









The problem Why it is important



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The response Framework and practices



The checklist Summary of actions

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Lessons learned



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## Introduction

- → Context, objectives, structure of this document
- → The focus of this chapter is on remote learning
- → How can this chapter be used?
- → Remote learning strategy key considerations





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## Context, objectives, structure of this document





### Context Objective

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

The goal of these chapters is to support countries in their K–12 educational response to COVID-19 by providing practices and examples, concrete steps for intervention, and tactical action checklists. This particular chapter focuses on the topic of remote learning.

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#### **Structure**

This chapter contains the following sections:

- The problem why it is important: Defining the chapter's topic and providing context for the challenge at stake
- The response framework and practices: Providing a framework of response including practices from other country responses in previous crises or during COVID-19
- The checklist summary of actions: Synthesizing the framework into a series of tactical actions that a country can take to prepare and implement its response
- Case studies lessons learned: Providing case examples from other countries' response during COVID-19 or other crises, including context, approach, impact and key learnings

While treated as a standalone topic in this chapter, remote learning is intricately related to other parts of the response. In particular:

- 2. Remote learning platforms: Remote learning strategy informs which platforms to prioritize and is informed by the remote learning platforms that are relevant to objectives and needs as well as available in the context
- 3. Planning to reopen safely (health and safety): Remote learning will be key to learning continuity and minimizing learning disruptions throughout the various phases of school reopening and access to/engagement in remote learning should be key in determining which students are prioritized in returning to school.
- 4. Re-enrollment: Remote learning strategy can have an impact (positive or negative) on re-enrollment rates and their speed
- 5. Remediation: Improving coverage and quality of remote learning will be critical for reducing the time and resources needed for remediation
- 6. Resurgence planning: The level of remote learning capabilities and effectiveness needs to be considered in resurgence planning
- **7. Hybrid learning:** Remote learning capabilities and effectiveness are a critical component in providing options for effective hybrid learning options
- **8. Recommitment and reform:** Possibility of building upon remote learning and education technology capabilities developed during the pandemic to improve longer-term teaching and learning strategies and improve participation of the most marginalized student groups
- **9. Organizing for the response:** The organization of remote learning solutions should be coordinated with other aspects of the response through a coordination response team

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## The focus of this chapter is on remote learning

### **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

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OPEN (+)

### 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

### 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

#### Re-enrolment

Identifying students at risk of dropout

Engaging students, parents and communities to ensure all students are back to school

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#### Remediation

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

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### **Hybrid learning**

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

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#### Recommitment and reform

Identifying longer-term implications of the crisis

Rethinking the new education system and reforming accordingly

### Organizing for the response

Defining a new architecture to plan, coordinate, and manage stakeholders and external partnerships

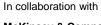
Developing the required capabilities for an effective response

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## 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 organizing remote learning strategies in your school system
- 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 remote learning

# Principal or teacher

- Reading the problem statement to validate that the chapter is relevant to your school system
- 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 on the key steps that countries take for remote learning
- Looking through relevant case studies to understand how school systems tactically put in place remote learning models

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













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## Remote learning strategy key considerations (1/2)

This chapter addresses how educational systems can **develop and continuously improve remote learning capabilities** to ensure learning continuity and support during school closures caused by COVID-19. It includes an overview of the challenges caused by school closures, a remote learning framework for education systems, and a checklist of actions to take. The chapter is platform-agnostic and does not provide guidance on how to select specific software(s) or provider(s).

### The problem

At its peak, school closures due to the COVID-19 pandemic affected approximately 1.6 billion learners. Many education systems responded by rapidly setting up remote learning systems to provide learning continuity; however they faced numerous challenges in doing so:

- Students not having have access to the internet or certain devices; concerns about student safety / privacy online
- Teachers being unfamiliar with remote-learning solutions; difficult adjusting subjects or learning activities to remote learning formats
- Solutions being unevenly distributed by age, subject, and / or language, with considerable long-term costs even if they are provided initially for free
- Education-system decision making is uneven across administrative levels, and systems are facing limited budget, digital maturity, and operational capacity

Given the uncertainty over the progression of the pandemic, systems now face the challenge of continually improving their remote-learning capabilities for the next academic year. Even in systems that have mostly returned to in-person or hybrid learning, a segment of the population will still require a remote approach, and every system would need to be ready to flip back to a remote model in case of resurgence.

### The response

Creating an effective remote learning strategy involves an iterative approach with four steps: understand and envision, decide and design, enable and execute, and monitor and adjust.

### 1. Understand and envision

This step involves setting the parameters of the remote learning strategy. One piece of this is aligning leadership on the **guiding principles** for the remote learning strategy and making them aware of the trade-offs in the speed and coverage of the rollout and pacing of students' study. Here it is also relevant to consider how the overarching strategy will be tailored to students' needs. The other critical component is assessing the system's current **digital infrastructure** (internet, device access), **student and teacher digital capabilities**, and **budget availability**.

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## Remote learning strategy key considerations (2/2)

### 2. Decide and design

Once the parameters are set, the next step is to create an integrated strategy for remote teaching, practice, and feedback for each grade-level and subject taught. Although these decisions are interwoven, they can be broken down across each step of the teaching process. System leaders need to ask a series of questions:

- How can we **communicate new assignments** and information to students? (mail/drop-off, TV/radio, email, online platform, adaptive software, live video conference)
- How can we teach new concepts remotely? (paper textbook, TV/radio program, unstructured supplementary service data device, recorded videos, adaptive software, live video conference)
- How can we **practice skills** remotely? (paper textbook/worksheets, non-adaptive software, adaptive software, live video conference with small groups)
- How can provide we **feedback and coaching** remotely? (physical notes, email/message boards, online platform, adaptive software, live VC)
- How can we **adjust staffing models** to optimize for remote learning, freeing up excellent instructional teachers to lead larger classes and other teachers for small-group facilitation and connection?

#### 3. Enable and execute

Rolling out a remote learning strategy involves engaging teachers, parents / families, and students and equipping them for success. This endeavor is not a one-time process—it will involve ongoing communication and training at every level:

- For **teachers**: training and accompaniment to deliver remote learning and support students; for example, technical training on remote solutions, instructional training, student engagement, and peer-learning; and initiatives to support mental health during this challenging period
- For **parents and families**: equipping them to support their students and maintain community engagement; for example, providing them with a series of tips and tricks to support their students in remote learning
- For **students**: ensuring access to remote learning (devices, internet), ensuring engagement and retention, and addressing well-being needs across spiritual and emotional, cognitive and social, and physical dimensions

### 4. Monitor and adjust

Depending upon the duration of remote learning, education systems have a series of policy choices to make around assessments and grading—whether to delay, adapt, or cancel assessments, and how to grade when assessments are cancelled. To continuously improve remote learning, systems can develop and monitor key indicators to assess adoption rates and effectiveness (e.g. satisfaction, test scores, equity). System leaders can then use the findings to inform tactical and structural adjustments across each of the design and execution choices above.



02



# The problem

Why it is important

- Definition of remote learning
- → Throughout the first quarter of 2020 many governments closed their schools temporarily in response to COVID-19 spread
- → The disruption in learning caused by school closure is not uniform across age groups or subjects
- Depending on how quickly the virus is controlled, remote learning may be limited to the spring of 2020, or may extend as far as fall 2021
- → However, educational systems and schools, particularly in certain countries, face significant challenges in setting up remote learning systems



# Definition of remote learning

Learning that occurs when the **learner** and the **instructor**, or **source of information**, are **separated physically** and hence cannot meet in a traditional classroom setting – it includes "online learning" as well as lower-tech remote learning options (e.g., TV, radio, mail)"



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The problem

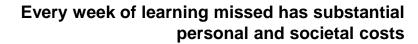
Throughout the first quarter of 2020 many governments closed their schools temporarily in response to COVID-19 spread

Countrywide school closure

Local school closure

COVID-19 school closures at point of maximum closures

April 15, 2020





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Countrywide school closures

6

Countries implemented localized school closures

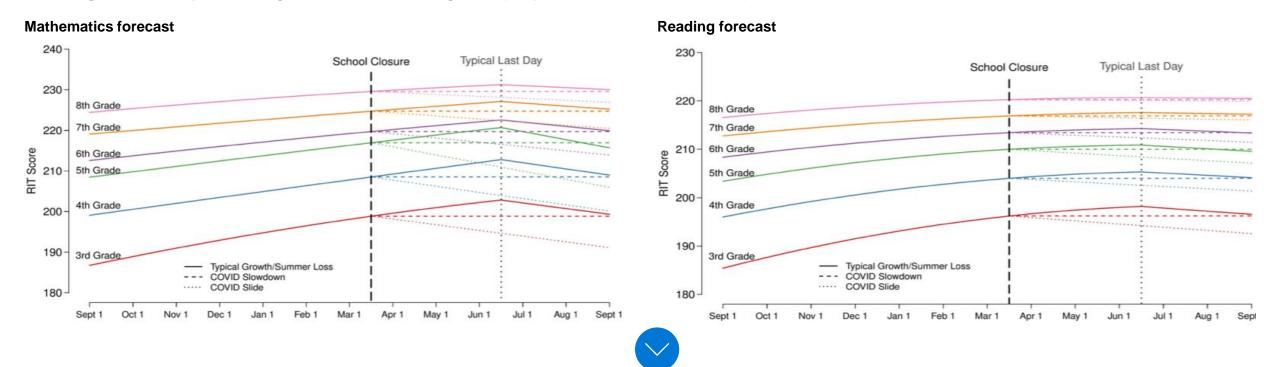
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Children affected

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# The disruption in learning caused by school closure is not uniform across age groups or subjects

The longer the disruption, the greater is the learning loss (Projections based on US data<sup>1</sup>)



## Some groups of students are disproportionately affected

Younger students tend to have quicker academic growth and as a result face higher risks of severe learning loss from school closures

Vulnerable students (e.g., children of parents who do not speak the language in which children are taught) who are less likely to have support at home for learning are also at higher risk of severe learning loss

<sup>1.</sup> Using anonymized data of 5 million third- to eighth-grade students in 16,824 schools from across the US in the 2017-2018 school year Source: THE COVID-19 SLIDE: What summer learning loss can tell us about the potential impact of school closures on student academic achievement

Remote learning In-person or hybrid learning

# Depending on how quickly the virus is controlled, remote learning may be limited to the spring of 2020, or may extend as far as fall 2021

AS OF AUG 25th 2020

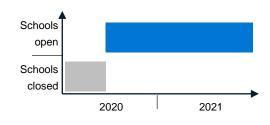
## **Epidemiological situation**

#### **Scenarios**

1 Virus spread controlled

### **Education disruption**

### Timeline



### Description

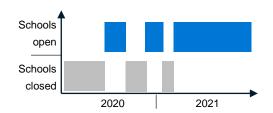
The academic year is disrupted for a period of time and pursued remotely but then returns to face-to-face

Extra learning programs and next academic year courses are able to operate face-to-face but with new health controls in place

Contingency plans are required in case of virus resurgence

Final year assessments are delayed and/or disrupted

Virus spread initially controlled but followed by local and regional virus resurgence



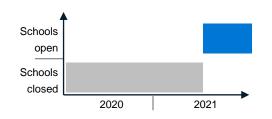
Remote and face-to-face delivery fluctuate through 2020 and potentially into 2021, with high degree of regional variability

Teaching returns to face-to-face, but ongoing rolling closures in response to local and regional resurgences disrupt education through 2020 and perhaps beyond

Final year assessments are delayed and/or cancelled

Remote learning is critical for learning continuity across all three scenarios

3 Virus spread not controlled until vaccine available



Education remains mostly remote through 2020 and into 2021 – until vaccines are broadly available

Assessments, grading, and progression are significantly disrupted



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# However, educational systems and schools – particularly in certain countries – face significant challenges in establishing remote learning systems

NOT EXHAUSTIVE

### Category

### Challenges

#### Students



Most students do not have access to the technological (e.g., devices, internet), intrinsic (self-regulation, autonomy) or social (e.g., a safe quiet place to study or parental support) prerequisites for remote learning



There are difficulties and uncertainties around ensuring student data protection and safety online

### For some countries the challenge is even greater

In sub-Saharan Africa, only 11% of households have computers, only 18% have a household internet connection<sup>1</sup>

## Teachers and curriculum



Many teachers are not familiar or properly trained on remote learning solutions and are constrained to fulfilling soft elements of teaching (e.g., social rules, empathy) while remote, and might also not have access to the technological and social prerequisites for remote learning



Converting subjects pedagogy and learning processes into remote learning format and addressing subjects reliant on physical interaction (e.g., arts, sports) into remote learning formats

Shortage of qualified teachers – e.g., shortage of 17 million qualified primary and secondary school teachers in sub-Saharan Africa in standard qualifications – shortage greater for teachers qualified for remote teaching<sup>2</sup>

## Technology solutions



Solutions are often subject and/or age specific, leading to a complex and fragmented technology landscape and not available in all instruction languages



Many solutions are **temporarily free**, but will need to be **paid for in the future**, creating long-term implications

**Limited focus on digital content** (e.g., total size of e-learning for Africa is <2% of total global market) which exacerbates the traditional challenge of providing teaching/learning materials<sup>3</sup>

### School system



Decision-making power is fragmented across central, middle layer, and school level (no school autonomy) and there is little time to rigorously assess or trial an overwhelming choice of solutions



Limited budget, digital maturity, and operational capacity to enable a wide choice of solutions to be implemented and scaled Most education systems in low- and middle-income countries are underfinanced, leading to higher private schooling – private expenditure accounts for 38% of spending vs. 19% in high-income countries<sup>4</sup>

- 1 Global Partnership for Education
- 2 UNESCO, 2016, "The World needs almost 69 million new teachers to reach the 2030 Education goals"
- 3 Arizton Advisory and Intelligence, 2020, E-learning Market Global Outlook and Forecast 2020-2025
- 4 Brookings Edu, Coronavirus and challenging times for education in developing countries



03



# The response

Framework and practices

- → Remote learning involves a 3-step approach supported by continuous monitoring and adjustment
  - → Understand and Envision
  - → Decide and Design
  - → Enable and Execute
  - → Monitor and Adjust





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# Remote learning involves a three-step approach supported by continuous monitoring and adjustment

- Understand and Envision:
  Establish a clear vision and create preconditions for success
  - Define the **vision** for **remote learning** strategy and key guiding principles
  - Ensure overarching strategy is tailored to individual students' needs
  - Assess the current state of digital infrastructure, budget and capabilities (e.g., student and teacher access to broadband and devices, teacher and system capability)

02

**Decide and Design:** Design remote learning solutions

- Create a strategy for remote teaching across different ages and subjects
- Determine how to communicate school assignments & information to students & parents
- > 2C Determine how to teach students content remotely that is new to them
- Determine how students will practice skills remotely
- Determine how teachers will provide formative feedback and coach students remotely
- Define staffing model to support chosen remote learning strategy

03

**Enable and Execute:** Rollout remote learning solution and actively engage key stakeholders

- Launch remote learning solutions quickly and improve iteratively
- > 3B Train and accompany teachers to deliver remote learning and support students
- Engage parents and families and train them on the devices
- Support students in their learning and well-being during the crisis, with a focus on the most vulnerable students

04

Monitor and Adjust: Continuously improve in response to feedback **4**A

Make critical policy decisions around assessment and grading, curriculum changes and level of centralization

