# **EdTech Readiness Index (ETRI)**

# **School Questionnaire**

# Introduction

The World Bank is collaborating with Imaginable Futures and is developing an EdTech Readiness Index (ETRI) to support countries in monitoring the extent to which technology supports teaching and learning processes. The ETRI aims to capture key elements of the 'ecosystems' within the education and technology sectors in a given country, and the extent to which the conditions are ripe for investments in 'EdTech' to bear fruit.

The ETRI indicators seek to collect information on two key dimensions that impact student learning: practices (or provision of services offered in the school) and policies (that guide implementation). The indicators on practices and policies have been structured into six general components: school management, teachers, students, devices, connectivity and digital resources.

Overall, the indicators will be populated with data collected using two questionnaires. This document contains the questionnaire that collects data remotely, at the school level. The school's principal will be the only informant and will provide the necessary data to produce both practices and *de facto* policy indicators. The second ETRI survey questionnaire (Policy Questionnaire) focuses on the *de jure* policy indicators and some key aspects of ICT policies in the education sector.

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

# **EdTech Readiness Index (ETRI)**

### **School Questionnaire**

Intended respondent: school's principal

Type of survey administration: remotely

Identification of school and information:					
Name:					
Address:		Province:			
Telephone:		E-mail:			
School EMIS Code:					
Grades¹ taught at the school:					
Pre-school					
Grade 1					
Grade 2					
Grade 3					
Grade 4					
Grade 5					
Grade 6					
Grade 7					
Special needs					

# Introduction

I am calling from *survey firm*. We are conducting a survey on the availability, access and use of information and communication technologies (ICT) in primary education schools to enable the development of ICT skills among youth. ICT is the general term that refers to the technological tools and resources that transmit, store, create, share or exchange information. They include computers, the Internet (websites, blogs, and email), live streaming technologies (radio, television), recording streaming technologies (audio and video players and storage devices), and telephony (mobile phones, landlines, satellite, videoconference).

The study is implemented in a set of schools in *Country, as well as* in other selected countries around the world and we hope that the results of the study will contribute to the design of policies to improve the learning experience of the children of those countries.

This study is conducted by the World Bank, with the support of the Ministry of Education.

We would like to ask you a few questions about your background and different aspects related to the use of ICT for teaching and learning. Your interview will take approximately XX minutes.

<sup>&</sup>lt;sup>1</sup> Text in **blue** indicates that it must be adapted to each country.

Your responses to the interview questions will be kept confidential. Research staff will protect your identity and personal information closely, so no one outside the global research team will be able to identify that the responses are coming from you. The data you share with us may be used as the basis for publications or presentations in the future, but we will never use your name or information that would identify you. Your colleagues and superiors will not see your responses and nothing you share will be linked to you. When the results are released, they will be aggregated at the province or district level and will not show data at the school level.

Your participation in this study is completely voluntary, and you may refuse to participate or withdraw from the study at any time. You may skip any question during the interview. Your relationship with any school or the *Ministry of Education* will not be affected by your decision to participate or not.

If you have questions or concerns about this research, please contact: XX

#### Consent

Do you agree to participate in this study?

0 = No

1 = Yes

If not, do not continue with the interview

١	General background information on the respondent and the school	Skips
	What is your position in the school? (most senior position)	
	a. Principal.	
	b. Deputy Principal.	
	c. Head teacher/Teacher.	
	d. Teacher assistant.	
	e. Owner/Co-owner.	
	f. Other (Specify:).	
	Have you ever taught in a school?	If A2=b, go
	a. Yes.	to A6
	b. No.	
	What year did you begin teaching?	(Between
	Years:	1950 and 2022)
	Do you presently teach at this school?	If A4=b, go
	a. Yes.	to A6
	b. No.	
	Which grades do you teach this academic year?	
	a. Grade 1.	
	b. Grade 2.	
	c. Grade 3.	
	d. Grade 4.	
	e. Grade 5.	
	f. Grade 6.	
	g. Grade 7.	
	h. Pre-School.	
	i. Special needs.	

