2021

EdTech Strategy

ESP Annex

Ministry of Education

Jordan

Contents

Acronyms

AET - Activating EdTech

EEF - Education Endowment Foundation

ERfKE - Education Reform for the Knowledge Economy

ESP - Education Strategic Plan

HRD - Human Resource Development

JEI - Jordan Education Initiative

LMS - Learning Management System

MoE - Ministry of Education

MOOC - Massive Open Online Course

MVP - Minimum Viable Product

NCCD: National Centre for Curriculum Development

PIP - Policy-Implementation-Process

QRC: Queen Rania Centre for Education and Information Technology

TCO - Total Cost of Ownership

Section 1. Vision

This national Education Strategic Plan (ESP) is anchored in the goals of the National Human Resource Development Strategy (2016-2025), which are to

> *"enable the Kingdom to meet its goals for sustainable development, which includes the development of the nation in economic, cultural, social, and environmental terms"*

and to

> *"ensure that current and future generations develop the skills and capabilities they need to live happy and fulfilled lives, and collectively realize the ambition of a prosperous and resilient Jordan"*.[1]

This annex is in turn anchored in the ESP. It supplements the ESP, offering a strategy for supporting the achievement of the ESP outcomes using education technology as a part of the wider innovations and changes to the Jordanian education system.

Our vision follows the vision of the HRD/ESP, to develop the education sector and associated human resources in terms of access, quality, accountability, innovation, and mindset, as well as in terms of inclusivity and equity.

Likewise, our goal, enhanced by education technology (EdTech; across the system) is to deliver outcomes for the Kingdom. In particular:

- For children, students, and learners: The opportunity to realize their full potential as happy, healthy, empowered, and active citizens with a love for lifelong learning and ambition to follow their own aspirations – academically, economically, and socially.
- For education providers and teachers: The capacity and tools to support learners across the Kingdom to realize their ambitions, with respect, fulfillment, and rewards to match.

We seek to realize an education system that all can be proud of, contributing to productive, collaborative, and resilient communities.

The ESP notes that, in light of the Ministry's interest in keeping abreast of the rapid development of ICTs and its continuous efforts to integrate technology into education, the Ministry studies and evaluates the existing ICT tools annually to determine their effectiveness, adapt them to the educational environment and to assess their efficiency in serving and improving the educational and learning process to provide the ideal school environment for students and teachers.

[1] http://www.mohe.gov.jo/en/Documents/National-HRD-Strategy.pdf

Section 2. Global Experience

Global research Experience shows that education policy, particularly when it comes to educational technology, often is:

- **unrealistic**, and is divorced from the reality on the ground and existing budgets;
- **focused on the wrong issues**, often by focusing on unimportant details not directly related to student learning;
- **poorly executed**, as a result of the large gap between policymakers and policy implementers.

Challenges lie in the ever-changing nature of technology, transforming contexts on the ground, a large number of stakeholders, and the unrealistic expectations of EdTech. Many of these challenges are common to overly theoretical policy-implementation processes that are not grounded in national conditions, including governance, policy-implementation processes and socio-economic realities. Moreover, policy development and policy implementation are often completely separate: Only when the policy is fully developed — and considered as complete — implementation takes place.

These challenges are by no means unique to any one country. Time and time again, national EdTech interventions have failed to impact learning outcomes. Several themes arise from these international experiences, including:

- **Hardware-Centricity.** The goal of employing educational technology is to improve learning outcomes, not to employ educational technology for its own sake. To achieve this, EdTech must play a broad role within education systems, targeting teacher professional development, curriculum, and assessments, all geared towards improving student learning. Instead of this broad conception, the emphasis in many countries is often on the rolling out of hardware, without considering how technologies fit into — and be effectively utilised in — the education system. For example, computer labs are installed in schools but are not integrated into the broader curriculum, and they are not accompanied by adequate teacher professional development ("training"). In this way, EdTech is often viewed as separate from other aspects of the education system, either as a purely technological issue or perhaps a *"flashy"* novelty that boosts an education system's positive perception and perhaps attracts donors - but does not contribute to learning outcomes.
- **Unsustainable technology rollout.** Technology is expensive. Technology also incurs recurrent costs, requiring both significant maintenance and ongoing replacement of old technology for new. Despite this, there is a tendency among lower-middle-income countries to rely on one-time donations to fund large-scale device rollouts. This means that without future on-off donations, and in the absence of sustained public investments that are needed, future students and teachers will be unable to perform the technology-supported tasks their predecessors did. However, this also means that even those teachers who have received hardware may be unlikely to use them — they may consider that there is no point integrating new approaches into teaching if the required materials are not regularly maintained, replaced and updated. Furthermore, the total cost of ownership (TCO) of educational technology is reported to be anything from 5-10 times more than the cost of the devices themselves. The TCO includes not only the hardware cost, but also the fees associated with training, change management, curriculum reform, and maintenance.

- **Inflexibility.** Technology evolves, as do curricula, textbooks, student and teacher's attitudes toward technology, and their socioeconomic conditions. Consequently, a one-size-fits-all or 'fixed' approach to employing EdTech is destined to soon become obsolete or inadequate for any country's context. Despite this, national EdTech strategies and policies have often lacked the flexibility to accommodate the varying and evolving contexts. They opt instead for single-model rollouts and long-term strategies with little room for changing direction.
- **Context mismatch.** A common phenomenon across EdTech solutions introduced in countries is a mismatch between the intervention and local context. While technology promises to address all sorts of challenges, from student collaboration to more robust feedback, these solutions will fail if their design does not reflect a deep understanding of the local challenges' nature. Often supposedly *"best practice"* is parachuted into countries or schools with the expectation that it will improve learning outcomes regardless of context.
- **Overly theoretical policy development processes.** Many countries have spent months and even years developing EdTech policies and strategies without setting foot in schools. Instead, such strategies only consider theory and general insights that are not rooted in the requirements of the education system or the needs of teachers and students. In many cases, the strategy development is assigned to consultants who not only lack contextual knowledge but also will not implement the strategy themselves. Given the highly contextual nature of EdTech and education policy more broadly, theory and desk research are far from adequate to meet the needs of learners.

It is for these reasons, among others, that such processes have failed over and over. In this, it is important to consider the opportunity cost. Not only are investments on such failed implementation wasted, but also such lost investments are not available for alternative and more effective implementations. To safeguard against failures, contemporary approaches favour adaptive and iterative processes. Such processes focus on impact rather than inputs, such as improved learning for young people. Policy is only developed in as much as it can be implemented and lead to impact.

Based on the research activities of the priority areas determined for 2020, we list some of the key findings below; these key findings form the basis of a preliminary, situation analysis.

Section 3. The Strategy as a Live Document

This is not a traditional education sector strategy and is far removed from a typical EdTech strategy. The strategy has shorter horizons (1-2 years) rather than typical 5+ year strategies. It deliberately does not yet have fixed answers to questions such as the nature of hardware needed in schools. The strategy also has an internal as well as external focus, looking critically at internal MoE practices and how they affect the education sector and ultimately reflect on classroom practices. Lastly, this strategy is *outcome-oriented*. While progress is monitored through output-focused indicators, the transition between phases (e.g. Alpha and Beta) is based on outcome-oriented criteria (e.g., has the Alpha indicated improved learning?). With few exceptions, the activities within the strategy will not progress until evidence of impact has been shown at smaller scales. It is anticipated that the strategy will not have a linear implementation, but rather respond constructively to unsuccessful attempts.

The main reason for this difference is captured by Andrews and colleagues in their 2017 book *Building State Capability*, where policy challenges are categorised according to the type of capability building needed. The categories include

1. policymaking services,
2. logistics,
3. implementation of intensive service delivery,
4. implementation intensive imposition of obligations and
5. *wicked hard* tasks.

Educational technology falls under the last category, *wicked hard*. The reason for this lies in the fact that education, as a sector, is service-intensive and based on the discretion of the many agents through which these services are delivered, mainly teachers. Educational technology is further complicated by the fact that *there is no comprehensive body of knowledge to base our practice on.* In short, no one really knows, conclusively, what effective practices in EdTech really looks like.