**>** 4B

Develop and monitor **key indicators** of adoption and effectiveness (e.g., satisfaction, test scores and equity) to **ensure access, quality** and **equity** 

> 4C

Launch continuous improvement process





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# Remote learning involves a three-step approach supported by continuous monitoring and adjustment

- Understand and Envision:
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- Decide and Design: Design remote learning solutions
  - Create a strategy for remote teaching across different ages and subjects
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- Make cri around a grading,
- Make critical policy decisions around assessment and grading, curriculum changes and level of centralization
- Develop and monitor **key indicators** of adoption and effectiveness (e.g., satisfaction, test scores and equity) to **ensure access**, **quality** and **equity**
- > 4c Launch continuous improvement process



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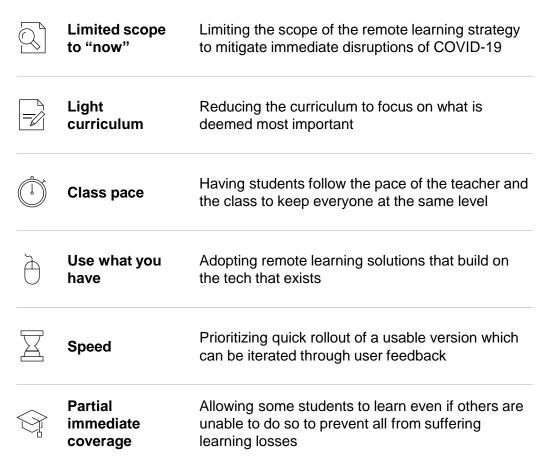


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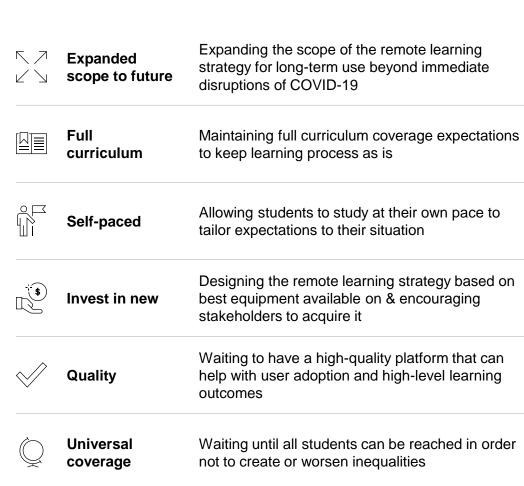
The response > Remote learning involves a 3-step approach supported by continuous monitoring and adjustment > Understand and Envision

## 1A When setting a vision for remote learning, leaders can consider balancing between key tradeoffs ...

## Balancing between ...







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The response > Remote learning involves a 3-step approach supported by continuous monitoring and adjustment > Understand and Envision

# 1A ... and fully grasp the role a remote learning strategy can play in mitigating consequences of school closures







School closure during pandemics leads to a series of challenges ...



... which are difficult and costly to address ...



... and can be mitigated through remote learning and complementary activities (examples during Ebola)

Loss of student learning and higher remediation needs when returning to in-person lessons Remediation efforts have high investment costs and are hard to operationalize

NGO-led Child to Child Talk, a radio program in Sierra Leone, contributed to children's learning

Disengagement and high student dropout rate

Re-enrolment campaigns and 2nd-chance programs have initial investment costs

Government-led emergency radio program in Sierra Leone helped sustain children's connection to education

Drop in student well-being<sup>1</sup>

Psychosocial costs to implement

Community-led psychosocial arts program in Liberia lowered instances of mental health problems in children

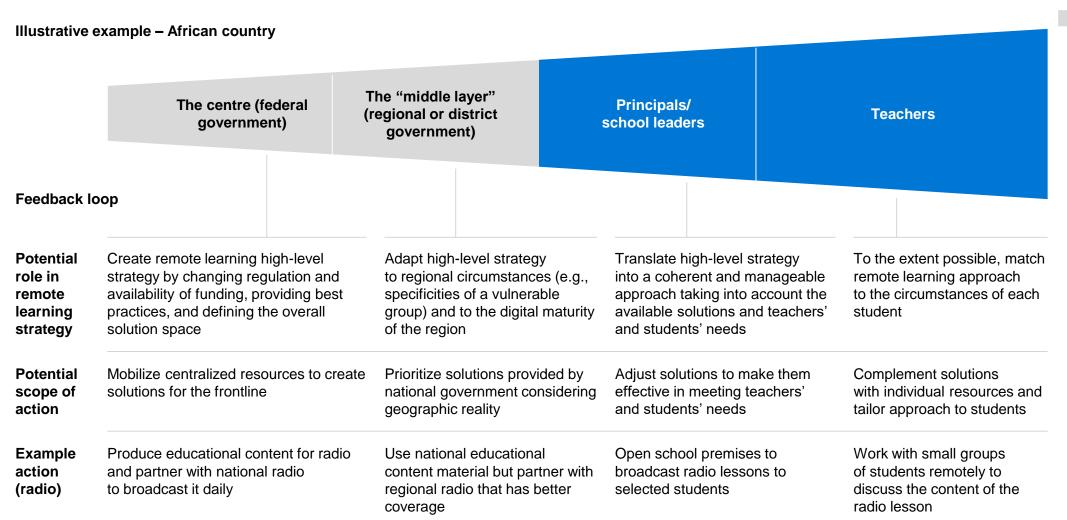
Perceived inexistence or ineffectiveness of remote learning strategy can lead to an increase in pressure to reopen schools earlier

Government

Schools

The response > Remote learning involves a 3-step approach supported by continuous monitoring and adjustment > Understand and Envision

# 1B Each system has a different decision-making structure, but all levels could collaborate to develop and implement a coherent strategy that is tailored to students' needs



# There is **no one-size- fits-all approach**

Given significant differences in the degree of centralization of education systems, decisions will be made at different levels across different systems

This toolkit lays out the full range of decisions that need to be made such that each level of the system can identify and tailor the elements most relevant to them

# 1C After setting the vision, school systems can establish a baseline of where they currently are by assessing four dimensions



Systems can leverage a variety of data sources to baseline remote learning readiness



Surveying families to assess whether students are ready for remote learning



Teachers contact with parents through e-mail

Phone calls

Teachers call families and students



Schools communicate with parents and students over WhatsApp groups



Schools leverage existing online information to collect data



There are four dimensions that can be assessed to understand the baseline



### Countries can focus on different metrics to assess these dimensions

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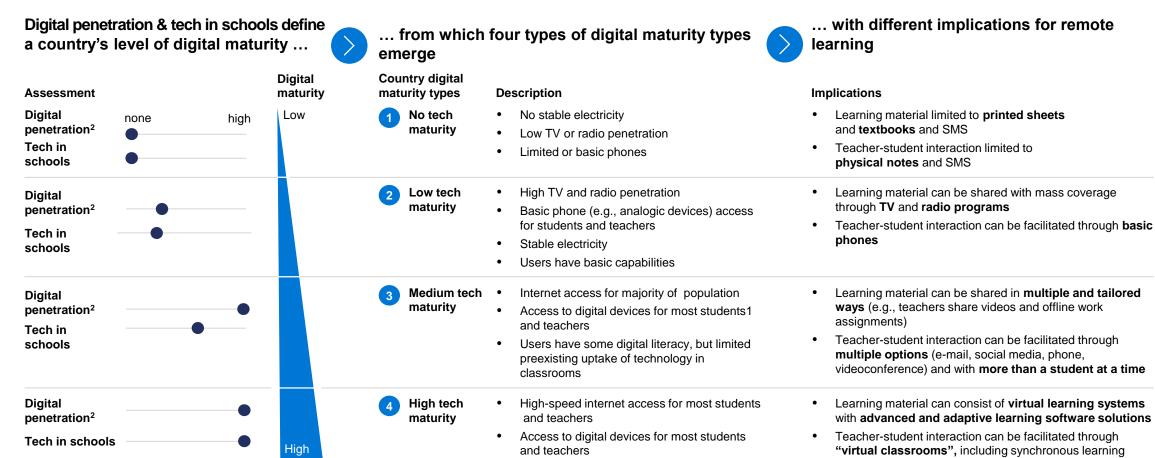
	What to assess		
	Guiding question	Example metric	
<b>Digital infrastructure –</b> stability and maturity of infrastructure	How <b>stable</b> and <b>available</b> is <b>basic digital infrastructure</b> ?	% home with stable electricity Availability of broadband Availability of mobile network connectivity	
User capability – user device access and usage capability	How accessible are devices to our students and teachers?	% users with access to a basic device (e.g., analogical phone)	
		% users with access to an advanced device (e.g., smartphone, laptop, tablets)	
		% users with access to TV and/or radio	
	What capabilities do our teachers and students have to use the devices?	% teachers trained on specific platforms	
		% parents able to provide children basic tech support	
Edtech platforms availability – portion of curriculum covered by remote learning solutions, and existing software or other resources	How much learning content is available or can be available remotely?	% of content ready for dissemination via. radio and/or TV % of subject curriculum online user review score for software	
Funding capacity – budget availability and partnership opportunity	What is our <b>existing budget</b> ?	Spend per student	
partition of the partit	Can we <b>leverage</b> partnerships to expand?	No. of tech companies in country No. civil society actors who can support No. of grants available	

through videoconferences

# 1C Depending on the digital infrastructure and user capability, school systems will have different levels of digital readiness and as a result different options for remote learning

Significant preexisting availability and use of

curriculum-aligned education technology solutions



Level of tech maturity can vary within and across countries

<sup>1.</sup> Availability of a digital device for use of the student while at home (if parent works from home and requires the device then this would not count as available)

<sup>2.</sup> Digital infrastructure + user capability



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# Remote learning involves a three-step approach supported by continuous monitoring and adjustment

- Understand and Envision:
  Establish a clear vision and create pre-conditions for success
  - > Define the vision for remote learning strategy and key guiding principles
  - Ensure overarching strategy is tailored to individual students' needs
  - Assess the current state of digital infrastructure, budget and capabilities (e.g., student and teacher access to broadband and devices, teacher and system capability)

02

**Decide and Design:** Design remote learning solutions

- Create a strategy for remote teaching across different ages and subjects
- Determine how to communicate school assignments & information to students & parents
- > 2c Determine how to teach students content remotely that is new to them
- Determine how students will practice skills remotely
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- Define staffing model to support chosen remote learning strategy

- Enable and Execute: Rollout remote learning solution and actively engage key stakeholders
  - Launch remote learning solutions quickly and improve iteratively
  - > Train and accompany teachers to deliver remote learning and support students
  - > 3c Engage parents and families and train them on the devices
  - Support students in their learning and well-being during the crisis, with a focus on the most vulnerable students

- Monitor and Adjust:
  Continuously improve in response to feedback
- > 4A

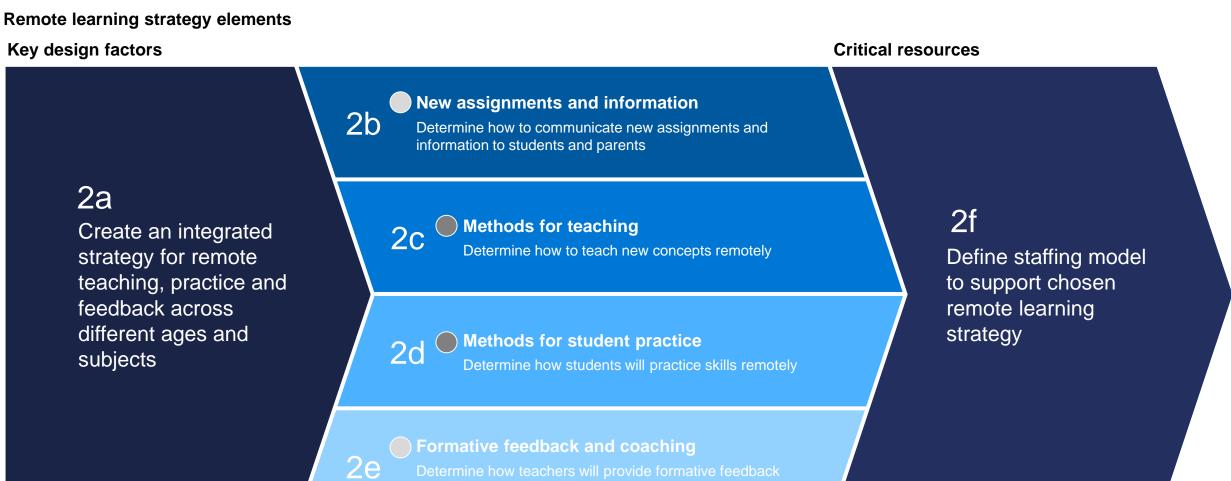
Make critical policy decisions around assessment and grading, curriculum changes and level of centralization > 4B

Develop and monitor **key indicators** of adoption and effectiveness (e.g., satisfaction, test scores and equity) to **ensure access**, **quality** and **equity** 

> 4C Launch continuous improvement process

# 2 The remote learning strategy can take into account key design factors, core learning activities,

and critical resources Type of learning activities Communication activities Content activities





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The response > Remote learning involves a 3-step approach supported by continuous monitoring and adjustment > Decide and Design

# 2A There are multiple factors that influence the choice of platform, most especially digital readiness, student age, and academic subject stand out



#### Context

The **choice** of which platform and methods to use across the sequence of activities of instruction, practice, and assessment can take into account three contextual factors: **digital readiness**, **student age**, and **academic subject** 



### **Key factors**

**Digital maturity** 



### **Guiding questions**

What level of digital infrastructure is there?

What are students' and teachers' capabilities in using basic and advanced devices?

How much technology is used in schools?

### Considerations

School systems with higher levels of digital readiness have a broader mix of solutions while those with less digital readiness are constrained to offline/low-tech options

#### Student age



What level of support do students require to be able to learn remotely?

For how many hours are students able to study?

How long should they spend on screens?

Remote learning solutions tend to be more **effective** for **older groups** of students who can **work autonomously** and are able to engage for a **long period**<sup>1</sup>

Other factors to be considered are student gender, disability, language and marginalization





To what degree is the subject dependent on physical equipment, space, or interaction?

To what degree does the learning revolve around practical exercises to develop skills?

How accessible are remote solutions for this specific subject?

