

TECHNOLOGY FOR EDUCATION INITIATIVE

Progress Report 2024 (June-December)







Technology for Education Technical Assistance Initiative

Reporting Period: June 15, 2024 - December 31, 2024

Introduction

The primary objective of the Technology for Education Technical Assistance Initiative (Tech4Ed TAI) is to strengthen the capacity of and within partner countries to use technology to improve education access and learning outcomes for children. This report describes progress achieved during the first six and a half months of the Initiative in Ghana and Tajikistan. The TAI's has an initial budget of US\$ 1 million, with UNICEF as the TAI's Grant Agent and the EdTech Hub as a key technical partner.

Background and rationale

- Today's education systems are poorly suited to prepare young people for a vastly different and uncertain future disrupted by conflict, climate change, technology, globalization and a fast-changing job landscape. Many children are not learning, and business-as-usual approaches are not increasing learning outcomes fast enough. Traditional classroom practices need to shift to nurture a broader range of competencies such as creativity, critical thinking, problem-solving and digital skills. Globally, nearly 25 percent of jobs will be disrupted by technology in the next five years, and by 2030 about 230 million jobs in Africa alone will demand digital skills.
- While many countries view technology as a means to accelerate progress in education, they face multiple challenges and barriers including a disconnect between education plans and overall technology policies; challenges in accessing evidence and using it for policy and programming; low government institutional capacity for technology-related decision-making; and challenges in procuring technology goods from providers and suppliers that are fit for country purposes.
- As countries seek to transform their education systems, technology is increasingly seen as an accelerator to provide multiple pathways for

learning and education continuity, particularly for hard to reach and vulnerable children. When designed and used correctly, technology has strong potential for better outcomes and more efficient systems. In a survey of all GPE Partner countries in February 2023, 84.6% of survey respondents (22 partner countries) indicated their demand for advisory and technical services to best leverage technology for education.

Objective and approach

The Tech4Ed initiative offers targeted on demand support to countries with the intent of scaling up technology for education as identified in partnership compacts and other national and sectoral planning instruments, and a more thorough assessment and integration of technology in education strategic and operational plans. More specifically, the initiative aims to ensure that Ministries of Education (MoE) benefit from:

- 1. Strengthened MoE capacity to identify and leverage technology to improve access, inclusion and learning outcomes
- Strengthened MoE capacity to leverage technology to improve the education systems' effectiveness – policies, data, planning, management, and monitoring
- 3. MoE better positioned to lead and coordinate cross-sectoral Tech4Ed strategies, including policies, programmes, and resource mobilization
- 4. MoEs are equipped to generate and use evidence on how to effectively leverage tech to strengthen education systems and continued evidence mobilization of what, how and why tech works for education

Pilot countries

The selection of Ghana and Tajikistan as pilot countries for the Tech4Ed initiative was based on a thorough methodology that included both qualitative and quantitative assessments, and extensive consultations. Criteria for selection included (in no particular order): countries' interest to join the Tech4Ed Initiative; complementarity with other ongoing initiatives and national efforts (captured in partnership compacts or education sector plans); status of education data systems; digital/AI readiness; and alignment with the

Tech4Ed initiative's objectives, among others. This process, aimed at ensuring regional diversification and alignment with global educational goals, led to their selection from a diverse pool of Global Partnership for Education partner countries.

Workplan Status and Progress

The Technology for Education Technical Assistance Initiative (Tech4Ed TAI) has made significant initial progress in its pilot phase, with two country workplans close to being approved by Ministry counterparts. The initiative, led by UNICEF as Grant Agent in partnership with EdTech Hub as global partner, has commenced activities in Ghana and Tajikistan.

This phase has seen prioritization for this initiative guided by countries' Partnership Compacts, Education Sector Plans, Digital Transformation policies and strategies, and emerging opportunities such as Artificial Intelligence and its impact on education. To guide this complex conversation, partners have used the Common Framework for Digital Transformation of Education Systems and its six pillars as a policy and programmatic dialogue tool. Table 4 maps how Tech4Ed TAI processes in both countries align with the framework.