Efforts are being made worldwide to collect knowledge and conduct research around good practice within EdTech, such as the EdTech Hub.[2] There is still a long way to go, however, before "effective practices" are determined at a global level, let alone within the Jordanian context.

Thus, EdTech is a *wicked hard* policy challenge, as it not only requires service delivery at the discretion of thousands of different agents (teachers) but also requires a body of knowledge to be *created* through wide-spread experimentation.

This is where this strategy comes into play. Not only does it aim to implement these educational technology initiatives within the MoE and schools, but it also aims to experiment and pivot according to how these interventions perform on the ground. Through this, the Ministry will create institutional and recorded knowledge with regards to best practices in Educational Technology.

[2] https://edtechhub.org

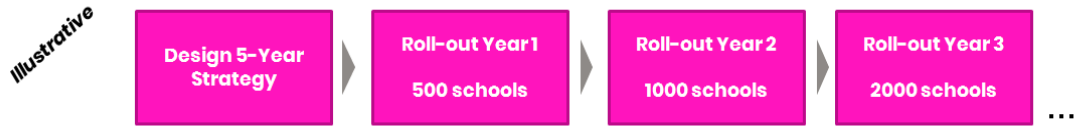
Connectivity and hardware are not prerequisites for digital learning

While hardware, connectivity and software are ultimately what set EdTech apart from regular education activities, they should not be what drives education practices. Hardware and technology are not prerequisites to good learning. While this strategy will ultimately address these questions, it is not where the strategy will start, but rather where it ends. This is because:

1. It can steer limited resources away from more important elements of EdTech and education, the most important of which is teacher professional development.
2. It can undermine the development of a tech-agnostic learning model.
3. There are countless connectivity and hardware models that could be adopted based on the learning model, not vice-versa.

A strategy can be implemented while it is still being developed

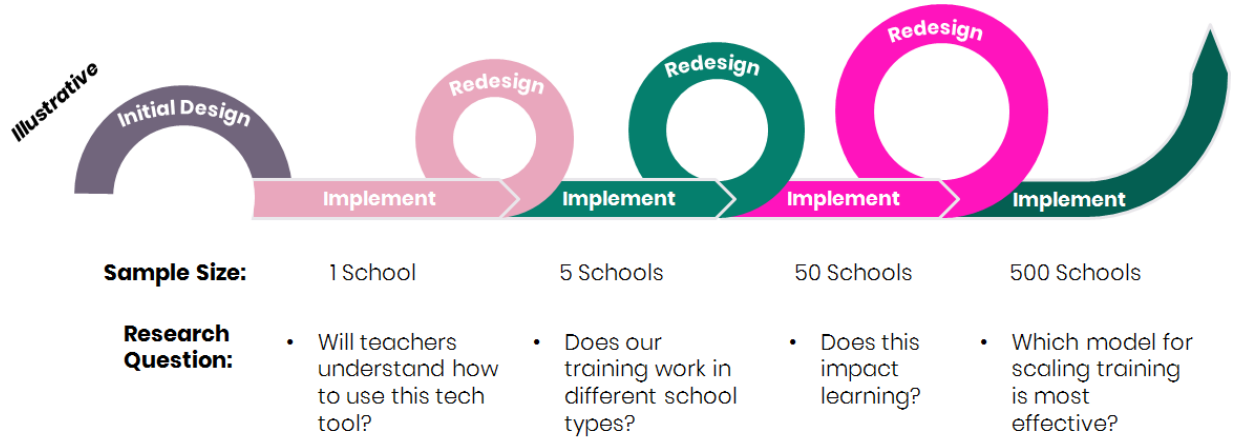
The strategy *is* designing through implementation. While traditionally implementation comes after design, with AET, the process is more cyclical, implementing segments of the strategy as they are designed. Traditionally, implementation comes *after* design.



This process, however, is cyclical.

Series of experiments are able to scale quickly

The strategy suggests running a series of experiments as a method for implementation. The goal, however, is not to run a series of pilots, but rather to scale through experimentation. Experiments answer specific questions based on the level of scale reached. With each iteration, the sample size will increase, and the questions will change until eventually, a national level is reached.



Section 4. Jordan Situational Analysis

Jordan's History with EdTech

Integrating technology in education has been a major reform goal in Jordan for more than two decades. The Ministry of Education (MoE) began teaching computer classes in secondary schools in 2000. Through reform programs such as the Education Reform for the Knowledge Economy (ERfKE), technology access in schools has expanded significantly. In 2003, the MoE launched EduWave, an e-learning and education management platform, which was expanded to all schools. The Jordan Education Initiative (JEI) was launched in 2003 to accelerate education reform through innovation and ICT integration, through partnerships between the public and private sectors. JEI piloted new technologies in nearly 200 schools, from laptops to interactive whiteboards, and developed a "cascaded'' training model for expanding ICT integration from school to school ("the JEI Model"). By 2012, there were 95,000 computers in schools across Jordan, and 86% of schools had access to broadband internet. Since 2014, JEI has also worked with the MoE, Ministry of Information and Communication Technology (MoICT) and local experts to facilitate the development of a national strategy for ICT in education. In 2016, the first strategy draft was finished. This strategy draft was reviewed in 2017 by an international consultant, who provided a set of recommendations, but this review did not provide any recommendations regarding the types of technologies to roll-out in schools. Instead, it provided a list of recommendations for piloting various educational technology programs and establishing a roadmap and vision for the use of technology in class.

Furthermore, the Ministry's Educational Strategic Plan (ESP) 2018-2022 envisages for all schools connected to the internet, for all primary schools to be supplied with computer equipment by 2022, and all teachers and principals trained in the use of ICTs. None of these goals is achievable until the question of what technology should be rolled out in school is answered.

In 2018, discussions began with the Ministry of Education over the potential of reviewing Jordan's National ICT in Education Strategy. The strategy covered five main domain areas, namely human resource development, infrastructure, management information systems, utilisation and monitoring and evaluation.

Given the highly contextual nature of EdTech, a "fixed" answer or strategy regarding EdTech does not meet the changing needs of Jordanian students and teachers, and will not lead to digital transformation. This is how Activating EdTech (AET) developed, as a discussion between the Queen Rania Centre for Education and Information Technology, the Queen Rania Foundation, and international consultants. Instead of a fixed, 5-10 year plan for the use of technology in education, AET proposed an agile approach to decision-making, responsive to ministry employees', students', and teachers' evolving needs. One of the first outcomes of the AET process was realizing the need for a new and more flexible strategy that would meet the needs of the Jordanian education system.

Current EdTech Initiatives

Table: Educational Technology Initiatives in Jordan[3]

Initiative	Details
Can't Wait to Learn[4]	**Overview:** War Child has developed a collection of educational games that are delivered on tablets to students of grades 1–6. The project provides teacher professional development and tablets to 75 schools. **Target group:** Grades 1–6, Arabic and maths **Reach / scale:** 75 Schools **Implementing organisations:** WarChild **Government partners:** QRC **Status of implementation:** Ongoing
Several 'digital content' initiatives	**Overview**: Over the last few years, there have been several initiatives to develop digital content to supplement the Jordanian curriculum. Most of this development took place outside of schools and was not supplemented by teacher professional development. These include: ● **ERfKE I e-content:** The MoE realigned and revamped digital material (including videos and simulations) to the new curriculum framework. These materials were created in the early–mid 2000s on Flash but have since been updated to a more up-to-date format. ● **Edraak-Tawjihi:** Edraak has worked alongside the QRC to develop Massive Open Online Courses (MOOCs) for Tawjihi, Jordan's high-stakes secondary school exams. ● **Edraak K-12**[5]**:** Funded by Google.org and the Jack Ma Foundation, Edraak has developed an online curriculum for K-12 maths and English. The content is aligned to the curricula of three countries, including Jordan. Edraak has already developed the maths content and is working to develop its K-12 English language curricula. ● **Abwaab**[6]**, Joacademy**[7]**:** Typically for-profit test-prep websites, the MoE partnered with these two companies during Covid-19 to a)

