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INTERNAL PAPER

Pakistan Landscape Analysis Inception Report

UNICEF Inception Report

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Notes

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1. Background

Since the onset of the Covid-19 pandemic, governments globally have deployed a range of educational technology (EdTech) tools to provide learning continuity for children unable to attend classes. EdTech tools including TV, radio, SMS, calls, digital audiobooks, feature phone apps, digital classrooms, video conferencing, and social media have all been used to support learning. These tools have helped maintain learning continuity designed to mitigate learning losses for children unable to attend school.

In Pakistan, the impact of multiple, ongoing, waves of school closures has meant that more than 46 million primary and secondary age students are no longer able to attend school. With an additional 22.8 million students already out of school before the pandemic, Pakistan must identify innovative ways to deliver educational opportunities to more than 60 million children (↑Ministry of Federal Education and Professional Training, 2020).[1]

Pakistan's federal and provincial governments have reacted quickly to this challenge. The Ministry of Federal Education and Professional Training (MoFEPT) released the National Education Covid-19 Response and Resilience Plan for K-12 students in May 2020 to provide a framework of options for continuity of learning including for remote learning. The government and other providers are now deploying various options to support students' remote learning in Pakistan. This includes internationally recognised initiatives such as the Teleschool initiative by the federal government and Punjab's Taleem Ghar educational television programme. Computers, tablets, and the internet are also being used to deliver education, however, access to these is generally limited to the wealthiest quintile. UNICEF is playing a key role in Pakistan's response, working closely with the government and other partners to provide funding, technical guidance, and advocacy for continuity of learning, as well as initiating a partnership with Microsoft to set up digital classrooms on MS Teams.

[1] The 22.8 million figure, however, is likely to be a significant underestimate and is likely to have risen due to drop-out rates occurring as a consequence of the Covid-19-related school closures. ↑ASER (2021) reports the number of out-of-school children to have increased by 2% between 2019 and 2021.

Figure 1. *Tech in Pakistan.*

Even before the pandemic, interest in using technology to support education was growing in Pakistan. This was grounded in the steady advancement of access to various technologies around the country. Pre-pandemic, TVs were owned by 63% of households nationwide (although 48% in rural areas) and computers owned by only 12% of households (7% in rural areas) and mobile phone ownership was at 46% (though only 39% in rural areas) (↑NIPS, 2019; ↑Government of Pakistan, 2020: p. 40).[2] Amongst the 45% of Pakistan's population who own mobile phones, 90% access WhatsApp (↑ASER Pakistan, 2021). While internet penetration is only 33% (though 23% in rural areas), this is expected to grow rapidly in the coming years (↑Government of Pakistan, 2020: p. 40). It is important to note that the gender gap in access to technology in Pakistan is one of the largest in the world. Only 25% of women own a mobile phone, compared to 65% of men (↑Government of Pakistan, 2020: p. 20).

Based on the growing access to technology, and the lessons learned from the experiences during the Covid-19 school closures, the Ministry of Federal Education and Professional Training (MoEFPT) has identified the formalisation of a strategy to develop and implement technology-based learning approaches as an immediate national priority.

UNICEF Pakistan is developing a strategy to guide its engagement in the technology-facilitated learning space in Pakistan. This strategy will identify how both low- and high-tech learning modalities can be scaled to improve access to and the quality of learning for all Pakistan's children and adolescents, including the most marginalised. This strategy will be underpinned by a rigorous review of the technology-enhanced learning landscape in Pakistan.

EdTech Hub has supported governments and development partners globally to research, design, implement, and evaluate EdTech-related programmes to support education service delivery both during school closures and since reopenings have commenced. EdTech Hub will support UNICEF to undertake the aforementioned landscape review, focused specifically on EdTech tools that are being used for student learning in Pakistan. EdTech Hub will then collaborate with UNICEF to develop a strategy for UNICEF's engagement in the technology-facilitated learning arena.

This inception report sets out the scope of work for this partnership. The remainder of the report contains the following sections.

[2] The most recent figures of national radio and TV ownership were published in 2018 in the National Institute of Population Studies' *Pakistan Demographic and Health Survey* (↑NIPS, 2019).