Some subjects (e.g., sports and arts) are less suitable for remote learning than others (e.g., mathematics, coding) due to the nature of teaching and practice, the dependence on physical interaction, and the availability of platforms in the context

# 2B When teaching remotely, the first step is communicating to students new assignments and information on how remote learning will work



ILLUSTRATIVE EXAMPLES

NOT EXHAUSTIVE

## There are six combinable solutions for schools to communicate to students their assignments and how remote learning will work

Digital maturity	Solution	Description	Pros	<b>•</b>	Cons	Requirements		
Low	Mail or drop- off/ pick-up in person	Teachers or post-office drops paper packets with assignment instructions	<ul><li>Minimizes data privacy concerns</li><li>No screen time</li></ul>		<ul><li>Time consuming</li><li>Increases exposure to the virus</li></ul>	Teachers or students with availability for movement or working postal system	*	France Cameroon
	TV/radio program	Teachers describe the relevant information and assignments through TV or radio	Centralized effort		<ul><li>No tailoring to students' situation</li><li>No teacher interaction</li></ul>	Students have access to TV and/or radio	* * * * * * * * * * * * * * * * * * *	Morocco Georgia
	Email, message boards or text messages	Teachers send students an e-mail or message with the relevant information, assignment, and instructions	<ul><li>Does not require any ne platform</li><li>Intuitive for parents</li></ul>	€W	<ul><li>Little interaction</li><li>Hard to keep track of multiple messages</li></ul>	Students with access to Wi-Fi and devices	_	Germany
	Online platform	Teachers upload the assignments with relevant instructions into a collaboration platform that students can access	<ul> <li>Single point for all assignments</li> <li>Ability to track submissing and link to adaptive software</li> </ul>	ion	<ul> <li>Interaction solely through platform</li> <li>Complexity of multiple logins and box-ticking</li> </ul>	Students with access to Wi-Fi and advanced devices Systems with platform license Teachers trained on platform	* <b>_</b>	Chile Brazil
	Adaptive software program	Software guides student to which assignments or content to focus on	Tailored assignments for needs of student		No teacher accompaniment	Students with access to specialized platforms across specific subjects and age groups	-	Finland
High	Live video- conference	Teachers and students interact through video-conference and teachers explain and share the assignments	<ul><li>Interactive</li><li>Most similar to in-person teaching</li></ul>	n	<ul><li>High tech requirements</li><li>Needs parental support</li><li>Lack of timing flexibility</li></ul>	Students with access to technology and parents available to help at the time of scheduled videoconferences	<b>©</b>	Finland Costa Rica

# 2C The chosen methods for teachers to transmit new concepts remotely will have implications for student engagement, teacher workload & level of student autonomy ILLUSTRATIVE EXAMPLES



NOT EXHAUSTIVE

## There are seven combinable solutions for teachers to transmit new concepts remotely to students

igital maturity	Solution	Description	Pros	Cons	Requirements
Low	Paper textbook	Teachers indicate which pages in the textbook the student should read	No tech	<ul> <li>Student needs to be autonomous No live Q&amp;A</li> </ul>	Access to textbooks in each home Colom  Argent
	TV/radio program	Teachers teach live or recorded classes through TV and radio programs	<ul><li>Low cost per student</li><li>High reach</li></ul>	<ul><li>One way only</li><li>Limited tailoring possib</li></ul>	Students have access to TV and/or radio  Quality programs exist or can be created in timely fashion  Argent  Croatia
	devices with students interacting through their basic device  Recorded videos – from pre-existing source (e.g., Khan Academy) and share with students recorded videos source  Recorded  Recorded  Teachers record videos of themselves system  Teachers record videos of themselves tagging the place and share it with the system to add to the process of the place and share it with the system to add to the process of the place and share it with the system to add to the process of the place and share it with the system to add to the process of the place and share it with the system to add to the process of the place and share it with the system to add to the process of the place and share it with the system to add to the process of the place and share it with the system to add to the place and share it with the system to add to the place and share it with the system.	<ul><li>Complex to set up</li><li>Limited functionality</li></ul>	System for basic phones adjusted Ugand for education Afghar		
		(e.g., Khan Academy) and share with	Ability to scale across	<ul> <li>Could be gaps with curriculum</li> <li>Less direct 'relatability' child's own teacher</li> </ul>	There is quality content online that matches the curriculum and school's preferred teaching methods  Russia
		watch it and at what pace  • Students' social connection	May be of less quality	Teachers have technology and capability Brazil to record videos  Bhutar	
	Adaptive software program	Software shares new content with students	<ul> <li>Teaching tailored to the needs</li> </ul>	<ul><li>High tech requirements</li><li>Difficulty to re-integrate class pace</li></ul>	platforms corose enseitie subjects and
-ligh	Live video- conference	Teachers teach live through a video conference platform as if they were in a classroom	Students feel connected	<ul><li>Tiring for teachers and for students (Zoom fation</li><li>Lack of timing flexibility</li></ul>	Costo

# 2D Student familiarity, level of group interaction, and degree of tailoring are factors when choosing methods for students to practice skills remotely



ILLUSTRATIVE EXAMPLES

NOT EXHAUSTIVE

## There are four combinable solutions for students to practice skills remotely

Digital matur	Paper textbooks and worksheets	Description Students complete exercises in textbooks and worksheets alone	<ul> <li>Pros</li> <li>Familiar method</li> <li>Enables focused deep learning</li> <li>Lack of screens</li> </ul>	<ul> <li>Cons</li> <li>No group learning</li> <li>Additional logistics for teacher to review</li> </ul>	Requirements  Student who can work autonomously	Costa Rica France
	Non-adaptive software program	Students practice on a basic, widely available software (e.g., writing an essay on a word-processing program)	<ul> <li>Accessible technology</li> <li>Suitable for some subjects<sup>1</sup></li> </ul>	<ul><li>Not responsive to the students' needs</li><li>Whole class moves at same pace</li></ul>	Students and teachers with access to basic devices	Egypt  Ethiopia
	Adaptive software program	Students interact with sophisticated software that adjusts content and exercises according to their needs	Tailored to the individual needs of students	<ul> <li>High tech requirements</li> <li>Difficulty to re-integrate into class pace</li> <li>Does not work for certain subjects</li> </ul>	Students with access to specialized platforms across specific subjects and age groups	Finland
	Live video- conference with small group	Students collaborate together via video conference	<ul><li>Interactive</li><li>Promotes social connection</li></ul>	<ul> <li>High tech requirements</li> <li>Requires support from parents</li> <li>Requires scheduling</li> </ul>	Students with access to tech and familiarity in using it	South Africa Finland

<sup>1.</sup> Where ability to create longer-form content like essays

# 2E The choice of method for teachers to provide feedback and coaching remotely has implications for teacher workload and the level of feedback granularity



## There are five combinable solutions for teachers to provide feedback and coaching remotely to students

Digital maturity	Solution	Description	Pros	Cons	Requirements	
Low	Physical notes	Teachers return physical papers to students with feedback on their learning	<ul> <li>Interaction with individual families</li> </ul>	<ul> <li>Time consuming Increases exposure to the virus</li> </ul>	Teachers with available transportation	<b>♦</b> Brazil
	Email, message boards or text messages	Teachers send feedback to students individually through e-mails or message boards	Easy to do	<ul><li>No verbal clarifications</li><li>Time consuming for teacher</li></ul>	Students with access to basic technology	USA  Bhutan
	Online platform	Teachers upload assignments with respective feedback for students	<ul><li>Detailed feedback across worksheets</li><li>Some level of automation</li></ul>	<ul> <li>Interaction solely via platform</li> </ul>	Teachers and students with access to online platforms	Germany Bulgaria
	Adaptive software program	Students receive feedback and coaching through notifications from the adaptive software program	<ul> <li>Tailored coaching for students' needs</li> <li>Student progression well tracked</li> </ul>	<ul><li>High tech requirements</li><li>More complex for teachers</li></ul>	Students with access to specialized platforms across specific subjects and age groups	<b>Finland</b>
High	Live video- conference	Teachers segment students into small groups with the same needs or have 1-on-1 coaching through video confzerences	<ul> <li>Tailored coaching for students' needs</li> </ul>	<ul><li>High tech requirements</li><li>Time consuming for teachers</li></ul>	Teachers with time for tailored feedback and access to technology that can facilitate it	Estonia  Morocco

Solution mix

Comprehensiveness of the

solution, addresses ...

... partially both

communication &

content activities

TV and radio

programs

Core learning activities

remote learning works

The response > Remote learning involves a 3-step approach supported by continuous monitoring and adjustment > Decide and Design

feedback and coaching

## 2B School systems have several solution options to ensure their remote learning strategy 2E covers their core learning activities

Type of learning activities — Communication activities — Content activities



NOT EXHAUSTIVE

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Communicating how	Teaching new concepts	<b>Enabling student practice</b>	<b>Providing formative</b>

remotely

	Solution, addicesce		Temote learning works			—————		
	all learning activities	Paper-based materials	Teachers deliver physical notes with instructions	Students read textbooks	Students complete paper based worksheet	Teachers deliver physical notes with feedback		
		Live video- conference	Teachers explain assignments through VC	Teachers deliver class through VC	Students work in small groups through VC	Teachers coach small groups or 1-on-1 through VCs		
		Adaptive software program	Program guides students to current assignments	Program shares new content with student	Students complete assignments in the program	Students receive feedback from the program		
	communication learning activities	Online platform	Teachers upload instructions and assignments			Teachers upload feedback		
n		Email	Teachers send emails with instructions			Teachers send email with feedback		
	content learning activities	Recorded video created		Teachers share video				
		Recorded video leveraged		Teachers share video				
		Nonadaptive software program			Students complete non-adaptive assignments			
		Offline devices		Students access content through offline device				

Teachers describe assignments Teachers describe concepts

- A complete remote learning strategy needs to have at least one solution for each learning activity
- Some solutions cover all learning activities while others would need to be used in conjunction with another to cover all of the activities
- Choosing only one solution is likely to be insufficient in addressing all of the needs of all of the students, but choosing too many can overwhelm teachers and students
- Having a mix of solutions enables benefiting from their strengths while mitigating their weaknesses
- The chosen solution mix can either be complementary with very distinct options (e.g., paper-based materials complemented by e-mail, recorded video, and applications with nonadaptive software), or reinforced by similar options (e.g., live VC, recorded video, and applications with online adaptive software)



# 2F School systems may consider deploying new staffing models to more effectively deliver remote learning



Each staffing model has different advantages and disadvantages







## All teachers assume largely the same responsibilities

#### Description

Each teacher has end-to-end ownership of the course, including providing asynchronous and synchronous instruction, remediation services, instruction and remediation services, as well as managing classrooms, monitoring attendance, and assessing performance

Other staff may assist with coordination and outreach as needed (e.g., librarian helps with weekly family check-ins)

### Classroom teachers are supported by aides

Classroom teachers are supported by a teaching aide who oversees administrative work (e.g., monitoring student engagement, calling parents)

Teachers are responsible for general instruction for all and additional remediation as needed for select students

For K-4 students, teachers may drive instruction across all subjects; for older students, teachers may specialize by subject

## Educators work in teams of three, each with a specific role

Teachers work in teams, dividing responsibilities and coordinating daily on instruction and needs of specific students

Instructor is responsible for live/recorded lessons

Interventionist focuses on supporting students who need remediation and additional support

Facilitator completes grading, monitors student engagement data, and communicates with families



Clear point of contact for teachers and parents

Greater autonomy for educators

Holistic view of student engagement/achievement Increased flexibility to adapt to evolving scenarios Ability for teachers to more closely focus on preparation and delivery of content

Increased capacity to engage with students and families

Targeted scope and set of responsibilities for each educator

Increased attention to each aspect of the educational experience



Broad set of responsibilities for teachers

Teacher support for both core instruction and remediation

Hiring/designation of teaching aides required

Potential confusion regarding key point of contact

Considerable amount of collaboration time among teaching teams necessary for success

Potential confusion regarding appropriate point of contact, particularly for parents and younger students



The expectations for and assistance provided to this role should consider the specific contexts of each school system



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## 2F There are several themes to consider when designing teachers' schedules

Example considerations for high tech system

**Considerations for structuring teacher schedules** 



# Time with students

Limit length of individual lessons and combine synchronous sessions with asynchronous activities (e.g., independent work followed max 30-45 minute live lesson) to avoid fatigue, offer diverse learning experiences, and free up teachers' time to spend on other tasks

Case studies



Balance large group with small group synchronous engagement, with specific teachers providing additional small-group support to students in need of remediation

Offer flexibility in designing synchronous learning schedules (e.g., offer options to host synchronous sessions outside of typical school hours if preferred for teacher and student population)

Dedicate some time to teaching students how to use learning tools and platforms and explaining why they have been selected

Hold regular synchronous group sessions focused on community building such as regular town halls, virtual clubs and social activities.

Regularly connect with students 1:1 to assess well-being and barriers to engagement

# Time without students

**Monitor students' tool/platform utilization** as well as task completion and content mastery to ensure any barriers to learning are identified and addressed and students are progressing appropriately through the curriculum



Participate in ongoing, frequent professional development that includes formal trainings (e.g., content delivery, training on tools) as well as informal opportunities to learn from peers

Reserve blocks of time for lesson planning and curriculum development

The balance between time spent with students and other activities can vary across school systems, schools and grades

School administrators may want to develop expectations for teachers' schedules based on the school's priorities



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# Remote learning involves a three-step approach supported by continuous monitoring and adjustment

- Understand and Envision:
  Establish a clear vision and create pre-conditions for success
  - > Define the vision for remote learning strategy and key guiding principles
  - Ensure overarching strategy is tailored to individual students' needs
  - Assess the current state of digital infrastructure, budget and capabilities (e.g., student and teacher access to broadband and devices, teacher and system capability)

- Decide and Design: Design remote learning solutions
  - Create a strategy for remote teaching across different ages and subjects
  - Determine how to communicate school assignments & information to students & parents
  - > 2c Determine how to teach students content remotely that is new to them
  - Determine how students will practice skills remotely
  - Determine how teachers will provide formative feedback and coach students remotely
  - Define staffing model to support chosen remote learning strategy

- Enable and Execute: Rollout remote learning solution and actively engage key stakeholders
  - Launch remote learning solutions quickly and improve iteratively
- > 3B Train and accompany teachers to deliver remote learning and support students
- Engage parents and families and train them on the devices
- Support students in their learning and well-being during the crisis, with a focus on the most vulnerable students

Monitor and Adjust:
Continuously improve in response to feedback

> 4A

Make critical policy decisions around assessment and grading, curriculum changes and level of centralization

> 4B

Develop and monitor **key indicators** of adoption and effectiveness (e.g., satisfaction, test scores and equity) to **ensure access**, **quality** and **equity** 

> 4C Launch continuous improvement process

# 3 Implementing remote learning relies on a successful rollout of the solutions and the active engagement of stakeholders

1

### Rollout of remote learning solutions

After choosing a remote learning solution, it is necessary to plan how to communicate and launch it

3A Launch remote learning solutions quickly and improve iteratively

2

### Active support of key stakeholders

The success of the remote learning solution's rollout is dependent on the buy-in and active support of those that will use it

Schools not only ensure learning but student well-being as well, particularly for those who are most vulnerable

- Train teachers to deliver remote learning and support students
- 3C Engage parents and families and train them on the devices
- Support **students** in their **learning** and **well-being** during the crisis



