- Persistence in face of difficulties

Socio-emotional skills include dimensions such as:
- Ability to resolve conflicts peacefully
- Willingness to help peers
- Potential for socialization

Digital skills include dimensions such as:
- Ability to retrieve information from learning platforms
- Tech literacy
- Online communication skills

Mental health needs include dimensions such as:
- Stress and anxiety
- Depression and withdrawal

Note: Not all students will experience remediation needs. Some, in particular environments, may actually thrive in remote learning

1 https://www.edutopia.org/article/why-are-some-kids-thriving-during-remote-learning
1C Academic and socio-emotional gaps can be assessed differently – academic needs

Academic needs can be assessed by

- Carrying out individual assessments
  e.g., formative tests, papers, projects, and quizzes

- Engaging students individually/in small groups to obtain firsthand impressions
  e.g., revision of students’ homework individually/in small groups

- Engaging families to help identify student learning gaps
  e.g., educational surveys to assess student progression

- Collecting data from online remote learning tools to compare assessments and progression

Examples

In France, teachers maintain contact with their students to ensure pedagogical continuity and obtain informal, firsthand impressions of student progress.

In India, an annual, a nationwide survey (since 2005) is performed to test children’s ability to read simple text and do basic arithmetic. This takes the form of the Annual Status of Education Report (ASER) which covers 700,000 children in 15,000 villages.

In Kenya, Tanzania and Uganda, the Uwezo initiative is engaged in monitoring basic literacy and numeracy levels of children aged 5-16 across at least 50% of the districts through a household-based survey.

Source: France’s pedagogical continuity; ASER; UWEZO
### 1C Academic needs: there are multiple approaches for systems to assess learning loss (1/2)

<table>
<thead>
<tr>
<th>Option</th>
<th>Direct assessment of all students</th>
<th>Direct assessment of sampled students</th>
<th>Teacher survey</th>
<th>Student/parents survey</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Baseline availability</strong></td>
<td>The system/school has a good understanding of the baseline and able to test all students effectively</td>
<td>Baseline available and can test a sample of students</td>
<td>Some baseline available and can assess all students indirectly</td>
<td>No baseline and can assess sample of students indirectly</td>
</tr>
<tr>
<td><strong>Approach</strong></td>
<td>Diagnostic assessment/test</td>
<td>Diagnostic assessment/test</td>
<td>Survey teachers after first week of school re-opening</td>
<td>Sample survey of parents &amp; students via phone prior to school re-opening</td>
</tr>
<tr>
<td><strong>Prerequisites to success</strong></td>
<td>Baseline data available for every student</td>
<td>Baseline data available for select student groups</td>
<td>Strong teacher capabilities to assess students in first week of re-opening (through conversations, quizzes, etc)</td>
<td>Access to parents and students</td>
</tr>
<tr>
<td><strong>Pros</strong></td>
<td>Personalized understanding of each student needs</td>
<td>Personalized understanding of select student needs</td>
<td>Teacher understanding of their students needs to adapt remediation strategies</td>
<td>Access to an estimated understating of learning loss prior to school start</td>
</tr>
<tr>
<td></td>
<td>Accurate remediation strategies</td>
<td>Focus on students at risk or transitional grades</td>
<td>Incorporates socioemotional needs</td>
<td>Incorporates socioemotional needs</td>
</tr>
<tr>
<td><strong>Cons</strong></td>
<td>Lack of preparedness &amp; induced stress of assessments</td>
<td>Lack of preparedness &amp; induced stress of assessments</td>
<td>Inaccuracies in teacher’s approach</td>
<td>Inaccuracies in data gathered due to sample size</td>
</tr>
</tbody>
</table>
1C Academic needs: there are multiple approaches for systems to assess learning loss (2/2)

### Description
- **MAP Growth assessment** run every in the fall, winter, and spring, yielding **precise data on what learning, or learning loss, is happening during the summer**
  - Over 20% of U.S K-12 public schools administer MAP Growth assessment
- France will **conduct early year assessments** in the beginning of the school year for select grades (1, 6, and 12) and compare it with **last year’s assessment**
  - It will also track these grades for **2 to 3 years** to see the long-term impact on learning loss
  - The government is also providing **sample tests for teachers** to assess students on a local level
- Mozambique plans to recruit **8,360 new teachers**, mostly for primary education, to **reduce the average number of students per teacher** and allow dedicated attention for assessment
- The **telephone surveys** are meant to unpack not only the **remote learning experience**, but also to shed light on **students’ time use and mental health**

### Examples
- **U.S using existing EdTech products that assess summer learning loss**
- **France assessing learning loss in key grades and providing tools to local schoolteachers**
- **Mozambique reducing the average number of students per teacher and allow dedicated attention for assessment**
- **Ecuador using rapid telephone surveys have been fielded in Ecuador**

### Source
SOURCE: NWEA, Expert input, AllAfrica, World Bank

Other macro-level assessment approaches can be found in the appendix
1C Academic and socio-emotional gaps can be assessed differently – Socio-emotional needs

Socio-emotional needs can be assessed by

Engaging families and encouraging them to report rising socio-emotional needs
e.g., regular parent–teacher conferences during the crisis to check in on student needs

Encouraging students to express socio-emotional needs through individual or group sessions that foster open communication
e.g., gamified classes, dialogue around the challenges of COVID-19

Observing student behavior once back in school to identify socio-emotional or digital needs
e.g., observation of social interactions during recess, observation of digital literacy (computer use, typing, etc.)

Examples

In Palestine, the ministry of education set up a thematic group for the response to COVID-19 specifically focused on assessing and delivering psychosocial support to teachers, education staff, and students

In Singapore, the Ministry of Education introduced a peer support programme in all schools, which equips students with skills to identify distress among their friends and provide them with support

In Sierra Leone in 2014, the International Medical Corps, assessed MHPSS Needs and Resources in the context of Ebola through interviews that included free listing of issues, ranking of challenges

In 2016, during the Serbian migration and refugee crisis, the International Medical Corps conducted a mental health needs assessment using interviews with key informants, international organizations, local stakeholders and NGOs, child protection groups and field visits to transit sites and information centers

After the April and May 2015 earthquakes in Nepal, a rapid mental health and psychosocial assessment was deployed. The assessment includes interviews, focus groups discussion and site visits

1. Mental Health and Psychosocial Support

SOURCES: Palestine; Singapore; Sierra Leone; Serbia; Nepal
1C Countries can roll out assessments continuously but consider trade-offs when assessing students remotely and in person

<table>
<thead>
<tr>
<th>Timeline options for assessments</th>
<th>Pros</th>
<th>Cons</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deploy remote assessments</td>
<td>✓ Pros</td>
<td>× Cons</td>
<td>• Developed remote channels</td>
</tr>
<tr>
<td>Deploy assessments in person</td>
<td></td>
<td></td>
<td>• Assessment quality checks</td>
</tr>
<tr>
<td></td>
<td>• No delay in assessments means more time to plan and the ability</td>
<td>• Need for adequate remote capabilities (e.g., trained teachers,</td>
<td>• Equity of access</td>
</tr>
<tr>
<td></td>
<td>to roll them out during disruption</td>
<td>online platforms)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• If digital capacities are highly developed, they have the</td>
<td>• Potential for equity issues and bias in assessments, resulting</td>
<td></td>
</tr>
<tr>
<td></td>
<td>potential to reach more students</td>
<td>from uneven remote capabilities (e.g., network issues)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Health and safety standards can be respected</td>
<td>• Difficulty of assessment quality monitoring (e.g., verifying identity of assessment author)</td>
<td></td>
</tr>
<tr>
<td>Assessments can be rolled out continuously</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Delayed assessment if schools are not open</td>
<td>• Well-suited for countries with less developed remote channels</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Potential health and safety risks</td>
<td>• A clear view on schools reopenings so that in-person assessments can take place</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• If not all students are back in school, risk of low/uneven reach of assessments</td>
<td>• Advanced health and safety protocols to lower risk</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• High potential to monitor the assessment environment</td>
<td>• Risk mitigation of uneven assessments if some students are still remote</td>
</tr>
</tbody>
</table>
Based on assessments, both of academic and socio-emotional needs, countries can be classified into four archetypes.