Project overview

This section outlines the tasks that are to be completed throughout this engagement. It provides a high-level overview of key elements including the phases of work, the deliverables and the timelines for this partnership.

Project phases and deliverables

This section includes more detail on the work that will be executed in each phase, including deliverables, the methods for performing the work (including research scope and design), a detailed timeline, UNICEF roles and responsibilities and stakeholder engagement activities.

Quality assurance

This final section outlines the measures that will be taken — both by UNICEF Pakistan and EdTech Hub — to ensure the quality of the deliverables that will be produced through this engagement.

2. Project overview

This section outlines the tasks that will be completed throughout this engagement. It provides a high-level overview of the key elements including the deliverables and phases of work, and the timelines for this partnership.

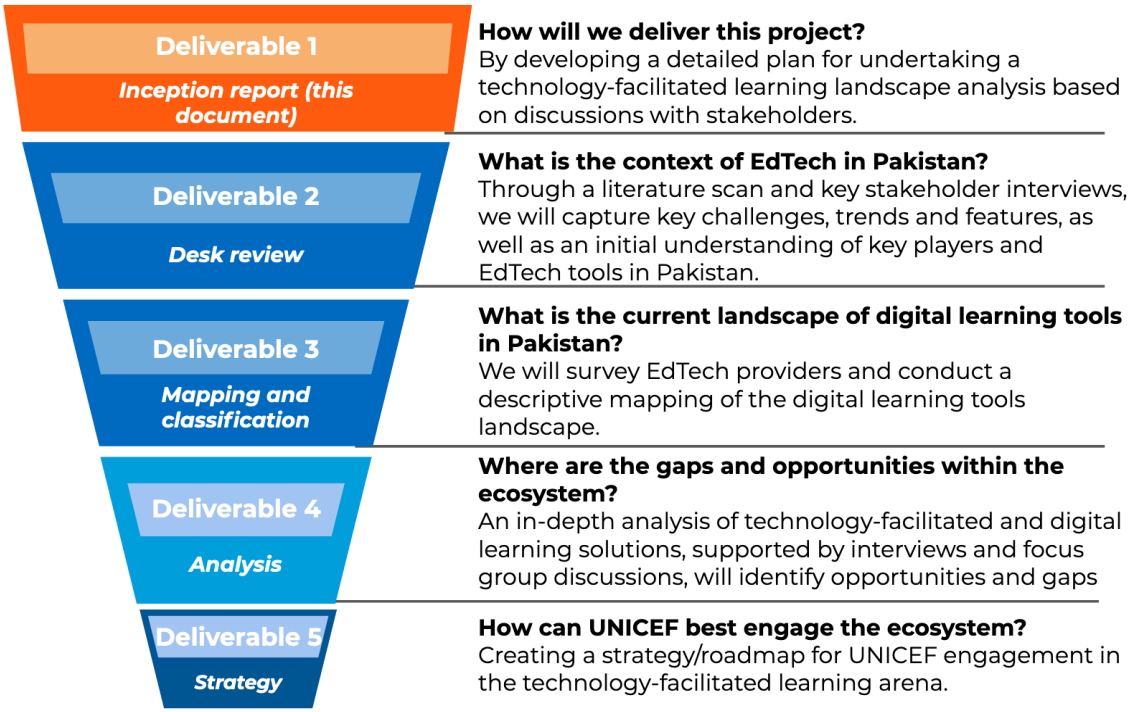
UNICEF Pakistan and EdTech Hub note the importance of ensuring this work both adds to knowledge about Pakistan's EdTech sector and that it supports the development of an impactful approach to EdTech deployment in Pakistan. As such, both parties agree that, if needed, the tasks and approach outlined below can be adjusted to ensure maximum impact.

2.1. Deliverables and phases

This work will provide evidence, data, and guidance to support UNICEF Pakistan and the government to sustainably build Pakistani capacity to roll out technology-facilitated learning modalities in the aftermath of Covid-19.

Figure 2 illustrates our approach to mapping and analysing the technology-facilitated learning landscape in Pakistan, and translating those findings into an actionable engagement strategy for UNICEF. The project will be delivered across five phases, each with its own deliverable.