Rollout of remote learning solutions

Active support of key stakeholders

Teachers Parents and families

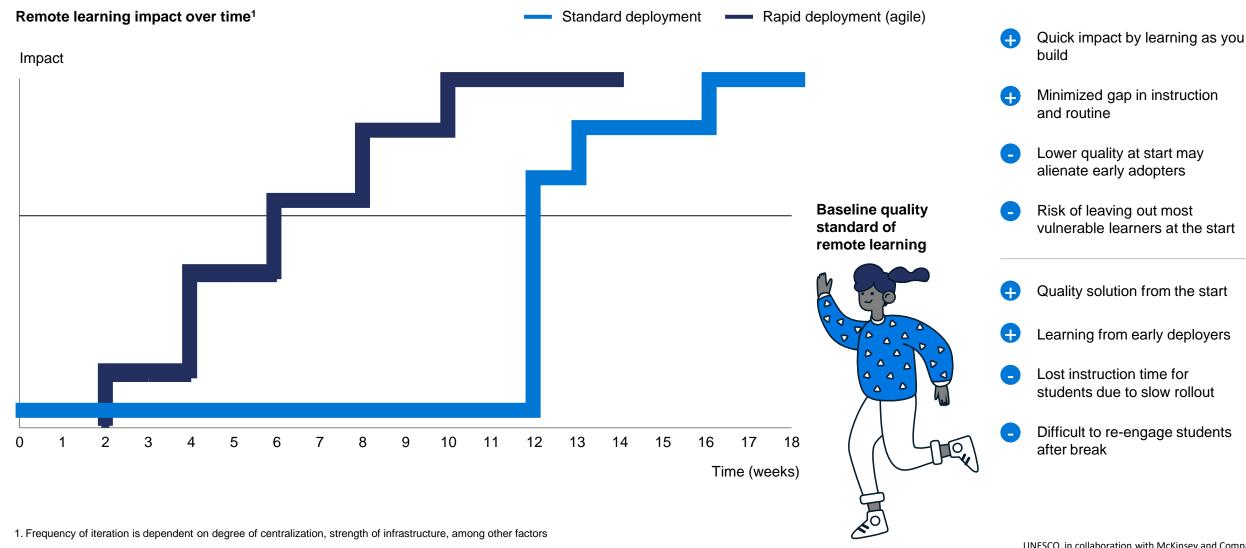
Parents and families

Students



## 3A School systems can potentially adopt a more agile approach that gets minimum viable solutions to students quicker, and may therefore reduce learning loss

**ILLUSTRATIVE** 



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## 3B Multiple initiatives could empower teachers to safely and effectively support students in their learning and well-being

Deep dive follows

NOT EXHAUSTIVE

### **Provide training**

Train teachers on using remote learning solutions (e.g., digital literacy and pedagogy webinars or toolkits)



Delivered training to teachers that focused on the application of distance education strategies and the management of interactive virtual classes<sup>1</sup>

#### Inform/communicate

Provide a one-stop platform including all the information and initiatives relating to the system (platforms, channels, programming, circulars, toll-free numbers, surveys, etc.) with frequent updates



Launched an official learning application of the Ministry of Education and Higher Education with information for teachers and other education personnel

### **Ensure health and safety**

Establish a health and safety protocol and provide the necessary equipment to teachers or teams mobilized to create content for remote learning



Designed clear health and safety protocols for teachers to ensure all protective measures are in place to continue student learning

### Increase access to necessary infrastructure

Make the infrastructure needed for remote learning available

- Access to electricity
- Access to devices
- Access to the internet



New

Zealand

Provided home internet and laptop/tablet devices to teachers and students who did not have the required infrastructure to support remote learning

#### Provide incentives

Set up communication campaigns for TV and social media that value teachers'

Set incentives for teachers to motivate and engage them sustainably



Paid an extra \$500 to teachers and school staff in remote communities to stay there over

the Easter holidays NT,

Australia

### Offer mental health support

Set up a listening unit for teachers with support from educational psychologists, associations, etc.

Set up pulse checks (mood barometers) and surveys



Launched a hotline to help people relieve mental stress over the ongoing COVID-19 outbreak: students, teachers, **China** and members of the public could call in to request help with psychological issues related to the pandemic

#### Create network of teachers

Provide platforms or other forms of communication and interaction that can enable teachers to connect, support each other and share best practices



Launched a website for teachers to share experiences, lesson plans and materials, that counts with more than 1.5 million users

#### Indonesia

1. Courses included, for example, a 4-hour course on becoming an online tutor in 24 hours and a 2 hour course on designing an online course Source: UAE (ICDE), China (Insider.com), Northern Territory, Australia (smh.co.au), Lebanon (Al-Fanarmedia.org), New Zealand (NZ Herald), China Daily), Indonesia (inovasi.or.id)



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## 3B There are several considerations about who needs to be trained on remote learning solutions, on what topics, and through which delivery methods

#### Who needs to be trained?

School leaders from various regions

Content experts (master teachers)

School teachers (could be grouped by grades)

Functional staff to support teachers and families

#### Considerations

- Assess specific leader/teacher capabilities or familiarity with remote teaching
- Develop an incentive structure for sustained engagement of teachers
- Identify facilitators for conducting training



### What topics could be covered?

Technical onboarding (new devices, platform usage)

Instructional topics (remote lesson planning, assessments, etc.)

Pedagogical topics (topic explanation remotely, skills covered, student engagement, etc.)

- Prioritize and cascade the training modules
- Develop workplan for ongoing support and ramp-up
- Assess teachers' access to technology
- Create teacher collaboration networks and/or mentorship for better support and leverage



#### How could it be delivered?

In-person training

Live streaming/online modes of interaction

Offline training material (videos, reading material)

Teacher collaboration

Ongoing coaching from master teachers

- Identify the lockdown situation in your region and prepare accordingly
- Evaluate device and connectivity needs in order to deliver effective training
- Send out required material in advance for better preparation

Faculty motivation and support is one of the most critical enablers for success in remote learning

It is important for administrators to motivate faculty on a daily basis and provide a strong feedback channel to get honest input and refine the approach for support

The process will need to be **iterative**, first with **basic training** delivered rapidly on whatever solutions are already available, then with peer **practices**, followed by **more advanced training** on platforms as they are developed

The current crisis is also an opportunity to **trial ways of teaching teachers remotely**: in Brazil a network of schools used an online platform with recorded videos of how to teach students remotely while in Kenya and Rwanda, educational programs used smartphones and SD cards with videos of teaching practices to support teacher training

The response > Remote learning involves a 3-step approach supported by continuous monitoring and adjustment > Enable and Execute

## 3B Teacher training could cover technical onboarding, instructional training, and student engagement

### Category

### Learning outcomes

## Technical onboarding

- Access and navigate the platform
- Conduct sessions, record and post assignments (screen sharing, multiple participants, etc.)
- Navigate logistics for delivering content (via mail, email, text messages, phone calls, etc.)
- Manage interactive features (breakout rooms, whiteboards, polls, etc.)
- Leverage advanced features such as data collection and analysis
- Use functional tools for teacher-to-teacher collaboration.

## Instructional training

- Create lesson plans that are flexible for both in-person or remote delivery
- Effectively deliver lessons remotely and test understanding
- Create and administer assessments, ensuring student equity
- Balance modes of student engagement (synchronous vs. asynchronous distribution)
- Gamify student learning and conduct nonacademic activities
- Consider adaptation of pedagogical approach given remote learning solutions

## Student engagement

- Engage students remotely through different models (e.g., projects, discussions)
- Build classroom culture remotely (including classroom norms, feedback culture)
- Change language, activities and emotional support based on student requirements
- Motivate students in a remote environment
- Establish practices for family engagement across hybrid learning environments
- Be culturally sensitive and acknowledge implicit bias
- Develop processes for student collaboration

It is essential for the training to build on teachers' experience and their knowledge of what is feasible or not given their student' characteristics



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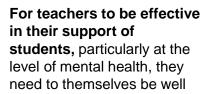
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## 3B For teachers to be effective in their support of students, they might need mental health support to address their own challenges during the pandemic

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OT EXHAUSTIVE

#### Context



Sending regular surveys can be a way to check their mental and emotional state and identify special needs

School leaders can also be proactive in initiating the conversations and helping teachers understand some of the challenges they might be feeling



#### **Challenges**



#### Workload

Teachers may struggle to separate their professional from personal life during this period. As they try to accommodate different student needs, they could end up extending their working hours, waking up early to respond to emails received during the night, or delaying going to sleep to adjust their lesson plan to online environment



#### Pressure for students' well-being and success

Teachers can be burdened by feelings of personal responsibility for the students' loss of learning and consequential impacts in their life, and for students' mental and physical well-being during this period, becoming aware of sad realities of financial distress, child abuse, and lack of adequate support for special needs



#### **Personal life**

Teachers are not immune to the personal impacts of the pandemic – they potentially face stress from the burden of isolation, the changed routine, confinement in their home, fear and anxiety over the virus, family life, etc.



### **Potential initiatives**



**Empower teachers** to be equipped to address the current needs of their students



**Adjust remote learning solutions,** taking into account the impact on teacher workload



**Clarify expectations** about the teachers' role and what is outside their purview, and that it is okay to not solve all the students' problems



**Set up buddy systems** that enable teachers to be in touch with another and support each other



**Share mental support resources** where teachers can find trained, confidential support for the challenges they are facing



Create an environment of support and authenticity, by allowing people to be vulnerable and removing stigma



**Enable teachers to take time off,** if appropriate, to be able to rest, refresh and return reinvigorated



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## 3C Schools have multiple options to support parents and families, who play a key role in ensuring education continuity

Deep dive follows

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	•		Deep dive follows NOT EXHAUSTIV			
Dime		sion of support	Description			
	1	Develop capability	Create and disseminate learning guides for parents and families on how to support the students Establish "IT coaching" for those in need on how to use the devices	Singapore	Sent parents a kit to prepare them to supervise the education of children at home	
	P	Inform/ communicate	Make sure information and initiatives related to the system reach parents using multiple channels (radio, television, SMS, platforms, programming, circulars, toll-free numbers, surveys, etc.) with frequent updates	The Gambia	Launched a #continuityoflearning campaign to inform parents and students to stay at home as lessons would be through TV and radio and sharing health best practices	
		Raise awareness	Make sure parents and families understand the issues with remote learning and the importance of educational continuity Increase awareness of the value of school and encouraging parents and families to send students back to school once the crisis is over Support more closely parents and families who are having difficulties (e.g., parents with low education levels)	Cameroon	Supported parents through mobile phones and shared educational information on WhatsApp and Zoom platforms	
	\$	Provide financial support	Provide economic support for the most disadvantaged families (e.g., stipends) encouraging them to let their kids go back to school	Sierra Leone	Provided financial incentives through waiving school fees and giving money for books	
		Tailor support to feedback	Set up a hotline for parents and families with support from educational psychologists, associations, etc.  Collect feedback from parents and families (by launching regular surveys)	<b>४०</b> % South Korea	Launched a national survey for parents	

officers, etc.)

Collect feedback from parents and families (by launching regular surveys)

Offer community support, especially for essential workers (doctors, nurses, police



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### 3C Systems can share key tips and tricks to help parents support students

### Example parent handout in high tech system

## Stay in touch with the school



- Attend briefing sessions and be open to teachers' feedback and observations about the student
- Make sure to know the best way to contact the teacher
- Avoid contacting teachers outside the working hours they have defined

## Control students' technology



- Set up controls to limit students' use of devices to learning relevant software during school hours
- Teach students to stay safe online (e.g., not to chat with strangers online or share information that can allow strangers to locate him/her)
- Help students have regular breaks to prevent them from continually looking at screens for a very long time

## Support students academically



- Have a check-in (e.g., What classes/subject do you have today?) and checkout (e.g., What did you discover? What was hard?) every day
- Do not complete students' homework or exercises for them – some level of struggling is good, and even encouraged, for students to learn
- Help students "own" their learning they need to develop responsibility and independence

#### Encourage students beyond the academic tasks



- Use opportunity to have personal conversations with students (e.g., family history or other subjects you usually do not have a chance to)
- Encourage extracurricular activities and even set special projects, as learning does not only occur in formal lessons
- Build on students' strengths and passions to undertake extra activities (e.g., music, drama)

## Create an appropriate learning environment



- Try to provide an adequate space for learning (e.g., quiet, comfortable, no distractions, good internet connection)
- Create routines and structure in the students' day set predictable segments and productive habits
- Remember that recess and recreational time are also part of learning

## Monitor students' health



- Encourage students to be in touch with their friends online and to connect to school community events
- Help students understand how to protect themselves from COVID-19 and to avoid going out unnecessarily
- Stay alert for signs of physical or mental distress and connect with school healthcare services or local health authorities for appropriate guidance

The response > Remote learning involves a 3-step approach supported by continuous monitoring and adjustment > Enable and Execute

## 3D Students face learning and non-learning challenges that may be exacerbated

Deep dive follows



Learning challenges



Non-learning challenges

### Students may face challenges of ...



- ... well-being from not benefiting from in-person services and being part of a group:
- Physical health at risk
- Cognitive and social health at risk
- Emotional and spiritual health at risk

Health challenges impose additional constraints on students' concentration



- ... engagement and retention from constrained interactions with peers and teachers:
- Low motivation to study remotely
- Difficulty with spending time in isolation
- Requirements for students with special needs (e.g., navigation online, understanding vocabulary, need for visual aids)

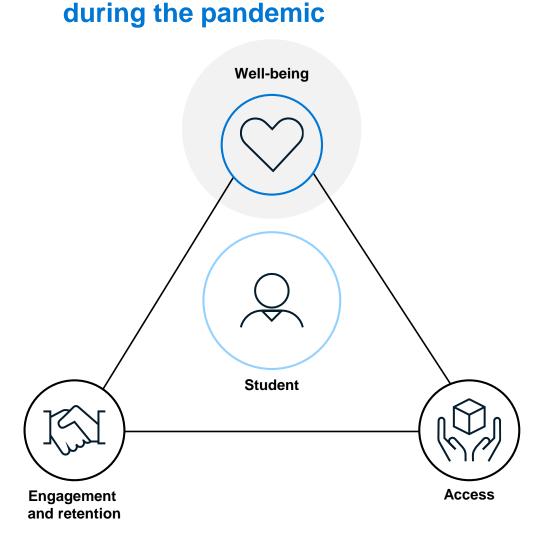
Unfamiliarity and difficulty with alternative school methods can lead students to disengage



- ... access from lack of basic infrastructure:
- Lack of internet connectivity with adequate bandwidth
- Lack of learning devices (e.g., laptops, tablets, mobile phones)
- · Lack of suitable working space at home

Lack of access to remote solutions can prevent students from learning





The response > Remote learning involves a 3-step approach supported by continuous monitoring and adjustment > Enable and Execute

## 3D Well-being has different dimensions that can be further broken down to enable nuanced prioritization and targeted responses

**xx** Example priorities for school systems

### Well-being taxonomy

## Well-being dimension

**Description** 

1

4

3

#### **Emotional and spiritual**

## Extent to which we feel our sense of meaning and purpose, social awareness, and emotional regulation

#### Cognitive and social

Extent to which we experience positive relationships and connectedness to others, have a sense of achievement and success

#### **Physical**

Extent to which we feel physically safe and healthy, and protected from violence and abuse

#### Subdimensions

- Mental health
- Self-esteem and school-related anxiety
- Sense of meaning and purpose
- Suicide prevention and postvention
- Drugs and addiction

- Engagement, attendance, and achievement
- Behaviour
- Positive relationships and tolerance
- Future pathway and expectations

- Nutrition
- Protection from abuse
- Active lifestyle
- Sexual health
- Safety and injury prevention
- Delivery of health services



NOT EXHAUSTIVE

Defining a well-being taxonomy is critical to being able to have a common nuanced view that enables the development and review of health services

Schools can assess, with the help of teachers and parents, the areas of students' well-being at highest risk during the crisis

Schools can then **prioritize** their **targeted responses** accordingly



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The response > Remote learning involves a 3-step approach supported by continuous monitoring and adjustment > Enable and Execute

### 3D Systems need to prioritize vulnerable populations when responding to challenges to minimize inequity and reduce loss of learning