**Extent of learning loss**

- **Archetype 1:**
  - Significant learning loss
  - with limited inequality

- **Archetype 2:**
  - Significant learning loss
  - with significant inequality

**Distribution of learning loss**

- **Archetype 4:**
  - Limited learning loss
  - with limited inequality

- **Archetype 3:**
  - Limited learning loss
  - with significant inequality

1. Archetype 4 will not be detailed, as the needs can be addressed through normal channels.
### Archetypes

<table>
<thead>
<tr>
<th>Archetype</th>
<th>Details</th>
<th>Response type</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Archetype 1</td>
<td>Significant learning loss with limited inequality</td>
<td>System-wide response or parallel program</td>
<td>Archetype 1 will likely involve a large-scale response either through a system-wide change (e.g., altering the educational curriculum) or a parallel remediation program (e.g., obligatory summer school for all students)</td>
</tr>
<tr>
<td>Archetype 2</td>
<td>Significant learning loss with significant inequality</td>
<td>Hybrid response – two cases possible</td>
<td>If gaps are uneven between schools, Archetype 2 will likely involve a schoolwide response (e.g., obligatory summer school, additional funding, appointment of an experienced principal) based on data collected at the school level (vs. student level)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Uneven gaps between schools</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Uneven gaps within schools</td>
<td></td>
</tr>
<tr>
<td>Archetype 3</td>
<td>Limited learning loss with significant inequality</td>
<td>Targeted response</td>
<td>Archetype 3 will likely involve a targeted response either within schools (e.g., after-school programmes for all children who are behind) or across schools (summer programmes for specific students)</td>
</tr>
</tbody>
</table>

The type of response could depend on the archetype of need.
Remediation involves a three-step approach supported by continuous monitoring and adjustment

**01 Envision and understand:** set a vision and determine remediation needs

- **1A** Define a vision of success for remediation and consider trade-offs (including helping students catch up on lost learning due to COVID-19 vs. taking into account previous gaps)
- **1B** Determine which aspects contribute to remediation needs (including extent of learning loss and distribution of learning loss)
- **1C** Assess academic and socio-emotional needs for remediation and determine archetype

**02 Decide and Design:** choose a remediation strategy

- **2A** Choose a strategy using the three levers of remediation (more time, dedicated attention, and compressed content), taking into account feasibility and impact
- **2B** Agree on channels of delivery for the strategy (e.g., remote vs. in-person, teachers vs. additional tutors)

**03 Enable and execute:** prepare for delivery and execute

- **3A** Identify the budget, infrastructure, human capital, and curriculum required to implement remediation strategy
- **3B** Consider strategies to address capacity gaps (e.g., a hiring campaign for teachers)

**04 Monitor and Adjust:** track progress through continuous assessment and adjust the plan

- **4A** Monitor progress for the impact of catch-up programmes on student progression and the process of implementation with specific metrics and KPIs
- **4B** Adjust the catch-up programme’s rollout and content based on the metrics monitored
Before choosing strategies, the design and implementation of remediation take into account two key foundations: stakeholder consultation and putting the student’s socio-emotional needs at the center.

Social dialogue and stakeholder consultation will be key when choosing and implementing remediation strategies.

- **Buy-in from teachers and including teachers in the design of the overall remediation guidance**, is important to ensure that the strategy is relevant and feasible.

- The **involvement of communities and families in the design and implementation of the strategy** is essential to ensure its success. Communities and families can be key enablers of remediation. For example, parents can be involved in homework assignments and support students in focusing on condensed content around key learning competencies.

When choosing remediation strategies for catching up lost learning, putting the socio-emotional needs of the student at the center is crucial.

Allowing students to connect with their teacher and their peers will help to:

- Build confidence
- Increase the likelihood of success of remediation strategies
- Support the construction of a safe and supporting environment
- Decrease likelihood of disengagement and potentially drop-out

**Strategies to support students’ socio-emotional needs** include:

- Starting the year with a few days of ‘carpet time’ to discuss experience of COVID-19
- Promoting peer-to-peer experience exchange and support through lockdown and reopening
- Investing in psychological support (e.g., counsellors or tollfree number)
2A Countries can consider three levers for remediation, depending on their archetype

---

<table>
<thead>
<tr>
<th>More time</th>
<th>Dedicated attention</th>
<th>Compressed content</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Examples</strong></td>
<td><strong>Increase the quality of learning by promoting better attention to the material</strong></td>
<td><strong>Reduce, synthesize, or revise the content of curricula to emphasize fundamentals within the same time period or provide scaffolds</strong></td>
</tr>
<tr>
<td>- Weekend school</td>
<td>- Peer-to-peer learning</td>
<td>- Intersubject or intrasubject prioritization</td>
</tr>
<tr>
<td>- Extended school day</td>
<td>- Breakout groups (through video conference or in-person)</td>
<td>- Condensed curriculum</td>
</tr>
<tr>
<td>- Summer school</td>
<td>- High-intensity tutoring</td>
<td>- Scaffolds for grade-level learning</td>
</tr>
</tbody>
</table>

**Potential uptake**

- 22% of systems plan to increase class time in the second half of the year
- 62% of systems will introduce a dedicated remedial programme
- 60% of systems have a plan to adjust the scope of contents to be covered

---

Countries can choose a combination of the strategies included in these levers to cater to different needs of students – See France’s case study for an example of the combination of different strategies

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2A To remEDIATE lost learning, more time can be allocated to learning

More time

Extend the number of hours spent on the material to ensure appropriate learning

Suggested strategies

Extended day/week
- Weekend school
- Extended school day
- Decreased recess time

Extended calendar
- Summer school
- Early school start
- Late school end

Best fit for …

Archetype 1 – significant learning loss with limited inequality
Rationale: change of weekly calendar across the system will bring large-scale remediation

Archetype 1 – significant learning loss with limited inequality
Rationale: large-scale extension of calendar will bring system-wide remediation

Archetype 2 – significant learning loss with significant inequality
Rationale: large-scale response that can be targeted to students who are most behind (e.g., girls in underserved regions, students under a certain testing score)

Examples

The state of New York provides summer school for students with learning deficits and special education needs

In India, the Balsakhi Program, a remedial education programme in the late 1990s, introduced a two-week training model at the beginning of the year and ongoing reinforcements of several hours a week while school was in session

To remEDIATE lost learning during COVID-19, France invested EUR 200 mn to reach 1 million students through a “learning vacation” programme (vacances apprenantes). The programme is entirely free for families

Attention should be paid to students’ readiness and capacity to handle extra school work

Note: Students who attend summer school programmes can gain two months of extra learning progress compared to similar students who do not.

The impacts of summer programmes are larger when they are academically focused and delivered intensively with tuition in small groups by experienced teachers.


Source: EU LOHUD; MIT; Ouest France
To remediate lost learning, learning time benefits from dedicated attention

Dedicated attention

Increase the quality of learning/teaching by promoting better attention to the material

Suggested strategies

<table>
<thead>
<tr>
<th>Greater attention and contact time</th>
<th>Best fit for …</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Fewer students per teacher, more aides</td>
<td>Archetype 2 – significant learning loss with significant inequality</td>
</tr>
<tr>
<td>• Breakout groups (either through video conference or in person)</td>
<td>Rationale: promote breakout groups or add more aides in vulnerable communities</td>
</tr>
<tr>
<td>• Coaching</td>
<td></td>
</tr>
</tbody>
</table>

1-on-1 models

• Peer-to-peer
• Adult-to-child

Examples

In Ghana, the “School for Life” (SFL) programme (since 1995), uses peer tutoring to increase students’ progression

England set up a £1 bn fund to help England’s children catch up lost learning due to school closures. The most dis-advantaged pupils will have access to tutors through a £350 million programme over the year from September. Primary and secondary schools will be given £650 million to spend on 1-on-1 or group tuition for any pupils they think need it

In Sierra Leone, the PLAN initiative established 29 study groups for 330 affected children

In South Africa, between 2015 and 2017, the Department of Basic Education established and tested three interventions: (1) a structured learning programme and centralized training, (2) a structured learning programme and specialist onsite coaching, (3) and parental intervention. The second intervention (coaching) provided the best improvement with least cost

Evidence generally shows the smaller the learning group, the bigger the effects

1-on-1 tutoring has the largest effects in most cases, but given that it is more expensive, teaching in small groups could be tried as a 1st step

Additional attention should be paid to students’ socio-emotional skills as well (e.g., through counselors)

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2. UNESCO; ERIC
3. BBC
4. DFID
5. Department of Basic Education of South Africa
### Compressed content

Reduce or synthesize the content of educational programmes to emphasize fundamentals within the same time period.