Summary of Tech4Ed TAI Activities

Country Level Activities

At the country level, significant groundwork has been laid in both pilot countries:

GHANA

Completed activities include:

- Initial engagement with country education leadership through comprehensive briefings
- Early stage meetings with government and development partners to identify key areas of interest and plan for the stakeholders meeting
- Execution of a planning workshop with key stakeholders

 Refinement of workplan and finalization for approval with new Ministerial leadership

Further details of these activities and outputs are described below:

Inception Phase and lead up to Stakeholders Workplanning Meeting

Country Context

In Ghana, both UNICEF and the EdTech Hub have longstanding relationships with the Ministry of Education and other important education sector actors. The Ministry as well as the Centre For National Distance Learning and Open Schooling (CENDLOS) have been very active in decisions around technology in education. Thus, from the early stages of Tech4Ed TAI design and planning, it was evident these groups would play an important role in ensuring government leadership, with the office of Planning, Budgeting, Monitoring and Evaluation (PBME) taking the lead within the MOE.

Planning and Development Meetings

In order to introduce the Tech4Ed TAI and identify education technology priorities for Ghana, UNICEF and EdTech Hub conducted a series of meetings with officials from the Ministry of Education and CENDLOS which were positioned as the primary government collaborators.

A first joint, hybrid in-person and virtual meeting was held on **July 24th**, with both headquarters and local representatives from UNICEF and EdTech Hub as well as officials from PBME and CENDLOS. This meeting served as an initial introduction to the Tech4Ed TAI program and a forum to discuss the way forward in developing a draft workplan based on the government's priorities. This group decided that an important next step would be to convene an incountry coordination group planning workshop with the participation of CENDLOS and PBME as well as other actors in the education technology space such as the Ghana Education Service (GES), Pre-Tertiary division of the MOE, Ministry of Communications, development partners, and private sector representatives to be more broadly inclusive and reflect a range of EdTech priorities. This meeting was tentatively planned for late August. Leading up to this meeting, EdTech Hub was asked to draft a terms of reference (TOR) for a

high-level steering committee as well as a TOR for a technical working group to support and guide the Tech4Ed work.

These goals were set with the aim of having an in-country stakeholders meeting to co-create the Tech4Ed TAI workplan at the end of October to align country priorities, as reflected in the Compact and sector initiatives, with the Tech4Ed TAI objectives.

After the introductory meeting in July, UNICEF Ghana and the Hub continued to engage with government counterparts to discuss initial ideas and to set the agenda for the proposed August pre-meeting. The meeting was held on **August 26th and 27th**, facilitated by EdTech Hub. This was a hybrid meeting so that representatives from the Hub, UNICEF and GPE not based in Ghana could participate.

Ultimately, 40 attendees participated during the two days, with representatives from government partners, including: Ministry of Education, Ghana Education Service, National Council for Curriculum and Assessment (NaCCA), CENDLOS and Ghana Investment Fund for Electronic Communications (GIFEC); project partners: EdTech Hub, UNICEF, GPE; as well UNESCO and private sector partners from: MEST Africa (an organization funding early and growth stage interventions), Perbi Cubs (Private sector edtech focusing on foundational literacy using a reading app) and Ghana Investment Fund for Electronic Communications, and University of Ghana. Participants included both Directors from PBME and CENDLOS. Given the wider participation, there was again an overview of the Tech4Ed TAI program and objectives. UNICEF and the Hub also presented draft TORs outlining proposed responsibilities for a strategic oversight committee and also a technical streeting committee. There was extensive discussion around the draft TORs, discussing the best way to provide strategic and technical guidance for the program while working in collaboration with existing organizing groups.

Another primary objective of this meeting was to discuss key technical areas that could be entry points for workplan activities. Various technical priorities arose such as data analysis, evidence on EdTech interventions, monitoring and evaluation, stakeholder engagement, program management, alignment of EdTech interventions to policy, digital skills development, and risk assessment and mitigation. Discussing these potential work areas also led to intensive

discussions around the goals of Tech4Ed TAI and the potential workstreams. Ultimately, it was decided that UNICEF and the Hub would continue to engage with government officials after this planning session to develop a short list of areas for discussion during the stakeholder's meeting set for late October.

Throughout September and October, representatives from UNICEF and the Hub worked with PBME and CENDLOS officials to finalize the logistics and goals for the stakeholders meeting while also identifying government priorities for inclusion in the draft workplan.

Stakeholders Workplanning Meeting

The Stakeholders meeting to discuss proposed workplan ideas was held at Labadi Beach, Accra, on October 28th and 29th. The meeting included international representatives from GPE, UNICEF and EdTech Hub, as well as additional private sector partners from Gates Foundation, Jacobs Foundation, Dalberg (representing Google) and Mastercard Foundation.

