

EdTech Readiness Index



Country Presentation

The document *ETRI Country Presentation* was elaborated by the World Bank's Education Global Practice as part of the EdTech Readiness Index. Version 1.0. Published on 22nd of March 2023. For further information please contact: ETRI@worldbank.org.



The Why





Context: EdTech Readiness Index

Understanding the Role of EdTech

The Problem

There is a **Learning Crisis** of enormous dimensions:

- Pre-COVID, Learning Poverty rate of 53% (percentage of children under 10 in LMICs who cannot read and understand a simple story). Expected to increase to 63%.
- EdTech might have potential to **alleviate disparities** and have **a positive impact on learning outcomes**. But we lack evidence and information needed to orient policies and ensure enabling conditions for EdTech to prosper.

A Solution

Create a **composite EdTech Readiness Index**:

- A multi-dimensional concept combined into a single index. This will help orient (frameworks) and inform (guiding instruments and good practices) existing EdTech policies.
- In essence: (i) **identify where EdTech practices can be strengthened** and (ii) **monitor progress** and status of implementation as countries take action.

Our Proposal

An Index to **motivate action and signal level of readiness** – Not a full diagnostic tool

An Index designed for **high-level policymakers** – Not one with all audiences in mind

A light instrument for cost-effective reporting – Not a comprehensive one



EdTech Readiness Index – *Why we need it*

Filling a Gap

- The **COVID-19 pandemic** has both:
 - **deepened the learning crisis** and
 - increased demand for such a tool as **countries increasingly rely on technology for continuity** in learning.
- The ETRI goes beyond measuring the availability of devices and level of connectivity to capture **key elements of the larger education-technology ecosystem in a country**.
- **Data gap**: the tool provides a snapshot of how well technology is integrated into the broader education system, to help guide **policy design** and **implementation**.
- The tool will guide efforts to **reduce inequalities** and **increase learning opportunities**.
- For education technologies to have a positive impact on learning requires a **comprehensive approach** – requiring the **efforts of multiple actors** as well as the integration of EdTech into the broader education system **policy and practices**.