Learning challenges

Non-learning challenges

**ILLUSTRATIVE** NOT EXHAUSTIVE

**Engagement and retention** 



Access



Well-being



All levels of digital maturity



**India:** Create additional incentives or support structures to reward and engage at-risk students



Nigeria: Prioritize vulnerable populations when distributing loan equipment



Canada: Keep selected schools open as a safe learning environment for vulnerable students



Philippines: Offer additional flexibility on enrolment deadlines; provide clear remote enrolment guidance and support



The Gambia: Communicate broadly with parents and students about the new remote learning solutions



South Africa: Organize alternative methods for food distribution (e.g., repurpose closed schools as food distribution centers, offer food credits/vouchers)

No-tech and low-tech situations



El Salvador: Establish a call center for students to ask questions to subject specialists



Romania: Prioritize existing platforms for mass remote learning delivery (e.g., TV or radio)



Austria: Enable school psychologists to be reached by telephone or email during evening hours and weekends



Chad: Give time for teachers to go home to home and review educational materials with small groups of students



Cameroon: Consider partnerships to fill basic infrastructure gaps (e.g., UNESCO, mail services to deliver materials to students with no internet access)



Pakistan: Provide guidance and increase awareness about well-being by launching communication campaigns on mass media (e.g., radio, TV)

High-tech situations



Bhutan: Adjust live lessons to be more interactive to keep students' attention



**Japan:** Liaise with telecoms to offer students discounts on data fees



Costa Rica: Create content related to cybersecurity for young people



Victoria, Australia: Leverage online platforms students are familiar with



Brazil: Partner will local mobile operators to launch an educational app that does not consume data



**USA:** Maintain school community through additional touchpoints outside of instruction (e.g., schoolwide "assemblies," peer buddies)

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### 3D There are unique needs and considerations for vulnerable students

ILLUSTRATIVE

NOT EXHAUSTIVE

## Example Vulnerable segment

### Description

## Students with special needs

Students with disabilities may have special education programs in place – the challenges presented by COVID-19 vary based on the disability

## Minorities and indigenous students

Minority students may face biases or report feeling less safe in schools

## Low-income and students experiencing homelessness

Low-income or poverty is often correlated with lower educational attainment and challenges to learning,

## Immigrants and non-native speaker students

Immigrants and nonnative speakers may face language and cultural barriers

## Students in unsafe environments

Students with physical safety risks (e.g., domestic violence, high-crime neighborhoods) and psychological abuse risks

## Students with mental health conditions

Students with mental health challenges (e.g., depression, eating disorders, anxiety disorders, ADHD) that receive support and sometimes therapy from the school

# Research shows that performance gaps by social class take root in the earliest years of children's lives and fail to narrow in the years that follow

Similarly, the **gap exists** in **vulnerable students** who need special support

Without targeted support and interventions, the risks to livelihood and learning for vulnerable student groups are exacerbated

### Example

In low and lower-middle income countries, around 40% of children with disabilities are out of school at primary level and 55% at lower secondary level

In Brazil, less than
2.1% of the
indigenous
population access
secondary school and
20.5% primary
education in the
communities

Young people from the poorest 20% of households are almost 6 times as likely to be unable to read as those from the richest 20% of households

Half of all children in low- and middle-income countries are not taught in a language they speak

Worldwide, around 15 mn adolescent girls aged 15-19 have experienced forced sex in their lifetime Worldwide, 10-20% of children and adolescents experience mental health disorders

In order to mitigate risks, schools can identify special support these students may need during COVID-19



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## Remote learning involves a three-step approach supported by continuous monitoring and adjustment

- Understand and Envision:
  Establish a clear vision and create pre-conditions for success
  - > Define the vision for remote learning strategy and key guiding principles
  - Ensure overarching strategy is tailored to individual students' needs
  - Assess the current state of digital infrastructure, budget and capabilities (e.g., student and teacher access to broadband and devices, teacher and system capability)

- Decide and Design: Design remote learning solutions
  - Create a strategy for remote teaching across different ages and subjects
  - Determine how to communicate school assignments & information to students & parents
  - > Determine how to teach students content remotely that is new to them
  - Determine how students will practice skills remotely
  - Determine how teachers will provide formative feedback and coach students remotely
  - Define staffing model to support chosen remote learning strategy

- Enable and Execute: Rollout remote learning solution and actively engage key stakeholders
  - Launch remote learning solutions quickly and improve iteratively
  - > Train and accompany teachers to deliver remote learning and support students
  - > 3c Engage parents and families and train them on the devices
  - Support students in their learning and well-being during the crisis, with a focus on the most vulnerable students

04

### Monitor and Adjust: Continuously improve in response to feedback

- > 4A
  - Make critical policy decisions around assessment and grading, curriculum changes and level of centralization
- Develop of adop satisfact
  - Develop and monitor **key indicators** of adoption and effectiveness (e.g., satisfaction, test scores and equity) to **ensure access, quality** and **equity**
- > 4c Launch continuous improvement process



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## 4A Given the level of disruption the educational system is experiencing due to COVID-19, it is necessary to identify the policy decisions that need to be made



### Type of policy

## How are student outcomes assessed as schools move to distance learning?

### Potential decisions to make following careful discussion

Keep/postpone/cancel summative exams

Adapt existing exams to effectively assess learning outcomes remotely e.g.,, switching to remote or take-home exams, restructuring exams into smaller learning assessments

Define criteria for grading and progression

### **Country example**

The Netherlands scrapped central exams in secondary schools for 2020, giving schools the authority to decide on progression to the next year

How should pedagogy and curriculums be modified given the shift to remote learning?

Adjust curriculums and learning standards for the long term as needed

Remove certain subjects from the curriculum

Reduce content across subjects, keeping exam-relevant content only

Add activities relevant to the situation (e.g., independent learning)

In São Paulo, Brazil, the minimum requirement for 200 school days was temporarily lifted to allow flexibility for curriculum readjustment during the second half of the year

How are systems changing their decision-making flow to facilitate remote learning? Determine at what level decisions get made and implemented across the system and how this needs to change based on the shift to remote learning

In Mexico, the Ministry of Public Education that is in charge of schools has devolved the responsibility of whether schools should open or not to the governors of each area

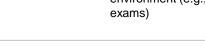
**ILLUSTRATIVE** 

The response > Remote learning involves a 3-step approach supported by continuous monitoring and adjustment > Monitor and Adjust

## 4A School systems have a range of assessment policy options, each with its special

set of considerations Ease of addressing consideration effectively

					<b>3</b> · · · · · · · · · · · · · · · · · · ·	, ,		NOT EXHAUSTIVE
Policy Policy options When to adopt categories			Considerations – to what degree					
			can we implement it?	can we ensure assessment integrity?	can we ensure equity?	can we gather stakeholder support?	can we engage students?	
Maintain student assessment (formal and informal)	Delay assessment decisions  Assessment decisions can be postponed until assessments are closer and the trajectory of virus infection is clearer	If the end of academic year is still far off	Health risks may still persist later in the year	Same as pre-COVID- 19 situation	Same as pre-COVID- 19 situation; content for testing needs to be modified	Acceptable per pre- COVID-19 situation	Students can continue learning	<ul><li>Tunisia</li><li>Pakistan</li></ul>
	Adapt student assessment Assessment format could be changed to adapt to remote environment (e.g., open book exams)	If remote learning solutions enable the transfer of assignments, assessment sheets & teacher evaluations	Additional arrangements needed to cater to students in low-access areas	Difficult to ensure there is no cheating or plagiarism	Additional support will be required to ensure that vulnerable students learn	Requires raising awareness with teachers and parents and families	Students can continue learning	Egypt



Cancel student

assessment



Grades could be projected based on historical performance of students

If there is capacity to develop an algorithm that can calculate grades and appropriate to the context

Dependency on data availability and validation of logic

Potential for missing assessments elements (e.g., class participation)

High potential for bias against vulnerable students

Possibility of dispute in case grades are not per expectations

Having no exams risks demotivation and lower participation





**Keep existing grades** 

Current cumulative grades from students' school year could be used

If most of the school year has been completed or official grades to date exist

Can be implemented at scale

Same level of authenticity as previous grades

Same level of equity as previous grades

Possibility of dispute in case grades are not per expectations

Having no exams risks demotivation and lower participation



Norway





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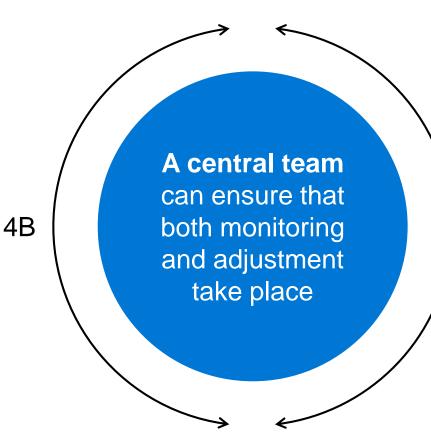
The response > Remote learning involves a 3-step approach supported by continuous monitoring and adjustment > Monitor and Adjust

## 4B Monitoring and adjustment are continuous processes, supporting the relevance of the remote 4C learning strategy



#### **Monitor**

both the effectiveness of the remote learning strategy execution, including the remote learning solution and key stakeholder engagement, and remote learning outcomes





#### **Adjust**

4C

based on the assessments of effectiveness of the remote learning solution and the engagement initiatives with stakeholders, through tactical and structural adjustments on a regular basis

NOT EXHAUSTIVE ILLUSTRATIVE

The response > Remote learning involves a 3-step approach supported by continuous monitoring and adjustment > Monitor and Adjust

### 4B Monitoring indicators for both the process and outcomes of remote learning can be assessed

4.i. Evaluate remote learning strategy execution					4.ii. Evaluate remote learning solution outcomes				
	Rollout of remote  3.1 learning solutions  3.1 Active engagement of key stakeholders								
What to evaluate	A Remote learning solution	B Teacher engagement	C Parent engagement	D Student support	>	E Access	F Quality	G Equity	
	User experience Cost of maintenance Requisites (e.g., size of app or broadband usage)	Planning and delivery Workload level Capability in remote learning solutions	Communication and feedback Level of support offered to students Financial investment	Well-being Confidence in learning ability Feeling of general plan effectiveness		Adoption rates Attendance/ engagement Participation in class	Learning outcomes	Access distribution Quality distribution	
Who to consult	Students, parents, teachers, school leaders	Students, parents, teachers, school leaders	Parents	Students, parents, teachers, school leaders		Teachers, online platforms, administrators	Teachers, online platforms, administrators	Teachers, online platforms, administrators	
How to evaluate it	Virtual lesson visits Stakeholder questionnaires	Teacher plans Recorded lectures Interviews	Interviews Feedback surveys	Check-ins		Attendance and absenteeism data (with focus on vulnerable groups) Discussions/intervie ws with teachers on participation Virtual lesson visits	Standardized summative exams Standardized formative exams throughout the year	Access and quality indicators Evaluation on a curve (vs. other students)	
How often	Continuously	Periodically (1-2 months)	Periodically (1-2 months)	Periodically (1 month)		Periodically (1-3 months)	Periodically (1-3 months)	Periodically (1-3 months)	



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The response > Remote learning involves a 3-step approach supported by continuous monitoring and adjustment > Monitor and Adjust

## 4C Tactical and structural adjustments to remote learning solutions and engagement initiatives with key stakeholders will likely be required

ILLUSTRATIVE

NOT EXHAUSTIVE

#### **Tactical adjustments**

Modify learning platform features: Change, add, and remove the learning platform features according to user feedback

**Change teaching methods:** If synchronous learning is proving not to be the right option due to the need for students to go at their own pace, switch to asynchronous learning

**Complement practice solutions:** Add online adaptive software assignments to the mix of solutions for students to have more options to practice remotely

2 Organize well-being campaign: Provide guidance and increase awareness for self-care by launching communication campaigns on mass media (radio, TV, etc.)

**Screen care:** Adjust students' screen time and share tips how to safeguard eye health

**Communicate more with parents:** Increase the frequency of communication to parents and the topics that are covered with regular check-ins

#### Structural adjustments

Launch a digital transformation: Make schools' operations paperless to facilitate tracking and planning of assignments and student performance

**Develop a library of asynchronous material:** Create a single library of instructional videos of all the key areas of content across all subjects and grades for rapid deployment

2 Integrate remote learning training into teacher training: Change teacher programs to include modules on how to teach remotely

**Create a well-being unit at schools:** Engage regularly with families and students on well-being issues

**Create a technology accessibility program:** Create a long-term program that ensures access to technology for teachers and students

#### Key takeaways

Actual interventions will depend on results of the monitoring mechanisms

Adjustments could focus on both the improvement of the design elements of the remote learning solutions and the holistic support initiatives targeted to key stakeholders

Segment between tactical and structural adjustments to ensure that pain points that can be easily solved do not undergo the same process of implementation as structural adjustments

1 Rollout of remote learning solutions

2 Active support of key stakeholders

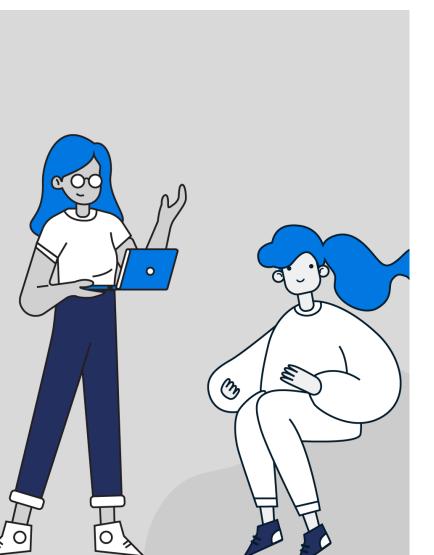
Teachers

Parents and families



Students

READ MORE



04

### The checklist

Summary of actions



- → Create a remote learning vision
- → Develop a remote learning strategy
- → Prepare the remote learning solutions rollout
- → Monitor and adjust



CLICK EACH TOPIC TO VIEW CONTENT



The problem

The response

The checklist



### Based on the framework, countries can tactically implement remote learning through four action checklists

**Create a remote** learning vision

**Develop a remote learning strategy** 

Prepare the remote **learning solutions** rollout

**Monitor** and adjust

GO TO CHECKLIST



GO TO CHECKLIST



GO TO CHECKLIST >

GO TO CHECKLIST >



The checklist > Understand and envision

### 1 Create a remote learning vision and understanding through the following actions

To be adapted and populated by the entity concerned

1A	Action  Define the vision for a remote learning strategy and key guiding principles	Responsible	Focal point	Time frame
	Convene <b>all stakeholders</b> relevant for remote learning (including leaders for finance, IT and infrastructure, principals, teacher and parent representatives, etc.)			
	Determine priorities for the remote learning strategy, and how to handle critical trade-offs (e.g., speed, quality, equity, coverage, curriculum coverage, degree of personalization)			
<b>1B</b>	Assess the current state of digital infrastructure, budget, and capabilities (e.g., student access to broadband and devices, teacher and system capability)			
	Identify data already available and determine the most efficient and effective means to collect outstanding relevant data			
	Assess the level of <b>digital connectivity</b> (e.g., availability and stability of electricity and broadband) by region and student group			
	Assess teacher, student, and parent <b>access to devices</b> (e.g., laptops, smartphones, TV, radio) and their <b>capability in using</b> them by region and student group			
	Assess the degree of technology currently used in schools and the level of teacher training			
	Assess <b>education technology platform</b> and solution <b>availability</b> by topic and grade level (home language, curriculum aligned)			
	Determine <b>funding capacity</b> and identify possible <b>partnerships</b> to be leveraged with telecom or Edtech companies to fill identified gaps			
	Assess <b>public opinion</b> to understand feasible options and the feeling of teachers, parents, and unions on remote learning solutions			
	Gauge the <b>willingness of key</b> partners to support strategy (e.g., TV broadcaster to air learning content) and the overall feasibility of different strategies			

