Educational Transformation: Refocusing Research, Innovation, Technology Integration and Social Inclusion – An Editorial

Md. Ahsan Habib¹, Muhammed Mahbubur Rahaman¹ & M Wahiduzzaman¹

ABSTRACT

In the post-pandemic era, the world simultaneously witnessed a rapid move towards technological integration and global interconnectedness, alongside social-economic disparities and setbacks. As a result of the COVID-19 pandemic, scientific progress extended beyond the healthcare industry and encompassed various domains of knowledge, including education. The pandemic accelerated the incorporation of ICT in education, an area that had lagged behind other sectors. Conversely, digital integration generates a disparity in knowledge acquisition between individuals who possess access to it and those who do not. This experience serves as a reminder that a considerable number of communities globally remain behind in terms of socioeconomic development and access to digital resources. This trend is especially evident in the global south, where the integration of numerous global educational innovations and approaches may further isolate an already marginalized community by failing to account for contextual factors. Providing this complexity of introducing innovative efforts to education, it is imperative to refocus contextual educational paradigms, employing a multimodal approach that intertwines research, innovation, technology integration, and social inclusion. The purpose of this editorial is to emphasize the importance of an all-encompassing educational approach that not only equips students for the challenges of the future but also cultivates a just, inventive, and resilient society. A total of 11 papers were selected to be published in this issue, which examines four significant domains of educational transformation: the integration of technology, innovative approaches, research in education, and the representation of perspectives from underrepresented groups in education. The increasing integration of technology in the field of education is evident in the articles that discuss ICT. media usage, and visual materials. Two papers revisit inquiry-based science instruction and school-home partnerships as educational strategies. Two publications centered on teachers' practice and intention research and action research exemplify the recent shift towards involving teachers in research activities, both in higher education and at the classroom level. Three additional papers investigate the perspectives of students and underprivileged groups who are often overlooked in the development of education procedures and policies. This journal issue, thus, represents the current focus, endeavors, and implementation of education across several educational disciplines.

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Corresponding Author md.habib@du.ac.bd

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¹ Professor, Institute of Education and Research, University of Dhaka

The globe is gradually recovering from the devastating effects of the COVID-19 epidemic. However, the pandemic has accelerated important changes in numerous sectors, particularly in education. The unprecedented challenges posed by the pandemic forced educators, policymakers, and stakeholders to reimagine traditional paradigms and embrace innovative approaches to teaching and learning. Now, as we navigate the post-COVID landscape, the world simultaneously witnessed a rapid move towards technological integration, innovative teaching-learning strategies, bringing unheard voice on board and refocusing teacher research in education (García-Morales et al., 2021; Jennings, 2020).

One of the most notable shifts brought about by the pandemic was the widespread adoption of remote and hybrid learning models. Overnight, schools and universities around the globe transitioned to online platforms, leveraging technology to ensure continuity in education. While this transition was initially met with skepticism and encountered numerous challenges, it also unveiled the immense potential of digital tools in expanding access to education and personalizing learning experiences (Mhlanga, 2022).

However, the digital divide quickly emerged as a pressing issue, highlighting disparities in access to technology and internet connectivity among students (Ramirez & Inga, 2022). Addressing this divide must be a cornerstone of educational transformation. Governments, educational institutions, and private sector partners must collaborate to ensure that all learners have equitable access to the necessary technology and internet infrastructure (Ainscow, 2020). Bridging this gap will not only enable students to participate fully in remote learning but also empower them with essential digital literacy skills for the future ((Ramirez & Inga, 2022).

The pandemic underscored the importance of flexible and adaptive learning environments. Traditional one-size-fits-all approaches to education no longer suffice in a world characterized by rapid change and uncertainty (Bilyalova et al., 2020). Moving forward, educators must embrace pedagogical approaches that cater to diverse learning styles and preferences (Ainscow, 2020). This might entail integrating project-based learning, competency-based assessments, and experiential learning opportunities into curricula to foster critical thinking, creativity, and problem-solving skills among students.

Furthermore, the pandemic shed light on the significance of socio-emotional learning and mental health support within educational settings. The prolonged periods of isolation and disruption took a toll on the well-being of students, teachers, and families alike. As we chart a course for educational transformation, it's imperative to prioritize holistic approaches to education that nurture students' social and emotional development (McBrien et al., 2022). This includes promoting empathy, resilience, and self-regulation skills, as well as providing access to mental health resources and support services.

The post-COVID era presents an opportunity to reevaluate the purpose and outcomes of education. Beyond academic achievement, education should aim to cultivate engaged and

responsible global citizens who are equipped to tackle the complex challenges of the 21st century (Mhlanga, 2022; Oke & Fernandes, 2020). This necessitates a shift towards a more interdisciplinary and values-based approach to learning, one that emphasizes critical thinking, ethical reasoning, and cultural competency.

The present issue of *Teacher's World, Journal of Education and Research*, has chosen 11 papers for publication. These papers explore four important areas of educational reform: the integration of technology, innovative approaches, research in education, and the representation of perspectives from underrepresented groups in education. The increasing number of papers on technological integration in education is evident in several papers with ICT, media usage, and visual materials. Two papers revisit inquiry-based science instruction and school-home partnerships as educational strategies. Two publications centered on teachers' practice and research intention and possibilities exemplify the recent shift towards involving teachers in research activities, both in higher education and at the classroom level. Three additional papers investigate the perspectives of students and underprivileged groups who are often overlooked in the development of education procedures and policies. This issue, thus, represents the current focus, endeavors, and implementation of education across several educational disciplines.

