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EDITORIAL

COVID-19 Pandemic and Innovations in Institutional Transformation, Technology and Pedagogy

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The 2020 COVID-19 Pandemic has been among the worst nightmares in the past century. It brought in panic and despair, but also reflection, resilience, and hope; and adversely affected the economic and education sectors the most. Teaching-learning and training in almost all countries were affected, with over 90% of students out of school including above 570 million in the Commonwealth (Kanwar & Daniel, 2020), and above 1.37 billion students studying from home (UNESCO, 2020). Most countries and educational institutions quickly delved into putting in place additional policies, systems, infrastructure, teaching-learning strategies, and capacity building of teachers and instructors; and some others followed suit gradually. The school and vocational sectors have been the worst-hit compared to higher education institutions (HEIs). Suddenly, online teaching/learning became the buzz word. Published reports and research during the pandemic indicated limitations (and constraints) in perceptions; and most were actually engaged in emergency remote teaching, rather than proper online/blended teaching-learning (Hodges et al, 2020).

Research and professional advice from leading educators (Bates, 2020; Hodges et al, 2020; McCarty, 2020; Weller, 2020; TeachOnline.Ca, 2020) started pouring in; and a comprehensive guideline has been put in order by Daniel (2020) based on an institutional case study in Canada [this is in addition to some good practices on technology-enabled learning which already existed (Contact North-Contact Nord, 2019; Bates, 2019), and a recent critical study on the Commonwealth (Mishra & Panda, 2020) that has been published]. There have also been reports and critical reflections on national strategies, the most visible being those by Bao (2020), Zhang et al (2020) and Zhou et al (2020) on the People's Republic of China; Brandt and Thompson (2020) on the United States; KPMG (2020) and Farooqui (2020) and many more on India. China embarked on a massive nation-wide campaign "School's Out, But Class's On" (Zhou et al, 2020) for online education, enabling 270 million students to learn online (choice of cloud online classes, on-demand teaching, and television lectures, among others). This was possible largely due to forward planning for the past three decades or so, along with technological and resource supports. But, as elsewhere, questions have been raised about teachers' poor perception of online courses and teaching, subject guidance, and interaction. This is not surprising, and this is not atypical in China alone. Similarly, in the United States, there was a felt need to deal with the lack of preparedness for the new skills and inadequate resources for the new normal (Brandt & Thompson, 2020). There are many more blogs and short reports accounting for the pandemic and educational status in many countries.

Given the concern and the context, the Editorial Board of *JL4D* at the Commonwealth of Learning (COL) took a considered decision to devote its November 2020 issue to 'Covid and Learning for Development'. The 18 papers and one book review in this volume include five invited papers from leading global educationists, and papers comprising research articles, case studies, and field reports

which, in one way or another, are related to COVID-19 and/or innovative teaching-learning in difficult or underdeveloped contexts.

The first '*invited paper'* is by Sir John Daniel, who is a leading internationally recognised educationist and global leader, and has been President and CEO of COL, Assistant Director General of UNESCO, Vice Chancellor of the UK Open University, besides many other global positions and responsibilities. Sir John shares a challenging but successful institutional action on dealing with the needs of international students at the time of COVID-19 in one reputed institution in Canada. Though previous plans helped in dealing with the new normal, what mattered most were institutional management leadership, meticulous planning, a robust student information management system, faith in the strength of e-learning, staff and student competency in using technology (including open source Web conferencing) for learning, aligning the curriculum to the new seamlessly interactive platform (including blending learning resources with synchronous conferencing), operating a 24 x 7 robust communication system (including personalised scaffolding), among others. The existing provision of 50% of credit hours by online also facilitated such a transition. What is coming up, and that other institutions could consider, is hybridisation of educational delivery with built-in flexibility for both faculty and students.

The second paper, by Sugata Mitra, an internationally acclaimed educationist, deals with the pedagogic framework of technology and learning, especially for children. Professor Mitra predicts hybridised flexible classrooms post-Covid, mostly with interaction and learning taking place through the Internet —'school in the cloud'. He offers two scenarios to choose from: i) 'producing identical people for obsolete armies, factories, and offices' and ii) 'a hybrid system, partly physical, partly virtual, with assessments that are focused towards the ability to create things and solve problems'. The practical and experiential discussions on learning, teaching, curriculum, assessment, technology, and the school-home relationship shall be useful to those engaged in child learning, and nevertheless no less useful to those dealing with adults. Writes the author: 'Learning – in the times to come will happen with relationships, trust, encouragement and freedom.'