<table>
<thead>
<tr>
<th>Suggested strategies</th>
<th>Best fit for …</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Reduced content</strong></td>
<td>All archetypes</td>
<td>Sierra Leone revised lesson plans to focus on essentials for all grade levels</td>
</tr>
<tr>
<td>• Intrasubject prioritization</td>
<td>Rationale: prioritizing core subjects or fundamental concepts within subjects works for all archetypes</td>
<td></td>
</tr>
<tr>
<td>• Intersubject prioritization</td>
<td>Liberia developed COPE, an accelerated education program for children displaced during the civil war in the 1990s; COPE was a 3-year primary school program that compressed the 6-year curriculum down to 3 years</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Synthesized content/ scaffolds</th>
<th>All archetypes</th>
<th>During school closures due to COVID-19, schools in Ontario, Canada compressed the required curriculum for students</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Summarize and condense the same curriculum (e.g., keep all subjects)</td>
<td>Rationale: condensing content or providing scaffolds (e.g., weaving in basic notions when they are needed at grade level) is helpful across archetypes and can prevent disengagement (e.g., no label of “remedial group”)</td>
<td>To support remediation, France’s ministry of education provides guides for each grade that underscore the prioritized objectives and topics to allow a focus on essentials</td>
</tr>
<tr>
<td>• Weave in scaffolds with grade-level material</td>
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<td></td>
</tr>
</tbody>
</table>

**Attention should be paid to students’ socio-emotional growth in addition to academic needs**

Source: Education.gov.sl; UNICEF; Ottawa citizen; Ministry of Education France
## Countries can decide which combination of strategies suits them best, based on an evaluation of complexity

<table>
<thead>
<tr>
<th>Levers</th>
<th>Strategies</th>
<th>Complexity</th>
<th>Tech/logistical complexity</th>
<th>Social complexity</th>
<th>Curriculum complexity</th>
</tr>
</thead>
<tbody>
<tr>
<td>More time</td>
<td>Extended day/week</td>
<td>Some additional budget for infrastructure and teachers</td>
<td>Mild reorganization of the school day (e.g., bell times)</td>
<td>Little impact on family organization (e.g., transportation, child care), some impact on teacher well-being (e.g., workers’ rights)</td>
<td>Need to prepare additional school materials for extended day/week</td>
</tr>
<tr>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Extended calendar</td>
<td>Additional budget for infrastructure and teachers</td>
<td>Some complexity given the need to reorganize the use of facilities (e.g., if facilities have been booked over the summer)</td>
<td>Some impact on student well-being due to shortened vacation (especially in tropical climates) and on teachers (difficulty of convincing them)</td>
<td>Need to prepare additional school materials for extended calendar</td>
</tr>
<tr>
<td>Dedicated attention</td>
<td>Greater attention and contact time</td>
<td>Significant budget for additional infrastructure and teachers</td>
<td>Need to source solutions to accommodate smaller classes (e.g., outdoor space, online platforms)</td>
<td>Hiring process or longer hours may be disruptive to teachers, have little impact on families</td>
<td>Some need to ensure uniformity across a higher number of classes and formats (e.g., online)</td>
</tr>
<tr>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td>1-on-1 models</td>
<td>Significant budget for additional staff for 1-on-1s, resulting in greater impact</td>
<td>Significant given the need to organize calls, higher difficulty in low tech settings, additional supervision needed for peer-to-peer interaction, tracking</td>
<td>Low impact but potential need to hire additional staff may be somewhat disruptive</td>
<td>Some need to adapt the curriculum to specific needs</td>
</tr>
<tr>
<td>Compressed content</td>
<td>Reduced content</td>
<td>Additional budget for curriculum advisors or for teachers to reorganize content</td>
<td>Low impact, need for meetings to align on the curriculum (e.g., online) or use of an online platform for the curriculum</td>
<td>Mild need to ensure students can keep up with an accelerated program, some disruption to teachers’ class content</td>
<td>High impact given the need to reorganize and reshape the entire curriculum, and tailor it to specific student needs</td>
</tr>
<tr>
<td></td>
<td>Synthesized content/scaffolds</td>
<td>Additional budget for curriculum content/scaffolds</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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1. Estimated budget implications of strategies 2. Implications related to logistics, IT infrastructure, tech skills, hardware/software 3. Implications on social disruption (e.g., teacher discontent, student comfort, family organization, general well-being) 4. Impact on curriculum change
2B Once the remediation levers have been picked, specific channels of delivery can be identified

Channels of delivery

**Who?**
- Additional teachers (or time per teacher)
- Other teaching providers (e.g., tutors, teaching assistants)
- Additional teachers, tutors, or assistants (as well as additional classrooms)
- Peer-to-peer support
- Teachers
- School administrators

**How?**
- Online platform learning
- Video calls with teachers or other providers
- In-person teaching time once safe
- Online video calls either 1-on-1 or in small groups
- Peer-to-peer phone calls
- In-person once safe
- Remotely on online platforms or by mail
- In-person once safe

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**Levers**

**More time**
Extend the number of hours spent on the material to ensure appropriate learning

**Dedicated attention**
Increase the quality of learning/teaching by lessening distractions and promoting better attention to the material

**Less content**
Reduce, synthesize, or prioritize educational content to focus on fundamentals within the same time period or provide scaffolds at grade level
Remediation involves a three-step approach supported by continuous monitoring and adjustment

01 Envision and Understand: set a vision and determine remediation needs

- 1A Define a vision of success for remediation and consider trade-offs (including helping students catch up on lost learning due to COVID-19 vs. taking into account previous gaps)
- 1B Determine which aspects contribute to remediation needs (including extent of learning loss and distribution of learning loss)
- 1C Assess academic and socio-emotional needs for remediation and determine archetype

02 Decide and Design: choose a remediation strategy

- 2A Choose a strategy using the three levers of remediation (more time, dedicated attention, and compressed content), taking into account feasibility and impact
- 2B Agree on channels of delivery for the strategy (e.g., remote vs. in-person, teachers vs. additional tutors)

03 Enable and execute: prepare for delivery and execute

- 3A Identify the budget, infrastructure, human capital, and curriculum required to implement remediation strategy
- 3B Consider strategies to address capacity gaps (e.g., a hiring campaign for teachers)

04 Monitor and Adjust: track progress through continuous assessment and adjust the plan

- 4A Monitor progress for the impact of catch-up programmes on student progression and the process of implementation with specific metrics and KPIs
- 4B Adjust the catch-up programme’s rollout and content based on the metrics monitored
3A Based on the strategy for remediation chosen, countries can determine what they need and which capabilities they are missing for implementation

**Resources needed for implementation**

<table>
<thead>
<tr>
<th>Levers</th>
<th>Strategies</th>
<th>Budget</th>
<th>Infrastructure</th>
<th>Human resources¹</th>
<th>Curriculum/materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>More time</td>
<td>Extended day/week</td>
<td>Payroll hours for teachers, admin staff, supervisors, janitors, extended infrastructure use, transportation of students; additionally for extended calendar: loss of revenue from canceled summer programmes replaced with school</td>
<td>Extended use of school grounds, communication materials for new schedules, organization of new bell times</td>
<td>Extended staff hours or new staff (teachers, admins, cleaning staff), curriculum advisors</td>
<td>New materials, print outs, books, notebooks, and other writing materials</td>
</tr>
<tr>
<td>Dedicated attention</td>
<td>Reduced class sizes</td>
<td>Budget for additional teachers, aides, tutors, cleaning staff (due to more classrooms), new classrooms or buildings</td>
<td>Outdoor spaces, other repurposed spaces for teaching (e.g., cafeteria)</td>
<td>Teachers, supervisors, and aides for smaller classes; more janitors and security for new buildings/classrooms</td>
<td>Same curriculum but tailored to class needs and smaller groups; chalkboards, online platforms for remote classes</td>
</tr>
<tr>
<td>1-on-1 models</td>
<td></td>
<td>Budget for additional teachers, aides, tutors, cleaning staff, new classrooms or buildings (to respect social distancing)</td>
<td>Space for 1-on-1 teaching</td>
<td>Teachers, supervisors, and aides for smaller classes, adults for supervision of peer-to-peer mentoring</td>
<td>Tailored materials for special student needs; potential need for online connectivity, smartphones</td>
</tr>
<tr>
<td>Compressed content</td>
<td>Reduced content</td>
<td>Budget for additional teaching and school admin time, curriculum advisors</td>
<td>Meeting rooms, online platforms, communication mediums (e.g., phone or e-mail) to align on content</td>
<td>Teachers, curriculum advisors, and administrators to tailor content</td>
<td>New books, worksheets, and homework templates for the new curriculum</td>
</tr>
</tbody>
</table>

¹ See UNESCO and Teacher Task Force’s Supporting teachers in back-to-school efforts – A toolkit for school leaders

**Key takeaways**

Each remediation strategy will require different resources to be implemented: budget, materials/infrastructure, human resources, curricula. Countries can adapt the strategies to their needs, expanding their current capacity or using innovation and collaboration to bridge the gap.
### 3B Where gaps in capacity exist, countries can either make the most out of current resources or explore new avenues through innovation and collaboration (1/3)

#### Materials/infrastructure

How can we increase infrastructure capacity, including IT and tech, to meet social distancing guidelines and enable remediation?