6	a. No education or less than primary education. b. Primary education completed. c. High school or secondary education completed. d. Tertiary non university degree. e. University degree – bachelor. f. University degree - master or doctoral. g. Other (Specify).	
7	In what year did you take your present position in this school?  Year:	
8	What is your age?	
	Age (in completed years):	
9	What is your gender?  Male   Female   Other   Prefer not to answer	
10	How many students are currently enrolled in this school (in total)? An estimate is fine.  Number:	
11	How many grade 5 students are currently enrolled in this school (in total)? An estimate is fine.  Number:	
В	School leadership and ICT	
13	To what extent do you agree or disagree with the following statements about the use of ICT at your school?  (1. Strongly disagree, 2. Disagree, 3. Agree, 4. Strongly agree)  a. In my school, there is a digital strategy or a plan/strategy to incorporate the use of technology and/or devices into the teaching and administration of the school.  b. In my school, the school leaders involve teachers in the development of the school's digital strategy.  c. In my school, school leaders support teachers in trying out new ways of teaching with ICT.  d. In my school, there are discussions on the advantages and disadvantages of teaching and learning with ICT.  See the glossary for the definition of digital strategy.  In your school, how important is it to ensure students have the skills to use ICT in each of the following ways?  (1. Not Important; 2. A little important; 3. Moderately important; 4. Very important)  a. For basic computer functions (e.g. Internet use, email, word processing, presentation software).  b. For accessing and using information.  c. For using digital devices safely and appropriately.  d. For improving their learning in non-ICT topics.  Which level of the education system is mainly responsible for integrating ICT use into schools' strategic plans?	If B12a=1, go to B12c
15	a. National level b. Sub-national/local level c. School level d. No level; those responsibilities are not assigned e. I don't know  Does your school use guidelines or supporting tools provided by the national or sub-national educational authorities	
	on incorporating ICT into teaching and learning activities?  a. Yes, and they are useful  b. Yes, but they are not very useful for what my school needs.  c. No, the educational authorities do not provide these guidelines.  d. I don't know about the existence of these guidelines/tools.	

- Over the last 12 months, did you attend or participate in any training on the management and use of ICT teaching and learning?
  - a. Yes. In official training that was required by government.
  - b. Yes. In official training with optional attendance.
  - c. Yes. In unofficial training (e.g. meetings and workshops) with other principals/teachers where such practices were shared.
  - d. No.
- 17 How was this training delivered?
  - a. In-person training
  - b. Remote training i.e. using online media or tele-conferencing facilities
  - c. A combination of both/blended.
- 18 Did you find this training effective i.e. did you use anything you had learned during the training in practice following the sessions?
  - a. Yes
  - b. No

# C Teachers' practices related to the use of ICT

The following 7 questions (19 to 25) refer to teachers' practices related to the use of ICT. When responding, please do so taking into account the knowledge you have of the teacher or teachers in charge of teaching grade 5 Maths or Language in your school.

If there is more than one teacher in charge of teaching grade 5 Maths or Language in your school, respond taking into account the knowledge of the teacher who is first in the list of those teachers, in alphabetical order.

- 19 Considering **the last 3 months**, to what extent did the grade 5 teacher do the following activities at any time during his/her direct class instruction?
  - (1. Never or hardly ever; 2. In some lessons; 3. In most lessons; 4. In every lesson; 9. I don't know)
  - a. Use ICT to search for information during in-class discussions (e.g. in digital books, on digital platforms).
  - b. Use ICT to present information (e.g. text, images, videos) during class instruction.
  - c. Use classroom management tools (e.g. Google classroom, Microsoft Teams).
  - d. Ask students to search for information (content) on the Internet.
  - e. Ask students to present results or outputs using digital tools.
  - f. Use digital tools to assess students' learning (e.g. tests, online quizzes, etc.).
- During **the last 3 months**, to what extent did the Grade 5 teacher do the following activities using digital devices (e.g. computer, tablet, smartphone, etc.) while preparing or planning his/her lessons?
  - (1. Never or hardly ever; 2. Once or twice a month; 3. Once or twice a week; 4. Every day or almost every day; 9. I don't know)
  - a. Search for lesson/educational content to use in the classroom (resources on the Internet, on education portals, etc.).
  - b. Share educational content with other teachers.
  - c. Participate in a project developed with other teachers and educators.
  - d. Prepare presentations or other educational materials to use for teaching.
  - e. Develop or deepen knowledge about the use of teaching and learning technologies.
  - f. Carry out administrative class management (e.g. recording absenteeism, producing grade reports, etc.).
- 21 How confident are you that the Grade 5 teacher can perform the following tasks using ICT?
  - (1. Not confident at all; 2. A little confident; 3. Moderately confident; 4. Very confident; 9. I don't know)
  - a. Contribute to a discussion forum or user group on the Internet (e.g. a wiki or blog).
  - b. Produce presentations (e.g. using Microsoft PowerPoint or a similar program) to be used during class.
  - c. Prepare lessons that involve the use of ICT by students.
  - d. Use a spreadsheet program (e.g. Microsoft Excel) for keeping records or working with data.
  - e. Assess student learning using ICT.
  - f. Collaborate with colleagues using shared resources (e.g. Google Docs, OneNote).