[3] Abdullah, K. & Taddese, A. (2020). *EdTech in Jordan: A Rapid Scan.* (EdTech Hub Country Scan). DOI: 10.5281/zenodo.3911128. Available from https://docs.edtechhub.org/lib/XCMYPX8N. Available under Creative Commons Attribution 4.0 International, https://creativecommons.org/licenses/by/4.0/.
[4] War Child (n.d.), as available at https://www.warchildholland.org/projects/cwtl/
[5] Queen Rania Foundation (2018), as available at https://www.edraak.org/k12/
[6] Abwaab (n.d.), as available at https://abwaab.me/
[7] Joacademy (2020), as available at https://joacademy.com/

	provide their content for free on Darsak.jo (see below) and b) to train a cohort of teachers on creating educational videos for Covid-19.
Noorspace	**Overview:** Having its launch accelerated by Covid-19, Noorspace is a learning management system developed by Al Manaseer Group, who provided a 10-year license to the MoE. Noorspace covers a list of services that include: managing student admission, activities, attendance and exams as well as staff and school asset management. **Target group:** Public school students **Reach/scale:** Intended for all public school students and teachers **Implementing organisations:** Al Manaseer Group **Status of implementation:** Ongoing, accelerated due to Covid-19
WiFi project	**Overview:** This pilot was launched in 2019 in 2 schools testing the possibility of covering full school with wifi and what kind of interventions can be implemented in schools if it was fully covered with wireless connectivity, **Target group:** Public school students starting with 2 schools as a pilot. **Reach/scale:** Intended for all public school students and teachers **Implementing organisations:** Umniah telecommunication company **Status of implementation:** Ongoing, paused due to Covid-19

COVID-19

Educational technology has become a government priority as the COVID-19 pandemic led to school closures, and the Ministry was forced to explore new avenues of tech-supported remote learning. The urgency of the situation led to major EdTech initiatives, addressed below, to be launched outside of this strategy's development. While the first wave of the pandemic has already passed in Jordan, the following waves, coupled with the potential benefit these initiatives could have on Jordan's post-COVID education system, means that the Ministry will continue to work to enhance these offerings.

Box 1. The Government of Jordan education sector response to COVID-19

Schools were closed and the country was put on lockdown on March 14, 2020. Later on, schools reopened again on September 1st to begin the new scholastic year.

During the pandemic, the MoE has launched three EdTech initiatives to support remote learning:

- **Darsak.gov.jo**[8] — Developed in partnership with Mawdoo3.com, Darsak is a website that compiles school lessons from different sources (including Edraak.org and Joacademy.com and Abwaab.me). The lessons are uploaded daily for the core subjects, for years 1–12. These were also broadcast on two TV channels. Digital assessments were also released as part of the Covid-19 response through the Darsak 1 platform. A second version of Darsak was developed in anticipation of the following waves of Covid-19 during summer 2020. This was done taking into consideration the lessons learnt from Darsak 1 to achieve interaction between students and teachers, virtual classsrooms and full LMS services.
- **Teachers.gov.jo**[9] — Brings together in one place a series of online courses aimed at teachers. These include general pedagogy courses as well as courses on the use of certain remote learning tools (MS teams and the MoE's LMS, Noorspace). The site only provides listings; to utilise any courses, teachers are redirected to other platforms (such as Edraak).
- **Microsoft Teams and Noorspace** — These two platforms were proposed to connect teachers with students to engage remotely, with MS Teams for grades 8–12, and Noorspace (the MoE's recently launched LMS) for younger children. Both of these platforms, however, were not always appropriate for the technological infrastructure available to students and teachers, who often had to share their limited devices and data with family members.

EdTech lessons learnt from COVID-19 in Jordan:

1. **Distance learning better suits older students than younger students.** This implies the need to revisit existing technological tools and content that is provided for younger students. Currently, younger students could not be fully engaged (shorter attention span); that is why it is always recommended that online videos last only 13-15 mins otherwise focus would be lost. Content and how it is presented to younger children should be thought about differently, and the role of the parent to support home learning needs more attention.
2. **Good schools with traditional/direct teaching tend to also do better in online learning.** Aside from technology, that means there are practices on school level that affect teaching and that are enablers of technology integration.
3. **Teachers play a significant role in online learning**. But those who could have a positive influence are the ones who a) are well-prepared to deal with technology, b) design instruction differently for online learning, and c) design assessment tools accordingly.
4. **Online learning works better for science-based subjects.**

[8] Ministry of Education, Jordan (2020), as available at https://darsak.gov.jo/
[9] Ministry of Education, Jordan (2020), as available at https://teachers.gov.jo/

Section 5. Principles and Approach

In response to these challenges, the Activating EdTech process was developed. To combat technology-centric, inflexible, centralised, unsustainable and overly theoretical approaches, an approach is needed which focuses on decision making that is collaborative, iterative, agile, research-based, contextual, and puts learning-first.

Decision-making is often associated with high-level officials, signing off on multi-million-dollar initiatives. 'Decision-making power' is thought to be in the hands of ministers and department heads. However, countless decisions that affect student learning are made every day by individuals at all levels. These decisions include deciding who should be involved in committees, editing documents and determining intervention success factors. Given the impact these might have on children's learning, it is essential that these decisions be well-informed.

However, given the large number of these decisions, it is impossible to monitor them. Therefore, these Agile, iterative, evidence-based decisions must be part of regular working habits.

5.1.1. Collaborative

Education systems are, by design, complex, mirroring the complex process of student learning. As such, to properly achieve learning impact, a broad set of actors must work together continuously. This does not simply mean holding stakeholder meetings and asking for input. Stakeholders must play a continuous and active role, and have this collaboration be part of business-as-usual.

5.1.2. Iterative

To adequately meet the needs of students and teachers, any intervention or strategy must be tested on the ground. Not only that, but there must also be a clear mechanism for redesigning the initiative after its initial deployments. This means that clear research questions must be determined prior to testing and must serve the broader design of the intervention.

5.1.2.1. Agile Development

Agile Development, while broadly related to all the other concepts, deserves its own emphasis. Originating from the latest software development practices, Agile is characterized by quick (re)deployment of a 'minimal viable product' (MVP). The MVP is the most basic form of the software (read: intervention) that can achieve the desired goal. This allows the developers to test basic assumptions quickly, avoiding large scale risks later, and allowing for pivoting and redirection early in the process. Agile methodology heavily influences the process of Activating EdTech.

5.1.3. Research-based

While experience does, and should, play an essential role in the everyday functions of policymakers, it must be coupled with and balanced by research. The typical image 'research' might conjure up is of a secluded scholar working behind a desk. The AET team, however, uses the terms 'research' and 'evidence' very practically: what people need to know to make good decisions. This may take the form of a research paper, a national survey, a randomised control trial, or a meta-analysis of impact evaluations. It may also be in the form of a small-scale intervention in a single classroom, individual interviews and focus groups.

Though the form of evidence and research can vary, one thing must be true: the activities of the AET team must be proportionate to the research question under consideration. For this reason, effort has to be expended on determining the exact research questions to be asked, before beginning to answer them.