The main objective for the stakeholders workshop was to discuss a short-list of Ministry identified priority areas and brainstorm possible activities under each priority area. Based on the engagement with PBME and CENDLOS, these four priority areas were:

- 1. How can EdTech improve curriculum design and assessment processes
- 2. How can numeracy and literacy programs boost outcomes with EdTech
- 3. Within the Education Sector Plan and Mid-Term Plan (MTP), how can opportunities for EdTech be identified and implemented
- 4. How can the development of 21st century skills, particularly around STEM and robotics be boosted via EdTech

Much of the workshop focused on discussion around these four thematic areas. Small groups engaged in robust productive discussions around the activities, outputs, outcomes and impact associated with the four areas.

Coming out of the Stakeholders Meeting, UNICEF and Hub were tasked with collecting the information from the discussions and utilizing this input to create a draft workplan.

Workplan Development

Based on the concepts shared and discussed at the Stakeholders Meeting UNICEF and Hub developed draft ideas to share with the Ministry. The primary activities proposed in the workplan include:

- 1. Establish an EdTech Steering Committee as a sub-group to other education steering groups
- 2. An analysis of the current EdTech landscape in Ghana, examining
 - a. How technology is used as part of education programmes (different modalities, dosages, etc.).
 - b. How content, curriculum, and assessments are developed and distributed
 - c. Infrastructure and access requirements
 - d. Equity and inclusion components
 - e. Evidence of effectiveness
 - f. How programmes address teacher skills & competencies, training, and support
 - g. How programmes engage parent and communities
 - h. Who are the main local edtech providers and are there any examples of public private partnerships, including opportunities
- Conduct implementation research around existing education interventions and explore where and how EdTech is being utilized, with a focus on the programme DL+ and GALOP AF.

Next Steps

UNICEF and the Hub will share the workplan with MOE representatives for discussion and feedback and then share an updated draft with GPE and other partners.

- Second week of January share draft workplan with GPE
- early February incorporate feedback from GPE
- mid-February share draft workplan with MOE
- mid-February incorporate feedback from MOE and refine workplan
- late February share draft workplan with private sector partners for feedback
- early March seek final approval for workplan from MOE

TAJIKISTAN

Completed activities include:

- Initial engagement with country education leadership
- Alignment with the National Roadmap for Education System Digital Transformation
- Integration with the Digital Learning and Transformation of Education Strategy
- Initial workplan development

Further details of these activities and outputs are described below:

Inception Phase and lead up to Stakeholders Workplanning Meeting

The UNICEF Tajikistan education team is a long-standing strategic partner of the Ministry of Education and Science (MOES), providing support along the areas included in the UNICEF Country Programme Document for the country. In late August, the UNICEF Tajikistan team met with UNICEF HQ and Hub HQ to discuss the best technical approach for working with the MOES to design the draft workplan. The teams decided it would be best to engage in an intensive "on-the-ground" workplan development approach that would include inperson meetings with MOES and other government of Tajikistan (GOT) officials. The two teams coordinated to identify additional local support, bringing on board a consultant with deep expertise in EdTech in Tajikistan and designing a terms of reference for two Hub representatives to travel to Tajikistan.

Given that the GPE Partnership Compact Mid-Term Review (MTR) was taking place the week of October 21st, it was confirmed with the government from an early stage that the Tech4Ed TAI Stakeholders meeting would take place the same week. UNICEF and the Hub decided that the Hub representative would be in the country from October 7th onwards. In the lead-up to the in-country work, the Hub and UNICEF teams worked together to develop key questions and identify key stakeholders to interview.

During the country mission, the Hub team met with a wide range of partners including divisions at the MOES, development sector partners, international and local non-government organizations (NGOs) as well as private sector partners. The objectives for these meetings and interviews were to 1) introduce and sensitize stakeholders to the Tech4Ed TAI, 2) conduct a rapid scan of the EdTech sector, 3) understand country needs and priorities, as expressed by the Compact and the Education Sector Plan, 4) develop preliminary workplan ideas to vet with UNICEF and the MOES, and 5) prepare for the stakeholders workplanning meeting.

