Critical Review on the Future of Teaching and Learning in the Post-Pandemic World: Top Ten Issues and Top Ten Ideas

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Article Information	ABSTRACT
	This paper explores the top ten issues and ideas for the future of teaching and learning in the post-pandemic world. The study uses the researcher's informed reflection as a method. The informed reflector role allows the researcher to explore realities from multiple dimensions by scanning existing teaching and learning scholarship. The subjective accounting, the lack of external verification of the thinking, overshadows limitations. The researcher devises phenomenological bracketing to reduce the researcher to a reflector. The researcher acknowledges that there could be other critical issues and ideas than those in this study. Nevertheless, the reflections shared in this study may contribute to the existing stock of all other contemplations, discussions, and debates.

INTRODUCTION

Teaching was disrupted during the pandemic, which affected learning and schooling. Some deliberated diligently and learned relevant lessons, while others struggled and suffered. This paper focuses on the general teaching and learning trends in times of the pandemic. It explores the opportunities and challenges and offers some ways forward for teaching and learning in the post-pandemic world. This paper accounts for the top ten issues for teaching and learning in times of the pandemic and envisages the top ten ideas for the future of teaching and learning in the post-pandemic world. It is acknowledged that there would certainly be other prominent issues and ideas for teaching and learning in different countries and contexts. In the author's humble opinion, these are the top ten global issues and ideas relating to teaching and learning. The study uses the researcher's informed reflection as a method.

The researcher devises phenomenological bracketing to reduce the researcher to a reflector. Moustakas (1994) considers bracketing as phenomenological reduction, the act of suspending judgment about the natural world, and recommends focusing on the analysis of experience. The informed reflector role allows the researcher to explore realities from multiple dimensions to embrace standpoint epistemology (Naples & Sachs, 2009). The subjective accounting, the lack of external verification of the thinking, overshadows limitations.

It is a common challenge for academic researchers to be narrative practitioners (Lainson, Braun & Clarke, 2019). The researcher acknowledges that there could be other critical issues and ideas than those in this study. The reflections shared in this study may contribute to the existing stock of all other contemplation. The following are the top ten issues of teaching and learning in times of the pandemic and the top ten ideas for teaching and learning in the post-pandemic world.

Issue 1 - The teaching and learning divide

We live in a world of unequal educational opportunities. We have witnessed the world's biggest disruption due to the pandemic. Half of the world's student population cannot attend schools and universities during the pandemic from low-income/single-parent families, immigrants, refugees, ethnic minorities, and indigenous backgrounds (OECD, 2020). These children would now possibly understand the disappointment of those 258 million children and youth who are out of school (UNESCO, 2020b). It also reminds us of our commitment to education for all, as only a third of countries reached global education for all goals (UN, 2020).

Idea 1 - Access, equity, and social justice: Experts predict that the economic crisis in the post-pandemic world might leave many jobless (CBPP, 2021). It means parents would not have enough money to send their children to private schools and universities. As a result, public schools and universities would have a high enrolment. Some low-cost private educational institutions might be closing; universities could close unattractive courses, resulting in the job loss of teachers and staff (Alam & Tiwari, 2021). This trend will further slow down access, equity, and social justice. Countries and institutions must have good strategies to overcome these challenges by reducing and eventually eliminating the gap in gender, race, social class, and urban/rural divide (David, 2016). Nations and citizens must continue to trust in valuing education. Individuals are vital to overcoming this by increasing public spending on education, meaningful public-private partnerships, safety nets, and supporting mechanisms for institutions (World Bank, 2021b). Furthermore, regulatory measures must be in place to manage exploitations and mismanagement (UNESCO, 2021a). The new social contract for education document of UNESCO (2021c) suggests that this new social contract for education must be grounded in human rights and based on principles of non-discrimination, social justice, respect for life, human dignity, and cultural diversity.

Issue 2 - Double standards in teaching and learning

Privatisation has helped expand educational access and opportunities, but it has created double standards for access to quality education to haves and have-nots. Even public institutions in many countries have raised tuition costs and, in some cases, offer self-financing courses under cost-sharing and cost recovery logic (David & Wildemeersch, 2014). Such trends have affected the excellent quality of teaching and learning practices across all educational institutions. Quality educational opportunities for underprivileged and marginalized groups have suffered heavily in such developments. It confirms argument that a son of a manager is ten times more likely to go to university compared to a low-grade employee's son, given the differences in socio-cultural capitals. His claim that schools reproduce existing inequality remains unresolved even today, and the use of aroused pedagogy over universal pedagogy seems to practice disadvantaging the marginalized.