5.1.4. Contextual

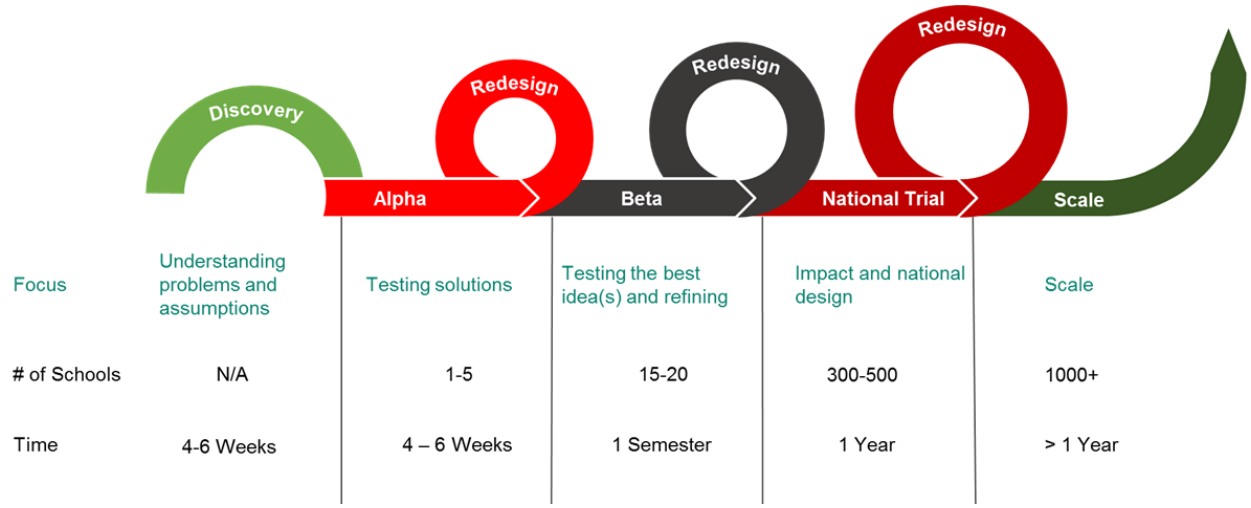
While the allure of 'global best practice' is a tempting one, it often fails to deliver learning impact. This is a well-studied occurrence, dubbed 'isomorphic mimicry'[10], in reference to a phenomenon in the natural world. The phenomenon illustrates the tendency of governments to pursue form over function; they tend to adopt practices that were successful elsewhere (form), over addressing the issues they are supposed to address directly (function).

To avoid this, the process must be highly contextual, looking inward, starting first from a deep understanding of the issue that needs to be addressed before looking outward.

5.1.5. Learning-First

Learning must be the goal of all interventions within an education system. This goal must not only be a measure of success but also what guides the design (and redesign) of the interventions. An intervention should not begin with a (technology) solution in mind without a clear understanding of the intended learning outcomes and what constitutes appropriate pedagogical approaches to obtain those outcomes.

Below an illustration of the decision-making approach, the target group could be schools, directorates, MoE staff, teachers, or students. The illustration below shows school numbers as an example.



Focus	Understanding problems and assumptions	Testing solutions	Testing the best idea(s) and refining	Impact and national design	Scale
# of Schools	N/A	1-5	15-20	300-500	1000+
Time	4-6 Weeks	4 – 6 Weeks	1 Semester	1 Year	> 1 Year

The approach also describes the phases utilized by all EdTech implementations:

- **Discovery**: During this 6-week phase, the technical team examines and understands the problem(s) they are solving and begin formulating solutions.
- **Alpha**: The initial solution(s) are tested in a limited (1-5) number of schools.
- **Beta**: A more refined version of the solutions is tested in a larger number of schools (15-20).
- **National Trial**: The technical team tests the delivery method in a nationally representative number of schools (300-500) before scaling nation-wide.

[10] Woolcock, M., Pritchett, L. and Andrews, M., 2017. Building State Capability: Evidence, Analysis, Action. [Erscheinungsort nicht ermittelbar]: Oxford University Press.

The principles on which this strategy is founded are as stated below.

5.2.1. Adaptive, iterative, agile processes

This is not a final strategy. This strategy is deliberately designed to be a live document, which can change from time to time. It is itself a minimum viable product (MVP). It is not designed to be a final or 'ultimate' strategy, but one that is evidence-based, and can be interrogated in the light of new evidence.

Just as EdTech is fast-moving, this strategy and the Ministry's capacity to implement must be equally nimble. The ability to react to changes in the classroom, to the ever-evolving EdTech industry and the policy environment is critical to the success of this policy.

This MVP should be read together with the Policy-Implementation-Process Handbook (PIP). This handbook outlines the process through which this policy has been, and will be, developed, and reflects the very same principles presented in this document.

5.2.2. Evidence-based policy development

In the design of this policy, available evidence was consulted. However, this existing evidence is not sufficient to address all the contextual issues and challenges Jordan faces in relation to EdTech. Therefore it is imperative to work adaptively. The MVPs to be developed are all evidence-based. This means that a mix of sources will be relied on to develop this document, including:

- High-level meta-analysis;
- Secondary research/meta-analysis (e.g. Education Endowment Foundation (EEF) Toolkit);
- Primary research, including user research as well as qualitative, quantitative, and mixed methods research;
- Personal experience.

5.2.3. High-level meta-analysis

The EEF toolkit[11] puts EdTech into the context of other interventions. The AET team appreciates that this is UK evidence; therefore, the various recommendations have to be considered carefully before they can be applied to the Jordanian context. However, the team heeds the overall approach of analysing the learning-effectiveness, cost-effectiveness of EdTech and security of evidence.

5.2.4. Principles for Digital Development

The AET team also heeds the broader principles that apply to any digital projects. The Principles for Digital Development are an established set of guidelines endorsed by many organisations.

This is an evidence-based, adaptive policy. Over time, the team will interpret the above high-level principles within the Jordanian context. It is noted that other principles and ideas in the future will need to be considered.

Principles for Digital Development

Design with the User (User-centered design)
Understand the Existing Ecosystem
Design for Scale
Build for Sustainability
Be Data Driven
Use Open Standards, Open Data, Open Source, Open Innovation, Open Content
Reuse and Improve
Address Privacy and Security
Be Collaborative

Source: https://digitalprinciples.org/

5.2.5 Who is this policy for?

The Jordanian government recognizes the valuable role of governmental and non-governmental organizations in contributing to the Jordanian education system. Similarly, it is recognized that individuals at all levels, from the public and private sectors, NGOs, teachers, and students all have a stake in this policy and should, therefore, have a voice in its development.

5.2.6 Stakeholders and Local Community

Numerous challenges are facing the Jordanian educational system. Still, the MoE is seeking collaboration and the contributions of national and international partners in supporting the management and implementation of joint programs, assisting in the provision of required resources and supporting the realization of a modern educational system that forms a critical element of building a prosperous future for upcoming generations.

5.2.7 EdTech Structure

The EdTech technical team is a cross-departmental working group that includes staff from different departments within the Ministry and that is directly involved in enacting the EdTech process with consideration to all departments' perspectives. Team members meet during sprints and regular coworking days. The technical team is usually accompanied by the AET coaches who provide expert support in the form of guidance and research-based advice.

Chaired by H.E. the minister of education, the EdTech Steering Committee represents the higher reference for decisions and strategic direction of EdTech in Jordan.

11 https://educationendowmentfoundation.org.uk/evidence-summaries/teaching-learning-toolkit/

The roles and responsibilities of the Steering Committee and the Technical Team are explained in the EdTech Committee's terms of reference document (see Annex 1 below).

Section 6. Priority Areas

Over the course of the previous year, the MoE's Activating EdTech team has identified six priority areas around which the MoE's EdTech activities will revolve.