These meetings were also informed by review of a range of technical reports shared by UNICEF and other partners. Based on this desk review and interviews with stakeholders, the team identified a set of challenges it would be important to address through the Tech4Ed workplan:

- **Electricity**. There is a lack of reliable electricity supply in most schools (at least over 70% of rural schools) during 5-6 months (October to April) of the academic year.
- Connectivity. Only 16% of schools across Tajikistan have internet connectivity, according to the study "Achieving Universal Connectivity for the Education Sector in the Republic of Tajikistan" which was developed by the ICON Institute, funded by the EU, and technically supported by UNICEF.
- Content. Access to online educational content is poor. According to interviewed stakeholders, a reason for this is that educational establishments in Tajikistan rely on global educational resources which are 5 to 10 times more expensive to access than local resources. In technical terms, the network bandwidth for global connectivity can be maximum 2 Mbps compared to up to 100 Mbps to the local Intranet. In other words, it takes longer to access global online resources, and more expensive, than accessing local resources—which are limited.
- **Capacity**. Low levels of digital competency, in particular with teachers, is another challenge that requires immediate attention.

Based on these challenges as well as recognizing ongoing EdTech programs, the Hub team developed a set of four potential areas of focus and vetted these with government and UNICEF partners. More formally, on October 21, the team presented this initial list of ideas to the First Deputy Minister (FDM) of the MOES, the head of the EMIS department and his team, the MoES System Administrator, and the head of the Republic Center on Information Technology and Communication (RCITC). These government leaders were in agreement with the proposed ideas and agreed that these could be presented during the broader stakeholders' meeting.

Stakeholders Workplanning Meeting

In conjunction with the GPE MTR, the Tech4Ed stakeholders' meeting was held at the National Library on Tuesday, October 22 and then reconvened on the afternoon of Thursday the 24th.

Day one of the workshop began with a plenary session, chaired by the First Deputy Minister. Attendees included representatives from GPE, UNICEF, EdTech Hub, civil society, private sector, international development partners, and key government agencies. The session kicked off with introductory remarks by the First Deputy Minister, the GPE Country Lead for Tajikistan, and the UNICEF Deputy Representative. The Hub team then presented an overview of the Tech4Ed project and provided some background on the current EdTech context in Tajikistan.

The team presented the four proposed workplan concepts:

- 1. Form an Education Technology Steering Committee (ETSC)
- Conduct an analysis of other low and middle income countries' utilisation of mobile connectivity for school internet access
- 3. Development of an implementation plan for developing an education sector intranet
- Develop a cost model for a proposed pilot initiative around a cluster school approach

During the afternoon of the first workshop day and the half-day session later in the week, participants convened in small groups that represented a cross section of government, development, NGO and private sector partners. Each group discussed the same workplan concept before reconvening in the larger group to share feedback.

Workplan Development

Following the workshop, the Hub team collated the feedback from the workshop participants and made adjustments to the workplan, consolidating down to three key activities. During this period, the Hub's in-country consultant and the UNICEF team worked to develop activities around the proposed areas, sharing them with government representatives for additional feedback. A draft of the workplan was shared with GPE for feedback on December 13th.

The team plans to share the draft workplan with the MOES and GPE in January.

Current components awaiting MOES approval are

- 1. Form an Education Technology Steering Committee
- 2. Develop an investment case and cost model for a proposed pilot initiative around a cluster school approach
- Conduct an analysis of innovative solutions, like mobile and satellite connectivity, to assess how it could be applied in Tajikistan to provide intranet/internet access

Global Results Framework

Below we indicate current progress towards indicators. It is important to note that the project is still in the inception phase, designing workplans and moving towards technical assistance goals.

Table 1. Global results to date.

Indicator	Indicator Definition	Ghana	Tajikistan			
Outcome 1: Strengthened MoE capacity to identify and leverage technology to improve access, inclusion and learning outcomes						
Level of articulation of	High level: participating countries	Evident to	Evident to			
the country's vision for	communicate their Tech4Ed vision or strategy,	Date	Date			
integration of	with equity, inclusion, and learning at the	High level:	High level:			
technology in education	center					
(# of participating						
countries)	Mid level: participating countries					
	communicate a Tech4Ed vision/strategy					
	where equity, learning, and inclusion do not					
	appear as clearly articulated, or some of those					
	elements are excluded.					
	Low level: participating countries					

	communicate a technocentric vision/strategy, or a vision not based on evidence, that does not have inclusion and learning at the center.		
# of MoE staff who receive training related to the Tech4Ed initiative		N/A	N/A
Alignment of Tech4Ed investments with prioritization in ESP, Compact, and	High alignment: New investments in technology in education support, based on evidence, the ESP and Partnership Compact	Working towards high alignment	Working towards high alignment
Workplan (# of participating countries)	Partial alignment: New investments in technology for education are not based on evidence, or partially support the ESP, Partnership Compact		
	Low alignment: New investments in technology in education are not supporting the ESP, Partnership Compact		