<table>
<thead>
<tr>
<th>Capacity needed</th>
<th>Leverage current capacity</th>
<th>Explore new avenues</th>
<th>Examples</th>
</tr>
</thead>
</table>
| Infrastructure  | • Use own outdoor spaces, cafeterias, meeting rooms (if appropriate)  
• Extend use of classrooms for additional time or weekend classes | • Partner with organizations with vacancies to alternate space and create designated classrooms (e.g., community centers, community-based organizations, religious centers, universities, town halls) | In Denmark, schools are using outdoor spaces to meet social distancing guidelines but have allowed most children to come back to school |

| Technology¹ | IT system infrastructure: Prioritize fixing broken fixtures, purchase or rent hardware from local libraries/tech stores  
Live-streaming platforms: Use free programmes (e.g., Skype)  
Online teaching platforms: Use free programmes (e.g., Google Drive, e-mail)  
Low tech options: Use printed materials with guidance (e.g., delivered through post) | IT system infrastructure: Partner with companies or foundations to provide access to hardware for teachers or students  
Live-streaming platforms: Apply for online platforms’ special education programmes (e.g., Zoom or Google Hangouts)  
Online teaching platforms: Set up group subscriptions for teaching (e.g, padlet.com)  
Low-tech options: Explore TV, radio, mobile avenues for communicating | Schools in the US are partnering with Logitech to provide webcams and headsets for teachers to facilitate remote learning  
France and the Orange Foundation are partnering to provide tablets and computers to disadvantaged students to promote remote learning  
Argentina partnered with the postal service to deliver school materials to students who could not access them online during COVID-19 lockdowns  
The Girls’ Education in South Sudan initiative is using SMS to communicate learning materials to students during COVID-19 school lockdowns |

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¹. Many prerequisites are necessary for a strong technological infrastructure to be in place: massive long-term infrastructure development is necessary including connecting all schools to electricity, then to internet, ensuring all children have access to an adequate connected device, and ensuring that teachers and children have the minimum necessary digital skills to be able to use those solutions.

Note: The mention of specific strategies or vendors does not represent an endorsement.
### 3B Where gaps in capacity exist, both innovation and collaboration can provide solutions and support effective remediation (2/3)

#### Human resources

How can we assign enough qualified educators or additional teaching time to enable execution?

<table>
<thead>
<tr>
<th>Capacity needed</th>
<th>Leverage current capacity</th>
<th>Explore new avenues</th>
<th>Examples</th>
</tr>
</thead>
</table>
| Teachers, mentors, tutors, and aides | • Partner with teachers, administrators, staff and aides to extend time  
• Divide activities that require teaching and those that require supervision more optimally between staff  
• Optimize administrative work for teachers who were doubling as administrators to allow focus on schoolwork  
• Bring on older students to support younger ones | • Reach out to university students to provide teaching services for junior grade levels  
• Engage capable parents to support lower-level classes  
• Work with nonprofits to deliver targeted learning to the most challenged students  
• Reintegrate recently retired teachers to manage the increased workload  
• Integrate technological solutions to reduce the number of teachers needed (e.g., AI-based homework revision) | The Education Policy Institute in the UK launched a one-year volunteer scheme for "retired and inactive" teachers, who would return to the profession to help prevent vulnerable pupils from falling behind.  
Note: older persons are a higher risk group and necessary precautions and care should be taken if considering this option  
An UK MP called for 200K university graduates from the class of 2020 to support disadvantaged pupils |
| Training | • Centralize all training to expedite delivery  
• Leverage the abilities of current staff to train others using central training guidelines  
• Let school administrators choose standardized training topics that teachers can take offline | • Create or leverage existing technical training for remote teaching (e.g., through Zoom, Moodle, school platforms)  
• Create mentorship programmes to guide teachers in their planning and execution  
• Organize self help groups amongst teachers and school leaders to share promising practices | The United Arab Emirates is offering training programs for teachers and school administrators on remote teaching and the use of technology in education  
Armenia created a database of mentor teachers experienced in distance learning to assist their colleagues  
The province of Ontario in Canada trained 15,000 teachers to provide classes online  
In Uganda, Teacher Training Institutions (TTIs) are being deployed to deliver capacity-building workshops for teachers lacking Information and Communication Technology (ICT) skills with the support of the UNESCO China Funds In Trust project |
3B Where gaps in capacity exist, both innovation and collaboration can provide solutions and support effective remediation (3/3)

Curriculum
How can we increase capacity to tailor curricula during the crisis?

Leverage current capacity
- Ask teachers to tailor the curriculum to the specific needs of their students
- Ask school administrators to review existing summer programmes or extended school materials

Explore new avenues
- Partner with companies and organizations to curate content aligned with a region’s curriculum
- Enable teachers to use online platforms to tailor teaching and classes (e.g., subscription fees, guidelines, and information)
- Digitize the curriculum for others to be able to curate and provide lesson plans

Examples
- Peru has curated content aligned with the national curriculum, combining existing content with external proprietary content from partner institutions
- French teachers and students are using an official online curriculum platform focused on fundamentals to ensure the coverage of basic knowledge (les-fondamentaux.fr)

Source: World Bank; http://lesfondamentaux.fr/
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4A Monitor progress for the impact of catch-up programmes on student progression and the process of implementation with specific metrics and KPIs

4B Adjust the catch-up programme’s rollout and content based on the metrics monitored
4 Monitoring and adjustment are continuous processes, supporting the relevance of the remediation plan

Monitor and evaluate
both the success of the impact (e.g., student progression) and the process (e.g., student experience) of remediation can be assessed continuously based on data.

A central team can ensure monitoring and adjustment

Adjust based on assessments of student progression and experience of the remediation program, the plan can be adjusted on a regular basis.

The central team can agree on the monitoring procedures and protocols (e.g., who collects which information, who shares it) and adjustment processes (e.g., who makes which decisions based on certain information)

See “Chapter 9: Organizing for the response” for additional detail on the central team.
4A Monitoring and evaluation – both the process of delivery (e.g., quality) and the outcomes of remediation (in grades and learning) can be evaluated continuously

<table>
<thead>
<tr>
<th>What to evaluate</th>
<th>Evaluate the process: overall quality of plan</th>
<th>Evaluate outcomes: the impact of the remediation plan on student progression</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A Logistics of the remediation plan</td>
<td>D Student attendance and participation</td>
</tr>
<tr>
<td></td>
<td>Ability to manage resources effectively</td>
<td>Attendance/engagement</td>
</tr>
<tr>
<td></td>
<td>Effectiveness of management team</td>
<td>Participation in class</td>
</tr>
<tr>
<td></td>
<td>Use of budget</td>
<td>Equity of access</td>
</tr>
<tr>
<td></td>
<td>Satisfaction of teachers, students, and families with the plan</td>
<td>Standardized summative tests</td>
</tr>
<tr>
<td></td>
<td>Effective communication of the plan</td>
<td>Standardized formative tests throughout the year</td>
</tr>
<tr>
<td></td>
<td>Effective collection of learnings</td>
<td>Evaluation on a curve (vs. other students [in remediation])</td>
</tr>
<tr>
<td>Who to consult</td>
<td>Management team, experts, auditors</td>
<td>Confidence in learning ability</td>
</tr>
<tr>
<td></td>
<td>Parents, teachers, students</td>
<td>Feeling of general effectiveness of catch up program</td>
</tr>
<tr>
<td>How to evaluate it</td>
<td>Teams satisfaction rate</td>
<td></td>
</tr>
<tr>
<td></td>
<td>External audit of budget use</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Benchmarks</td>
<td></td>
</tr>
<tr>
<td>How often</td>
<td>Periodically (1-3 months)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Periodically (1-3 months)</td>
<td></td>
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<tr>
<td></td>
<td>After action (after 3-4 months)</td>
<td></td>
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</tbody>
</table>