Figure 2. *Our approach.*



Section 3 details each of these phases and the corresponding deliverables.

2.2. Timeline

Table 1 provides the anticipated project timeline by deliverable. More details can be found in Section 3.

Table 1. *Project timeline by deliverable.*

Deliverable	June			July				August					September				October			
	14	21	28	5	12	19	26	2	9	16	23	30	6	13	20	27	4	11	18	25
Inception						Eid		X												
Desk review									X											
Digital learning solution mapping and classification											X									
Analysis of digital learning solutions																		X		
Engagement strategy																				X

Legend

	Phase completion. At the end of this period, the phase deliverable will be completed in a manner that allows us to transition into the following phase.
	Deliverable finalisation. During this period, the deliverables are complete, but final edits, checks, and polishes are made. This is to ensure other phases are not delayed by minor edits.
X	**Deliverable completion.**

2.3. Summary of deliverables

Table 2 provides the expected completion dates for deliverables, assuming all implementation requirements are met and that no additional or alternative arrangements are necessary.

Table 2. *Completion dates for deliverables.*

Deliverable	Completion date
Deliverable 1: Inception Report	6 August 2021
Deliverable 2: Desk review	13 Aug 2021
Deliverable 3: Comprehensive mapping and classification of digital learning solutions	27 Aug 2021
Deliverable 4: Analysis of digital learning solutions	15 Oct 2021
Deliverable 5: Engagement strategy	29 Oct 2021

These dates reflect when these deliverables will be formally submitted. It is also important to note the following.

- Deliverables are expected to be substantively completed before these dates. The final version of the deliverables will be submitted to meet contractual obligations.
- EdTech Hub will share penultimate drafts for final review in advance of formal submission (i.e., before EdTech Hub copy-editing, etc.) to ensure that the deliverables are in line with expectations.
- This process emphasises the collaborative approach that EdTech Hub will adopt throughout this partnership. EdTech Hub and UNICEF will regularly communicate with regard to both the technical content and administrative requirements to ensure both parties are aligned.
- Finally, EdTech Hub acknowledges that the operating environment in which this project is being executed is rapidly shifting. EdTech Hub's aim is to ensure that the outputs of this work will positively impact the quality of education in Pakistan and as such the Hub will work collaboratively with UNICEF Pakistan to adjust the scope of this engagement if required.

3. Project deliverables

This section describes in detail the process that will be taken to complete each of the project deliverables. This includes methods, activities, and timelines. This section also provides an overview of the stakeholders that should be engaged during each phase, and outlines UNICEF's roles and responsibilities.

3.1. Inception

The inception phase will result in a detailed plan for project delivery. This phase culminates in an inception report (this document).

3.1.1. Overview of deliverables

The deliverable that will be produced in the inception phase is:

Deliverable 1: Inception report, (this document), which outlines the detailed project plan, research methodology, and outlines the project deliverables.

3.1.2. Methods and activities

This phase is designed around a series of scoping interviews, an inception workshop and developing research methods and planning. Key phase activities are outlined in Table 3, below.

Table 3. *Inception phase activities*

Activities	Detail
1. **Meetings & interviews**	Meetings with key stakeholders to determine project implementation approach.
2. **Developing research methods**	Develop and determine research methodology for data collection and analysis.
3. **Inception workshop**	A workshop with key UNICEF stakeholders to review a draft of the inception report, identify key stakeholders, determine inclusion criteria and agree on timeline and methods.
4. **Finalise**	The inception report will be finalised.

3.1.3. Timeline

Table 4. *Timeline for Deliverable 1: Inception report*

Activity	Week commencing								
	June 14th	June 21st	June 28th	July 5th	July 12th	July 19th	July 26th	Aug 2nd	Aug 9th
Meetings & interviews									
Developing research methods									
Inception workshop									
Finalise inception report									

3.1.4. UNICEF roles and responsibilities

UNICEF's input is required at several stages to successfully develop the inception report. This includes:

- Participate in and facilitate the coordination of relevant meetings.
- Participate in the inception workshop.
- Provide written feedback on the initial draft of the inception report.