Outcome 2: Strengthened MoE capacity to leverage technology to improve the education systems' effectiveness – policies, data, planning, management, and monitoring

Tech4Ed integration in	High integration: participating countries data	Evident in	Evident in
data strategy/vision (#	strategy/vision identifies feasible entry points	workplan	workplan
of participating	for technology to enable improvement of data	design and	design and
countries)	collection, analysis and use	stated	stated
		intentions:	intentions:
	Mid integration: participating countries data	High	High
	strategy/vision identifies entry points for	integration	integration
	technology to enable improvement of data		
	collection, analysis and use, but these are not		
	feasible due to enabling infrastructure or		
	costing.		
	Low integration: participating countries data		
	strategy/vision does not identify entry points		
	for technology to enable improvement of data		
	collection, analysis and use		

Outcome 3: MoE better positioned to lead and coordinate cross-sectoral Tech4Ed strategies, including policies, programmes, costed Tech4Ed Plans, and resource mobilization

		Т	ī	ı
	Level of formalization of	High level: Partner Engagement Strategy is	Current	Current
	engagement with	fully developed, identifying components and	Status	Status
	partners including the	modalities (commercial or philanthropic) in	mid level	mid level
	private sector. (# of	which private sector and other partners can		
	participating countries).	contribute to the implementation of the		
		Workplan T4E TAI.		
		Mid level: Partner Engagement Strategy is		
		partially developed.		
		Low level: Partner Engagement Strategy is not		
		yet developed.		
	Maturity of the	Mature: Management arrangement is	Current	Current
	management	functional with clear accountabilities and	Status	Status
	arrangement to oversee	responsibilities.	Early Stage	Early Stage
	implementation of the			
	national Tech4Ed	Emerging: Management arrangement is		
	strategy (# of	formed, with accountabilities/responsibilities		
	participating countries).	still to be developed.		
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	Early stage: Management arrangement is not yet formed.						
Outcome 4: MoE equipped to generate and use evidence on how to effectively leverage tech to strengthen education systems, benefiting from continued evidence mobilization							
Level of maturity of knowledge management system to embed evidence in decision making for Tech4Ed (# of	High level: Knowledge management system is institutionalized and routinely consulted/used to inform policy, implementation, and evaluation of Tech4Ed. Mid level: Knowledge management system is not institutionalized (depends on individuals)	Current Status mid level	Current Status mid level				
participating countries).	not institutionalized (depends on individuals), or is rarely consulted/used to inform policy, implementation, and evaluation of Tech4Ed. Low level: Evidence is rarely used and hard to find to inform policy, implementation, and evaluation of Tech4Ed.						

The Table below summarizes the linkages between the priorities discussed during the inception phase's consultation processes, and the Common Framework for Digital Transformation of Education Systems.

Table 2. Alignment with the six pillars for digital transformation of education

		Tajikistan		Ghana				
		Prop	Proposed Workplan Ideas			Proposed Workplan Ideas		
		Form an Education Technology Steering Committee	Develop an investment case and cost model for a pilot initiative around a cluster school approach	Conduct an analysis of innovative solutions, to assess how they could be applied to provide intranet/inter net access	Form an Education Technology Steering Committee	An analysis of the current EdTech landscape in Ghana, examining	Looking at implementati on research around existing EdTech interventions	
Coordination and I	Leadership							
	Vision and Goals	~	~	✓	~			
	Governance and regulation	~	~	~	~	~		
	Participative Change Management	>	~	~	~	~	~	
нн	Evidence informed decision making	~	~	~	~	~	~	
	M&E	✓	~	✓	~	~	~	
Connectivity and I	nfrastructure							
	Electricity		~	✓		~	~	
7190	Internet access		~	~		~	~	
	Hardware and devices		~	✓		~	~	
43.	System software and services		~	~		~	~	

	Learning spaces		~	~		~	~
Cost and sustainal	oility						
	Sustainable funding models	~	~	~	~		
(D.)	Alignment to outcomes and priorities	~	~	~	~		
(\$)	Ecosystem development and maintenance	~	~		>		
	Operation expenses and resource management	~	~	~	>		
	Green solutions		~	✓			
Capacity and Cultu	ıre						
	Future-ready skills		~	✓			✓
(763)-	Competencies and mindsets		~				~
	Role of parents and caregivers		~				~
	Relationships with local communities		*	~			~
	Innovation and knowledge generation	~	~	~	~	>	*
Content and soluti	ons						
	Learning platforms		~				~
ם פירים	Application software quality and openness		~				~
	Curricular alignment		~				
<u> </u>	Pedagogical models		~				
	Assessment and certification		*				