The checklist > Design and decide

### 2 Develop a remote learning strategy through the following actions

To be adapted and populated by the entity concerned

	Action	Responsible	Focal point	Time frame
2A	Create a strategy for remote teaching across different ages and subjects			
	Determine overall guidelines for the number of hours of remote learning by age and by subject			
2B-2E	Design remote learning solutions for each learning activity			
	Determine how to communicate new assignments and information to students and parents			
	Determine how to <b>teach new concepts remotely</b> and engage with teachers to ensure their level of comfort with the solution chosen			
	Determine how students will practice skills remotely and engage with parents to ensure feasibility			
	Determine how teachers will provide formative feedback and coach students remotely			
	Ensure the <b>solution mix</b> per <b>age</b> and <b>subject covers all students</b> , <b>enhances the learning experience</b> , and is <b>manageable</b> for the <b>schools</b>			
2F	Define a staffing model to support the chosen remote learning strategy			
	Define a <b>staffing model</b> to support the chosen <b>remote learning strategy</b> and engage with main stakeholders			

To be adapted and populated by the entity

The checklist > Enable and execute

## 3 Prepare the remote learning solutions rollout and stakeholder support through the following actions

concerned **Action** Responsible Time frame Focal point Launch remote learning solutions quickly and improve them iteratively Define the rollout option (agile vs. standard deployment), manage stakeholder expectations, and clearly communicate the advantages of the choice Engage and support key stakeholders (teachers, parents, and students) Identify teacher training and support needs given the remote learning solutions chosen and student support needs Support and motivate teachers by keeping them informed, receiving their input, and offering mental and health support Determine modalities of teacher training (remote or in-person), prioritize content to cover, and identify training providers Raise parent awareness of the importance of their children's learning continuity and keep them informed of the remote learning strategy **Engage with parents** to receive input, understand obstacles to supporting student learning, ensure their well-being, and deliver support effectively Help students overcome remote learning challenges (e.g., ensure all students have access to devices, create printed materials for those that do not) Provide continuity of critical social support to overcome non-learning remote challenges (e.g., school meals, therapist support)

## 4 Monitor and adjust the remote learning strategy through the following actions

To be adapted and populated by the entity concerned

	Action	Responsible	Focal point	Time frame
4A	Make critical policy decisions around assessments, grading, and level of centralization			
	Decide on an approach for <b>summative assessments</b> and <b>grading</b> (wait/keep/postpone/cancel/modify) and academic progression			
	Decide on an approach for <b>formative assessments</b> (timing, authenticity, etc.) and how it will inform adjustments to learning solutions			
	Determine curriculum coverage requirements across subjects and grades			
	Decide whether to modify minimum school hour/day requirements			
	Ensure <b>policy decisions proposals</b> & <b>levels of decentralization</b> (e.g., if schools can determine the coverage of the curriculum) are <b>coherent with learning strategy</b> that is being put in place			
	Gather stakeholder support for policy decisions			
4B	Develop and monitor key indicators of adoption and effectiveness (e.g., satisfaction, test scores, and equity) to ensure quality			
	Choose which <b>dimensions the team should monitor</b> , including the process of execution of the remote learning strategy (e.g., user experience) and the learning outcomes (e.g., equity)			
	Align on which <b>metrics</b> will be tracked for these dimensions (e.g.,, % of students enrolled), and <b>how</b> they will be tracked (e.g.,, through surveys)			
	Agree on responsible parties and a timeline for the collection of each metric			
	Gauge the <b>willingness of key</b> partners to support strategy (e.g., TV broadcaster to air learning content) and the overall feasibility of different strategies			
4C	Agree on responsible parties and a timeline for the collection of each metric			
	Regularly compile data and share findings with the central team			
	Adjust the process as necessary with tactical and structural interventions			
	Compile learnings into a lessons learnt compendium		UNESCO, ir	collaboration with McKinsey and Compa



05

### **Case studies**

Lessons learned



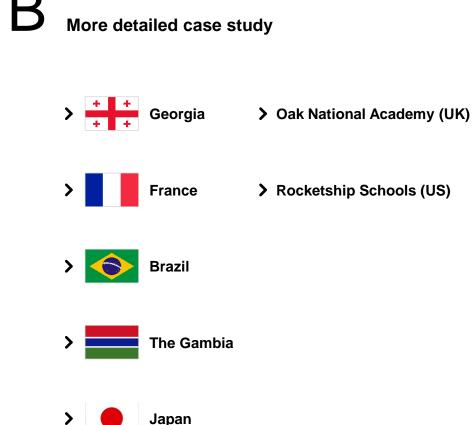
- → Brief examples of practices on specific sections of the framework
- → More detailed case studies



Case studies

### Countries have implemented remote learning practices during COVID-19







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Case studies > Countries have implemented organizational practices during COVID-19 and other crises > Brief examples of practices on specific sections of the framework

### A The remote learning strategy value-chain shows the sequence of activities

Reminder

#### Remote learning strategy value-chain



### New assignments and information

Determine how to communicate new assignments and information to students and parents

Create an integrated strategy for remote teaching, practice and feedback across different ages and subjects

#### **Methods for teaching**

Determine how to teach new concepts remotely

#### Methods for student practice

Determine how students will practice skills remotely

#### Formative feedback and coaching

Determine how teachers will provide formative feedback and coach students remotely

Define staffing model to support chosen remote learning strategy



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### A Countries have used different methods according to their context (1/2)



NOT EXHAUSTIVE

## Paper textbooks and worksheets



Cameroon

Cameroon – Printed and distributed learning material to students in disadvantaged areas

#### TV/radio



Morocco

Morocco – Courses are being broadcast on four television channels. Daily lesson schedules available from the ministry of education. USAID is supporting distance learning in Morocco.



Sierra Leone

Sierra Leone – Used radio to continue teaching for all grade levels after Ebola and launched multiple radio channels for different grade levels and developed pedagogically scripted content with a focus on basic learning competencies

## Email, message boards or text messages



**USA** 

USA – Teachers provide feedback to students through email and messaging platforms (such as Messenger and WhatsApp). "Homework hotlines" are also used to provide feedback to students and parents.

## Virtual classroom and learning menu



Saudi Arabia

Saudi Arabia – Interactive platform providing interactive digital content, virtual classrooms, as well as syllabi for teachers.

## Virtual classroom or other platform



Jordan

Jordan – A unified electronic system for all schools to communicate and organize work between schools, teachers, students and parents through an electronic portal



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Case studies > Countries have implemented organizational practices during COVID-19 and other crises > Brief examples of practices on specific sections of the framework

### A Countries have used different methods according to their context (2/2)



#### **Nonadaptive** assignments

#### **Ethiopia**

Ethiopia – Textbooks for teachers and students in electronic format provided by the Ministry of Education

#### Solutions with offline capacity



**Afghanistan** 

Afghanistan – Provided education in areas with limited internet connectivity, through video lectures that can be run offline



Uganda

Uganda – Offered a platform (Kolibri) with offline capacity providing education content

#### **Nonadaptive** software



**Egypt** 

Egypt – Contracted with the online learning provider Edmodo to deliver remote instruction to the country's entire K-12 student body during school closure

#### Online adaptive software



China

China – Mobilized society-wide resources to launch 22 validated online course platforms, empowered by Artificial Intelligence, have been mobilized to provide primary and secondary schools with free online courses



The problem

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### A Case studies on Design & Decide

## Learning value chain

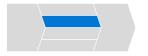
Country

Costa Rica



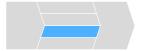
#### **New assignments & information**

Costa Rica has a central website that hosts digital learning resources and information for educators, students and parents



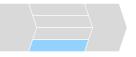
#### Methods for teaching

They are using public media to broadcast educational programs, virtual programs for teachers, and they are also planning on distributing hard copy formats for families with no internet access



#### **Methods for student practice**

Students are connecting via platforms like Zoom to receive online classes, and for those without access to internet, hard copies are given



#### Formative feedback & coaching

The Ministry of Education gave students an email account so they can keep in touch with their teachers

#### **Finland**



The Finnish National Agency for Education guides schools to plan and organize different kinds of flexible learning arrangements

Content repository and materials with resources, material blanks, apps and solutions for distance education

Most commonly used tools where students are able to conduct projects and tasks independently and attend classes online are Moodle, Google Classrooms, Ville, Teams, O365, Skype and Zoom

Online platforms in Finland are used for posting student assignments, test scores, grades and notes/feedback between home and school

#### Bulgaria



To support distance learning, the Ministry of Education and Science (MES) has developed a National Electronic Library of Teachers, which publishes materials of pedagogical specialists for working in elearning environments

Publishers provide online textbooks from grades 1-10 for free. Regional educational institutions are supporting through videos and webinars. School education content is being broadcast through the channels BNT 2 and BNT 4

Nearly 89% of students are enrolled in elearning. Each student is enrolled in distance learning six hours a day, including through broadcast lessons on national television channels All schools have been sent accounts to work on the Microsoft Teams platform. Profiles have been created for all students and teachers

#### India



The DIKSHA portal contains e-Learning content for students, teachers, and parents aligned to the curriculum

Swayam Prabha is a group of 32 Direct To Home (DTH) channels devoted to telecasting of educational programs round the clock and accessible all across the country

e-Pathshala is an e-Learning app by NCERT for classes 1 to 12 in multiple languages. The app houses books, videos, audio, etc. aimed at students, educators and parents

The problem

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## B Remote learning involves a three-step approach supported by continuous monitoring and adjustment

Reminder



01

**Understand and Envision:**Establish a clear vision and create pre-conditions for success

02

**Decide and Design**: Design remote learning solutions

03

**Enable and Execute:** Rollout remote learning solution and actively engage key stakeholders

04

**Monitor and Adjust:** 

Continuously improve in response to feedback

The problem

Case studies > Countries have implemented organizational practices during COVID-19 and other crises > More detailed case studies

### B COVID-19 led to school closures in Georgia which disrupted student learning



### COVID-19 disrupted Georgia ...

Georgia registered its first case of coronavirus on February 26, 2020, and in the first half of 2020 reached nearly 1,000 infections

As in many other countries, Georgia went into lockdown to reduce the spread of the virus

#### ... and its educational sector ...

The education sector was severely impacted, by a nationwide school closure that affected 592,900 students

#### ... undermining student learning

Most students did not have alternatives to continue learning, in particular, those from vulnerable groups (rural areas, children of immigrant parents and special needs)





Case studies > Countries have implemented organizational practices during COVID-19 and other crises > More detailed case studies

**Back to countries** 

## B The Georgia Public Broadcaster partnered with the Ministry of Education to launch "TV-School", as a response to the reality of the students and the two institutions



## Georgia Public Broadcaster built a remote learning vision with the Ministry of Education ...

Understanding the urgent need to provide remote learning, staff from the Georgia Public Broadcast (GPB) approached the Ministry of Education (MinEd) to propose the conversion of the content of the Second Public Channel to educational material

GPB and MinEd mobilized teams to prepare a solution that fulfilled the following guiding principles to the extent possible: was immediately relevant; adopted the full curriculum; used technology students already had access to; enabled a guick rollout; and covered all students

### ... around the reality of the students and of the two institutions

**Access:** a significant higher percentage of students have access to TV than to broadband and smart devices

**Capability:** GPB had expertise in production and viewer experience that could be complemented by the MinEd's expertise of the curriculum, teacher training and learning experience

**Budget:** GPB was able to cover the costs associated with production and technical staff through money reserves, re-channeling travelling budget and appealing to staff's sense of duty who volunteered beyond paid hours while MinEd could cover the costs associated with teachers

Case studies > Countries have implemented organizational practices during COVID-19 and other crises > More detailed case studies

## B Initiative consisted of 15min lessons for all subjects for all 12 grades, complementary programs and support for stakeholders



## "TV-school" consisted of 15min lessons and other complementary programs that addressed students of all grades

The schedule of lesson broadcasting was based on the national study plan which addressed all students by covering every subject from grades 1-12 at least once week with specific classes twice a week for 12th grade students

Lessons consisted of a 15-minute lecture, followed by independent student work and integrated with online platforms (e.g., Facebook) to share work produced

There are also complementary programs like "University entrant's hour" where experienced specialists give recommendations to graduating students on the national exams

Extra lessons such as music, singing, dancing, chess, fitness, and recommendations of psychologists were offered during the weekend as well as educational fiction/documentaries

## Its preparation and delivery did not neglect support for teachers, parents and vulnerable student segments

**Working with teachers:** MinEd selected an initial group of ~150 teachers from public and private schools for screening, and ended up with ~50 teachers who were recording lessons one day in advance of being broadcasted until a school break enabled them to build a one week of lessons backlog and reduce the pressure on the teachers

**Support for parents:** One-hour programmes targeted at parents were prepared with tips and suggestions on how to support students' learning and well-being, with a separate program specially dedicated to parents of preschool age students

**Special support for vulnerable segments:** The lessons were also recorded in the languages of national minorities (e.g., Azerbaijanian and Armenian); sign language translators helped adapt the lessons to students with hearing disabilities; psychologists helped in the lesson preparation to ensure these were adapted for students with special needs

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## B Georgia is a an example of domestic collaboration that delivered an engaging learning experience that was equitable



## Partner to bring the best of each organization to serve students

Georgian organizations were able to develop effective remote learning programs by complementing their expertise and taking a collaborative student-centric approach

## Create a pleasurable learning experience to engage students

Teachers were screened to ensure they could deliver quality lessons, parents were prepared to support students, programs were designed to offer students a positive viewer experience to ensure their engagement and extracurricular activities that interest students were offered

## Ensure the quality of the solution is equitable for all students

Remote learning solution was based on a platform that was most widespread among the student population, and special consideration was given to adapt it to students from minority groups and with special needs



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## B COVID-19 led to school closures that affected 9,000 primary & secondary students & 14,000 vocational education students in the Sistema Fiep in Paraná





## The COVID-19 pandemic reached Parana ...

In the state of Paraná, southern Brazil, there had been +69,000 of cases and ~1,700 deaths up to July 2020

Almost half of the state is under a lockdown established by the state government

## ... and impacted the education sector ...

Public and private schools have been closed for more than four months

Among them were Sistema Fiep's different educational systems which led to +9,000 students in primary and secondary education (SESI) and +14,000 students in vocational education (SENAI) not going to school

## ... leading to innovative remote learning

Sistema Fiep was suddenly forced to think about remote learning solutions in order to mitigate impact of school closure in both student learning and well-being

Sistema Fiep <sup>1</sup> is the Federation of Industries of the State of Paraná which works for the sustainable growth of industries and defends their interests in the public and private sphere. It has a branch exclusively dedicated to education which started in 1943 with a vocational school and has since grown to include primary, secondary and tertiary educational institutions



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## B Sistema Fiep "bought" time to develop a remote learning strategy aligned with the possibilities of the organization and its main actors