Present transformation in education is shaped by the accelerated digital revolution, sustainable and global educational approaches which highlight the need to address inclusive, equitable, safe and healthy learning for the students. The educational landscapes must include collective endeavors with social inclusion, connect knowledge from all contexts from most marginalized and disadvantaged and equip learners with life skills to enhance learning opportunities in both personal and professional trajectories. Apart from these, equally essential aspects to accelerate the progress in transforming education are research studies that improve teachers' capacity to practice innovative approaches in teaching. Currently the educational transformation is led by technological integration, innovation in teaching-learning and research which demand social inclusion, increasing teachers' autonomy and sense on agency in conducting research as well and connecting local and indigenous knowledge with global perspective.

In reimagining the integration of technology in education, the first paper by Islam and Salam investigated the effect of visual learning materials in non-formal primary educational settings. Using technology to teach with visual teaching aids positively impact disadvantaged learner's motivation, engagement and review of prior knowledge that enhance sustainable learning and digital literacy. Technology in learning practices also influence learning psychology and individualized pedagogical perspectives. Another paper by Kamal and Debnath analyzed the language use and learning occur by exploring media platforms which is nurtured through individual choice. Learning language with support of media platforms as a self-directed approach greatly accelerates the language acquisition process. Though technology is efficiently transforming education, it limits the outcomes and uses. Rayhan Ara Zaman led a study that found lower ease-of-using ICT mainly attributed to limited teacher's training, resources and

technology infrastructure. The study underscores the importance of thorough initiatives in training, the use of up-to-date teaching equipment, modern infrastructure, and strategic planning in order to effectively use relevant ICT in education.

Alongside technological advancements, a number of innovative pedagogical strategies were evaluated in an effort to promote and diversify learning experiences. School-Home partnership, for example, is an innovative phenomenon in enhancing language acquisition in Bangladesh. Hasan and Sadek emphasized that primary students' standard Bangla language acquisition would be effective in a learner-friendly natural standard Bangla language (SBL) practicing environment. Another article by Tonni, Hoq and Chowdhury examine teachers' positive beliefs toward inquiry-based teaching approach beyond the contextual and demographic factors. The effectivity of IBT can further reach the science classroom with the opportunity of teachers individualized teaching practices, quality teacher education and adequate resources. Further, despite the fact that sexual and reproductive education has been around for quite some time, teachers have yet to be sufficiently prepared to incorporate teachings on these subjects into their actual classroom instruction. Mridul Chowdhury Konok developed a scale in measuring the secondary school teachers' attitudes toward sex education in Bangladesh. After thorough analysis of the scale both reliability and content validity were ensured as well as the Stanine scores or grades were calculated ranging from 1 to 9 to provide a clear and reasonable finding.

Emphasizing educational research is another gateway of educational transformation. The paper authored by Habib, Malak and Kabir found teachers from all spare including gender, age, and professional experience consider research and publication as a prominent driver for pragmatic, academic professional and personal growth. A similar research conducted on secondary education teachers by Zinnah, Islam and Ahsan showed action research is also a tool for teachers implanting Gender and Inclusive Pedagogy (GIP) in classroom practices in mitigating student's absenteeism and enhancing learning engagement. To ensure meaningful participation, teachers need to collaborative initiative and motivation in conducting action research to address ever changing classroom needs.

Ensuring equal opportunity, fairness, and justice in education cannot be accomplished solely through the integration of technology and innovation; all stakeholders, particularly educational service recipients from marginalized groups, must be involved. In understanding the perspectives from underrepresented groups in education, Shah, Shahidullah , Mojahar and Sultana looked at the educational status of Santal, one of the largest indigenous communities and how the attainment rate from primary to further level is deteriorating. Several socioeconomic factors related to employability social aspects of early marriage and gender discrimination along with industrialization, cultural and language issues also responsible for low educational attainment of the community. Under a similar inspiration, two articles focused on the experience and perspective of students, which are frequently disregarded in educational decision-making. In considering the social capital theory of Bourdieu, Haider examined the procedure by which significance is extracted from the student experience. On the contrary, Nasir and Hossain argue, supported by empirical research, that educators should possess proficient delivery skills, subject matter expertise, and a motivation for need-based facilitation in order to increase student engagement. Sustaining the advancement of marginalized groups' educational standing requires a comprehensive approach and strategic policy planning.

Conclusion:

In this editorial, we have explored the complex terrain of the post-COVID change of education and examined how this shift is evident in the studies featured in this issue. As the field of education continues to evolve at an unprecedented pace, it is essential to recognize both its immense potential and the accompanying challenges. The pandemic accelerated the incorporation of ICT in education, an area that had lagged behind other sectors. Conversely, digital integration in education generates a disparity in knowledge acquisition between individuals who possess access to it and those who do not. This experience serves as a reminder that a considerable number of communities globally remain behind in terms of socioeconomic development and access to digital resources. We must take advantage of these shifts to construct a future education system that is more robust, inclusive, and efficient. Our editorial emphasises the significance of ongoing research and innovation, while also stressing the need to ensure that these advancements benefit all stakeholders equally.

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