

# PULSE CHECK

## ON DIGITAL LEARNING

EXECUTIVE  
SUMMARY



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# EXECUTIVE SUMMARY

This report aims to **take the pulse** of each vital element of digital learning and **offer steps to recovery** through child-centered, equity-driven and innovative solutions, particularly as technologies and digital learning have come center stage since COVID-19. It is also part of UNICEF’s larger efforts to provide quality, personalized and safe learning experiences to all children, ensure learning and skills development, close the digital divide and spearhead innovative and scalable solutions to educational challenges.

The five interlinked vitals for effective digital learning proposed in this brief are: **1) ICT in Education policies and financing, 2) digital learning platforms and content, 3) teachers and school leadership, 4) digital literacy, and 5) holistic learning opportunities within and beyond classrooms**, which aim to provide a starting point to transforming education systems and ensuring effective digital learning experiences. In view of these vitals, this brief calls primarily on policymakers, but also private sector partners, research agencies, and international and local organizations, as well as civil society, to prioritize the following actions:

## 1 Ensure a whole-of-system approach to digital learning through national ICT in Education policies and Master Plans, as well as cross-sectoral partnerships.

Countries with established and up-to-date ICT in Education policies and Master Plans were better equipped to respond to the COVID-19 pandemic and its effects, ensuring resilience and readiness to global changes and crises. In order to build robust and effective education systems, government entities and key partners across various sectors, including education, telecommunication, finance and others, must come together to plan and develop ICT in Education policies and Master Plans that are properly budgeted and preferably implemented by dedicated national educational technology agencies, in coordination with the Ministries of Education and those in charge of ICT and Telecommunications.

## 2 Increase resources dedicated to digital learning.

UNICEF has estimated that a minimum of **\$1.4 trillion** in funding is needed by 2030 to cover spending related to digital learning. To be edtech ready, countries





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need multisectoral investment in not only electricity, infrastructure, devices, data and connectivity, but also educational content, teacher training, broader capacity development across the education sector, and data and research. This can be achieved by standardizing the tracking of edtech investments and channeling financial instruments towards edtech development, with consideration of the needs and realities of marginalized children and youth from low-income families, alongside scalability and sustainability.

### 3 Address the digital and usage divides.

During the COVID-19 pandemic, hundreds of millions of learners were not able to access digital learning content and platforms and receive remote support from their teachers due to the digital and also usage divides, both of which must be urgently addressed. Findings from a recent mapping of national digital learning platforms from over 180 countries show that progress on digital learning platforms has stalled or even backtracked in many countries, and offline functionalities, accessibility features, and basic interactivity are sorely lacking. It is therefore essential to put in place equity and quality assurance mechanisms for digital learning platforms and content. Ensuring that support systems for caregivers, teachers and students are also in place can help guarantee that resources are accessible and used effectively. Finally, a balance must be struck between provision of high quality content and optimization for low connectivity settings.

### 4 Support, train and empower teachers and school leaders.

Teachers' capacity was one of the biggest barriers in shifting to remote learning during the pandemic, flagging a gap that needs to be urgently addressed. School leaders have been overlooked and undervalued. To address system-wide issues around teachers' capacity, promotion and career pathways, ICT competency standards for teachers should be developed and implemented, relevant to the countries' realities and needs, accompanied by pre- and in-service teacher training, pedagogical coaching, and other support mechanisms, with a focus on effective pedagogy in utilizing technologies in the teaching and learning process. Support to school leaders, national standards and clear career pathways is also key, together with training opportunities and guidance, particularly related to technology integration, digital skills, remote learning and instructional leadership practices, among others.

### 5 Foster development of digital literacy for all learners, teachers and caregivers to enable digital learning and the development of the full range of skills, and to support success in school, work, and life.

According to UNICEF and the Education Commission, 68% of youth are not on track to develop digital skills, with large disparities between high- and low-income countries, and



gender gaps favouring boys. While integration of computer science in curricula is an important way to build learners' digital literacy, children in low-income countries are less likely to have access to these courses than their peers in high-income countries. Digital literacy frameworks should be developed and integrated within national curricula, and teachers must be supported to develop their own digital literacy and leverage technology in sound pedagogical approaches. Parents and caregivers should be provided with opportunities to build their digital literacy so they can support their children's learning and safety online.

**6 Meet children where they are.**

Remote learning during COVID-19 has led to a greater reliance on technology for children and youth, as well as teachers and caregivers, to learn, seek information, engage with others, find entertainment and play. It has become evident that learning can happen not just through explicitly educational apps and software, but also through social media and games. When carefully planned and facilitated by teachers, caregivers and communities, edutainment (or "entertainment education") can improve knowledge and skills, increase motivation and engagement, reach children where they are, and complement other learning approaches.