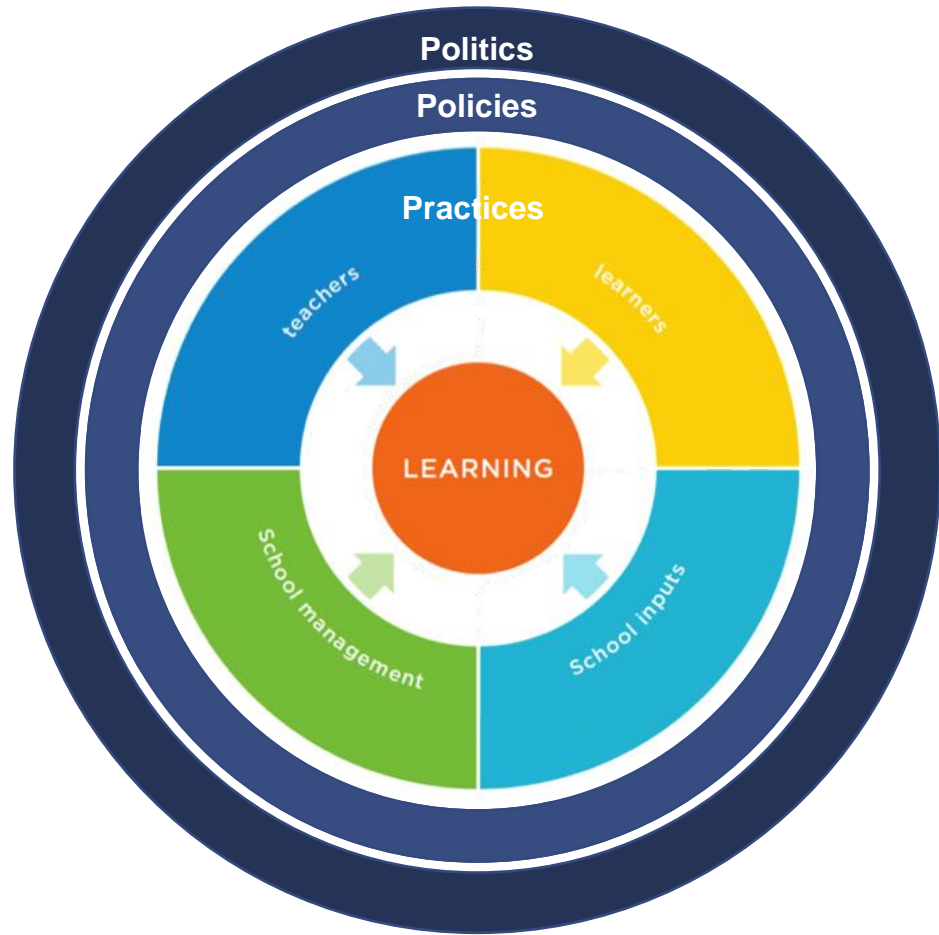


The What





Leveraging the Dashboard to Strengthen the EdTech Measurement Agenda



STEP

1

Understanding the outcomes

STEP

2

Understanding the quality of practices

STEP

3

Understanding policies driving practices

STEP

4

Understanding the politics & bureaucratic capacity



EdTech Readiness Index

6 Pillars to Understand the System



School Management



Teachers



Students



Devices



Connectivity



Digital Resources

PRACTICE

- Strategy
- Leadership
- Prioritization

- Self-Efficacy
- Use – planning
- Use – teaching

- Self-Efficacy
- Use – Inside
- Use – Outside

- Availability
- Student access
- Tech Support

- Connectivity
- Student access
- Quality

- Access
- Use
- Quality

POLICY

- Responsibility
- Guidance
- Support

- Standards
- Support
- Evaluation

- Framework
- Curriculum
- Assessment

- Standards
- Monitoring
- Responsibility

- Plan
- Monitoring
- Support system

- Guidance
- Strategy
- Standards



Value-Added of EdTech Readiness Index:

4 Key Global Public Goods

1

A Framework

A sound framework to understand the enabling conditions for EdTech to be effective in promoting learning.

2

A Set of Instruments

Ready-to-use survey instruments to collect the needed information remotely or in-person.

3

An Approach to Data Collection

A flexible and cost-effective data collection approach that leverages **best practice** for remote data collection.

4

Country-Level Data

Evidence collected in **4 pilot countries** to help push the global knowledge frontier, but also to help inform country-level strategies.



EdTech Readiness Index – *Outputs and Benefits*

Key Outputs

- The EdTech Readiness Index signals the **overall level of readiness** to deploy effective EdTech policies.
- It reports on policies at the **national aggregate level** – not policies at school level–disaggregated by **rural-urban** (where applicable) and **gender**.
- The index will help governments **pinpoint actionable areas for improvement**
e.g. 50% of principals report that teachers are not confident enough to prepare lessons that involve the use of ICT by students.
- The index leverages evidence from **global best practices**.
- **Guides policy-making** and **informs investment decisions** required for EdTech to bear fruit – *to strengthen how EdTech is integrated into policies and practices at the school level.*

Benefits

- Information could be collected **early in the next calendar year (2022)**
- **Timing of data** would be ideal and enable the government to have **recent data to inform policies** help support finding new ways to deliver remote education effectively.



The How





Measuring Practices and Policy

ETRI measures **practices** – activities and conditions associated with the use of digital technologies in the school, and **policies** – how the system defines, articulates and implements strategies to foster desired practices.



School Survey

- Related to ICT in school practices and *de facto* policy implementation at school level, focusing on **basic education** (Grade 5 practices).
- Administered **in-person** to school principals and teachers or **remotely** to school principals at **200-300 primary schools**.
- Approx. **48 questions** related to the 6 pillars of ETRI.^a



Policy Survey

- Related to *de jure* existence of ICT policies in education .
- Administered to **consultant experts**, who will carry out a legislative review.
- **Self-administered** and shared electronically.
- Approx. **31 questions** related to the 6 pillars of ETRI.
- Includes a brief **context report**, particularly highlighting the pre/post COVID-19 results.

^a. 6 pillars of ETRI: School management, teachers, students, devices, connectivity and digital resources.



Data Collection Approach

Addressing COVID-19 Challenges



The initial idea: World Bank's Global Education Policy Dashboard (GEPD) data collection would also gather the necessary information for the ERI.



The problem: Given the school closures associated with the pandemic, data collection had to be postponed (for both Dashboard and ERI). Even when schools re-open, in-person data collection will continue to be a problem given the transmission risks.

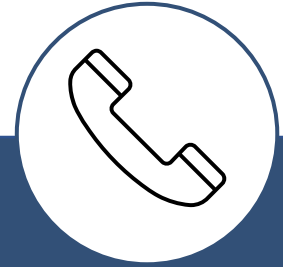


Our approach: After consulting with international organizations and experts inside and outside the World Bank, the suggested way forward is to have a remote data collection approach with the two instruments: School Survey and Policy Survey.