Although monitoring all aspects may be challenging for countries, one strategy is monitor a sample of students in the Fall and through upcoming years – See example of France in the case study section
4B Adjustment – based on the monitoring and evaluation of the process and impact of remediation, the plan may be adjusted in two ways

Adjustment of the process (overall quality of plan)

What is evaluated

- Logistics of the remediation plan
  - Ability to manage resources effectively
  - Effectiveness of management team
  - Use of budget

- Reception of the plan
  - Satisfaction of teachers, students, and families
  - Effective communication of the plan

- Longevity of the plan
  - Ability of the system to continue amid another lockdown
  - Effective compilation of lessons learned

What can be adjusted

- Management team dynamics, distribution, and management of financial resources
- Inclusion of other stakeholders into the plan, communication strategy
- Compilation of lessons learned, applicability of the plan

How it can be adjusted

- Clarify roles and responsibilities
- Adjust team structure (e.g., hiring)
- Reorganize (e.g., add, take out, or simplify budget allocations)
- Iterate the plan with students/teachers (e.g., through workshops)
- Start a communication/awareness campaign (targeting specific grievances)
- Simulate other crises to ensure relevance and adapt
- Start compilation of lessons learned (e.g., a dedicated team member writes an after-action report)

Adjustment of the content (impact of the plan on student progression)

What is evaluated

- Students attendance and participation
  - Attendance/engagement
  - Participation in class
  - Equity of access

- Standardized formative and summative exams
  - Standardized summative exams
  - Standardized formative exams throughout the year
  - Evaluation on a curve

- Remediation program and target
- Remediation program and target

How it can be adjusted

- Move students from tiers and adapt plan to focus on specific needs
- Classify students into tiers and use monitoring to understand which segments are improving and which ones are not
- Classify students into tiers and use monitoring to understand which segments are improving and which ones are not
- Integrate aspects of confidence building into remediation plan (e.g., focus on strengths)
Based on the framework, countries can tactically implement remediation through four action checklists:

- Envision and Understand
- Design and Decide
- Enable and Execute
- Monitor and Adjust
Based on the framework, countries can tactically implement remediation through four action checklists:

1. Envision and Understand
2. Design and Decide
3. Enable and Execute
4. Monitor and Adjust
1 **Set a vision and assess remediation needs through the following actions**

To be adapted and populated by the entity concerned

<table>
<thead>
<tr>
<th>Action</th>
<th>Responsible</th>
<th>Focal point</th>
<th>Time frame</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1A Define a vision of success</strong></td>
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<tr>
<td>Convene all stakeholders relevant for remediation (including leaders for finance, IT, infrastructure, etc.)</td>
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<tr>
<td>Set a time-bound and precise vision with clear goals and targets for remediation and agree on priorities, considering key trade-offs</td>
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<tr>
<td><strong>1B Determine which aspects contribute to remediation needs</strong></td>
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<tr>
<td>Classify types of remediation needs that students could be experiencing</td>
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<tr>
<td><strong>1C Assess academic and socio-emotional needs for remediation</strong></td>
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<tr>
<td>Decide on the types and the tools to be used for the assessments</td>
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<tr>
<td>Choose metrics to be used to evaluate needs based on available data and proxies</td>
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<tr>
<td>Determine which skills and knowledge should be tested to assess these needs (e.g., academic vs. socio-emotional criteria)</td>
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<tr>
<td>Decide on the timeline of the rollout for these assessments, differentiating based on the specific requirements (e.g., in-person assessment requires more time)</td>
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<tr>
<td>Weigh different options for the delivery of assessments of students (e.g., in person or online), taking into account equitable access, health, and safety</td>
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<tr>
<td>Map out the extent of the needs using the learning quadrant in the student population (e.g., the extent and distribution of learning loss)</td>
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<td></td>
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<tr>
<td>Derive appropriate response archetype based on need</td>
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</table>
# Develop a remediation strategy through the following actions

To be adapted and populated by the entity concerned

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<th>Action</th>
<th>Responsible</th>
<th>Focal point</th>
<th>Time frame</th>
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<tbody>
<tr>
<td>2A. Choose levers of remediation, taking into account feasibility and impact</td>
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<tr>
<td>☐ Classify types of levers that are available and appropriate to use for specific needs identified (e.g., additional learning time, dedicated attention, reduced content)</td>
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<tr>
<td>☐ Map out which specific strategies within these levers would suit remediation needs (e.g., facilitate 1-on-1 time between teachers and students, synthesize curriculum to focus on fundamentals)</td>
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<tr>
<td>☐ Evaluate the feasibility of different strategies and choose which combination is best suited both to current capabilities and to the needs of the country’s population (including public opinion of teachers, parents, labour unions)</td>
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<tr>
<td>2B. Agree on channels of delivery for the strategy</td>
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<tr>
<td>☐ List potential channels through which strategies can be delivered (e.g., additional teachers), including who will deliver and where will it be delivered</td>
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<tr>
<td>☐ Assess feasibility and impact of these channels depending on needs (e.g., if country is low-tech, find in-person alternatives)</td>
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<tr>
<td>☐ Choose rollout time of remediation plan depending on archetype and the timeline of school reopening (e.g., if remote capacity is weak, consider implementing remediation once schools are reopened)</td>
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<tr>
<td>☐ Design timeline of implementation from current date to full school opening, including strategies, channels, and levers</td>
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<tr>
<td>☐ Develop full remediation plan materials (including new curriculum, communication materials)</td>
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</table>
Prepare for delivery and execute through the following actions

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<th>Time frame</th>
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</thead>
<tbody>
<tr>
<td><strong>3A</strong> Identify the requirements for operationalization for each lever</td>
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<tr>
<td>- List which capacities will be needed to implement the remediation plan (e.g., additional teachers)</td>
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<tr>
<td>- Analyze current levels of the required capacities in the system already in place or available</td>
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<tr>
<td>- Assess the gap between capacity needed for remediation and existing abilities</td>
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</table>

<table>
<thead>
<tr>
<th><strong>3B</strong> Consider strategies to address capacity gaps where they exist</th>
<th>Responsible</th>
<th>Focal point</th>
<th>Time frame</th>
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</thead>
<tbody>
<tr>
<td>- Prioritize capacities with the largest gap and the highest potential to address learning issues</td>
<td></td>
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<tr>
<td>- Map out potential strategies to fill these gaps, taking into account collaboration opportunities, innovative capacity-building solutions (e.g., partnership with non-profits)</td>
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<tr>
<td>- Capacity-building: train and recruit teachers, provide budget for additional infrastructures, deliver curriculum guidance, etc.</td>
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<tr>
<td>- Implementation: set up extended school day/week/year programmes, tailor curriculum, reduce class size, or introduce 1-on-1 models</td>
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</tbody>
</table>
## Monitor and adjust through the following actions

To be adapted and populated by the entity concerned

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<th>Action</th>
<th>Responsible</th>
<th>Focal point</th>
<th>Time frame</th>
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</thead>
<tbody>
<tr>
<td><strong>4A Monitor progress both for impact and process with specific metrics and KPIs</strong></td>
<td></td>
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</tr>
<tr>
<td>- Choose which evaluation criteria will be used to monitor the progress and inform adjustment (take into account the evaluation of both the progression of students and the quality of the overall plan)</td>
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<tr>
<td>- Develop and agree on the KPIs with baseline and target</td>
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<tr>
<td>- Design process to monitor dimensions of evaluation regularly (e.g., collection of data)</td>
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<tr>
<td><strong>4B Adjust the program based on the metrics monitored</strong></td>
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<tr>
<td>- Compile lessons learned (including challenges) regularly</td>
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<tr>
<td>- Regularly compile data and share findings with the central team</td>
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<tr>
<td>- Adjust process and outcome targets as necessary, including communication strategy and materials</td>
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</tbody>
</table>
Case studies
Lessons learned

