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RESILIENCE ACROSS THE EDUCATION ECOSYSTEM DURING THE COVID-19 PANDEMIC

Authored by

Salma Abbasi

Chairperson and CEO, eWorldwide Group and

Vice Chair, Digital Resilience Initiative, IEEE

Ashirwad Tripathy

Cofounder/President, Educating Nepal and

Chair, Internet for Education Special Interest Group, Internet Society

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RESILIENCE ACROSS THE EDUCATION ECOSYSTEM DURING THE COVID-19 PANDEMIC

ABSTRACT

In response to the education crisis during restrictions of COVID-19 pandemic, continuation of education was carried out through broadcasting and digital technologies. However, the majority of children around the world are seen to not have access to such technology. For those who have access to technology and devices, education delivery has not been effective due to lack of digital skills in educators and learners. For those with internet access and digital skills, challenges of online exploitation, violence, and exposure to harmful content is felt. In such a scenario, in order to achieve Sustainable Development Goal SDG 4, adoption of holistic e-resilience by design is needed to help ensure that education is inclusive and fit for the future. But in order to succeed, all stakeholder involvement from the entire ecosystem is essential. This paper has examined critical aspects across the educational ecosystem, highlighted gaps in essential components, and posed alternative approaches and policy reforms.

Multiple dimensions necessary for e-resilient education system have been considered while making the recommendations. National policies and multilateral collaborative approaches are needed to bridge the digital divide and help ensure broadband connectivity for digital education of all students. It is also important to overcome any linguistic barrier. Encouraging technologies to develop educational contents in local language can ensure that language digital divide is bridged. Another important aspect of resilient education system is putting efforts in improving digital skills of educators and learners. Digital literacy programs must be implemented effectively in order to achieve a digitally competent population. The next pertinent aspect is measurement of learning outcomes of students. Different approaches are needed to measure and ensure that meaningful learning is taking place in digital space. It is also important to consider that the content of learning is relevant to the student and the economy, as well as that the means of delivery must also accommodate the learning needs of students. A greater emphasis on digital transformation of technical and vocational education and training in alignment to the labor market must be given while developing curriculum for education.

In order to develop a resilient education system, sociocultural norms also need to be considered. Despite the growing number of initiatives, there is still a prevalence of gender digital divide. A holistic way that

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focuses on the technologies including girls and education addressing wider issues surrounding involvement of women in tech sector must be considered. An effective online learning space also needs safety considerations. Holistic strategies to ensure safety of children and girls in digital space is imperative. The school closures during COVID-19 pandemic appeared to be stressful to both educators and learners. Therefore, well-being and positive mental health of learners and teachers ought to be prioritized.

The voices of children and youths, particularly the marginalized, need to be included while shaping policies or while designing interventions. Flexible learning strategies to help ensure underprivileged, poor, or students with disabilities must be attained through policy or multistakeholder partnerships. Digital content must be made inclusive and accessible for all. With all the mapping and discussions made above, the paper has assigned an area of priority for e-resilience in education actions and upon that, needful recommendations have been made.

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1. SETTING THE STAGE

The COVID-19 pandemic resulted in unprecedented school closures across the globe, affecting more than 90% of learners (nearly 1.6 billion individuals), in more than 190 countries.[1] As multiple waves of infection continue to affect countries, the crisis is far from over—especially for those uncertain of when there will be mass vaccination will be available. The pandemic is undoing years of educational progress and worsening preexisting educational inequalities, even in high-income countries.[2] The United Nations estimates that 23.8 million additional children and youth may drop out or not have access to school this year due to the pandemic's economic impact alone,[3] which, in turn, will have an impact upon their future opportunities for acquiring essential skills and future employment.

In response to this deepening educational crisis, many countries have been innovative in promoting education and training continuity through the use of broadcasting and digital technologies—from radio, television, and mobile phones to online classes via Zoom and other platforms. Over the past two decades, countries have been using broadcasting and digital technologies in education (to varying degrees) to enhance the quality and relevance of teaching and learning and to improve education management and delivery. COVID-19 has accelerated these efforts to digitalize education.

United Nations Children's Fund (UNICEF), however, found that at least a third of the world's children do not have the technology they need for remote learning via radio, television, and the internet during the pandemic, even in high-income countries.[4] For instance, in California, the fifth-largest economy in the world, only 56% of low-income households have broadband subscriptions.[5] Digital learning solutions are only possible for those with compatible devices and an internet connection. Furthermore, not all connections are strong enough to download data or take part in video calls. In addition, there are challenges related to the lack of digital skills among both educators and learners that prevent participation in online teaching and learning.