One version for remote data collection to address the data needs in the short term (2021)



Remote Implementation of the School Survey



The Basics:

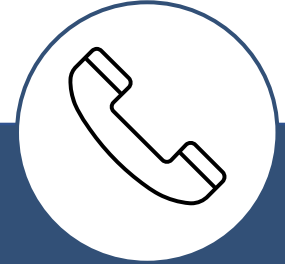
- Remote data collection when **schools reopen** and are operational.
- Close **coordination** with **Government for gaining approval** and accessing school **contact** information.
- **Centrally managed** by World Bank global team, contracting local survey firms to implement the surveys.

The Sample:

- **Unit of analysis** is the **school** and **principals** will be the sole informant.
- Sample frame constructed from Government EMIS data: **200 – 300 schools per country**.
- Probabilistic sampling will be used to create a **nationally representative** sample.
- Sample dependent on **school phone connectivity** and quality of **phone records** in EMIS (*quasi-random nationally representative sample is a possibility*).



Remote Implementation of the School Survey



The Execution:

- Phone-based survey (48 questions in total) lasting approximately 42 minutes.
- Some questions (related to e.g. infrastructure, teacher practices, etc.) will be shared in advance with principals over email/Whatsapp.
- The sample will comprise **principals of primary schools** from approximately **200 – 300 schools**.
- Surveys will be administered to each principal using through a phone-based survey (**CATI**), by a team of trained enumerators in the local language.

The Questionnaire:

- The principal will be asked about **school management, teachers, students, connectivity, devices, digital resources**, and the **policies** related to them
- **Focus and scope** – for questions related to school actors (teachers and students), the questions will focus on **grade 4** activities over the **past 3 months**, as an indicator of EdTech use in **basic education**.
- **Perception framing** – Because direct observation is not possible (e.g. an Internet connection), questions will ask about **perceived quality** of school EdTech inputs (Internet, devices and digital resources).
- **De facto policies** – Principals will be asked about the **de facto** policy implementation and awareness of policies, for which there is an equivalent question about **de jure** policies (in the Policy Survey).



Vision: EdTech Readiness Index

How Scores will be Reported

Data collected from the surveys will be reported as scores for each of the six pillars (School Management, Teachers, Students, Devices, Connectivity and Digital Resources):

- Each pillar will have **an indicator score out of 5** for **Practice** and **Policy** (broken down into a ***De Facto*** and a ***De Jure*** score)
- Scores will be **averaged across all schools in the sample** and given a color to pinpoint areas for improvement
- Scores will be **grouped** and broken down accordingly (e.g. rural vs. urban).
- **Important metrics** for each pillar will be highlighted e.g. *55% of schools report having working digital devices available to students for learning activities*

DEVICES

55.2

ACCESS TO DIGITAL DEVICES

NEEDS

IMPROVEMENT



3.5

TECHNICAL SUPPORT

CAUTION





The Who



Key Actors and Stakeholders



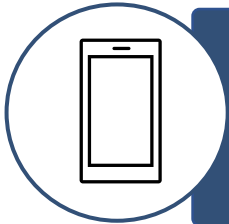
The Government:

- Participates in the pilot, grants necessary approvals and engages education officials to support and participate in piloting the EdTech Readiness Index.
- Provides the sample frame consisting of the **national EMIS school directory** and **contact information**.



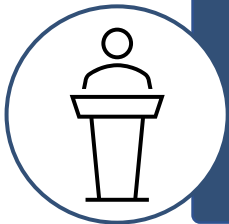
The World Bank Country and Global Teams:

- Coordinate with the Government to **implement the Index** and access **school contact information**.
- **Centrally manage** the project and **contract a local survey firm** to implement the data collection.
- **Supervise the implementation** and process and **analyze the collected data**.



Local Survey Firm:

- **Implements data collection for the School Survey** at 200-300 primary schools.
- Trains and manages enumerator teams and coordinates any logistics associated with data collection.



Survey Participants

- School survey: **Principals** of operational primary schools.
- Policy survey: **Consultant expert** with knowledge of education and EdTech-related **policies and legislation**.



The When





Implementation Timeline

Next Steps



Step 1: Engage Government

The World Bank Country Office teams would engage the Ministry of Education to acquire participation in the implementation of the EdTech Readiness Index in their country. We will also require approvals and a sampling frame. This process is scheduled for July - September 2021.



Step 2: Engage data collection firm

Following MOE engagement and approvals, we will procure a data collection firm to implement the data collection, subject to TORs defined by World Bank. Our team will work with them on sampling, procurement, implementing protocols, enumerator training, quality control processes and fieldwork supervision. Scheduled for late 2021.



Step 3: Data collection: Beginning of 2022 calendar year, contingent on relevant engagement, approvals and contracting.



Step 4: Analysis and sharing findings: Analysis and preliminary findings could be shared as early as the mid-2022.



Thank you!

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