Date and Evidenc	е						
	Actionable insights	~	~	~	~	~	~
01010101	System integration		✓				~
1015-310	Quality and coverage		~	~		~	~
\ 01 O3 /	Security and privacy		~	~	~	~	~
	Al					~	~

Challenges, Successes and Insight Stories

Systemic challenges and Tech4Ed TAI approaches

Three recurring challenges across countries confirm the need for this initiative:

- Complex Agency Coordination: Education technology initiatives face complications when ICT authority is centralized under technologyfocused agencies rather than education-focused ones. This organizational structure often prioritizes technical considerations over educational outcomes.
- 2. **Initiative Fragmentation**: Multiple concurrent EdTech projects often emerge without clear paths to scale, incentivized by internal and external agendas. This leads to:
 - Inadequate monitoring of learning outcomes
 - Stretched institutional capacity
 - Higher operational costs
 - Inefficient use of resources
- 3. **Gap Between Planning and Implementation**: While countries often have ambitious EdTech strategies, many remain theoretical without practical implementation pathways.

To address these challenges through the Tech4Ed TAI, in both country contexts, there was support from government and development partners to create working groups or committees within existing education groups that could focus on education. Thus, both workplans include the establishment of EdTech working groups that will look at fostering better coordination, communication and collaboration across all education technology programs, including the Tech4Ed TAI. The Tech4Ed TAI will work to establish guidelines and work parameters that address the challenges noted in points 1 and 2 above. Point 3 could also be addressed within these groups and this issue will be taken into consideration and noted in technical resources developed under the Tech4Ed TAI.

Implementation challenges and Tech4Ed TAI approaches

One of the challenges apparent across the country contexts has been garnering understanding around the concept of "catalytic funding" and encouraging the investment of time and personnel resources into a program that represents a relatively low amount of funding. In Tajikistan, having the stakeholder's meeting linked very explicitly to the Partnership Compact during the MTR made clear some of these linkages for government participants. This has been a challenge in Ghana, and one the initiative will need to continue to address as it is socialized with the new ministry leadership.

In future country implementation it will be important to have clear explanations around the catalytic funding concept. It will be useful to share the Ghana and Tajikistan workplans with additional countries as an example of the types of technical assistance best suited to the program. It was also important to identify alignment with the broader GPE compact and other possible funding alignments from early stages.

Specific country challenges, lessons learned, and way forward

There have also been distinct challenges and opportunities in each country.

Ghana

The number of invested and interested groups across the government has been both an asset and a challenge. It has been beneficial in that there has been a strong contingent of supporters and important technical contributions that represent different areas of the education sector. At the same time, not having one specific division that has decision making authority for the program has been a persistent challenge. With the new political administration, there will likely be some restructuring of different education groups which may mediate this issue.

A significant challenge in Ghana was the timing of the stakeholders workshop happening during a politically complex time. This impacted availability of important decision makers in the lead-up to and for the stakeholders' meeting. In future country contexts, it will be important to ensure that the project is aware of significant national election cycles that could impact Ministry leadership and plan around these cycles.

Tajikistan

In Tajikistan, government structures have relatively more distinct lines of responsibility and protocols around hierarchy and approvals. This is another area that has been both a challenge and an asset. The well-defined lines of authority clearly define decision makers but centralized decision making can also cause bottlenecks. The Tech4Ed implementation has worked to create networks of relationships at the MOES in order to have different entry points and lines to decision makers.

Successes, lessons learned, and adaptation

One of the keys to success has been the strong cooperation between UNICEF and EdTech Hub. The partnership has been able to leverage UNICEF's on-the-ground relationships, clout, and legitimacy. UNICEF has been able to easily arrange meetings with government and other education sector partners that have been essential to workplan development. The Hub has been able to bring to bear its deep technical expertise, using research and perspective from its global viewpoint on education technology in low- and middle-income countries to provide context and a basis for proposed technical approaches. Despite timing challenges in Ghana, ultimately there have been high levels of government support in both countries based on existing relationships as well as significant work to socialize the Tech4Ed program and encourage high levels of dialogue and engagement.