If B16=d, go

to C19

- 22 Is there a framework or set of guidelines that defines the digital competences\* that a teacher is expected to have or develop?
  - A digital competence is the knowledge, skills and attitudes that are required when using ICT and digital media to communicate, access, manage, combine, share and evaluate information in order to perform tasks or solve problems.
  - a. Yes, and this framework/set of guidelines is useful.
  - b. Yes, but the framework/set of guidelines is not relevant within this school.
  - c. No, there isn't a framework/set of guidelines.
  - d. I don't know of such framework/guidelines.
- 23 During the last school year, was the Grade 5 teacher formally evaluated on their use of ICT?
  - a. Yes.
  - b. No.
  - c. I don't know
- 24 Did the initial training programme taken by the Grade 5 teacher in your school include the following elements?
  - (1. Yes; 2. No; 9. I don't know)
  - a. Learning how to use ICT generally.
  - b. Learning how to use ICT in teaching.
- 25 Over the last 12 months, did the Grade 5 teacher participate in any professional development activities on using ICT in teaching and learning practices?
  - a. Yes. In official training that was required by government.
  - b. Yes. In official training with optional attendance.
  - c. Yes. In unofficial training (e.g. meetings) with other principals/teachers where such practices were shared.
  - d. No.
  - e. I don't know.

## D Students' practices related to the use of ICT

The following 6 questions (26 to 31) refer to students' practices related to the use of ICT for learning and associated regulations. When responding, please do it based on the knowledge you have of the Grade 5 students in your school.

- Thinking about the last 3 months, how often do the Grade 5 students <u>use digital devices</u> (e.g. digital television, computers, tablets) for the following activities **while in school**?
  - (1. Never or hardly ever; 2. In some lessons; 3. In most lessons; 4. In every lesson; 9. I don't know)
  - a. Searching for information or data for a project.
  - b. Communicating with other students on projects.
  - c. Sharing assignment results or other schoolwork with other students.
  - d. Submitting completed work for assessment.
  - e. Evaluating information resulting from a search.
  - f. Producing a document, presentation, or creating visual outputs or videos.
- 27 Thinking about the last 3 months, how often do the Grade 5 students <u>use digital devices</u> for the following activities outside of school?
  - (1.Never or hardly ever; 2. Once or twice a month; 3. Once or twice a week; 4. Every day or almost every day; 9. I don't know)
  - a. Browsing the Internet for schoolwork (e.g. when preparing for an essay or presentation).
  - b. Using a messaging application (e.g. WhatsApp, Facebook Messenger) or social networks (e.g. Facebook, Twitter) for communication with teachers.
  - c. Using email for communication with teachers and submission of homework or other schoolwork.
  - d. Doing homework on a digital device.
  - e. Using learning apps or learning websites on a digital device.