3.2. Desk review

Deliverable 2 will document an initial understanding of Pakistan's technology-enhanced learning landscape. This will include key challenges, trends, and features, as well as key players and EdTech tools in the technology-enhanced learning landscape in Pakistan. This will involve a scan of available grey and academic literature and high-level interviews with a small selection of key stakeholders.

The desk review will provide insights into key features of the EdTech context in Pakistan. This work will build upon previous resources published by the EdTech Hub including EdTech in Pakistan: A Rapid Scan and Country-Level Research Review: EdTech in Pakistan. It will progress insight into Pakistan's

technology-enhanced learning landscape by also including a specific focus on equity in the use of technology to support learning - a key priority of UNICEF's work in the country.

This desk review will provide the foundational context for the comprehensive mapping (Stage 3) and analysis (Stage 4).

3.2.1. Overview of deliverables

The deliverable that will be produced at this stage is:

Deliverable 2: Desk review of existing data / evidence / documents outlining technology-facilitated learning in teaching and learning for children in Pakistan. This will include a set of student profiles to guide future analysis and strategy development.

3.2.2. Methods and activities

We will conduct a literature search of academic and grey literature and interviews with key UNICEF and Pakistani government stakeholders. The desk review is intended to serve as a precursor to the primary data collection in Stage 3. Table 5 below summarises the key steps.

Table 5. *Desk review activities.*

Stage	Detail
1. **Interviews**	5–10 30-minute interviews with key stakeholders.
2. **Literature scan**	Literature scan of key documents, such as: ■ Pakistan government grey literature documents (federal and provincial). ■ EdTech Hub documents. ■ Grey literature from donors active in the EdTech sector in Pakistan (e.g., World Bank, ADB, JICA, USAID, GIZ, UNICEF, FCDO etc.).[3]

[3] Suggested donors: USAID, World Bank, Asian Development Bank, UNICEF, UNESCO, FCDO, GIZ, AusAID, Australian DFAT, JICA, Aga Khan Foundation.

3.	**Write up**	Write up initial findings from desk review as a short background note. This will include student profiles.
4.	**Present to UNICEF**	Present initial findings to UNICEF and receive feedback.
5.	**Finalise desk review**	Incorporate changes based on feedback and make final edits.

3.2.3. Timeline

Table 6. *Timeline for Deliverable 2: Desk review.*

Desk review activity	**Week commencing**					
	July 5th	**July 12th**	**July 19th**	**July 26th**	**Aug 2nd**	**Aug 9th**
Interviews			*Eid*			
Literature search						
Write up						
Present to UNICEF						
Finalise desk review						

3.2.4. UNICEF roles and responsibilities

The desk review will need the following input from UNICEF:

- Suggest staff and arrange initial interviews.
- Participate in the desk review workshop.
- Provide written feedback on the initial draft of the desk review.

3.3. Mapping

Deliverable 3 involves mapping relevant tools and organisations working in the EdTech space in Pakistan. To do this we will launch a survey and conduct an

internet search designed to capture relevant information on EdTech tools and organisations, as well as feed in information gathered in the desk review.

This phase will result in a database of EdTech tools and organisations in Pakistan, aligned to Deliverable 3. The database will provide quantitative data for analysis and will serve as the long list for selecting 5–6 of the most relevant organisations for further investigation in the analysis phase.

3.3.1. Overview of deliverables

The deliverable that will be addressed at this stage is:

Deliverable 3: Comprehensive mapping and classification of technology-facilitated learning currently in use in teaching and learning at both national and provincial levels.

3.3.2. Methods and activities

In order to achieve Deliverable 3, we will conduct a survey and internet search. The survey will follow the same approach utilised by the EdTech Hub, EdTech East Africa and Centre for Education Innovations which collected information on all EdTech Interventions in the sub-Saharan African region. Full information on the approach utilized can be found here. The scope of the search, inclusion criteria, and provisional parameters of the database are set out below.

3.3.2.1. Defining scope of search

This phase is intended to gather data on relevant EdTech solutions. Inevitably, some of the information captured through the survey and internet search will require sifting to ensure only relevant organisations are captured in the database. To guide this we have included an initial outline of inclusion / exclusion criteria in Annex 1.