Idea 2 - Quality enhancement in teaching and learning: Expects such as David Chard from Boston University predict that learners' expectations will be different, mostly higher in the post-pandemic education (WorldAfterCorona, 2020). The demand in the job market in the post-pandemic world will be shifting radically. It might pose opportunities and challenges for quality enhancement in teaching and learning. Gudmundsdottir & Shulman's (1987) 'pedagogical content knowledge (PCK) framework has been influential in teaching and learning research and practices, which was furthered by Mishra and Koehler (2009) as TPACK's technological, pedagogical, and content knowledge. It is proposed to expand it further, including moral, empathy, and language dimensions, and call it MELTPACK, which may serve as the post-pandemic pedagogic framework. We must fulfill the moral duty of teaching and be empathic with instructors and learners, especially during disruption.

Furthermore, language, technology, and content knowledge will support quality enhancement in teaching and learning practices. Teachers must continue to teach with passion and compassion, particularly in times of crisis, such as the pandemic (Scroggs, 2021). Research-informed teaching and learning practices would help students gain holistic experience (Higgins, Hoog & Robinson, 2013).

Issue 3 - Teachers are taken for granted

According to the World Bank (2021b), there are about eighty-five million teachers around the world from pre-primary to university-level teaching, and by 2030, an additional sixty-eight million teachers will need to be recruited. More than half of the teachers in the world do not have a stable

contract or job security, often are underpaid, overworked, struggling to pay their bills, and challenge live-in conditions. They often do not have platforms to make their voice (Teacher Task Force, 2021). In some cases, teachers' pay varies based on numerous factors deviating from the demand for equal pay for equal work (Hansen & Quintero, 2017). Thus, the respect and value of teachers have been declining to a considerable extent in many countries. In many countries, young people think twice before choosing the teaching profession as it is not a lucrative job in many contexts (Kumar, 2021).

Idea 3 - Restoring teachers' pride: Experts also predict that there will be renewed respect for teachers in the post-pandemic world as parents experience the challenges of teaching during the lockdown (World After Corona, 2020). Some predict that many teachers might lose jobs due to a lack of student enrolment (Alam & Tiwari, 2021). It means the supply of teachers would increase while the demand might fall, leaving the profession less lucrative and attractive. Countries and institutions must create a culture of supporting teachers, recognizing their challenging work, offering rewards and prizes, and making the profession attractive with lucrative packages to restore teachers' pride.

Issue 4 - Teacher-student ratio

One of the longest debated educational issues is the teacher-student ratio. According to UNESCO (2020a), the world's average teacher-student ratio is 1:30, while some of the poorest countries have the highest of 1:60. Although experts recommend 1:20 as an ideal teacher-student ratio, many countries compromise their educational spending at the cost of teachers' comfort and quality teaching and learning. There is a strong relationship between school size, student-teacher ratio, and school efficiency (Alspaugh, 1994).

Idea 4 - Healthy classroom size/management: It is highly advocated to manage the ideal teacher-student ratio for quality teaching and learning experiences. The bigger the classroom is, the higher the teacher's tasks and loads are. The ideal teacher-student ratio helps the pupil-teacher ratio, disciplinary problems, classroom emotional climate, and turnover intention (Jensen, 2021). Teachers' tasks must be managed meaningfully to contribute to quality teaching and learning (Chew & Cerbin, 2020). Parental engagement must be enhanced to create a good teacher-parent/student relationship (Al Junaibi & David, 2018). It is necessary to focus more on humanistic approaches in classroom practices to ensure a healthy and conducive environment for teaching and learning.

Issue 5 - Technology-driven teaching and learning

The world is rapidly shifting to education 4.0, driven by technology (World Economic Forum, 2020). Technology was a panacea for education during the pandemic (Williamson, 2021), and everyone had no choice but to embrace it, which could be called the pandemic shift (not the paradigm shift). There are opportunities and challenges in using technology in teaching and learning (Castaneda & Williamson, 2021). The digital divide, tech-ability, and tech-resource are some challenges to be aware of. Some try to rely heavily on technology, while others caution, focusing more on pedagogy. Technology is relevant, but pedagogy is more important (McLain, 2021). We must use technology for our benefit, not as a burden. Ideally, pedagogy must be driving, not technology.