No	Priority Area	Description
1	**Activating EdTech Development and Monitoring**	**Rationale** In order to ensure the implementation of this strategy is successful and remains Agile, special and explicit attention needs to be made to the process itself: Activating EdTech. Professional development and learning for the technical team, coupled with the creation of processes, as well as a robust monitoring, evaluation and learning system must be in place.
2	**Decision Making**	**Where did this priority come from?** The AET team conducted a prioritization exercise and highlighted the need to develop evidence-based processes for decision making, not only with regards to technology but broader initiatives and projects.
		Rationale The technical team identified that there was no clear, unified and consistent method of decision making within the MoE, especially when it came to initiatives and projects. There was a consensus that before any change could be seen at the level of the classroom, these issues needed to be resolved within the MoE.
3	**Professional Development**	**Where did this priority come from?** The AET team conducted a prioritization exercise. PD was determined to be a necessary area of focus.
		Rationale Professional development is at the heart of any successful educational intervention, whether technological or otherwise. Furthermore, there were

		several areas that were identified that could potentially support the TPD systems in place.
4	**Digital Content**	**Where did this priority come from?** This priority area came through ministerial direction (as a response to COVID-19) and was approved by the AET Steering Committee on February 19th, 2020.
		Rationale High-quality teaching and learning material are key components of a high performing education system, especially when coupled with effective TPD. Technology has broadened both the types of materials available, as well as the delivery methods. Finding a combination of content, delivery methods and TPD suitable to the Jordanian context could lead to better learning outcomes for more students.
5	**Digital Assessment**	**Where did this priority come from?** This priority area came through ministerial direction and was approved by the Steering Committee on February 19th, 2020. The need for developing digital assessment is currently increased as a result of the MoE's response to COVID-19.
		Rationale Constant feedback has the potential to positively affect learning outcomes. Technology can play a role in the promotion of positive feedback practices and the facilitation of formative feedback in specific. This is because it provides tools through which analyzing student performance at both the classroom and national levels is made more convenient.
6	**Digital Skills**	**Where did this priority come from?** This priority area came as a suggestion from the AET team in July 2020.
		Rationale This strategy aims to utilize technology to improve learning, but it also recognizes that learning to use technology is a desired outcome itself that is dependent on the provision of technology combined with suitable curriculum and teacher professional development.

Priority changes

In keeping with the responsive and nimble nature of the AET process, the strategy remains open to changes to respond to shifting priorities. While the AET team and the ministry will be dedicated to delivering and working within these objectives, they will be open to revising the priorities. Changes in these priority areas will be based on several factors, including:

- **Findings based on the process of implementation.** Realities on the ground can quickly disprove previously held assumptions. This strategy remains open to change based on these findings.
- **Extenuating circumstances.** Jordan has seen several extreme circumstances which have caused national priorities to shift, including influxes of refugees and the COVID-19 pandemic. This strategy needs to be open to react to such incidents.
- **Steering Committee approval**. Steering Committee approval is necessary to add, change or remove priority areas.

Priority Shifts: COVID-19

Ministry and school lockdowns due to the COVID-19 pandemic caused delays in the team's original timelines. Not only were many of the Alphas not possible when schools were closed, but the technical team was put on mandatory leave or preoccupied with the Ministry's emergency response. Similarly, the Ministry's priorities had shifted drastically toward remote learning. For these reasons, the team conducted a voluntary virtual Sprint on Webex, during which they shifted priorities to fit the more urgent needs. Two priorities were identified:

Activating the Role of Supervisors and Principals in Remote Learning
Launching a Help Desk

While the shift was short-lived due to Jordan's rapid response to the pandemic, it does demonstrate the flexibility of the process and the team to respond to the most urgent needs of the Ministry.

Priority Area 1: Activating EdTech Development and Monitoring

Lack of internal and external coordination among stakeholders, transforming contexts, device and tech-centricity, and unsustainable ambitions have hampered Jordanian EdTech planning in the past. The AET team sought to address these challenges by developing this strategy collaboratively and based on on-the-ground experimentation. These challenges, however, carry on through implementation and do not end with strategy development. This priority area will focus explicitly on the process through which not only the strategy is implemented, but also how it is revised. Processes, governance structures, monitoring methods, human resources and professional development practices must all be in place to deliver this strategy. This priority area is in place to ensure these supporting structures are available.

This priority aligns with the Quality domain in the ESP and specifically under ICT in education.

Strategic Sub-objectives:

PA1.1 To develop capacity for iterative adaptation, Agile and EdTech (continuous)

Sub-objective	Activity
Develop capacity for iterative adaptation, Agile and EdTech (continuous)	Establish a process for iterative EdTech program design
	Develop capacity for iterative adaptation Agile and EdTech within the MoE
	Conduct regular system-level reviews

Priority Area 2: Decision Making

During a prioritization exercise in Sprint 4, the technical team found that decision-making at the ministry level could be improved greatly; the current decision making in the Ministry is not perceived as being methodical or uniform. As they were trying to analyze the rationale behind some of the decisions made at the MoE, the team discovered that the decision-making is not based on a set of consistent principles and criteria or an evidence base, especially for decisions with regards to new interventions or projects. Unfortunately, this leads to a lack of coordination and communication between MoE departments and in turn to duplication of tasks/interventions and incoherent effort.

This is how the *system's approach to decision making* became a priority that the team decided to focus on. The purpose is to develop an evidence and research-based approach to decision making in order to make sure that the outcomes of these decisions would be as efficient as could be.

This priority aligns with the System Strengthening domain in the ESP and specifically with the sub-objective of Institutional Performance Management. Under this domain, there is also the following objective: "Evidence-based strategic policy, planning and M&E functions take place at all levels (the Ministry's center, field directorates and schools) by the end of 2022."

Strategic Sub-objective:

PA2.1 To digitise key MoE activities

Objective	Activity
Digitise key MoE activities	Develop an EdTech initiative criteria + platform to ensure alignment across depts
	Digitise key MoE activities
	Develop key e-Government services
	Develop and deliver key financial and management systems

Priority Area 3: Professional Development

Professional development (PD) at ministerial, directorate and school level is an essential driver for improving student learning outcomes. There are several areas in which technology can support successful delivery of PD, as well as address some of the challenges Jordan is facing. These include:

1. Training needs assessment. While a system for collecting teachers' training needs exists, the tools and methods to do so are not yet unified across the education system. This leads to an inaccurate representation of staff needs in Jordan and a mismatch between the actual and reported needs.
2. Training delivery. A shortage of funding for and provision of In-Service training programs therefore the MoE is unable to meet all the reported needs.
3. Assessing training impact. There is often a mismatch between the environment of the training session and that of the actual classroom/school, making some material non-transferrable.

This priority strongly relates to the Human Resources domain in the ESP.

Strategic Sub-objectives:

- **PA3.1 To support the organization and planning of the MoE staff's PD activities**
- **PA3.2 To Support professional development program delivery through technology**
- **PA3.3 To Support staff evaluation through technology**

Sub-objective	Activity
To support the organization and planning of the MoE staff's PD activities	Digitise staff professional development databases
	Develop tech-supported practices for identifying staff training needs
Support professional development program delivery through technology	Develop and launch a tech-supported TPD program *(coupled with blended learning program and TPD platform)*
	Develop a Platform for Professional Development *(in-tandem with tech-supported PD program)*
Support staff evaluation through technology	Develop tech-supported practices for evaluating staff

Priority Area 4: Digital Content

Actualizing effective learning and dynamic learning experiences by means of digital media and content is exceedingly becoming a primary concern in contemporary education. The recent situation of the COVID-19 pandemic has also shed light on the importance of having high-quality digital teaching and learning material that could facilitate the distance learning experience.

This priority aligns with the *Implementation of Technology* component that is in the MoE Education During Emergency Plan 2020/2022. and also aligns with the Quality domain in the ESP and specifically under ICT in education.

Strategic Sub-objective:

PA4.1 Develop a Blended learning program

PA4.2 Develop a Blended learning - SEND

PA4.3 Develop a Blended learning – Non Formal education

Sub-objective	Activity
Blended learning program	Develop a scalable blended learning model
Blended learning - SEND	Develop a scalable blended learning model to support special education, needs and disabilities (SEND) students
Blended learning – Non Formal education	Develop a scalable blended learning model to support non formal education students

Priority Area 5: Digital Assessment

Feedback impacts the learning process and outcomes immensely. Based on evidence, the EEF Teaching and Learning Toolkit lists feedback as the most impactful learning intervention with the least cost. The following benefits of digital assessment could amplify and facilitate the non-digital process:

- Digital feedback is immediate, prompt and formative
- Increases student engagement
- Cost-effective (no printing or commuting expenses)
- Clarifies grading criteria

This priority aligns with the Quality domain in the ESP and specifically under ICT in education.