Ghana

In Ghana there have been high levels of excitement and interest in the program. This excitement and eagerness to be involved in the planning and design have led to a wealth of ideas. These ideas take time to discuss and vet, but there have been productive engagements across multiple divisions at the MOE and with other government bodies invested in EdTech. There has also been an eagerness for technical support in reviewing government plans and policies and ensuring these documents are informing the Tech4Ed TAI workplan. In future country contexts, we will look to encourage high levels of

engagement, but strive for balance to streamline workplan development and finalization.

Tajikistan

In Tajikistan, conducting a specific in-country workplan development mission was highly effective. This allowed for the real-time gathering of current information and small, in-person meetings allowed for high levels of candor about operating realities and challenges. If the project was to use this model in the future, it could be beneficial to allow for more time between the scoping mission and the full stakeholders meeting. Additional time would allow for broader sharing of draft workplan ideas so that attendees could review the plan before participating in stakeholders meetings and have more developed responses. Additional time between conceptualization and presentation would also allow time to identify linkages between workplan ideas and existing government policies, donor funded projects, and the GPE compact to ensure complementarity and identify areas to leverage funding opportunities.

Aligning the stakeholders meeting with the Mid-Term Review (MTR) of the compact helped underscore the importance of the Tech4Ed TAI and highlight the possibility of linking to other funding pools. During future stakeholder meetings it will be important to make this connection and broader GPE support explicit.

Additional Lessons Learned

An important component of the Tech4Ed TAI is the flexibility of the program design. Piloting the program in two very different country contexts in Ghana and Tajikistan has demonstrated the advantages and necessity of developing tailored programs but also the commonalities evident in EdTech programs in low- and middle-income country contexts. In future countries we will consider what workplan development process makes the most sense and will build off lessons learned in the success of a focused fact-finding mission (Tajikistan) or using more fluid plenary style approaches (Ghana). In any context, it will be important to meet the government where they are in their EdTech uptake process and ensure that solutions align with current policies and realities. Moreover, aligning the program with the GPE compact and existing grants from the outset is important as a foundation for talking about the available financial

resources. Overall the team has been able to adapt to the unique country contexts and looks forward to continue adapting and expanding the knowledge base with the addition of more Tech4Ed TAI countries.

Budget Expenditures

The following outlines a funds consumption report, allocating all current expenditures to the inception phase. Actuals represent expenditures that have already been incurred.

Budget Item	Amount	Actuals	Available
Total Cost	\$ 999,999.53	\$ 203,871.81	\$796,127.72

Annex

Table 3. Summary of activities in Ghana from June 15 to December 31, 2024

Meeting	Date	Location	Participants (v) denotes virtual	Purpose	Outcome/Next Steps
Introductory meeting	July 24 (2hr meeting)	hybrid virtual/in person	MOE PBME CENDLOS UNICEF/Ghana UNICEF/HQ (v) GPE (v) EdTech Hub/Ghana EdTech Hub HQ (v)	Introduce the goals, objectives and timeline of the Tech4Ed TAI and establish points of contact with GOG partners	Establish an in-country coordination group to guide technical and strategic decisions
Learning Pioneers-In Country workshop on Imagining Futures	29 th July- 31 st July 2024	In-person	34 stakeholders including participants from government (GES, MoE, Ministry of Communication), private sector, CSOs, students, teachers, caregivers, EdTech start-ups/business, CENDLOS, PBME, GES, EdTech Hub, UNICEF, Pre-Tertiary, Ministry of Communications, Private	Understand opportunities of collaboration between the edtech entrepreneurial ecosystem and the education system.	Identification of the need to further work with local entrepreneurial ecosystem to strengthen collaboration with the education system, further attuning edtech startup efforts to operational environment (i.e. connectivity and electricity) and education priorities (FLN).

			sector rep, teacher union rep/s, DP rep.		
Pre-workshop meeting	August 26th/27th 2 day meeting	hybrid virtual/in person	Government MOE CENDLOS Ghana Education Service National Council for Curriculum and Assessment (NaCCA) Ghana Investment Fund for Electronic Communications (GIFEC)	Discuss draft TOR for strategic and technical steering committees Discuss potential technical areas for presentation and discussion at stakeholders meeting	UNICEF and EdTech would continue to work with government officials to refine topics for discussion at October Stakeholders Meeting EdTech Hub would update its 2020 rapid scan of EdTech in Ghana
			TAI Partners: UNICEF/Ghana UNICEF/HQ (v) GPE (v) EdTech Hub/Ghana EdTech Hub HQ (v)	Discuss agenda for stakeholders meeting	
			Private Sector. MEST Africa Perbi Cubs Other UNESCO University of Ghana		