Idea 5 - Technology-enhanced teaching and learning: We talk about education 4.0 that comes with education anywhere, anytime, customization, knowledge-based curriculum, research-based teaching, and evidence-based assessment (World Economic Forum, 2020). The promise seems attractive, but we must remain cautious and skeptical. There are experiments worldwide to engage humanoids as teaching assistants, which might be a future reality (Alhashmi, Mubin & Baroud, 2021). Some are excited about this science fiction type of future development, while others caution about the potential adverse effects (Poolswad et al., 2020). The sad reality is that humans are hooked to electronic gadgets and social media while machines are learning. Machines could be programmed to outsmart humans, but humans can easily unplug machines. Some might simply prefer a human to a humanoid for a real-world experience. According to UNESCO (2021b), there are sixty-nine million teacher shortages worldwide.

On the one hand, we will have to deal with unemployment issues while we want to use AI, robotics, and humanoids (Webster & De Boer, 2021). Nevertheless, on the other hand, it will cause huge un-restness for teachers due to further job loss. We must therefore be cautious and embrace technology-enhanced teaching and learning rather than technology-driven teaching and learning (An & Oliver,

2021). However, on the other hand, educational leaders must facilitate the technology integration smoothly and effectively (Daraghmeh & David, 2017).

Issue 6 - The curriculum curve

There is no unified curriculum across the world, making it difficult to compare learning outcomes on a fairground for all (David & Wildemeersch, 2014). We have witnessed curriculum shifts from being skill-based to outcome-based to knowledge-based. There have also been shifts from teacher-centered to content centered and from content-centered to student-centered approaches. We are aware of the gap between the intention and the outcome of the curriculum, as argued by Stenhouse (1975).

Idea 6 - Comparable and competitive curriculum: Bernstein's pedagogic device, stratified and differentiated approaches, classification, and framing are instrumental in deploying appropriate curriculum to learners of different ages (Singh, 2002). In an increasingly globalized world, a curriculum must create a comparable learning outcome due to learning and job mobility (David & Hill, 2020). Curriculum in the post-pandemic world must therefore be competitive and current as the expectations will be higher, while it must also be realistic and feasible. Curriculum alignment (Squires, 2012), curriculum compacting (Reis, Renzulli & Burns, 2016), research-informed curriculum choice (Chan, 2018), stakeholder-led curriculum design (Hubert et al., 2013), curriculum leadership (Ylimiak, 2011) would facilitate effective implementation and optimization of the comparable and competitive curriculum.

Issue 7 - Assessment aversion

We live in a testing culture. One must understand the distinction between assessment culture versus testing culture as they have different impacts on learning (Birenbaum, 2016). Students are undergoing various tests, which often increases their test anxiety and affects learners' well-being (Hamilton et al., 2021). A classic children's fun riddle, 'the nation students hate most is the examination,' says it all. One of the biggest challenges in our teaching and learning today is that not all who access education complete it successfully, partly due to unrealistic assessment strategies (McDill, Natriello & Pallas, 1986). Therefore, we must address success and throughput carefully (David, 2016).

Idea 7 - Evidence-based assessment: We must reduce the ambiguity around assessment. Students must be informed about the assessment criteria. It is important to use evidence-based assessment, which is strongly linked to the learning objectives (David & Hill, 2021). Spacing and self-testing help students and teachers predict learning outcomes (Rodriguez et al., 2018). Clear, constructive alignment must be between curriculum objectives and outcomes (David & Hill, 2020). It could be achieved with careful pedagogical processes and constructive feedback linked to the learning progress (Du Toit, 2012).

Issue 8 - Teacher's continuous professional development:

Teachers must undergo continuous professional development (Gesel et al., 2020). Many schools do not have the time and resources to develop their teachers. Most often, they are worried about teachers leaving after development. At the same time, we must also ask, what if they stay without development. It is, therefore, necessary to encourage periodical CPDs (Al Abbassi & David, 2021). However, it is important to use CPD meaningfully. CPDs have a significant impact on teachers' performance and students' learning.