## Sistema Fiep moved up the school break to have time to develop a strategy ...

In order to have time to develop a remote learning strategy, Sistema Fiep move up the July school break to March so that there were no classes and teachers could be trained in the solutions that were going to be rolled out

The goal of the response was to replicate remotely the in-person educational activities for both primary and secondary students, as well as vocational education students, in order to ensure no one suffered any loss of learning

This meant keeping the full curriculum, going for universal coverage and developing the highest quality solution during the school break

### ... within the possibilities of the organization and its main actors

Data from their annual survey was used to confirm that the majority of students had access to devices and broadband, making online learning a possibility

They identified a learning platform that already existed within the organization which could be adapted for online learning

The organization also partnered with suppliers to offer some training to teachers and to provide access to key digital tools for both students and teachers



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## B Sistema Fiep's remote learning was supported by a mix of solutions and succeeded due to engagement with stakeholders





### Remote learning was based on a mix of digital solutions ...

The virtual educational activities were designed in line with Sistema Fiep's methodology across ages, grades and groups of students

Weekly timetable, class distribution and teacher allocation remained the same but classes adjusted from 50 minutes to 35

The core of its remote learning strategy consisted in virtual live synchronous lessons, and each student was allocated a personal account and password to Microsoft Office 365 suite and the organization's own Learning Management System

**Primary and secondary** lessons adopted "flipped classroom" to re-emphasize student autonomous research, and used simulators for experiments in chemistry and physics, as well as using programming and robotics applications to help in the practice of mathematics

**Vocational education** lessons on theoretical classes and practices that could be supported by simulators were brought forward, while other practices requiring in-person interaction were postponed indefinitely

For coaching and feedback teachers organized 1-on-1 VC sessions with their students

## ... and its success dependent on special support and engagement to key stakeholders

**Support for teachers**: Teachers were allocated many hours for training, participated in webinars with suppliers of digital tools and given an exclusive online platform where they found asynchronous training material, and several suggestions for activities for remote classes with students from the early years of elementary school through high school

**Support for parents:** Many communications by teachers and schools' pedagogical teams were conducted through email, Microsoft Teams, and WhatsApp to provide information on remote work and how to assist students were

**Support for students:** Teachers maintained the same level of availability to interact with students as they have before, and for the small portion of students without connectivity, printed material was made available and a schedule established for picking it up and delivering it

**Monitoring and adjustment:** Each school analyzed its reality in depth with the intention of identifying points of attention that could compromise student learning in the future and launched surveys to identify specific problems, for example low quality of the lessons, to address them accordingly

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## Sistema Fiep was able to support all their students during the pandemic and develop practices that will be maintained post-crisis





## The entire student base continued learning through remote learning ...

The entire student base of 9,000 students from primary to secondary school and +14,000 in vocation education had the opportunity to continue their learning journey

In a survey with ~6,000 respondents it was found that

- 88% of students declared having their questions and needs addressed by their teachers remotely
- 83% of students declared being satisfied with the quality of the remote learning classes
- 76% of students declared being satisfied with the level of support from the school in coping with everyday difficulties
- 74% if students declared not having any difficulties in accessing the digital tools

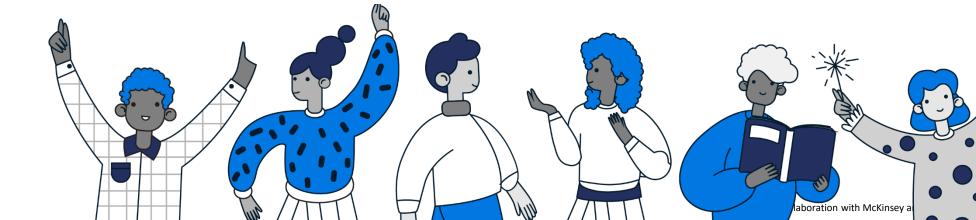
## ... with some of the new changes expected to last beyond the pandemic

Anecdotal stories point to students developing a sense of autonomy as individuals responsible for their own learning process which will help them throughout their schooling

The teachers broadened their toolkit and the teachings possibilities have multiplied

Community shift towards digital adoption was accelerated and will continue to be explored

- New digital platform for teacher training and engagement
- Use of simulators to enhance student experience



# B This case shows the value of having a mix of solutions, and emphasizes that data enables targeted action and that teacher training is crucial





#### Mix of solutions enriches learning

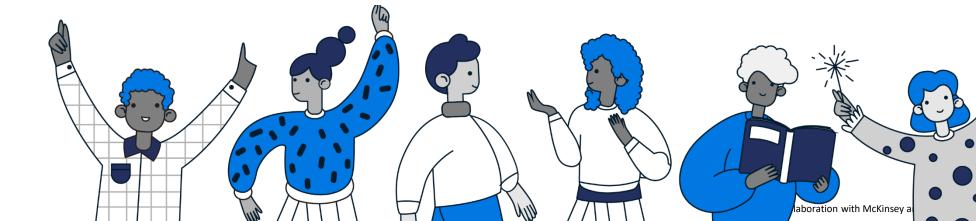
Students experience were enriched by a mix of solutions from student textbook-based autonomous work, student practice with digital simulators, discussions and feedback through live VCs and a lot of asynchronous material available in a central platform

#### Historical data enables targeted action

By using data from previous annual surveys that noted students connectivity capacity, the school was able to quickly identify the solution space and deploy solutions that were suitable to the context, and their ongoing launch of surveys of student access and satisfaction permitted them to pull the right levers at the right time to improve the learning experience for all

#### Teacher training is crucial

Teacher training is fundamental as they are a central piece of delivery with several functions: they need to be comfortable with the technical elements of remote solutions to buy in to them and to be able to assist students in their adoption, they need to be accompanied in the formulation of creative engaging virtual lessons, and be empowered to take care of their own, and students', mental and physical well-being during this period



# B School closures in France due to COVID-19 pandemic led to +15 million learners losing 26 hours of face-to-face interaction per week



### COVID-19 disrupted France ...

France was one of the European countries most strongly hit by the pandemic registering its first case of coronavirus on January 24th, 2020, and as of 21 June, had reported 160,377 confirmed cases and 29,640 deaths

# ... led to the sudden closure of schools ...

Measures that were launched to prevent the spread of the virus were announced on March 12<sup>th</sup> and included nationwide school closure with effect Monday 16<sup>th</sup>

This affected +15 million learners who would lose on average 26 hours of face-to-face compulsory instruction time at school (~3% of annual instruction time) per week

# ... and forced students into remote learning

Schools were forced to roll out remote learning solutions to their students in short period of time to mitigate their learning loss and contribute to their well-being during the crisis

Schools only remained open for the children of essential workers to enable them to return to work



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# B France's school system was coordinated at several levels and built on strong enablers for remote learning



#### France's school system coordinated approach at several levels...

National government decreed schools had to ensure continuity of learning

There was a mixed approach with central administration and academies<sup>2</sup> making resources available as well as organizing training and schools counselling

Schools and teachers had the ultimate decisions for organizing remote learning depending on their context

The Education Ministry's National Centre for Distance Education (CNED) had already developed an e-learning platform that as of 2017 was being used by 237,000 students around the world and had a 15 million-student capacity

#### ... and could build on strong enablers for remote learning

France had a relatively robust remote learning enablers, including:

- 91% of students reported having a computer they could use for schoolwork (vs 89% OECD) <sup>1</sup>
- 94% of students reported having a quiet place to study at home (vs 91% OECD)<sup>1</sup>
- 91% of students "agreed" or "strongly agreed" that their parents supported their educational efforts and achievements (vs 85% OECD)<sup>1</sup>

Training programmes and webinars were set in place by the academies to help teachers use the tools and methods for remote learning

<sup>1</sup> OECD: School education during COVID-19: Were teachers and students ready?: France

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# B Schools' online platforms and resources of the CNED were a core part of the remote learning response, complemented by centralized initiatives



# Schools' digital workspaces and CNED's platform were core remote learning solutions ...

Most schools in France have online platforms (ENT for "espace numérique de travail" or digital workspace) for remote exchange between teachers with parents and students that also enable access to resources such as online books - during lockdown, these platforms were extensively used

Among others institutions, CNED gave open access to its online resources, exercises, and its "virtual classes" platform

Teachers in primary school used predominantly synchronous activities for all teaching activities of the class while high school teachers often adopted a "flipped classroom" and shared asynchronous material with students and then had synchronous sessions to address questions or complete exercises

When practice was not online, students had to practice autonomously aided by their textbooks or other materials prepared by the teachers

### ... complemented by other initiatives

Schools and local authorities distributed hardware equipment to students in need

For situations where it was not possible to provide students with access to online resources, the Ministry of Education partnered with the post office to print and distribute physical copies of materials for students to study autonomously

Educational TV programs were put in place both nationally ("Lumni" or "Learning Nation") as well as in some regional academies, alongside with the radio and the print press, to provide extra learning resources to a wide audience

Surveys were launched to teachers to evaluate the level of the response and support that might be made available in the future

# B France's response shows the need to avoid prescriptive measures, the usefulness of using what exists and the diversity of initiatives to support vulnerable segments



#### **Avoid prescriptive measures**

Due to novelty of the situation, national and regional authorities made digital resources and support available, but were not prescriptive in their adoption by allowing schools to define what was best for them according to their context<sup>1</sup>

#### Use what exists

Most schools chose to promote usage of curriculum and platforms that already existed instead of developing new solutions

### **Support vulnerable segments**

Ministry of Education partnered with several other entities to launch additional initiatives to improve access to online resources or offer alternative educational solutions to students from vulnerable segments



<sup>1</sup> National and regional authorities are now trying to understand what were best practices in order to inform future guidance Source: Expert interview



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# B The Gambia's Ministry of Primary and Secondary Education had anticipated the possibility of school closures from COVID-19 and had already started planning a response



# Though COVID-19 did not spread intensely in The Gambia, it was still disruptive...

The Gambia registered its first case of coronavirus on March 17, 2020, and in the first half of 2020 registered 48 cases and 2 deaths - WHO's classified its transmission as 'Sporadic cases'

Nonetheless, the country adopted similar measures as other countries from closing borders, suspension of non-essential activities and reducing people movement

# ... but the education sector had the opportunity to anticipate planning on school closures

As the Ministry of Primary and Secondary Education monitored reports of other countries responses, it decided to create a taskforce, with several stakeholder representations from the teachers union, association of junior schools, parents, community heads and Ministry of Health, on 15 March tasked to "develop and support the implementation of a coherent, effective and equitable educational responses to the COVID-19 Pandemic"

Two days later there was an announcement of the closure of schools that directly affect about 674,300 children from Early Childhood Development to Senior Secondary School

The taskforce estimated that 72 hours of instructional time would be lost during the initial 21 days of school closure but that it would strive to mitigate the loss of instructional hours and keep school children engaged and ensure continuity of learning at home



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# B The Gambia Ministry of Primary and Secondary Education built on an existing vision of TV and radio learning, that addressed the reality of its students



# The Gambia Ministry of Primary and Secondary Education used the circumstances to fulfill an existing vision...

The overarching objective of the Education Sector COVID-19 Response Plan was to ensure that no child was left behind

Due to challenges in ensuring that all national schools were staffed with teachers who had subject matter expertise and the dominion of local languages, The Gambia Ministry of Primary and Secondary Education had already started since 2016 two programmes called Progressive Mathematics Initiative (PMI) and Progressive Science Initiative (PSI) to deliver education through TV and radio

The core of the remote learning strategy during COVID-19 was the extension of this programme to more subjects and to be broadcast more intensely

# ... that spoke to the existing reality of the students and teachers

The Ministry approached the Broadcasting Gambia

Association to secure a partnership to dedicate broadcasting time for educational lessons given that

- Based on the most recent available data from a UNESCO survey, TV and radio were the most widely accessible channels, with 77% of the population having access to it
- There was a group of teachers that had adequate training in delivering lessons through these remote channels and others could be easily trained

Given the situation the Ministry was able to secure favourable charges that were within its budget

# B Lessons covering some core subjects across all grades were broadcast through the main media houses and were adopted thanks to engagement with stakeholders



# Lessons were broadcast through all main media houses and covered all the curriculum ...

Lessons covered subjects that had already been prepared for remote learning (mathematics and science) and teachers built on that experience to prepare new subjects (e.g., English)

Lessons ran for all school grades seven days a week, and in each lesson a teacher would transmit new concepts, students would practice alone at home and later there would be a Q&A session in the radio or TV in which students could call in to ask for coaching

The Ministry re-emphasized the policy for each student to take textbooks back home so students could at least study autonomously



# REPUBLIC OF THE GAMBIA Ministry of Basic and Secondary Educatio Willy Thorpe Place Building Banjul, The Gambia DRAFT PROGRAM SCHEDULE FOR TV AND RADIO

TIME	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
10:00 AM - 11:00 AM	English Language	Maths	Chemistry	Maths	Maths	Repeat	Repeat
	LBS	LBS	SSS	SSS	SSS	English Language LBS	Maths, LBS
11:00 AM - 12:00 PM	English Language	English Language	Science	Biology	Chemistry	Repeat	Repeat
	UBS	LBS	UBS	SSS	SSS	Maths, LBS	English Language SSS
4:00 PM - 5:00 PM	English Language	Science	Maths	English Language	Biology	Repeat	Repeat
	SSS	UBS	LBS	UBS	SSS	English Language UBS	Maths, UBS
5:00 PM - 6:00 PM	Maths	Maths	Physics	English Language	Physics	Repeat	Repeat
	UBS	UBS	SSS	SSS	SSS	Maths, SSS	English Language SSS

# ... and were prepared and used thanks to Ministry's engagement with key stakeholders

#### Working with teachers

- Around ~30 teachers of the previous program (PMI & PSI) were joined by new ~20 teachers selected across a number of schools, and recorded lessons at the Ministry's Science Centre, in facilities specially prepared for this purpose, that were broadcasted the next day by the media houses
- Teachers that were not involved with the creation of content were asked to provide feedback to improve it, and to support their schools if they created remote learning initiatives through social media or other platforms

**Communicating with parents -** Ministry's communication unit launched the campaign #continuityoflearning through e-mails, flyers, radio, tv and social media to inform that students should stay at home as learning would be through TV and radio and sharing healthcare best practices, and asking parents to support learning from home

**Supporting vulnerable students -** In partnership with the National Teacher Union it distributed 2,000 radios across rural areas and the educational were programs were also prepared in local languages and worked with the World Food Programme to ensure that students living in underprivileged family households were supported with basic food items

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# B The Gambia anticipated problems, leveraged existing resources and engaged with stakeholders



# Monitor evolution of events in other countries to anticipate needs

The Ministry and the COVID-19 response taskforce followed the evolution of the pandemic in other countries and the impact it had had on their education sector, and it acted promptly and decisively to keep the students safe and help them learn effectively when the pandemic hit the country

# Leverage existing resources and accelerate change

The Ministry did not start from scratch but built from the information and programs available that were most relevant and used the opportunity to not only mitigate immediate disruption of learning but to accelerate a shift towards the long-term vision of education

### Engage with stakeholders extensively

The Ministry engaged with stakeholders extensively, from including them in initial taskforce to making an effort to communicate with parents and teachers during the crisis through multiple channels to keep their support and asking their feedback to improve the remote learning solutions



## B COVID-19 led to school closures in Japan which affected students learning



### COVID-19 affected Japan ...

- The first COVID-19 case was reported in Japan on January 14, 2020
- As the number of cases rose, State of Emergency for the most affected areas was declared on 7 April 2020 for one month, while strict lock-down was not implemented. On 16 April, the State of Emergency was declared nation-wide.