Strategic Sub-objectives:

- **PA5.1 Classroom-based digital assessment (coupled with blended learning program)**
- **PA5.2 National level digital assessment**

Objective	Activity
Classroom-based digital assessment (coupled with blended learning program)	Develop and scale model for tech-supported classroom assessment
National level digital assessment	Develop and scale model for tech-supported national assessment (Tawjihi)

Priority Area 6: Digital Skills

For students to engage with digital content and assessment, they need to enhance their digital skills so that they can benefit from the electronic tools that are expected to make the learning process for them easier and more effective.

The aim is to provide students with the digital skills required to manage and interact with digital information.

This priority aligns with two domains in the ESP:

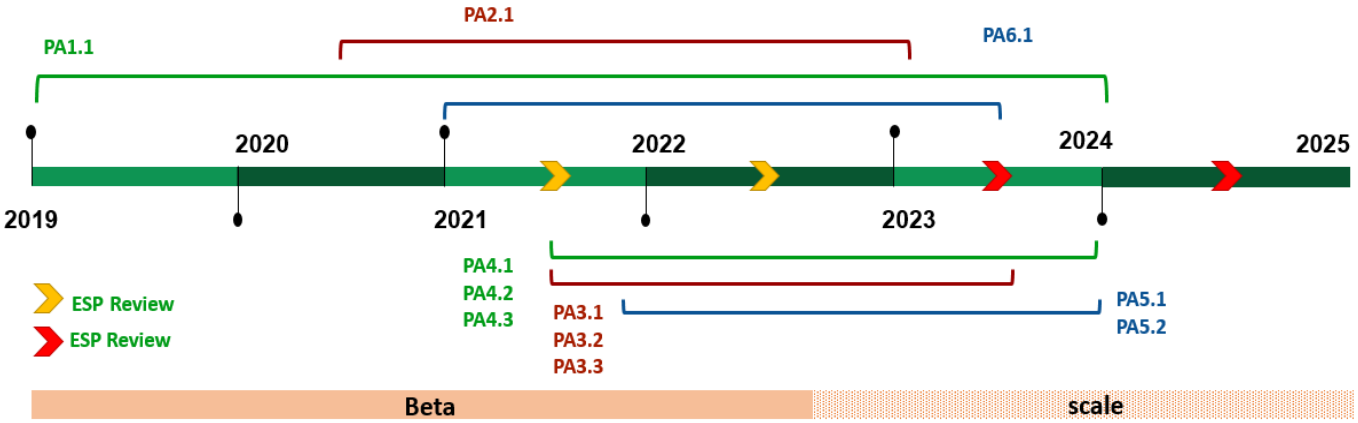
1. Quality and specifically under ICT in education
2. Human Resources

Strategic Sub-objective:

PA6.1 To develop digital skills curriculum to enhance students learning outcomes

Sub-objective	Activity
Develop Digital skills curriculum to enhance students learning outcomes	Develop a digital skills curriculum framework
	Develop a digital skills curriculum for grades 7 and 9
	Develop a digital skills curriculum for grades 8 and 10

Timeline



Priority Area #	Strategic Objective
PA1.1	To develop capacity for iterative adaptation, Agile and EdTech (continuous)
PA2.1	To digitise key MoE activities
PA3.1	To support the organization and planning of the MoE staff's PD activities
PA3.2	To Support professional development program delivery through technology
PA3.3	To Support staff evaluation through technology
PA4.1	Develop a Blended learning program
PA4.2	Develop a Blended learning - SEND
PA4.3	Develop a Blended learning – Non Formal education
PA5.1	Classroom-based digital assessment (coupled with blended learning program)
PA5.2	National level digital assessment
PA6.1	To develop digital skills curriculum to enhance students learning outcome

This strategy is aligned with the Jordanian National Strategy for Human Resources Development 2016-2025. This document will be released by the end of 2020 to become an Annex to the ESP until the end of 2022. The

technical team will provide input to the next ESP review and all annual reviews until the end of 2022, aiming to be fully integrated in the writing of the ESP II in 2023 which will last until the end of 2027.

The Digital Content and Digital Assessment priority areas were accelerated by COVID-19 and launched in 2020. The Ministry accordingly released Darsak I and II, which can be considered the official kick-off for the Digital Content and Digital Assessment priority areas.

Professional Learning and Digital Skills priority areas are anticipated to align with the HRD Strategy and the World Bank "Youth, Technology, and Jobs" project (mentioned above at PA6) that aims to "improve digitally-enabled income opportunities and expand digitized government services in Jordan"[12]. Lastly, maintaining and supporting the Activating EdTech process and digital transformation for all MOE staff will be a continuous objective throughout the delivery of this strategy.

[12] http://documents1.worldbank.org/curated/en/544751585015347579/pdf/Jordan-Youth-Technology-and-Jobs-Project.pdf

Section 7. Legacy Projects in this Strategy

Legacy projects in the new strategy

This EdTech strategy is a national strategy, aimed at coordinating all EdTech initiatives within the MoE. The strategy also recognises, however, that this new method of designing and implementing EdTech cannot and will not be rolled out overnight. A clear transition plan is needed to not only introduce the new initiatives indicated in this document, but also to align existing and legacy projects. For this reason, the AET team will conduct a thorough study of existing initiatives as they begin working on the relevant priority area. During the Discovery phase of each priority area, the team will explore existing initiatives and determine potential ways forward. The team will work closely with the relevant departments to align chosen projects to the Activating EdTech Process.

ESP Alignment

The following table clarifies how every strategic objective in this strategy aligns with the domains of the ESP:

Priority Area #	Strategic Objective	ESP Domain
PA1.1	To develop, maintain and support the Activating EdTech process to deliver value for students, teachers and Ministry staff	**Quality**
PA1.2	Digital transformation for all MOE staff and MOE tasks and public services.	**Quality**
PA2.1	To activate the role of technology to support evidence-based decision making within the Ministry	**System Strengthening**
PA3.1	To support the organisation and planning of the MoE's PD activities	**Human Resources**
PA3.2	To improve the quality, reach and impact of the MoE's PD programs through supporting delivery	**Human Resources**
PA3.3	To imbed professional learning and development into all initiatives	**Human Resources**
PA4.1	To utilise open access to digital content for teachers and students to improve learning outcomes	**Quality**
PA5.1	To utilise digital assessment models to improve student learning and ministry planning	**Quality**
PA5.2	To leverage digital tools and practices to improve the delivery and assessment of all examinations and Tawjihi in specific	**Quality**

PA6.1	To create programs for developing MoE staff's digital skills to improve learning outcomes	**Quality** **Human Resources**
PA6.2	To create a curriculum for developing students' digital skills to improve learning outcomes	**Quality** **Human Resources**

Recommendations for ESP

In addition to aligning the objectives and activities of this strategy to the ESP, the strategy has also reviewed the existing EdTech-relevant indicators within Jordan's Education Strategy Plan 2018-2022. These are included below in addition to the suggested amendments.

Item	Progress to date	Comments and suggested action
Number of SMART rooms	1200 classrooms already completed (Baseline) (Activity is as follows: Increase partnerships with the private sector to increase computer equipment and internet networks in schools)	It is unclear whether SMART classrooms are the best route forward for schools. The initiative needs to be assessed regarding the use that is being made of the SMART classrooms and VfM in relation to learning gains
Percentage of schools receiving updated or new computers	40%	The devices in place may change, especially as current budget levels are not high enough to regularly maintain the existing levels of technology. The initiative needs to be assessed regarding the functionality and type of equipment provided. Further, it needs to be assessed what use is made of the equipment (VfM in relation to learning gains). How this indicator is measured and monitored needs to be reviewed as well, so that the information can be more dynamically used, and aligned with other MoE databases.
Electronic content and improved learning resources available for all subjects and grades	*Available* *This content is form different sources starting form the digital content that was developed previously for eduwave and content that was developed for public*	The available content needs to be audited. Where appropriate content is available, it needs to be aligned with the curriculum. Where no content is available (subjects/grades) such content will need to be prioritized. Cost savings by using OER should be explored. Content needs to be aligned with TPD to ensure that teachers are able to draw on content (both in the classroom and supporting learning at home).

	schools through initiatives and interventions that was implemented in schools and finally there if the Edraak k-12 platform that covers the content of english and Math for K-12	
E-resources available for learners with special needs	N/A	Same as above
% of schools that report using e-content	N/A	Same as above
ICT capacity assessment conducted (for teachers who need training on ICT)	N/A	"ICT training" should not be conducted separately from regular pedagogy TPD. Assessment of ICT capacity should be conducted within the context of a pedagogically-based TPD program.
Number of technical staff trained	N/A	Unclear what this training should look like yet.
Number/percent of school principals and teachers trained on the Cambridge Programme (ICDL)	N/A	Activating EdTech coaches' team don't believe that the Cambridge program is appropriate for teachers and principals. Teachers/Principals should instead be trained on a tech-supported TPD program. (e.g. differentiated learning)
LMS, CMS and AMS Development and training		The LMS/CMS/AMS in operation need to be reviewed. New indicators to be developed to review these within the context of AET and COVID-19. Specific indicators on Darsak are also needed (proportion of students, etc.)