There are three types of case studies that provide practices for the design and development of a remediation plan:

- COVID-19 case studies
- Case studies from other crises
- Case studies from non-crisis-related remediation plans
There are three types of case studies that provide practices for the design and development of a remediation plan

A COVID-19 case studies
- USA
- Philippines
- Mozambique
- Italy
- Belgium
- France

B Case studies from other crises
- Sierra Leone
- Haiti
- Indonesia

C Case studies from non-crisis-related remediation plans
- Brazil
- Ghana
- Senegal
**A COVID-19 remediation plans – case studies from around the world (1/2)**

**Maryland, US**
- Maryland suggested calendar modifications, including extended school days (afternoons or early mornings), Saturday school, night classes, and summer programmes
- Hybrid programmes are also on the table: 1 full day in person and the rest remote with one designated day for remediation
- Focus on mental health, with dedicated psychological support and established “safe rooms” within facilities

**Philippines**
- The Philippines issued a highly centralized plan for remedial classes for students who received a grade lower than 75% starting on May 11 and for a six-week period
- The government allowed schools to opt out of the plan and to organize make-up classes in the next year, but not without providing an implementation plan to be submitted before August

**Mozambique**
- Mozambique plans to recruit 8,360 new teachers, mostly for primary education, to reduce the average number of students per teacher and allow dedicated attention
- In addition, the government will distribute over 21.7 million free school textbooks to allow student access to curriculum content

**Italy**
- Italy is planning a major hiring wave for teachers (24,000 teachers) in order to start the school year with an initiative of remedial classes

**Belgium**
- The Flemish minister of education (Belgium) announced free summer school for all
- To avoid conflicts with unions, schools can decide if they open. If they do, a compensation of EUR 25 per student/day is provided (EUR 325 per teacher per day, as groups cannot exceed 13 students)

**France**
- The French administration announced their intention to measure students’ learning loss (through engagement with parents, student self-assessments, remote assessment)
- France provides support to summer camps/schools and to children to attend them
- Other measures include extension of the school year to the summer, Saturday school, or the creation of an on-demand platform for self-learning

**Archetype 3-4: Limited learning loss with limited or significant inequality**
- To make up for lost classroom time, schools [...] need to provide remedial instruction
  — Director of the Center on Reinventing Public Education
- We must] exercise prudence in making decisions on learner remediation, particularly during this period of health crisis
  — Department of Education Memorandum
- The government would also prioritize the expansion of access to education and health care
  — Prime Minister
- We are [...] encouraging young people to join the teaching profession and starting the school year with a massive initiative of remedial classes
  — Minister of Education
- [Summer schools are] ideal to get rid of the learning disadvantage as much as possible and to ensure that everyone can start the new school year with equal opportunities
  — Flemish Minister of Education
- We need a pedagogical Netflix, centralized and free
  — French Minister of Education

**Archetype 1-2: Significant learning loss with limited or significant inequality**
- Archetype 1-2: Significant learning loss with limited or significant inequality

**Archetype 3-4: Limited learning loss with limited or significant inequality**
- Archetype 3-4: Limited learning loss with limited or significant inequality

Source: Baltimore Sun; Le Monde; ABS CBN; AllAfrica; UNESCO; HLN.be

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UNESCO, in collaboration with McKinsey and Company
In France, more than 15 million learners were affected by COVID-19 with 90-95% of students having kept in touch with their teachers during quarantine (1/5)

On 24 January, the 1st COVID-19 case was reported in France.

On 12 March, French President Emmanuel Macron announced on public television that all schools and all universities would close from Monday 16 March until further notice.

Schools have started a gradual reopening as of 11 May.

More than 15 million learners were affected by school closures.

Thanks to the remote learning measures established in the country, teachers maintained contact with 90% to 95% of their students during lockdown.

To support students in catching up on lost learning, France set up assessments both nationally and locally (2/5)

Understand & Envision

In its yearly note to academic regions, principals and teachers, the Ministry of Education underscored differentiated remediation and consolidation of knowledge as an absolute priority for the upcoming year. In order to identify the needs of students when it comes to catching up on lost learning, France plans two mechanisms:

- **National level evaluations for 1st, 6th and 10th grade**: the yearly assessments for these grades have been adapted and, for some, moved to earlier in the school year to allow teachers to react accordingly
- **Ad hoc tests for teachers** to administer at the local level for all other grades which allow teachers to assess learning gaps

![Ad hoc tests are available online and can be downloaded or conducted directly on the platform](image)

A Although the assessments are set to be conducted in the fall, France preempted the need for remediation by organizing summer and fall catch-up programmes for students (3/5)

Design & Decide

The ministry of education put into place two sets of initiatives to remediate academic and non-academic needs

- **Summer initiative - Operation learning vacation:** To support students in catching up on lost learning before the start of the next school year, France invested **200 million euros** to put in place operation learning vacation (‘Vacances Apprenantes’) for **1 million students**. The objective of the operation is to respond to the students’ need for social interaction as well as academic needs and gaps before the school starts. It contains multiple programmes, including:
  - **Open school programme:** Schools will remain open for students who are not leaving their place of residence to offer a balanced programme associating reinforcement of learning to physical and cultural activities
  - **Open ’Truancy’ school:** To raise awareness around sustainable development, mini summer camps are organized in coastal and rural areas
  - **Pro summer:** High school students in a vocational track will be able to go back to their original school to receive additional training where needed

- **Fall initiatives:**
  - **Prioritization of learning objectives:** The ministry of education provides guides for each grade that underscore the prioritized objectives and topics to allow a focus on essentials
  - **Personalized support to students:** Over **1.5 million additional teaching hours** will be deployed for students in all levels with priority to those who are struggling in key grades (1st, 6th and 10th grade)
  - **Reinforcement of the ‘Devoirs faits’ programme:** The ‘Devoirs faits’ programme (i.e. Finished homework), which offered voluntary homework support, will be strengthened. At least 3 hours per week of support for all students in intermediary schools will be available in the Fall

**Enable and Execute**

To enable schools to support students in catching up on lost learning, the ministry of education is providing institutions with:

- **Additional training** (e.g., kindergarten teachers can take the M@gistère training which support the development of a secure environment to better learn)

- **Funding**: schools and learning camps can benefit from support from the government. In addition, many of these programmes are free or partially reimbursed for families, allowing access to lower income students

- **Guidance for teachers** (e.g., practical guides to support teachers, Lumni online platform for remote learning, etc.)

**Monitor & Adjust**

To monitor the effect of these initiatives, the Ministry of Education will evaluate a sample of students over the course of multiple years, comparing results of evaluations with previous years to understand the impact of COVID-19 and of the remediation initiatives put in place by the government.

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A Lessons learned – the initiatives set up by France for remediation demonstrate three key lessons (5/5)

Preempt learning gaps

By setting up summer programs before the new school year, the French ministry of education preempted the potential learning loss and did not wait for thorough assessments to address COVID-19's impact on learning.

Monitor student progress in the long run

Instead of assessing students only for the upcoming school year, the Ministry of Education will monitor a sample of students over several years to understand the effects of the crisis.

Cater to different needs

The French government put in place a variety of programmes that can cater to the needs of different students. For example, the students who do not leave their home during the summer holidays can turn to their own schools for support whilst others are offered the possibility to take part to learning summer camps.
Sierra Leone – post-Ebola education sector plan

Programs from past crises

Context
During the Ebola crisis, the school system stopped for nine months in 2014. After the crisis, many students were behind grade level and it was unclear how to reopen the school system given major skill gaps among students.

Approach
The plan focused on developing essential skills only for grade 1 and mathematics and English for grades 1-9. The programme included mandatory training for teachers on lesson plan delivery as well as close monitoring of student progression through coaches (retired teachers). Special lesson packs of past exams were developed to help students prepare for exams over a short period of time.

Impact
Net improvement of literacy and math performances for all students.

Key lessons learned
The program aptly used retired teachers to monitor student progression and increase teaching capacity. By reducing and focusing the content on target needs, students’ learning could be accelerated.