#### ... and its educational sector ...

- The government requested a nation-wide school closure on 28
   February for about three weeks (from 2 March until the beginning of the Spring vacation).
- While following the "request" was not legally compulsory, as of 16 March, almost 100% of the schools were closed
- Many schools closed again after spring break following the state of emergency declared nationwide on 7 April 2020.
- Schools started to gradually open from Mid-May and were almost fully reopened in June.



# B During the school closures, Japan launched various platforms in cooperation with private sectors



# Children's Learning Support Website (Ministry of Education, Culture, Sports, Science and Technology)

Launched on 2 March, the portal site includes learning contents for students from pre-school to high school (videos, audio files, downloadable workbooks, useful links, materials for teachers etc). The contents were collected from various sources, both from government sources and private sources (e.g., publishing companies, private education companies, education TV channels, museums etc).

The contents are organized by subject and by grade, but they are also organized by topic (e.g, how to make facemasks ).

Though schools reopened in June, the portal continues to evolve with new contents being added regularly.



# <u>"Learning Innovation project to keep on learning"</u> (Ministry of Economy, Trade and Industry)

Focusing on EdTech, the portal site was launched at the end of February to support students, teachers and parents during school closure.

Includes a searchable database of curated EdTech providers for children, parents and schools. Many EdTech and private education content providers made their service available for free during the school closure.

Links to the government's long-term reform agenda of <u>learning innovation</u> to make learning more action-oriented (rather than input-focused) and personalized with support of EdTech, so that each individual becomes a "change maker"





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# Japan made it a stated priority to take a balanced approach to remote learning from the beginning of school closures



### Japan focuses on blending remote learning and face-to-face learning

The key principles of learning: (1) **maintaining learning during school closure both online and off-line** through home learning with teachers' close monitoring and guidance; and (2) **combining remote learning and face-to-face learning** while minimizing the health risk to students and teachers and where possible.

Close communication and guidance of students by teachers are highly recommended and teachers and schools are asked to maximize the use of existing channels such as mobile phones and personal devices while following the security guidelines.

# At the same time Japan is accelerating integration of ICT in education

Japan is accelerating the implementation of the **GIGA** (**Global and Innovation Gateway for All**) **School** project, launched in 2019, aiming at supplying an educational digital device to every student and to establish high-speed, high capacity communication network to all schools.

Since the pandemic started, the implementation of the project accelerated, aiming at ensuring the availability of the devices for the key grade students (e.g., last grades of primary and secondary) as well as the students from disadvantaged families.

Financial support is provided for low-income families to cover communications expenses.

Additional 2.2 billion USD for FY2019 (April 2019 – March 2020) and 2.16 billion USD for FY2020 (April 2020 – March 2021) allocated to ensure accelerated implementation of the project

# B Japan's experience may offer lessons learned on remote learning and considerations for future education strategies



# Japan emphasized the importance of blended/hybrid learning

Fostering students' social development through interaction is considered as one of the main functions of schools in Japan. From the beginning of school closures, it was noted that the priority is not to replace the entire learning by remote learning but to focus on what can be done remotely and what needed to be still conducted face-to-face (where possible)

# Public-Private partnership worked effectively in responding to school closures

The government and private partners such as telecommunication companies and education service companies worked together effectively to provide maximum support to students over a short period of time.

# Lessons learned from school closure can accelerate ICT integration

Further integration of ICT in learning was already on the reform agenda, but the school closure caused by COVID-19 accelerated the process, both in terms of infrastructure (including availability of device) and in pedagogy.



## **B** Case study on Oak National Academy – UK



#### Context

Virtual platform emerged out of the initiative of 40 school teachers and school leaders who saw the need to create resources that ensured learning continuity for students during the COVID-19 pandemic

It is focused on content for ages between 5 to 15 years old

Future plans are to create and publish content that covers a whole academic year across most subjects for every grade

It is primarily financed by the national government of the UK

## 01

#### **Envision & Understand**

It is completely open access with no login details and open to any type of user

It tries to be technology-agnostic so that it can be accessed by any device with access to internet and which can display a video

The online lessons are both being used directly by parents at home and being signposted to pupils by schools who have adopted Oak resources into their distance learning offer

## )2

## Decide & Design

Most classes consist of:

- a pre-lesson quiz
- a specially recorded asynchronous video
- a worksheet
- a post-lesson quiz

Users have access to a suggested schedule which indicates which lessons to take

Alternatively, users can browse and choose specific lessons

The presentation style and length of videos is tailored to students' age

Students practice with paper and pen the exercises that are displayed on their device

## 03

## **Enable & Execute**

The platform was launched in an agile way as the features and the content are being added and refined according to the needs identified

- · academic subjects are being added
- special features are being introduced
- content is being added on a weekly basis

Teachers have access to a fact pack that shares key tips about using the platform

The goal of the platform is to be used by schools to free up teacher time for individual follow-up with students and ensuring their well-being

It has some features for children with specialist needs:

- specialist curriculum content
- navigation features added to aid users with vision or hearing difficulties

04

#### **Monitor & Adjust**

They look at lesson and quiz completion by subject and year group and use it to feedback to teachers, to potentially adjust future lesson production

The platform is being improved to be able to process and display more data that can inform future decisions (e.g. level of success on quizzes)



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## B Case study on Oak National Academy – UK

### Key take away

- Create content that can be easily accessible (no logins) needs a device for video and simple quiz with most exercises needing only a pen and paper
- Create suggested schedules of lessons for parents to guide their children at home
- Tailor content according to the age of the students and subject of study
- Launch solution in an agile way ensuring a usable product is accessible as soon as possible and then iterate for improvements and continue to add content and new features
- Measure understanding after the lesson to be to monitor and track effectiveness

## **B Case study on Rocketship Public Schools – US**



#### Context

Rocketship is a non-profit network of 19 public elementary charter schools

Independent learning, small group tutoring, and adaptive online learning programs augment teacher-led instruction and provide valuable time for students to develop more ownership of their learning and achieve the mastery they need to advance

Rocketship prepared in one week to respond to lockdown and organize remote learning by leveraging existing technology in the school

## 01

#### **Envision & Understand**

Focused on guiding principles of personalized learning, talent development, parent power and continuity of care

Surveyed families through multiple means (email, phone app, Facebook group) if they had access to a device

Published learning and well-being resources for free access by other actors concerned with continuing education of children

## 02

### **Decide & Design**

Adopted an adaptive software which sets a learning goal for each student

Organized lessons with:

- Initial asynchronous video lessons
- Followed synchronous zoom discussion of the asynchronous video

Included tips for students on how to use the digital platforms to minimize disruption to classes (e.g. unmute microphones)

Teachers ask questions on Zoom and encourage students to answer through chat function

Teachers share schedule of physical exercises and art activities (that do not need many materials) to students

## 03

#### **Enable & Execute**

Piloted first with four schools, learned from them and changed the initial strategy and then rolled it out to all 19 schools

Distributed all learning devices that were in the school and connected with local and national agencies and mayors to ensure they could provide the families with broadband

Tried to instil a group identity with opening session with the whole school, virtual lunches and enrichment activities (gardening, cooking, dancing)

Offered a lot of teaching to students about COVID-19 – what it is, how to wash hands, how to speak with their family about it

Created two- to three-hour breaks for teachers as it was exhausting to be on the same uninterrupted space looking at screen

## 04

#### **Monitor & Adjust**

Schools tracked assignment progress and when faced with disappointing results launched "Care Corps" initiative that consisted in staff members doing one-on-one daily wellness check-ins with students and families - asking "Do you feel safe and have the resources you need to study?" and then acting on it - participation increased considerably in just one week

School asked parents daily "Did your child complete yesterday's remote work? Yes or No". By cross-referencing data with platform usage they realized many parents were not aware of the lack of progression, so aided parents to navigate the dashboard and monitor their children

Students use emojis daily to express their experience and enjoyment of the lessons

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## **B** Case study on Rocketship Public Schools – US



### Key takeaway

- Launch surveys through different methods familiar to families to understand their devices needs and help prioritize support
- Use learning adaptive software is possible to tailor learning assignments and outcomes to students
- Use teaching time to address student well-being concerns such as what is COVID-19, how they can protect themselves and how to talk to their families about their feelings
- Define key performance indicators (e.g. student completion of learning goals and parent awareness of student work ) and monitor from the start
- Take action to create well-being initiative to address bottlenecks that prevent learning from occur that consist in brief and simple daily check-ins and teach parents how to supervise student learning



06

# **Appendix**

- → Glossary of key terms
- → Remote learning resources



# **Glossary of key terms**

**Remote learning solution:** a system, a platform, a method, or a tool that enables remote learning and is characterized in 4 dimensions, **experience** offered, **technology** used, **connection** enabled, and **learning activities** covered

The **experience** that the solution offers the users can be live or self-paced:

- Live (synchronous) learning: learning occurs live (e.g., videoconferencing and live TV or radio programs) for real-time lessons the student follows the pace and intensity of learning of the class
- **Self-paced (asynchronous) learning**: students participate in self-paced on-demand learning (e.g., recorded videos, textbooks, and post mail assignments) the student is more autonomous with the pace and intensity of learning

The **level of connection** the solution enables can be interactive or individual:

- Interactive learning: students and teachers meet live (e.g., videoconferencing) for real-time collaborative lessons and discussion
- Individual learning: students pursue learning activities in isolation (e.g., adaptive software or textbook) from each other

The **technology** which the solution relies on can be digital or analog:

- Digital: advanced digital devices that generate, store, or process data:
  - Adaptive software: specially designed adaptive software that collects data through the interaction with the student to identify
    learning needs and adapt the content and practice accordingly (e.g., mobile app that adapts language exercises based on student
    performance) frees up teacher for tailored and more in-depth 1-on-1 coaching
  - Nonadaptive software: software that can enable students to practice but does not collect data or adapt to student needs (e.g., computer word-processing program, coding programs) demands teacher feedback and close supervision to ensure learning outcomes
- Analog: basic analog devices that do not generate, store, or process data (e.g., mail, textbook, radio)

The **learning activities** covered by solution can be of communication or content:

**Communication activities:** consist in activities where the teacher communicates the assignments and general information to students and provides feedback and coaching on student results (e.g., online board, post mail, e-mail, text messages, and videoconferencing)

**Content activities:** consist in activities where the teacher shares new content with the students and the students practice (e.g., videoconferencing, textbook, nonadaptive software)



Case studies

# Remote learning resources (1/3)

		Resource type > Article or report	Resource type > Article or report > Compilation of resources > 0		
Ti	tle	Description	Country	Date	Source and link
>	Learning through radio and television in the time of COVID-19	Overview of the need for learning through radio and TV across the world and principles to think about in TV or radio learning: No success without collaboration, Making pragmatic decisions, A learner-centered approach	Global	02/06/2020	UNESCO
>	Digital gap during COVID-19 for VET learners at risk in Europe	This report calls for a COVID-19 response that puts the needs of each VET student at risk front and centre. Students from disadvantaged socioeconomic backgrounds, migrants and from ethnic minorities, learners with disabilities and special educational needs, have an equal right to health, education and protection during the global recovery of COVID-19.	Europe	04/06/2020	European Center for the Development of Vocational Training
>	Harvard EdCas - Remote Learning and the Digital Divide	Podcast with guest Lecturer Uche Amaechi, who speaks about considering issues of equity when moving instruction online	Global/US	22/04/2020	Harvard Graduate School of Education
>	Technology Integration Practices (TIP) Guide	This guide provides a process to design lessons that integrate technology in ways that support students to engage in content, connect and collaborate, and learn new skills in supported and equitable ways	Global/US	2020	Stanford Graduate School of Education
>	Maintain Operational Capacities	This article provides education authorities with guidance for minimizing and overcoming operational challenges during a crisis	Global	2020	International Institute for Educational Planning (UNESCO)
>	Remote learning: Rapid Evidence Assessment	This rapid evidence assessment aimed to investigate methods that schools could use to support remote learning during school closures caused by the 2020 coronavirus pandemic (Covid-19). The review sought to find the best evidence behind the wide array of approaches that schools might choose to use during the crisis	UK	04/2020	Education Endowment Foundation
>	Online learning sites				https://www.thatquiz.org/ https://anton.app/

NEXT >

# Remote learning resources (2/3)

		Resource type > Article or report > Compilation of resources > Guide or toolkit > Materials > Podcast > Data				
Title		Description	Country	Date	Source and link	
>	Brief: Remote Learning, EdTech & COVID-19	This page attempts to curate useful resources and publish related documents collected and prepared by the World Bank's Edtech team in support of national dialogues with policymakers around the world	Global	21/05/2020	World Bank	
>	Resources Memo: COVID-19What are considerations and strategies for implementing continued learning during school closures?	Educators are grappling with several questions regarding how to implement alternative learning strategies to provide continued learning for students while school buildings are closed. REL Central has compiled resources to address these questions	USA	2020	Institute of Education Science	
>	What considerations have education systems across the world made when choosing a distance learning model?	This Regional Educational Laboratory (REL) Pacific FAQ highlights international education practices to provide a sample of common and effective distance education models and additional resources to support education stakeholders as they strengthen students' access to learning opportunities	USA	2020	Institute of Education Science	
>	Distance learning solutions	This list of educational applications, platforms and resources aims to help parents, teachers, schools and school administrators facilitate student learning and provide social care and interaction during periods of school closure	Global	2020	UNESCO	
>	Learning through radio and television in the time of COVID-19	This article describes the needs caused by COVID-19 for learning as well as a few principles that should shape this new era (e.g., collaboration, putting the learner at the center)	Global	02/06/2020	UNESCO	
>	COVID-19: 10 Recommendations to plan distance learning solutions	UNESCO is sharing 10 recommendations to ensure that learning remains uninterrupted during this period.	Global	06/03/2020	UNESCO	
>	Learning in the COVID-19 era	This article shares lessons learnt from a webinar series on learning in the COVID-19 era	Global	10/06/2020	UNESCO	

# Remote learning resources (3/3)

	Resource type > Article or report > Compilation of resources > Guide or tool			kit > Materials > Podcast > Data	
Title		Description	Country	Date	Source and link
>	National learning platforms and tools	This article provides a list of learning tools and platforms by country	Global	10/06/2020	UNESCO
>	Resilience and Transformation for the Future of Learning	The objective of the document is to provide Education System Leaders concepts and ideas for transitioning from distance learning to building resilient, human-centered models of teaching and learning	Global	06/2020	Microsoft and UNESCO
>	UNESCO Coalition - Modern Teaching & Learning	A Guide for Microsoft Country Engagement Teams Planning Educator Development for Distance Learning in Emerging Connectivity Contexts	Global	04/2020	Microsoft and UNESCO
>	UNESCO Coalition - Technology Blueprint	This blueprint provides simple and clear technical guidance to Country Engagement Teams implementing Microsoft's Distance Learning Strategy	Global	04/2020	Microsoft and UNESCO
>	Distance Learning Strategic Plan	A Guide for Primary and Secondary Education Systems to Implement Distance Learning, in partnership with UNESCO Global Education Coalition	Global	2020	Microsoft and UNESCO