Activating EdTech (AET) Glossary

1. **EdTech (Educational Technology):** EdTech (shorthand for "education technology") refers to hardware and software designed to enhance teacher-led learning in classrooms and improve students' education outcomes.
2. **Minimum Viable Product (MVP):** the most basic form of a product that can achieve the desired goal.
3. **Policy-Implementation-Process Handbook (PIP):** This handbook outlines the process through which this policy has been, and will be, developed.
4. **The AET Technical Team**: a team made up of 18 individuals, from 8 Ministry of Education (MoE) departments. The technical team is responsible for carrying out the task at hand, in Activating EdTech's case, it is designing and testing Jordan's EdTech Strategy
5. **The Coaching Team**: consists of members of the Queen Rania Foundation and 2 external EdTech consultants, with the goal of handing this role over to members of the AET Technical Team. The coaching team is responsible for enabling the project technical team to do their work effectively.
6. **The Steering Committee:** made up of the Minister of Education, heads of MoE departments, the secretary-general and members of the NCCD. The Committee is responsible for providing overall strategic direction to the team, approving medium-large scale projects, and approving high-level outputs from the technical team, including the strategy iterations.
7. **Sprints:** short, 5-day bursts of intensive working, where both the coaching and technical teams work together on a specific deliverable or set of deliverables. These are typically used to deliver high-priority deliverables (e.g. the EdTech Strategy) or when the technical team needs more direct capacity-building support (e.g., transition to a new phase for the first time; Alpha, Beta, etc.).
8. **Coworking Sessions:** when the technical team meets for one day a week to work on the process. During this session, the technical team carries out the agreed-upon experiments, gathers and analyses data, and plans next steps.
9. **Iterative:** "a procedure in which repetition of a sequence of operations yields results successively closer to the desired result."[13]
10. **Agile approach:** an agile approach is a project management methodology that uses short development cycles called "sprints" to focus on continuous improvement in the development of a product or service. An agile approach usually comprises of four phases:
    a. **Discovery:** exploring the current situation, what user needs exist, how these needs are being currently met, what gaps or challenges need to be addressed.

[13] https://www.merriam-webster.com/dictionary/iteration

b. **Alpha:** designing a minimal viable product that meets user needs and testing it on a small scale. At the end of this test, feedback is used to redesign and improve.
c. **Beta:** the refined and redesigned version of the alpha service and testing it on a larger scale and preparing to run it.
d. **Live:** when the final version of the beta service after testing and redesigning is released and running. improvement based on feedback is continuous.

Annex 1. EdTech Committee TOR

EdTech Committee

Terms of Reference

The purpose of this Terms of Reference (TOR) document is to clarify the roles and responsibilities of the EdTech steering committee that provides support in evidence-informed decision-making regarding EdTech in the Ministry of Education (MoE).

About Activating EdTech (AET)

AET Phase I

In January 2019, Activating EdTech Phase I was launched to provide a new direction for EdTech in Jordan.

> **"AET is an innovative process which concurrently *designs* and *implements* the new EdTech strategy through a series of ever-growing pilots".**

QRF has been facilitating this new iterative process through helping to animate and provide technical assistance to a working group - an Activating EdTech Team - formed of multiple Ministry of Education departments in addition to other relevant national stakeholders (e.g. NCCD, Edraak, QRTA). Since January, 7 workshops were held with the Activating EdTech Team during which: i) It was agreed that the previous version of the strategy was not sufficient for Jordan's needs; ii) Pillars for a new strategy were put in place, and; iii) micro-pilots began that will feed into the Strategy.

Due to the iterative nature of this project, ***the process itself is just as (if not more) important than the outputs (the actual strategy document).*** The process needs to include the (ongoing) strengthening of national capacities and the creation of buy-in from a wide range of stakeholders expected to implement. The 'Activating EdTech' assistance to the MoE is being financially supported by DFID and has included support from international EdTech experts (coaches), as well as from the UK Department for Education.

AET Phase II

Efforts have increased in AET Phase II, and the AET team has adopted an accelerated timeline. The team will be restructured into a Steering Committee, which will be responsible for strategic decisions and reviewing outputs, and a Technical Team, which will produce and implement the EdTech Strategy.

AET Phase II has introduced different phases of piloting shown in the visual below. The EdTech strategy will be revised and expanded upon at the end of each phase:

- **Discovery:** During a 6-week phase, the team will understand the problem(s) they are solving, and begin formulating solutions.
- **Alpha:** The initial solution(s) are tested in a limited (1-5) number of schools.
- **Beta:** A more refined version of the solutions is tested in a larger number of schools (15-20).
- **National Trial:** The team tests the delivery method in a nationally representative number of schools (300-500) before scaling nation-wide.