For those with internet access and digital skills, there are challenges related to their exposure to harmful content, violence, abuse, and exploitation online. Two out of five children reported having bad experiences using social

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1 United Nations, "Policy Brief: Education during COVID-19 and beyond," Aug. 2020, https://www.un.org/development/desa/dspd/wp-content/uploads/sites/22/2020/08/sg_policy_brief_covid-19_and_education_august_2020.pdf.

2 Saavedra, Jaime, "A silent and unequal education crisis. And the seeds for its solution," World Bank Blogs, Jan. 5, 2021, https://blogs.worldbank.org/education/silent-and-unequal-education-crisis-and-seeds-its-solution.

3 United Nations, "Policy Brief: Education during COVID-19 and beyond," Aug. 2020, https://www.un.org/development/desa/dspd/wp-content/uploads/sites/22/2020/08/sg_policy_brief_covid-19_and_education_august_2020.pdf.

4 UNICEF, "COVID-19: At least a third of the world's schoolchildren unable to access remote learning during school closures, new report says," press release, August 26, 2020, https://www.unicef.org/press-releases/covid-19-least-third-worlds-schoolchildren-unable-access-remote-learning-during.

5 Lee, Courtney, Justin Goss, and Niu Gao, "How California's Digital Divide Affects Students," Public Policy Institute of California (blog), Apr. 25, 2019, https://www.ppic.org/blog/how-californias-digital-divide-affects-students/.

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media that they would not want to tell anyone about.[6] Comprehensive measures to equip both adults and children with the knowledge, tools, and skills to address online risks are necessary.

Trends show that crises and shocks like the COVID-19 pandemic—extreme climate events, increasing trade tensions, and complex geopolitics—will continue to disrupt our lives, which is why resilience building is more crucial than ever. Another clear trend is the centrality of digital technologies as we become more dependent on them to cope, recover, adapt, and transform in this new reality. In education, there has been an urgency to improve teaching and learning systems and to strengthen their resilience through digital transformation.

However, if countries address new crises only as they arise, we will continue to have similarly disjointed responses and again face similar disruptions, undermining development gains and our capacity to protect and enhance quality of life. The hasty adoption of digital solutions for education is likely to not only widen educational gaps and inequalities but also create ripple effects beyond education, with implications on children's nutrition, mental and physical health, and future employability.

As countries move towards "building forward better" from the COVID-19 pandemic, the underlying educational crisis that countries were dealing with even before COVID-19 must be addressed. Pre-COVID-19, the World Bank estimated that 53% of 10-year-old children in low- and middle-income countries could not read and understand a short paragraph, a figure that rose to over 80% in the poorest countries. There were 258 million students out of school, including 59 million children of primary-school age. The situation was worse in communities afflicted by conflict and violence; in particular, girls and children with special educational needs were being left behind.[7]

Therefore, the adoption of holistic e-resilience by design, not by crisis, is essential in education for achieving United Nations Sustainable Development Goal 4, which ensures inclusive and equitable quality education and promotes lifelong learning opportunities for all. Holistic e-resilience will be critical for ensuring that education is equitable, inclusive, and fit for the future.

To help ensure the success of such an approach, however, it is essential to engage stakeholders from the entire ecosystem. This requires stakeholders beyond the education sector: government, civil society, and the private sector working in, for example, telecommunications; physical and mental health; labor and employment; skills development and training; social protection; and finance and planning.

This will, in turn, strengthen communities and countries against future shocks and crises and create opportunities to fully reap the primary benefit of digital technologies: improving lives.

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[6] UNICEF, *Our Lives Online: Use of social media by children and adolescents in East Asia,* Bangkok: UNICEF East Asia and the Pacific Regional Office, 2020, https://www.unicef.org/indonesia/media/3106/file/Our-Lives-Online.pdf.

[7] Hawkins, Robert, Michael Trucano, Alex Twinomugisha, Cristóbal Cobo, and Iñaki Sánchez Ciarrusta, *Reimagining Human Connections: Technology and Innovation in Education at the World Bank,* Washington, DC: World Bank Group, 2020, http://documents1.worldbank.org/curated/en/829491606860379513/pdf/Reimagining-Human-Connections-Technology-and-Innovation-in-Education-at-the-World-Bank.pdf.

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