20	independently (without assistance)?  (1. Almost all; 2. More than half; 3. About half; 4. Less than half; 5. None; 9 I don't know)  a. Open a new tab in a browser.  b. Save a photo that they find online.  c. Find a website they have visited before.  d. Check if the information they find online is true.  e. Post online videos or music that they have created themselves.  f. Make basic changes to online content that others have created.	
29	Does the educational curriculum recommend using ICT in teaching of Grade 5 students? a. Yes, it does. b. No, it does not. c. I don't know	
30	Is there a framework or set of guidelines defining the digital competences* that a student is expected to have or develop?  *A digital competence is the knowledge, skills and attitudes that are required when using ICT and digital media to communicate, access, manage, combine, share and evaluate information in order to perform tasks or solve problems.  a. Yes, and this framework/set of guidelines is useful.  b. Yes, but this framework/set of guidelines is not relevant within this school.  c. No, there isn't a framework/set of guidelines.  d. I don't know of such a framework/guidelines.	
31	During the last school year, were the digital competencies of the Grade 5 students <u>formally evaluated/assessed?</u> <ul><li>a. Yes.</li><li>b. No.</li><li>c. I don't know.</li></ul>	
Ε	Digital devices and internet connectivity	
32	How many digital devices (specifically desktop computers, portable computers and/or tablets) are at this school? This includes all devices that might be used by staff or students in the school. An estimate is fine.  Number of digital devices:	If E32=0, go to E37
33	How many of those digital devices are currently in working condition at this school? An estimate is fine.  Number of digital devices currently in working condition:	If E33=0, go to E37
34	Out of the digital devices that are currently working, how many are available for students to use in learning activities? An estimate is fine.  Number of working digital devices that are <u>available to students</u> :	If E34=0, go to E37
35	Does your school have digital devices that are adapted for the use of students with disabilities (e.g. increased font size or contrast, reading text aloud, special keyboard or mouse)?  a. Yes.  b. No.  c. I don't know	
36	How often did the Grade 5 students use these digital devices in class in <a href="the-last month">the last month</a> ? <ul> <li>a. Never or hardly ever.</li> <li>b. Once or twice a month.</li> <li>c. Once or twice a week.</li> <li>d. Every day or almost every day.</li> <li>e. I don't know.</li> </ul>	
37	Does this school have Internet access? a. Yes. b. No.	If E37=b, go to E39
38	Approximately, how many of all digital devices (computers, portable computers and tablets) available to students in the school <u>are connected to the Internet</u> ?  Number of digital devices <u>available to students and connected to Internet</u> :	Check if E32=0 or E34=0, go to E39

- 39 To what extent do you agree with the following statements about your school?
  - (1. Strongly disagree, 2. Disagree, 3. Agree, 4. Strongly agree)
  - a. The number of digital devices for instruction is sufficient to support teaching and learning effectively.
  - b. The number of digital devices connected to the Internet is sufficient to support teaching and learning effectively
  - c. The school's Internet bandwidth or speed is sufficient to support teaching and learning effectively.
  - d. The school's Internet stability (i.e. connection without service interruption) is sufficient to support teaching and learning effectively.
  - e. There is sufficient technical support to maintain ICT resources so that they are fully functional.
- 40 If your school has problems with Internet connectivity, such as stability, low bandwidth, etc., is there a system or mechanism at the government level to assist you and resolve the problem?
  - a. Yes, I have used it.
  - b. Yes, but I have not used it.
  - c. No, there is no system.
  - d. I don't know.
- Do you know if there are standards in place which require that students in all [public/private] schools have access to functioning digital devices (PCs, laptops, tablets and/or other digital devices)?
  - a. Yes
  - b. No.
  - c. I don't know

See the glossary for the definitions of policy and standards.

- 42 Does the government have any strategy or plan to provide or facilitate Internet connectivity to all public schools?
  - a. Yes.
  - b. No.
  - c. I don't know.

See the glossary for the definition of strategy and plan.

- 43 Is there someone or any <u>institution or mechanism</u> (such as education information system, regular survey, etc.) that monitors the following?
  - (1. Yes, there is; 2. No, there isn't; 3. I don't know)
  - a. That all public schools have access to functioning digital devices (PCs, laptops, tablets, mobiles, etc.).
  - b. Availability of an Internet connection.
  - c. If digital devices and connectivity are used by the students.
- 44 Is there government legislation that assigns responsibility for maintaining public school ICT infrastructure and/or technical support?
  - a. Yes, those responsibilities are mainly assigned to the national government level.
  - b. Yes, those responsibilities are mainly assigned to the subnational/local education authority level.
  - b. Yes, those responsibilities are assigned to the school level.
  - c. No, those responsibilities are not given to any level of school government.
  - d. I don't know.

See the glossary for the definitions of legislations and policies.

F Digital Education Resources (DERs)

See the glossary for the definition of digital education resources (DERs).

- To what extent do you agree or disagree with the following statements about using digital learning resources in teaching at your school?
  - (1. Strongly disagree, 2. Disagree, 3. Agree, 4. Strongly agree)
  - a. My school has access to sufficient digital learning resources (e.g. learning software or apps).
  - b. The available digital learning resources are of adequate quality.
  - c. The available digital learning resources are aligned to the needs of the curriculum.
  - d. The available digital learning resources are adapted to the local context and language needs.
  - e. The available digital learning resources are adapted for the use of students with disabilities.

See the glossary for the definition of digital learning resources.