Source: World Vision; Planipolis UNESCO; World Bank

Archetype 1-2
Significant learning loss with limited or significant inequality
Haiti – UNICEF program following 2010 earthquake

Drawing on past crisis programmes and learnings

---

**Context**

Haiti suffered a massive earthquake in 2010, which worsened an already large education crisis: only 50% of people were literate.

The education sector had very little financial support, many schools used outdated curricula, only 50% of the teachers were properly trained.

On the student side, Haiti experienced high drop-out and low enrolment rates.

Due to the weak state capabilities, the education sector has become increasingly privatized (92% in 2002-03).

---

**Approach**

A nationwide “All to School” campaign was launched to increase the number of children sent to school.

UNICEF and partners distributed tents to set up temporary learning spaces and provide national programmes for free education.

Training was provided to increase educational personnel capacity, including psychosocial care for children to overcome trauma.

An adapted curriculum was developed so children would not have to repeat a year.

Inspectors, directors, and teachers were trained on disaster risk reduction and education in emergencies to ensure relevance and impact.

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**Impact**

The programme managed to reach high rate of students allowing large-scale remediation, especially for the most deprived children.

Using risk reduction strategies, UNICEF was able to effectively address the educational impact of the outbreak of cholera later in 2010.

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**Key lessons learned**

Create capabilities for future disasters

UNICEF and Haiti trained personnel for the long term, ensuring readiness for future disasters.

Large-scale remediation can be an opportunity to address preexisting gaps

Where enrolment rate is already low, large-scale remediation programs can be an opportunity to integrate students back into the school system.

Innovation and partnerships are key to create capacity and capabilities

Partnering with UNICEF, Haiti managed to roll out its plan in a very short time.

Integrate mental health in remediation

Haiti included mental health training and space spaces as part of their plan.

---

Archetype 1-2
Significant learning loss with limited or significant inequality

Source: UNICEF; World Vision; USIP; Pulitzer Center; IAEM; FAS
**B Indonesia – 2004 Indian Ocean earthquake and tsunami**

Drawing on past crisis programmes and learnings

---

**Context**

In 2004, Indonesia was hit by the Indian Ocean earthquake and tsunami. 41,000 students and 2,500 teachers died or went missing; over 71% of primary schools were damaged or destroyed.

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**Approach**

UNICEF with the Indonesian provincial Office of Education launched “back to school” campaign.

The programme focused on recruiting and training teachers to address staff shortages.

To increase staff capabilities, information collection and management systems were developed to allow evidence-based monitoring data for planning and policy.

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**Impact**

90% of students were able to resume their schooling within weeks of the disaster.

Gross enrolment rates exceeded national rates and remained stable in the most affected districts.

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**Key lessons learned**

- Information systems allowed for the monitoring and adjustment of the remediation program.
- Indonesia’s quick response allowed for high impact.

By training teachers within days of the tsunami, the country was able to re-enrol almost all students normally.

---

*Source: World Vision; UNICEF; UNESCO*
Brazil’s “Acelera Brasil” programme

General practices

Context
In 1997, the government of Brazil understood that many students were repeating grades due to a disconnect between their age and the level of education they had achieved.

In fact, initial evaluations showed that about 30-40% of students would keep repeating grades because they did not learn how to read.

Approach
To address the rising illiteracy and low education challenge, the Brazilian government established a programme (Acelera Brasil).

The goal was to accelerate learning in order for students to be able to re-enter the grade appropriate for their age.

To target the main issue of literacy, the curriculum’s main focus was on reading.

The programme divided students according to their needs in separate classes for fully illiterate students and students that needed to improve reading to be able to re-enter their age-appropriate grade.

Within 1 school year, students received supplementary classes that allowed them to catch up multiple grade levels.

Impact
Results showed that within five years, 52% of participating students in the State of Paraíba were able to pass more than one grade and rejoin the appropriate age group.

In the State of Pernambuco, the dropout rate of participant students (3.2%) proved to be significantly lower than the state average of 14.8% after this program.

In the State of Tocantins, 99% of graduates from the Acelera Brasil were promoted to the next grade.

Key lessons learned
Clear goal and data collection: the programme defined a clear goal (increase literacy and allow students to rejoin their age group) and assessed current levels with clear data.

Smart adaptation of the programme to varying needs: the program acknowledged that students would have different remediation needs and created two cohorts, allowing for more students to benefit from the programme.

Source: Ayrton-Senna
C Ghana’s Teacher Community Assistant Initiative

General practices

**Context**

Although 95% of children were enrolled in school, the majority of students were not keeping up with the curriculum.

Less than 10% of Ghanaian students in 3rd grade could read four-letter words, 6% could read a basic paragraph, and 20% were able to identify three-digit numbers.

**Approach**

In response, Ghana developed the Community Assistant Initiative (TCAI), focusing on literacy and numeracy skills for students in grades 1-3.

The initiative recruited teaching assistants from high school graduates in local communities and placed them into government primary schools across Ghana.

The 1st phase of TCAI tested 4 different programs to identify the most effective approach for remediation:

- In-school remedial
- After-school remedial
- Normal curriculum
- Targeted lesson training for teachers: public school teachers were trained on small-group instruction, targeted at pupils’ actual learning levels.

**Impact**

The in-school remedial approach and the after-school remedial approach yield the largest increase in learning relative to the comparison group: 6.4% and 6.2% respectively.

**Key lessons learned**

- The programme had a clear goal: the program targeted an increase in literacy and numeracy skills in grades 1-3.
- The programme leveraged existing capabilities and local help: community-based facilitators could be easily trained and teach children they were already in touch with.
- Trying different methods allowed for comparison: by trying four different programmes on a small scale, Ghana was able to retain lessons learned, which could be applied in the future.

Source: Poverty Action

Archetype 1-2

Significant learning loss with limited or significant inequality.
Senegal’s PARI program

General practices

Context
In 2010-11, Senegal faced high dropout rates and low primary school completion. The normal school system had weak capabilities and could not provide remediation.

Approach
To address the issue without relying on the current system, Senegal implemented two-month remedial summer courses: PARI programme (Partenariat pour l’Amélioration des Rendements Internes à l’Ecole Elémentaire).

Selecting underperforming students from grades 1 and 5 in vulnerable schools, the programme provided summer remedial programmes that allowed students at risk of repetition to master basics in reading and math and progress to the next grade.

The programme specifically targeted girls, ensuring that at least 50% of enrollees were girls.

Impact
Between 75-80% of students participating who were at risk of repeating a grade, progressed to the next grade.

57.5% of the successful students were girls.

Key lessons learned
Unable to rely on the normal school system, the programme used innovation to deliver remediation.

The programme had a clear target – avoiding grade repetition – which it measured throughout the programme.

Source: World Bank

Archetype 1-2
Significant learning loss with limited or significant inequality.
Appendix

- Remediation additional external resources
- Resources for macro assessment of learning loss
- Glossary of terms
# Remediation additional external resources (1/2)