Idea 8 - Teacher Professionalism: Beyond continuous professional development, teachers must embrace this as a culture that would lead to teacher professionalism (Goodwin, 2020) and become part of the professional learning communities (Zheng, Yin & Liu, 2019). Schools must continue to invest in their teachers to enhance their professionalism (Al Abbassi & David, 2021). Richard Branson says, ' Train people well enough, so they can leave, but treat them well enough, so they do not want to.' Meaningful collaboration among relevant stakeholders and networking among the professional learning communities would be supportive (Rensburg, Motala & David, 2016).

Issue 9 - Teacher turnover and student anxiety

It is estimated that one in three qualified teachers leave their profession in the first few years, given the increase in pressure and less appreciation at work (Wyatt, O'Neill, 2021). The absence of

qualified teachers seriously impacts quality teaching and learning. Rethinking teacher quality is important to optimize the quality of teaching and learning (Goodwin & Low, 2021). The rising competition for excellent higher education and lucrative jobs has forced students to work harder than ever. In most cases, schools prepare students for jobs that will not exist in the future. These and other challenges have left teachers' and students' well-being at risk, which we must take seriously (Kern & Wehmeyer, 2021). Unacceptable behaviors and a lack of positive and safe working conditions affect the well-being of teachers and students (Ravalier, Waslh & Hoult, 2021).

Idea 9 - Well-being of teachers and students: We have recently become more aware of the issues around teachers' and students' well-being (Von der Embse & Mankin, 2020). Teachers' tasks must be managed effectively. They have their family as well. Parents and students must realize there is life after studying and enjoy learning. The new social contract for education document of UNESCO (2021c) recommends that education encompass an ethic of care, reciprocity, and solidarity. Schools and universities must ensure that teachers and students are safe and happy to engage in enjoyable teaching and learning processes. Promoting positive education would support the well-being of teachers and students (Kern & Wehmeyer, 2021). An inclusive work environment and appreciation of diversity are vital for healthy organizational behavior and dynamics (El Alfy & David, 2017). We must, therefore, promote positive education in the post-pandemic world.

Issue 10 - The inconsistency in instructional processes and practices

There is often a lack of consistency and constructive alignment between curriculum, pedagogic practices, and assessments (Squires, 2012). Often countries and institutions fail to benchmark their local standards with global standards. It is important to observe that some national and global ranking tools and criteria are not holistic and realistic (David, Motala, 2017). In many cases, learning is often bookish and does not relate to real-world problems, making the employability of young graduates difficult as they do not have the required industry skills (David, Wildemeersch, 2014).

Idea 10 - Leading instructions: Instructional leadership by both instructors and institutions is essential in using an appropriate and authentic curriculum, effective pedagogic practices, and useful assessment techniques (David, Abukari, 2020). Instructional leaders are pivotal in leading instructors, instructions, learners, and learning (Al Husseini & David, 2017). It is important that instructional leadership makes sure that there is freedom in teaching and learning for instructors and learners to overcome potential roadblocks to optimize teaching and learning (David & Hill, 2021).

CONCLUSION

Deloitte's global resilience report (2021) indicates COVID-19 as a rare storm that tested everyone and those adequately prepared for adverse turmoil raised above with their ability to show resilience. As informed earlier, these are not only the key issues in teaching and learning but there might also be many other challenges we constantly have to deal with. The top ten issues and the top ten ideas discussed in this paper are the thoughtful choices of the author. Exploring these issues and ideas might make teaching and learn more purposeful and productive. Debating and discussing these and other critical issues and ideas would continue supporting and sustaining quality teaching and learning. It is argued that teaching and learning are central to schooling; therefore, schools and universities must continue supporting and sustaining quality teaching and learning. Teaching is central to schools' and universities' existence; therefore, schools and universities must find better ways to strengthen and sustain quality teaching. Supporting instructors, students, and one another is important at this time of disruption to overcome the challenges in teaching and learning. The new social contract for education document of UNESCO (2021c) informs that reflecting and debating on the future of education in the post-pandemic world would allow us to build necessary visions and strategies that are a starting point needed to be translated with necessary actions with collective global effort. Let us reflect on the best interests to enhance teaching and learning practices.

Funding and Conflicts of Interest

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