Internal Planning Meeting	Sept 9	Video Call	UNICEF/Ghana UNICEF/HQ Hub/Ghana Hub/HQ	Discuss next steps for Stakeholders Meeting Planning	Assignments for outreach to government counterparts
Internal Planning Meeting	Sept 18	Video Call	UNICEF/Ghana UNICEF/HQ Hub/Ghana Hub/HQ	Discuss next steps for Stakeholders Meeting Planning	Assignments for work on draft workplan
Planning Meeting with govt partner	Oct 8	In-person (UNICEF office)	UNICEF/Ghana Hub/Ghana MOE CENDLOS	Discuss logistics and agenda for Stakeholders Meeting	Govt task force assignments to confirm venue and develop formal invitation EdTech Hub asked to share available research on Ghana Subsequent request to provide an update on 2020 rapid scan

Stakeholders	Oct 28-29	In-	TAI Partners	Ensure familiarity with	Develop draft
Meeting	2 day	person	GPE	T4E for a key group of	workplan based on
	meeting		UNICEF	stakeholders	stakeholder input
			EdTech Hub		
				Discuss proposed	
			Government	workplan ideas	
			Ministry of Education –		
			Performance Budgeting		
			Monitoring & Evaluation (PBME)		

Reform Secretariat
Centre for National Distance
Learning and Open Schooling
(CENDLOS)
Complementary Education
Agency (CEA)
Special Education Division
Development/ INGO
Association for the Development
of Education in Africa (ADEA)
Education Sub-Saharan Africa
• FCDO
UNESCO Ghana
UNICEF Innocenti
USAID
• World Bank
Private Sector
Gates Foundation
Dalberg Advisors
Jacobs Foundation
Mastercard Foundation
Other
MEST Africa
Transforming Teaching,
Education & Learning (T-TEL)

4. Table 4. Summary of activities in Tajikistan from July to December 31, 2024

Meeting	Date	Location	Participants	Purpose	Outcome/Next Steps
Internal Introduction Meeting	Aug. 29	Virtual	(v) denotes virtual UNICEF/Tajikistan UNICEF/HQ Hub/HQ	Discuss inception phase of T4E program and lead up to stakeholder meeting	UNICEF/Tajikistan to work on meeting logistics EdTech Hub to identify a local consultant and plan for an in-country consultation process to draft workplan
In-country workplan development meetings	Oct 7-18	In person, Dushanbe	 Government of Tajikistan Ministry of Education and Science First Deputy Minister Head of Department and Specialist from Education Management and Information Systems Head of Department of Science and Innovation Academy of Education of Tajikistan President Republican In-Service Teacher Training Institute Rector Republican Teaching and Methodological Center Director 	Meet with a range of EdTech stakeholders to identify possible areas for T4E TA	Develop draft workplan for MOES approval

Center for Information Technology and	
Communication	
∘ Director	
Agency on Digital Innovation and	
Technologies under the President	
Head of department on innovation	
development	
Vocational Education Committee	
o Chairperson	
International Development Partners	
USAID	
UNESCO	
Aga Khan Foundation	
European Union	
Civil Society	
Public Fund Civil Internet Policy Initiative	
Former CEO of Open Society Institute of	
Tajikistan	
 Additional independent experts on ICT for 	
Education	
Association of Adult Education	
Centre ICT	
Private Sector	
Babilon-T and Babilon-M (telephone and	
mobile service provider)	
Zypl (technology and AI focused company)	
TCell (mobile services provider)	

			TexNet		
Stakeholders Workshop	Oct 22 and 24	In-person, Dushanbe	 TAI Partners GPE UNICEF EdTech Hub Government MoES MOES - Department of Secondary Schools Education department of Temurmalik district Republican Centre for Information Technology (RCITC) branch in Temurmalik district Research Institute under the Ministry of Labour RCITC Committee on Technical Vocational Education under the Government of Tajikistan RITTI, Rector Education department of Khatlon Province Development/INGO UNESCO USAID European Union EU QESP II (Quality Education Support Program) Aga Khan Foundation (AKF) Tajikistan World Bank 	Ensure familiarity with T4E for a key group of stakeholders Discuss proposed workplan ideas	Develop draft workplan based on stakeholder input

	 National Private sector & CSOs Technical University of Tajikistan Association of Adults Education Public Fund CIPI Continuous Education Center Tajik Academic Research and Education Assocation (TARENA) Babilon-T Public Organization Centre ICT Livo, Digital Development Association 			
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