The Contribution of Technology to Achieving Quality Learning for All

Jakarta, 24 May 2022–The integration of technology in education has been catalyzed by school closures due to the coronavirus disease 2019 (COVID-19) pandemic. However, significant gaps exist between stakeholders, policymakers, and practitioners with regard to technological capabilities and their knowledge of how technology may bring positive changes, e.g., help reduce teacher workload, promote differential teaching, and support efficient school management and teacher professional development.

These emerging trends, opportunities, and challenges will affect education systems in the future. As countries develop postpandemic recovery strategies, the integration of technology in education that is accessible to all groups of population will become increasingly important. Realizing the potential of technology in education is a collaborative endeavor that should be coordinated at the global level. Policymakers, educators, the private sector, and communities from developing and developed countries must all be involved. Continuous learning, sharing of experiences, and innovation in the design and integration of technology in education systems are essential to shaping the future of education.

Cohosted by The SMERU Research Institute and the Asian Development Bank Institute, this Think20-associated webinar aims to gather policy recommendations on how to scale up inclusive digital learning to achieve a more prosperous future for all.

Every education system has to harness the potential of digital technologies to address issues of access and quality.

As most schools in G20 member countries have reopened, the emphasis is shifting from connecting individuals to connecting classrooms. However, the priority should still be given to connecting individuals and the future of technology in education. “This means investment in hybrid and blended learning and integrating digital skills into school and teacher training curricula,” said Stefania Gianini (Assistant Director General for Education, UNESCO).

Teachers should be involved in every step of the process. Now more than ever, the public and private sectors must work together to ensure that pedagogy drives the development of educational technology that supports teachers rather than the other way around. In March 2020, UNESCO launched a global education coalition at the peak of the pandemic which is now counting around 200 members from the public and private sectors. They are working together to ensure learning continuity and to empower teachers and learners with digital skills. “With a set of partners, we had developed a global declaration on the connectivity of education that puts forward three basic principles for an inclusive transition. First, it’s about focusing on the most marginalized. Second, it’s about the spending investment in high-quality digital content. Third, it’s about supporting pedagogical innovation,” Stefania added.

The strategic use of digital technology can be beneficial to closing the gaps in access to quality education.
The Ministry of Education, Culture, Research, and Technology of the Republic of Indonesia learned that the disruption resulting from the COVID-19 pandemic brought a new momentum for the adoption of digital technology. “We released our platform called Merdeka Mengajar which wonderfully connects teachers who are physically separated by distance and allows them to learn and share with each other. They can share their best practices or excellent ideas in teaching,” said Iwan Syahril (Director General of Teachers and Education Personnel, Ministry of Education, Culture, Research, and Technology of the Republic of Indonesia, and Chair of G20 Working Group on Education).

The Government of Indonesia has also provided several policy packages to improve the competencies of teachers so that they become more proficient in using technology to support teaching and learning. The implementation of the policy packages to improve the competency of human resources has a profound impact. “We believe in the fundamental transformation principle that our technology is still going to be the tool, but most importantly it’s about the human being,” said Iwan. Furthermore, as the pandemic has affected almost every country, every single person in the world calls for a stronger collective global leadership.

**We need to scale up learning for all at affordable and sustainable costs so that all students can complete good quality secondary education.**

It is necessary that we use an *ecosystem approach* to identify and institutionalize an effective digital learning system—a system that can ensure learning for all, is cost-effective and affordable, and can be scalable to include everyone. “This means we must consider important aspects, such as open-source learning materials; low-cost, energy-efficient devices; and online and offline support that helps to scale up learning for all at affordable costs. The new generation of adaptive learning technology can be a powerful tool when applied with efficient connectivity,” said Brajesh Panth (Chief of Education Sector Group, Asian Development Bank/ADB).

The ADB has developed an index to measure the digital education readiness based on the data collected from its developing member countries. The index is focused on five key pillars: policy governance, digital infrastructure, schools and teachers, students and parents, and educational technology providers. The analysis shows that all of the countries have significant gaps in infrastructure, educational technology platforms, teacher readiness, and policy support.

**There is a need to focus on learning design and support for learning and teaching.**

The COVID-19 pandemic has made technology a bigger question in the education sector than it was before. Through distance or hybrid learning, technology has improved access to and opportunities for learning for people who are not able to come to schools or university campuses. Despite its positive impact on learning, technology should still be used wisely as a tool. “We are telling all these stories of how technology becomes a shining object like something that by itself has the capability of saving the day and saving the world …. Unfortunately, these stories are strongly impacting educational
policymaking worldwide,” said Hanna Teräs (Research Group Lead, Critical Applied Research of Digitalization in Education, Tampere University of Applied Sciences). Amid the growing use of technology in education, pedagogical skills must always be present to create learning opportunities and build learning pathways. “We need to focus on inclusive pedagogy, we need to focus on learning design, support for learning, and I should add support for teaching as well,” Hanna Teräs added.

**Philanthropic organizations can help improve the education system landscape with their active participation in creating innovative solutions.**

Philanthropic organizations have a role in creating solutions to accelerate learning recovery by providing necessary support in the education ecosystem. However, they cannot accomplish much by working alone, so they need to work with the government and be a part of their initiatives. “Tanoto Foundation identifies support for change makers, whether they are teacher training institutes, educational technology companies, or other like-minded organizations. Together we can join to create innovations and disseminate best practices in education,” said Michael Susanto (Head of Strategic Planning and Partnership, Tanoto Foundation). “We have learned that when we partner with the central government, we also need to partner with subnational and district governments, and communities. So, the foundation is adding more talents. We are reskilling and upskilling our organization so that we can embrace technology to its fullest extent and support more people,” Michael Susanto added. He also emphasized the need for ecosystem integration where programs and solutions must be integrated to ensure their effectiveness in achieving desired outcomes.

**For further information, please contact:**

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<tbody>
<tr>
<td>Head of Communications Section</td>
</tr>
<tr>
<td>The SMERU Research Institute</td>
</tr>
<tr>
<td><a href="mailto:rseptiana@smeru.or.id">rseptiana@smeru.or.id</a></td>
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Speakers’ presentation slides can be downloaded from [https://smeru.or.id/en/event/contribution-technology-achieving-quality-learning-all](https://smeru.or.id/en/event/contribution-technology-achieving-quality-learning-all).
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The SMERU Research Institute is the host of Task Force 5 T20 with the focus on topics of inequality, human resources, and well-being. With Asep Suryahadi as the lead co-chair, together with other co-chairs, SMERU leads the development of 17 policy briefs written by global authors; formulates an integrated policy brief on inequality, human resources, and well-being for T20 and G20; and organizes side events in the near future. Please refer to https://www.t20indonesia.org/tf5/ for more information about TF5 T20.