We will seek to capture a range of data for every organisation that meets the criteria. This stage aims to capture organisations operating in this space (we predict 30–50), providing an overall picture of the learning-focused EdTech tools in the Pakistan context.

3.3.2.2. Descriptive mapping

The data collected from the survey will be mapped out according to the pre-defined variables. This will be accompanied by a narrative written discussion of the data results. Some initial examples of these predefined variables include:

- The number of students targeted by each digital learning solution.

- The geographic location that the digital learning solution is targeting (e.g., rural / urban; by province / district;
- The main user characteristics that the digital learning solution is targetting (e.g., gender, socio-economic status, disability).
- The type of tech device used and accompanying operating system (e.g., smart device, phone, radio, computer).
- The educational challenge being addressed by the digital intervention (e.g., out of school, Covid-19 response, learning crisis).
- The impact of digital learning solutions (where evidence is available).
- The main funding source of the digital learning solution.

In order to conduct the survey and internet search to arrive at a comprehensive database of relevant EdTech tools and organisations, we propose the following activities outlined in Table 7, below.

Table 7. *Mapping activities.*

Activity	Detail
Survey	Actions include: ■ Agree inclusion / exclusion criteria and data to be collected ■ Create survey ■ Distribute survey to EdTech Hub and UNICEF contacts (via, for example, email, social media, blog post, etc.)
Internet search	Using agreed inclusion / exclusion criteria conduct Boolean search using keywords (for details of keywords, see Annex 3) and contact additional organisations directly in order to add their details to the database
EdTech tool database completion	This includes a review of the data in the database to ensure no key actors have been missed. It will also entail cleaning of the data received as required
Descriptive analysis	Conduct descriptive analysis of survey data

Review by UNICEF	Draft descriptive analysis reviewed by UNICEF
Final database and descriptive analysis	Final versions of both the database and descriptive analysis are shared with UNICEF

3.3.3. UNICEF roles and responsibilities

The mapping phase (survey and internet search) will require the following input from UNICEF:

- Agreement on inclusion and exclusion criteria, and data categories to be collected (to be agreed in inception phase).
- UNICEF publication and promotion of the survey through Pakistan contacts, including direct mailouts to specific initiatives that they are aware of.
- Review of draft descriptive analysis.

3.3.4. Timeline

The timeline of activities is set out in Table 8, below. The survey is planned to start while the desk review (Phase 2) is still ongoing in order to leave adequate time for gathering responses.

Table 8. *Timeline for Deliverable 3: Mapping.*

Mapping activity	**Week commencing**							
	July 5th	**July 12th**	**July 19th**	**July 26th**	**Aug 2nd**	**Aug 9th**	**Aug 16th**	**Aug 23rd**
Survey			Eid ul Adha					
Internet search								
EdTech tool database completion								
Descriptive analysis								
Review by UNICEF								
Final database and descriptive analysis								

3.4. Analysis of technology-facilitated and digital learning solutions

During the analysis phase, we will conduct further interviews and focus group discussions (FGDs) to move the analysis beyond the survey outlined in Section 3.3.

3.4.1. Overview of deliverable

Deliverable 4: An in-depth analysis and write-up of technology-facilitated and digital learning solutions that identify opportunities and gaps, with recommendations for next steps, with careful consideration of equity, scalability, and sustainability dimensions.

3.4.2. Methods and activities

While the previous phase (outlined in Section 3.3) is to gather data on digital learning solutions and provide a descriptive mapping of the tools, the main activities of this phase relate to the analysis and synthesis of the data collected on these digital learning solutions. We will further strengthen this analysis via interviews and FGDs. The analysis will likely comprise the following steps.

3.4.2.1. Interviews and FGDs exploring digital solutions with potential for impact

This phase will kick off by conducting a series of key stakeholder interviews and FGDs. A provisional list of the participants can be found in Annex 2. The purpose of the interviews will be to gain a richer understanding of the following issues.