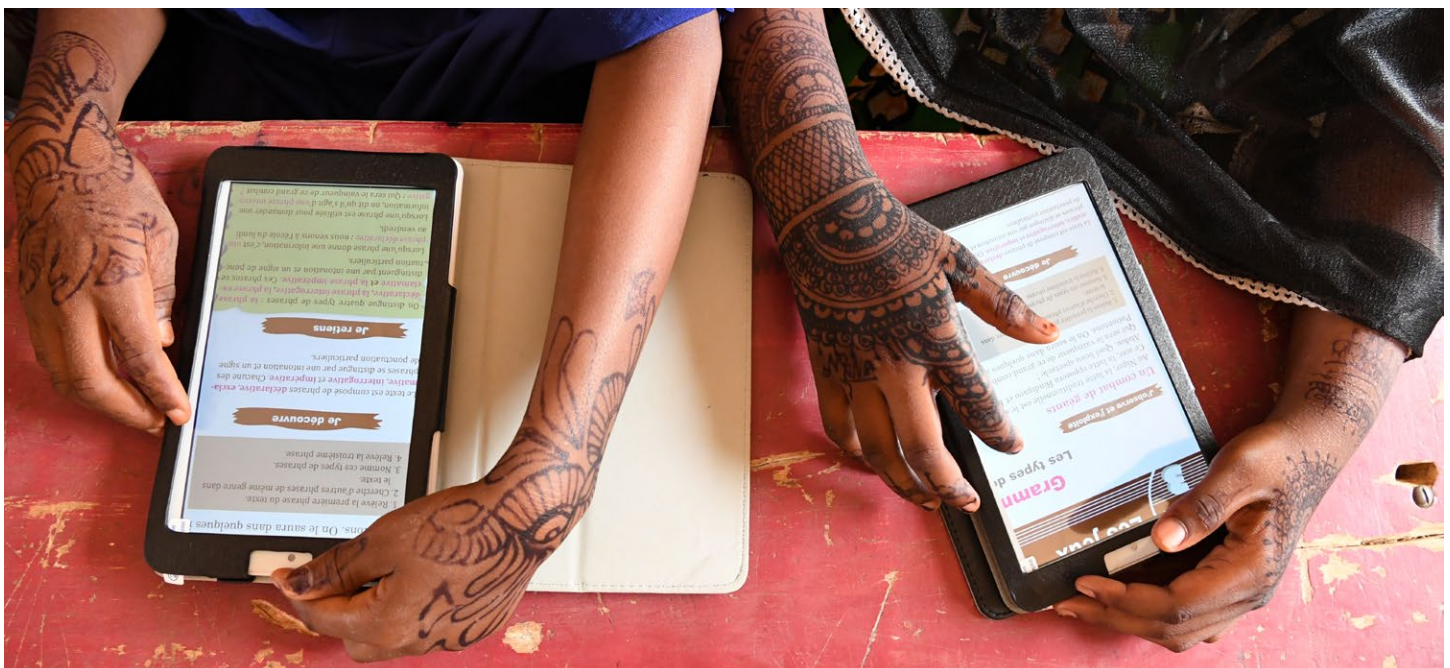
Some of the additional recurring themes highlighted throughout this brief:

- There is still a great **lack of data, evidence, and monitoring and evaluation (M&E)** across each vital element, creating a blind spot around key areas that

require urgent attention and action, and a significant barrier to further investigation, policy changes, financing and interventions. While this brief consolidates some of the available data and research available, the findings still only scratch the surface.

- To achieve **true digital transformation**, we must look beyond singular elements, such as electricity, connectivity, devices or infrastructure. Without a holistic approach that considers policy development and implementation, quality content and digital learning platforms, teacher training, digital literacy and more, the effectiveness and impact of edtech efforts can only go so far.
- **Marginalized learners and low-income families**, particularly in low- and lower-middle income countries, **must be at the center** of digital learning policies, decision-making processes, initiatives, platforms and engagement. Without appropriate consideration of these groups, the potential for digital learning remains minimal.

Most importantly, these efforts require a **broader transformative approach to education** to avoid replicating outdated and obsolete models of teaching and learning, even with the use of technologies. The persistent and deeply rooted issues discussed require immediate attention and consolidated efforts through targeted and innovative reforms and human-centered technologies, as well as coherence among all stakeholders. The resultant healthy and revitalized education systems and overall empowering environments can support the children and youth of today to become the change agents of tomorrow.



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