How often did the Grade 5 teacher use the following tools in her/his teaching this school year? (1. Never or hardly ever; 2. In some lessons; 3. In most lessons; 4. In every lesson; 9. I don't know) a. Computer-based information resources (e.g. topic-related websites, wikis, encyclopedias). b. Digital resources linked with school textbooks. c. Digital learning games. d. Collaborative software (e.g. Google Docs, OneNote). e. Graphing or drawing software (e.g. Paint, drawing tools). f. Word-processor software (e.g. Microsoft Word). g. Presentation software (e.g. Microsoft PowerPoint). Is there government legislation/policy about digital education resources (DERs) that defines any of the following? (1. Yes; 2. No; 3. I don't know) a. A strategy for ensuring that public schools have access to digital educational resources. b. Quality standards for digital educational resources. c. How DERs should be aligned to the curriculum's requirements. d. How DERs should be adapted to the local culture or language. e. How DERs should be adapted for the use of students with disabilities.

	Questions shared in advance	
	Information about school (shared in advance)	
10	How many students are currently enrolled in this school (in total)? An estimate is fine.  Number:	
11	How many grade 5 students are currently enrolled in this school (in total)? An estimate is fine.  Number:	
	Information about devices (shared in advance)	
32	How many digital devices (specifically desktop computers, portable computers and/or tablets) are at this school? This includes all devices that might be used by staff or students in the school. An estimate is fine.  Number of digital devices:	
33	How many of those digital devices are currently in working condition at this school? An estimate is fine.  Number of digital devices currently in working condition:	
34	Out of the digital devices that are currently working, how many are available for students to use in learning activities? An estimate is fine.  Number of working digital devices that are available to students:	
38	Approximately, how many of all digital devices (computers, portable computers and tablets) available to students in	
	the school <u>are connected to the Internet</u> ?	
	Number of digital devices available to students and connected to Internet:	

# **END OF THE QUESTIONNAIRE**

# Glossary

**Digital Competency Framework (DCF)** – A Digital Competence Framework is a framework or set of guidelines which defines the digital competences that an individual is expected to have. A digital competence is the knowledge, skills and attitudes that are required when using ICT and digital media to communicate, access, manage, combine, share and evaluate information in order to perform tasks or solve problems.

**Digital device** – A digital device is an electronic device that can create, receive, process, store, send and display information. These include, but are not limited to, personal computers (PCs), laptops, tablets, mobile phones, smartphones and similar storage devices.

**Digital Education Resource (DER)** – Also known as digital learning resources, DERs are pedagogical resources that support learning outcomes and which are in electronic format and include text, images, audio, video and sound. They can take the form of e-books, learning software, videos, databases, tools, animations and simulations.

Information and Communications Technologies (ICT) – Information and communications technologies is an umbrella term that refers to technological tools and resources that transmit, store, create, share or exchange information. They include computers, the Internet (websites, blogs and emails), live broadcasting technologies (radio, television), recorded broadcasting technologies (podcasting, audio and video players and storage devices) and telephony (mobile phones, landlines, satellite, video-conferencing, etc.).

**Legislation** – Government legislation is a set of laws or policies that have been passed by the government (or parliament, if appropriate) of a country, which govern how activities should be run.

**Mechanism** – A mechanism is a separate body, organization, committee or bureau that has been given responsibility by the government for promoting, coordinating and ensuring correct implementation of ICT in education. In this survey, it is used to describe a body or system that has been set up to achieve an education-related output e.g. monitoring the availability of Internet in public schools, assessing teacher's competencies, etc.

**Plan** – A plan is a government-issued document on how its goals in ICT in education are to be achieved within a specified timeframe. It details each activity to be undertaken, the method employed for implementation, the timeframe, the resources required and the actors responsible for implementing each activity.

**Policy** – A policy is a government-issued document which sets out the principles, guidelines and strategy for ICT in education. It is distinct from rules or legislation which can compel or prohibit specific actions, and instead guides actions towards a desired outcome.

**Strategic plan** – A strategic plan is a document that defines the organization's objectives, goals, mission, vision, values and actions required to achieve the goals. It is often used to define priorities and core objectives of an organization's activities.

The document *ETRI School Questionnaire* was elaborated by the World Bank's Education Global Practice as part of the EdTech Readiness Index. Version 1.0. Published on 22<sup>nd</sup> of March 2023. For further information please contact: <a href="mailto:ETRI@worldbank.org">ETRI@worldbank.org</a>.