- What users and providers of EdTech see as the existing solutions to access and learning challenges.
- The different priorities stakeholders have regarding digital learning solutions.
- The experiences of different stakeholders in the use of digital learning solutions.
- The modalities which digital learning solutions employ, differentiating between distance, blended, and in-classroom learning.
- Understanding the different experiences of marginalised groups, including exploration of:

- the extent to which digital learning solutions in place have been specifically designed to target marginalised groups (e.g., children with special needs, remote children, etc.)
- how stakeholders do this.

3.4.2.2. Analysis of interviews and FGDs

An analysis combining the data received through the survey (see Section 3.3), the interviews, and the FGDs will form the basis of profiles created for approximately five digital solutions. This will include assigning weighted scores to these five different digital solutions against criteria that will be identified collaboratively by UNICEF and EdTech Hub. Some example criteria are:

1. Proof of impact
2. Focus on marginalisation
3. Proof of / Potential of scale
4. Team credibility
5. Proof of / Potential of creativity
6. Proof / Potential to strengthen education systems.

More detail on each of these criteria can be found in Annex 4.

Analysis of interviews and FGDs may include the following.

1. Transcription of interviews from regional languages to English.
2. Coding of themes using inductive and deductive approaches.
3. Thematic organisation of data according to these themes.
4. Sense-making workshop with UNICEF officials.
5. Write-up of quantitative and qualitative data according to emerging data.

The data will be analysed and organised. This will first start with trends, themes or key takeaways that help distil the experience of different stakeholders (national and provincial government officials, donors, EdTech providers and users of EdTech devices) in the use of digital learning solutions more widely, Second, with a focus on more specific information on the five digital learning solutions that demonstrate either existing or potential for high impact, and on

what makes these solutions unique insofar as meeting the criteria that informed their selection.

Table 9. *Survey analysis activities.*

Activity	Detail
Survey analysis	A more in-depth analysis of the survey data
Interviews and FGDs	These include: ■ 5 in-depth discussions with shortlisted EdTech providers ■ 15 interviews with key stakeholders including non-profits, donors, government officials, and private sector partners. ■ 10 FGDs with government partners and initiative beneficiaries
Transcriptions	Transcribing FGDs and interviews to enable coding and theme organisation
Coding and theme organisation	Coding interview and FDG transcripts for more in-depth and rigorous analysis
Sense-making Workshop	Workshop with key stakeholders to present analysis findings and to collect participant insight
Write up	Consolidating findings into a single document

3.4.3. Timeline

Table 10. *Timeline for Deliverable 4: Analysis.*

Activity	Aug 9th	Aug 16th	Aug 23rd	Aug 30th	Sept 6th	Sept 13th	Sept 20th	Sept 27th	Oct 11th	Oct 18th
Survey analysis										
Interviews and FGDs										
Transcriptions										

Coding and theme organisation										
Sense-making workshop										
Draft write up										
Review by UNICEF										
Final write up										

3.4.4. UNICEF roles and responsibilities

In order to successfully complete the analysis phase, UNICEF will be required to support the project by providing:

- Input into which stakeholders are to be involved in the sense-making workshop.
- Coordination support for the workshop and contacting participants.
- Support for the Hub to conduct interviews or FGDs in languages not spoken by our team (when possible).
- Written feedback to the initial draft of the analysis.

3.5. Engagement strategy

The project will culminate in an engagement strategy for UNICEF based on the findings of previous phases.

3.5.1. Overview of deliverable

Deliverable 5: Engagement strategy for UNICEF engagement in the technology-facilitated learning arena, building on the landscape analysis and UNICEF's priorities and comparative advantages, identifying critical entry points and linkages for partnerships, programmes and system strengthening opportunities as a basis for further work by UNICEF.

3.5.2. Methods and activities

While this phase will largely depend on the outcomes of the landscape mapping and analysis, the team will begin working on understanding UNICEF's and Pakistan's broader strategic needs starting in the inception phase. By conducting preliminary interviews and workshops during the

inception phase and studying existing UNICEF and MoFEPT strategy documents and roadmaps, we will steer the data gathering activities to address strategic research questions.

The bulk of strategy development, however, will occur during the final phase of the project and will be a consultative process designed around two workshops.