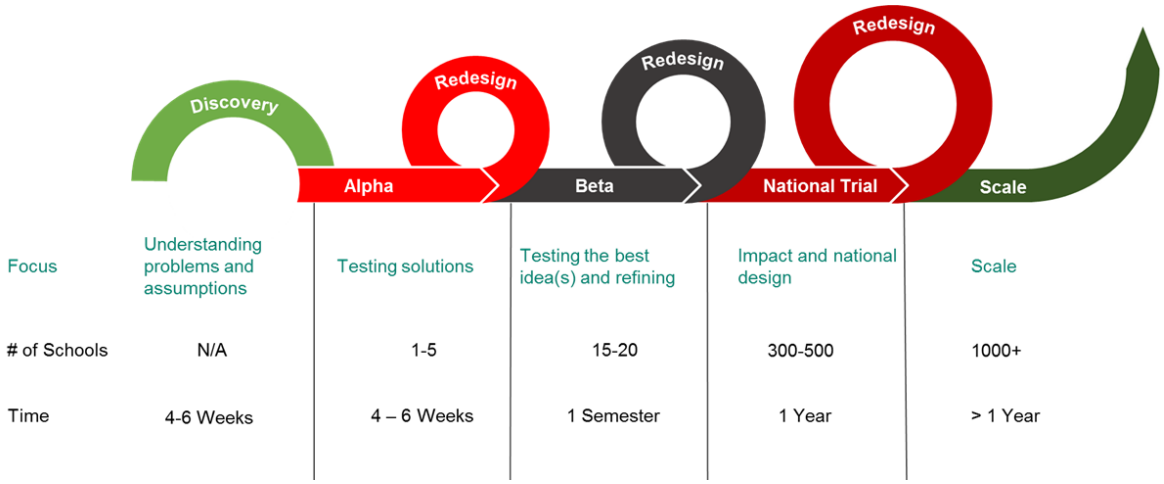


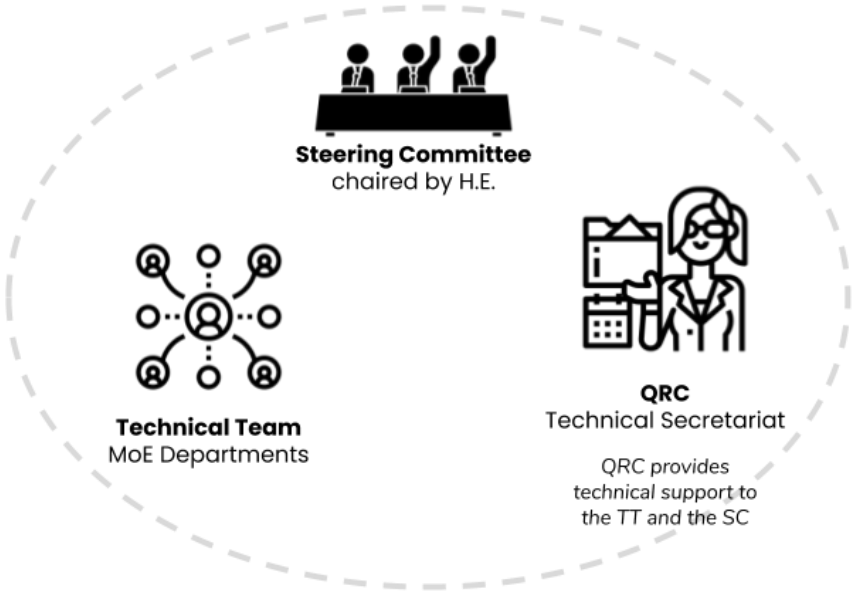
Figure 1. EdTech Process

Proposed Structure — Overview

Restructuring the committee is proposed to address any lack of coordination between departments to improve communication and facilitate information sharing/updates across all levels of role-players in the ministry.

The new Steering Committee structure suggests that QRC acts as a technical secretariat to support the technical team with implementing the process in all EdTech-related interventions. The proposed structure and its dynamic are shown below in Figure 2 and 3.

Figure 2.



EdTech Keyplayers Structure

The technical team is cross-departmental including staff from different departments within the Ministry and that is directly involved in enacting the EdTech process (discovery, alpha, beta, live) with consideration to all departments' perspectives. During sprints and regular coworking days, the technical team is usually accompanied by the AET coaches who provide expert support in the form of guidance and research-based advice.

Chaired by H.E. the minister of education, the EdTech Steering Committee represents the higher reference for decisions and strategic direction of EdTech in Jordan. The roles and responsibilities of the Steering Committee and the Technical Team are explained further below.

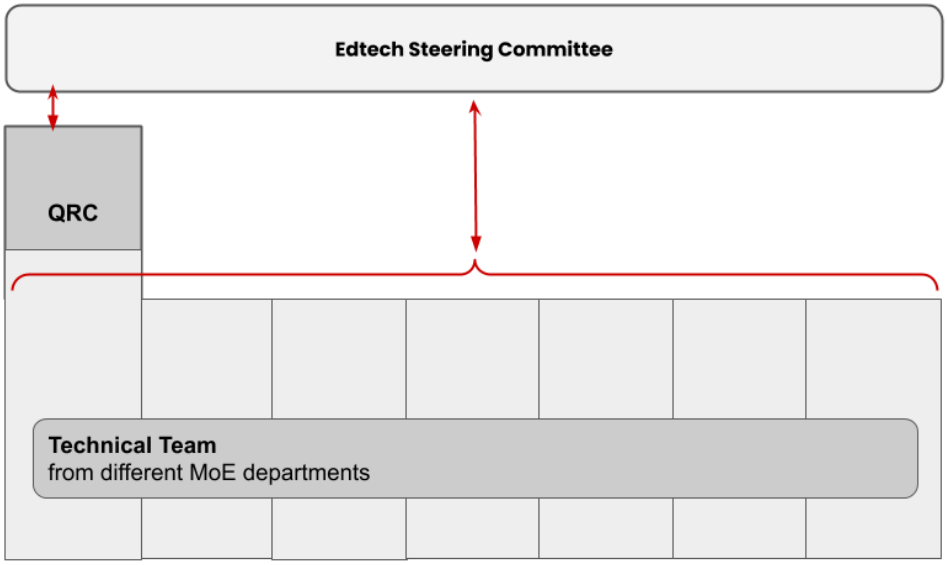


Figure 3. EdTech Keyplayers Structure

Overall responsibilities of the Steering Committee

The members of the steering committee constitute a group of people who are genuinely interested in EdTech and the outcomes that are intended to increase learning outcomes for children and young people.

Roles and Responsibilities of the Committee

Monthly

- Reviewing major outputs of the Technical Team;
- Providing input to the development of the EdTech projects, including the evaluation strategy;
- Providing advice on the EdTech budgets;
- Defining and helping to achieve the EdTech project outcomes;
- Identifying the priorities in the EdTech project – where most energy should be directed;
- Identifying potential risks;
- Responding to risks raised by the team, project timeline and quality as it develops;
- Providing advice and approving changes regarding the EdTech project as it develops.

- Meeting monthly to follow on the EdTech progress ensuring that ongoing projects are on track and to provide strategic insight;
    - The technical team is expected to submit any relevant reports one week prior to the meeting;
    - Meeting agenda is expected to be shared one week prior to the meeting;
    - The meeting is usually held at the Ministry of Education;
    - The meeting arrangements are expected to be taken care of by QRC;
    - If the Steering Committee chair cannot chair the meeting, the Vice-Chair will chair the meeting instead.

Quarterly or less

- Selecting members for the EdTech Technical Team;
- Providing strategic direction for EdTech within Jordan;
- Reviewing iterations of the EdTech Strategy.

As needed or Emergency responses (e.g. COVID-19)

- Conduct urgent meetings responding to situations that arise or upon a request by the minister or a department;
- Analyze the current situation and the size of the response needed;
- Information analysis and risk identification (risk prediction);
- Studying the perspective of other parties to the situation and predicting their different reactions;
- Study previous similar situations and identify lessons learned from them;
- Predicting potential priorities and setting those priorities;
- Continued assessment of risks according to emerging new changes;
- Formulate alternatives and determine the best course of action;
- Preparing potential response scenarios and training plans for them;
    - Determine the methods and means for implementing each scenario;
    - Predict the possible reactions to each scenario or decision;
- Taking appropriate decisions according to the variables of the situation;
- Follow up on reactions and prepare countermeasures;
- Follow-up, update and develop the response accordingly.

Technical Team Members Roles and Responsibilities

- Understand the EdTech process, and how to present, explain, and introduce to others;
- Understand the aims, strategy, and intended outcomes of the EdTech projects and solutions iterations;
- Agree on main priorities that should be addressed in the Edech strategy and submit them for the steering committee approval;
- Design, plan and implement Alphas, Betas, National Trials, and at scale level EdTech solutions;
- Research activities and micro-experimentation on each iteration of testing any EdTech solution;
- Ensure the EdTech solutions and projects implemented in MoE matches the aim of the EdTech strategy;
- Be an advocate for the EdTech process by doing what they can to promote its outputs;
- Consider how they will know if the aim of the implemented EdTech solutions and projects has been achieved;
- Review the progress of the project against the milestones set;
- Consider ideas and issues raised;
- Provide support and continuous guidance to the EdTech solution/project implementation team, schools, etc;
- Help balance conflicting priorities and resources;
- Foster positive communication outside of the Committee regarding the EdTech process and solutions;
- Progress and outcomes;
- Actively promote the outputs of the process;
- Contribute to the evaluation of the EdTech solutions and projects, both the process of developing and implementing the project and its actual impact on its intended audience.

Members

Department / Organisation	**Role**
Minister of Education	Chair
Secretary-General of the Ministry of	Vice-chair

Education for Educational Affairs	
Secretary-General of the Ministry of Education for Administrative and Financial Affairs	Vice-chair
Head of QRC	Member/Secretariat
Head of Curriculum Department	Member
Head of Examinations Department	Member
Head of Technical and Vocational Education Department	Member
Head of Development coordination Unit	Member
Head of Teacher Training and Supervision	Member
Head of General Education Department	Member
Head of Planning and Research	Member
Head of NCCD	Member
Queen Rania Foundation	Member/Secretariat