<table>
<thead>
<tr>
<th>Title</th>
<th>Description</th>
<th>Resource type</th>
<th>Country</th>
<th>Date</th>
<th>Source and link</th>
</tr>
</thead>
<tbody>
<tr>
<td>The COVID-19 slide: what summer learning loss can tell us about the potential impact of school closures on student academic achievement</td>
<td>COVID-19 school closures will likely impact student academic achievement. Research on summer learning loss can offer insights to help educators, policy-makers, and families understand, plan for, and address some potential impacts of this extended pause when students return to school</td>
<td>Article or report</td>
<td>US</td>
<td>04/01/2020</td>
<td>NWEA</td>
</tr>
<tr>
<td>Number of learning hours lost due to Ebola virus disease school closures in West Africa as of February 2015, by country</td>
<td>This statistic shows the number of learning hours lost due to the Ebola virus disease school closures in West Africa as of February 2015, by country. As a result of the Ebola outbreak in West Africa starting in 2014, the country of Guinea had a loss of 486 learning hours due to school closures</td>
<td>Data</td>
<td>West Africa</td>
<td>11/03/2015</td>
<td>Statista</td>
</tr>
<tr>
<td>Human capital accumulation and disasters: evidence from the Pakistan earthquake of 2005</td>
<td>This report traces the effects of a devastating earthquake that occurred in Northern Pakistan in 2005. Using a new data set from a survey conducted 4 years after the earthquake, it shows, among other findings, that the distance of the household from the fault line was not correlated with pre-existing household characteristics, while it was strongly predictive of earthquake-related damage and mortality</td>
<td>Article or report</td>
<td>Pakistan</td>
<td>05/01/2020</td>
<td>Rise Programme</td>
</tr>
<tr>
<td>4 ways to reintegrate pupils who have disconnected from school</td>
<td>This article describes how to reconnect with students in 4 ways: understand their challenges and meet them where they are, focus on nurture, celebrate the small wins and see the positive, make them feel visible</td>
<td>Article or report</td>
<td>US</td>
<td>15/06/2020</td>
<td>BigEducation.org</td>
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<tr>
<td>Remedial Education Programmes to Accelerate Learning for All</td>
<td>This guide provides a step-by-step process to create and execute remedial programmes</td>
<td>Guide or toolkit</td>
<td>Global</td>
<td>01/05/2012</td>
<td>Global Partnership for Education</td>
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<tr>
<td>Equity-Focused Approaches to Learning Loss during COVID-19</td>
<td>This article addresses the following questions: 1. What do we know about equity challenges in learning continuity? 2. Remote learning opportunities for children without connectivity 3. Recovery: planning for learning recovery when schools reopen It provides a variety of tactical strategies to address learning loss</td>
<td>Article or report</td>
<td>Global</td>
<td>16/04/2020</td>
<td>Center for Global Development</td>
</tr>
<tr>
<td>Learning Loss Discussion Guide</td>
<td>Learning loss discussion guide</td>
<td>Guide or toolkit</td>
<td>Global</td>
<td>29/04/2020</td>
<td>Hanover Research</td>
</tr>
<tr>
<td>The effects of the Elevate Math summer programme on math achievement and algebra readiness</td>
<td>This randomized controlled trial shows that a 19-day summer math intervention for students entering grade 8 improved their scores on the Mathematics Diagnostic Testing Project’s Algebra Readiness test by 4 points (0.7 standard deviation) and increased estimated algebra readiness rates from 12% to 29%</td>
<td>Article or report</td>
<td>US</td>
<td>07/01/2015</td>
<td>National Center for Education Evaluation and Regional Assistance</td>
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<td>Expanding Access to Summer Learning in Response to COVID-19</td>
<td>This article describes the benefits of expanding access to summer learning to curb learning loss due to COVID-19</td>
<td>Article or report</td>
<td>US</td>
<td>11/05/2020</td>
<td>The Century Foundation</td>
</tr>
<tr>
<td>Learning Acceleration Guide: Planning for Acceleration in the 2020-2021 School Year</td>
<td>This guide addresses 3 key questions: 1. How do we create a plan to accelerate student learning? 2. How do we accelerate student learning in the next 2 years? 3. What other challenges should we be anticipating as we plan to accelerate student learning?</td>
<td>Guide or toolkit</td>
<td>Global</td>
<td>04/2020</td>
<td>TNTP</td>
</tr>
<tr>
<td>Equity Reset Toolkit: Re-envision Instruction Through Equitable Systems</td>
<td>This toolkit offers the district leadership team a 9-week data collection and analysis process focused on equitable learning recovery for K-12 ELA and math</td>
<td>Guide or toolkit</td>
<td>Global</td>
<td>25/06/2020</td>
<td>Pivot Learning</td>
</tr>
<tr>
<td>School Practices to Address Student Learning Loss</td>
<td>This brief is the 1st in a series aimed at providing K-12 education decision makers and advocates with an evidence base to ground discussions about how to best serve students during and following the novel coronavirus pandemic.</td>
<td>Guide or toolkit</td>
<td>US</td>
<td>06/2020</td>
<td>Annenberg Institute</td>
</tr>
<tr>
<td>The Learning Generation: Investing in education for a changing world</td>
<td>This report provides information on the investment case for education, including return on investment for several remediation strategies</td>
<td>Guide or toolkit</td>
<td>Global</td>
<td>09/2016</td>
<td>The International Commission on Financing Global Education Opportunity</td>
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<tr>
<td>The Investment Case for Education and Equity</td>
<td>The Investment Case for Education and Equity explains the global education crisis and outlines solutions. It calls for an increase in funding for education and investments that are more equitable and efficient.</td>
<td>Guide or toolkit</td>
<td>Global</td>
<td>01/2015</td>
<td>UNICEF</td>
</tr>
<tr>
<td>Learning as We Go: Principles for Effective Assessment During the COVID-19 Pandemic</td>
<td>This paper summarizes the findings from a panel of assessment experts on diagnostic assessments and their role in helping educators and parents support student learning</td>
<td>Guide or toolkit</td>
<td>Global</td>
<td>07/2020</td>
<td>The Evidence project at CRPE</td>
</tr>
<tr>
<td>The Mental Health &amp; Psychosocial Support Network</td>
<td>The network functions as an online community of practice for mental health and psychosocial support in challenging humanitarian and development contexts. It contains assessments for mental health and socio-emotional needs that can be performed in emergency settings</td>
<td>Guide or toolkit</td>
<td>Global</td>
<td>2020</td>
<td>MHPSS</td>
</tr>
<tr>
<td>Survey on National Education Responses to COVID-19 School Closures</td>
<td>This survey by UNESCO, UNICEF and the World Bank seeks to collect information on national education responses to school closures related to the COVID-19 pandemic, including data on remediation measures planned by systems for the fall</td>
<td>Guide or toolkit</td>
<td>Global</td>
<td>2020</td>
<td>UNESCO, UNICEF, World Bank</td>
</tr>
</tbody>
</table>
1C Resources for macro assessment of learning loss

The World Bank simulating the potential Impacts of COVID-19 school closures on schooling and learning outcomes

- The world bank used data of 157 countries to simulate the different lengths of school closure and different levels of mitigation effectiveness (mostly remote learning), resulting in different global scenarios
- The simulations assume that mitigation effectiveness in low income countries could range from 5% to 20%
- COVID-19 could result in a loss of 0.6 years of schooling adjusted for quality bringing down the effective years of basic schooling that children achieve during their schooling life from 7.9 years to 7.3 years
- 25% increase (from 40% to 50%) in the share of lower secondary-aged children who are below the minimum level of proficiency
- Without effective remedial policy action when students return to school, approximately $10 trillion of lifecycle earnings lost for this cohort of learners

Statistical models to estimate the potential impact of school closures on learning in the U.S

- The models were based on login rates in the first months of COVID-19 as well as academic studies of the effectiveness of remote learning relative to traditional classroom instruction
- Scenarios were developed based on quality of remote learning and length of closure
- These models estimated learning loss (3-14 months of learning loss)
- How much learning students lose during school closures varies significantly by access to remote learning, the quality of remote instruction, home support, and the degree of engagement
- Learning loss will probably be greatest among low-income, Black, and Hispanic students: exacerbating existing achievement gaps

# Glossary of terms

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
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<tbody>
<tr>
<td>Remediation</td>
<td>Ongoing effort to support students in catching up on lost learning through a variety of means, including additional teaching time, focused content, and specific pedagogy</td>
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<tr>
<td>Learning loss</td>
<td>Any specific or general loss of knowledge and skills (including socio-emotional) or reversals in academic progress</td>
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<tr>
<td>Extent of learning loss</td>
<td>Depth and breadth of loss of knowledge and skills across the student population</td>
</tr>
<tr>
<td>Catch-up programme</td>
<td>A short-term transitional education programme for children and youth who had been actively attending school prior to an educational disruption, which provides students with the opportunity to learn content missed because of the disruption and supports their re-entry to the formal system</td>
</tr>
<tr>
<td>Learning gaps</td>
<td>Relative performance of individual students—i.e., the disparity between what students have actually learned and what they were expected to learn at a particular age or grade level</td>
</tr>
<tr>
<td>Formative and continuous assessments</td>
<td>Wide variety of methods that teachers use to conduct in-process evaluations of student comprehension, learning needs, and academic progress during a lesson, unit, or course.</td>
</tr>
<tr>
<td>Summative assessments</td>
<td>Assessment used to evaluate student learning, skill acquisition, and academic achievement at the conclusion of a defined instructional period—typically at the end of a project, unit, course, semester, program, or school year</td>
</tr>
<tr>
<td>Distribution of learning loss</td>
<td>Consistency with which learning loss is affecting the student population (including whether certain vulnerable groups are more affected than others)</td>
</tr>
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</table>

Source: The Glossary of Education Reform; INEE Key Programme Definitions