Table 11. *Engagement strategy phase activities*

Stage	Description
1. **Strategy workshop preparation**	This will focus on distilling insights from the analysis phase based on UNICEF's needs and strategic objectives highlighted in earlier phases. This activity will also include outlining student profiles to better focus the Pakistan engagement strategy on UNICEF's target beneficiaries.
2. **Strategy workshop**	This workshop will be focused on developing a vision and objectives, as well as highlighting key considerations that need to be taken into account.
3. **Initial strategy development**	During this phase, we will draft the initial engagement strategy. This strategy will also include a set of student personas, which will inform key recommendations.
4. **Review workshop**	Collectively review initial strategy and answer any outstanding questions.
5. **Final draft of strategy**	Deliver the final strategy.

3.5.3. Timeline

Table 12. *Timeline for Deliverable 5: Engagement strategy.*

Activity	Sept 13th	Sept 20th	Sept 27th	Oct 4th	Oct 11th	Oct 18th	Oct 25th
Strategy workshop preparation (including student profiles)							
Strategy workshop							
Initial strategy development							
Review workshop							
Final draft of strategy							

3.5.4. UNICEF roles and responsibilities

UNICEF will need to input heavily into the design of the strategy through:

- Engaging in strategy workshops.
- Providing written feedback on the initial strategy.

3.5.5. Stakeholder engagement

UNICEF is the key stakeholder during the strategy development phase.

4. Quality assurance

The project team will adhere to a set of quality assurance practices so that all deliverables meet quality standards. These review processes will include internal Hub reviews, as well as UNICEF reviews to ensure not only quality but also alignment with UNICEF objectives.

4.1. EdTech Hub review

All major deliverables will be subject to EdTech Hub's quality assurance processes. This includes review by both technical experts and EdTech Hub's quality assurance team to ensure alignment with effective practice and contextual appropriateness.

4.2. UNICEF review

UNICEF's input and sign-off have been embedded within the project plan. This takes many shapes, including:

- **Workshops.** These will serve as a way to gather group insight and key information needed for completing the deliverables. They also serve as a chance to receive feedback on early drafts of deliverables, such as during the Inception Workshop and Strategy Review Workshop.
- **Draft reviews**. The project plan allocates time for UNICEF to review initial drafts of all major deliverables. Written feedback will be provided, which we will incorporate into the final versions of the deliverables.
- **Final sign-off**. Once feedback has been incorporated, a final version of the deliverable will be submitted to UNICEF for sign-off. The final version will be reviewed to ensure that it incorporated or addressed all feedback provided on the draft deliverables.

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This bibliography is available digitally in our evidence library at https://docs.edtechhub.org/lib/HL6BNMQZ

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Annex 1: Inclusion/exclusion criteria

Table 13. *Inclusion / exclusion criteria.*

Category	Criteria for inclusion
EdTech intervention status	Current / ongoing as of 2021
Operating environment	Pakistan. We will include EdTech organisations operating in multiple countries including Pakistan
Type of EdTech	Digital. Both online and offline. Non-digital EdTech solutions will be excluded
Education focus	End-user of EdTech, which in this case is the student. Language of Instruction: any Subject: any
School level	Grades 1–12 (exclude: pre-primary & higher education)
Device type	Any digital
Geographical location	User province: any User locality: rural or urban EdTech provider location (e.g., HQ): any
Target population	School age — 5–16 years old (or equivalent academic years) The database will include EdTech for students who are in: Formal education

- Basic education (Grades 1–12)
- Government or private school

Non-formal and informal education.

Marginalised, including

- With special educational needs
- Ethnic minorities
- In education for refugees and displaced people
- Girls
- Street children

Using EdTech at home (distance learning)

Income quintile: any

Annex 2: Provisional interview and FGD list

Table 14. *Provisional interview and FGD participants.*

Development partners	Government partners	EdTech providers	Users of EdTech devices
Interviews (1 hour)			
FCDO GiZ UNICEF USAID World Bank JICA UNESCO	*Federal level* Ministry of Federal Education and Professional Training (MoFEPT) Ministry of Information, Technology and Telecommunication (MoITT) Program Monitoring and Implementation Unit (PMIU) in Punjab Reform Support Unit in Sindh Province Delivery Units t.b.d.	*EdTech providers* *Associations* Representatives from Ilm Association *Academic* Lahore University of Management Sciences Aga Khan University	
FGDs (1 to 1 ½ hours)			
	Provincial level - Balochistan - Punjab - Sindh - Khyber Pakhtunkhwa - Islamabad Capital Territory - Azad Jammu and Kashmir - Gilgit-Baltistan		*School leaders, Teachers and Parents / caregivers by province* - Balochistan - Punjab - Sindh - Khyber Pakhtunkhwa - Islamabad Capital Territory

Notes:

1. Numbers in brackets are the cumulative number of interviews and FGDs.
2. Selection of EdTech providers (currently listed as t.b.d) will be contingent on information received from the wider survey questionnaire disseminated to all digital solution providers. The organisations we intend to select, including for a 'deep dive', are ones that offer potential / promise going forward. These would be defined as

existing or emerging solutions, which are high-quality / high-impact interventions. These will be selected in consultation with UNICEF colleagues.

Note on stakeholder interviews and FGDs

The selection of these stakeholders is contingent on:

1. Representation from across Pakistan's four provinces and Islamabad.
2. Representation of both providers and users of digital solutions across the education system.
3. Digital solution providers that have met the threshold for offering high-quality / high impact solutions — based on criteria presented in Annex 4. — will be selected as interviewees.

Annex 3: Search Terms

Table 15. *Key search terms.*

Theme no.	Theme name	Search terms
1	Pakistan	Pakistan
2A	Education	Education OR Learning OR Classroom OR Learner OR Student
3	Technology	EdTech OR Technology OR Digital OR Remote OR Internet OR “Social Media” OR “Distance learning” OR Online OR Mobile OR Phone OR Virtual OR Laptop OR Tablet OR Computer OR Device OR Software OR MOOC OR MOOCs OR ICT OR Video OR Blended Learning OR e-learning OR learner management system OR Web OR OER OR Open Educational Resources OR handheld device OR eBooks OR game-based learning OR Supportive Technology OR Assisted Technology OR Instructional Technology OR Tools OR Resources

Annex 4: Criteria for selection of five digital providers

Table 16. *Criteria for selection of five digital providers.*

Judging criteria	**Definition**
Proof of **impact**	The initiative has been proven to generate impact, ideally through real-life use or testing with users. This does not have to be rigorous, and we accept ideas with proof of impact over a shorter time period or smaller sample.
Focus on **marginalisation**	Potential to support the most marginalised. The initiative is either designed or able to impact marginalised communities (e.g., those with physical or mental disabilities) and / or those in low-resource contexts.
Potential to **scale**	Potential for scale: The initiative has the potential to scale rapidly. For example, it builds on existing assets or partnerships, it is easy to replicate elsewhere, it has a clear idea of revenue models, etc.
Team **credibility**	The team is credible, with a track record in education and / or technology.
Potential for **creativity**	The initiative takes an innovative approach to solving a long-standing or previously intractable problem.
Potential to **strengthen education systems**	The initiative has the potential to strengthen education systems through technology in the long term (post-Covid).

Annex 5: Student profiles

In order to inform strategy development and the study of various initiatives, this project will seek to develop a set of student profiles. We anticipate that we will develop 3–5 student profiles in preparation for the strategy development. A potential list of profiles could be as follows:

- Male / Female students
- In school / Out of school
- Breakdown by province
- Rural / Urban
- Breakdown by income quintiles

Here is a sample student profile

Sample student profile			
Age	*12 years old*	**Province**	*Punjab*
Gender	*Female*	**In / Out of school**	*In school*
If in school what grade	*Grade 5*	**Family income**	30,000 Rupees per month
Bio and context			
E.g., number of siblings, type of school (e.g. public, private, formal, non-formal), etc.			
Pain points			
Challenges faced while learning at school/ at home, support provided at school. home while using technology, self-learning or learning supported by school/ teacher			
Behaviour			
Availability of devices, familiarity with tech, types of devices / apps used, how often were tech devices used to access learning			

This bibliography is available digitally in our evidence library at https://docs.edtechhub.org/lib/HL6BNMQZ

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