The third invited paper by Professor Traxler and Dr Smith deals with 'research methodology/tools' for digital learning, post-COVID. John Traxler is one of the most renowned early educators pioneering mobile learning across the globe, and Matt Smith is known for his work on mobile learning in Brazil and Palestine. Drawing lessons from many interdisciplinary perspectives, including development studies, inclusive education, human-computer interaction, and lifelong and community learning, the authors analyse the research methods and research instruments for digital learning in the context of COVID-19 and from the points of view of language, power, educational status, infrastructure, security, and capacity; and in contexts of 'mobilities', personal constructs, soft systems methods, Delphi, human-computer interaction; and in consideration of research ethics. The methodological paradox and the human-related and contextual methodological stances and processes analysed and suggested by them will certainly give a new dimension to digital learning research during and post-pandemic. This augurs well with the understanding today about 'social shaping of technology' as against/or rather much ahead of the past 'diffusion of technology'.

We then go to the analysis of international higher education and new emerging models during and post-Covid, scholarly analysed by Professor Asha Kanwar and Alexis Carr. Professor Kanwar is an international authority in gender studies and women empowerment, sustainable development, open

education and open educational practices, and educational leadership. A global educational leader herself (and as the President and CEO of the Commonwealth of Learning), she has seen through the effective intervention of COL and its international experts in effectively navigating COVID-19 and strategising post-Covid interventions toward a more just, equitable and sustainable world and constituent communities. In this well-articulated paper, which includes a thorough analysis of international higher education, while the authors critically reflect on the economic and personal constraints that the pandemic imposed, they also reflect on the impact on international higher education and the business models that sustained it so far. There is a need for governments and institutional leaders to reconsider/revisit their policies, programmes, models, and approaches to deal with the new normal. Open, distance, online, and blended learning are the future strategies and disruptive innovations to take centre stage, and comparative qualifications frameworks need to be developed for cross-border credit transfer (ref. the recent National Education Policy 2020 of the Indian government, which commits to cross-border education, credit-transfer and certification, though this requires formulation of additional regulations to effect this new commitment).

In the next invited paper in this section, Mawoyo and Vally explore and analyse the economic/financial conditions affecting Covid- and post-Covid schooling in, especially, the low- and middle-income countries. Based on critical analysis of cross-sectional data and situational analysis on literacy outcomes and per capita educational expenditure, especially in the context of South Africa, the authors plead for outcome-based contracting (rather than input-based), federal and provincial interventions, impact evaluations, among others, to address literacy challenges in times to come.

In the next section on '*research papers'*, we have four significant contributions relating to: blended learning in teacher education, parental involvement in teaching effectiveness, multimodal micro-learning, and the role of educational technology in the time of the pandemic. In an experimental study, Ranjan explored the comparative effectiveness of blended learning and online learning in an undergraduate teacher education programme with a randomly selected sample (classroom-students, equally divided into control and experimental groups) in India. The researcher concluded that blended learning (combination of F2F and online delivery) was superior to online learning in terms of student-student and student-teacher interaction, motivation, and learning attainment. Erdem and Kaya, in the next paper, report the process and findings of meta-analysis of published papers (between 2010-2019) on the effect of parental involvement on academic achievement of school students. It is reported that school-based involvement had much higher impact than home-based parental involvement. The related variables influencing the impact included academic socialisation and parental expectations. In the case of in-service teacher education, Allela, Ogange, Junaid and Charles report, in the next research paper, the effectiveness of multimodal micro-learning (integration of offline resources via Moodle mobile app, e-portfolio, F2F seminar, and interaction on WhatsApp) in the Freetown Teachers' College, Sierra Leone. While WhatsApp had greater significant effect than both offline resources and the e-portfolio, the researchers suggest judicious decisions on learning design, technical support, and instructor capacity building. This is a valuable study contributing to our understanding of the integration of ICT and micro-learning resources in teacher training, the constraints involved, and the cost considerations. In the last research paper in this section, Katy Jordan reports the findings of a qualitative content analysis of published literature (122 documents) during the pandemic (between February-April, 2020), based on grounded theory, in terms of access,

responses, support (including teachers and the community), educational quality, and futures, and their implications for educational technology in the low- and middle-income countries. The immediate Covid-oriented responses included the use of radio, television and online communication; and the future planning needs to include 'learners and learning', and also that there are systemic and social issues which need to be addressed for educational technology to be effective in post-Covid times.

In the *'case study'* section, we have included four papers relating to the COVID-19 pandemic and: i) curriculum changes in the University of Pikeville by Werth, Williams and Werth, ii) e-learning status and constraints in the secondary schools in Kenya by Onesmus, iii) teaching-learning experiences in a medical university in Tanzania by Ibrahim, Luzinge, and Kapanda and iv) an exploratory case study on the use of OER during school lockdowns in Uganda by Kabugo. The lessons learned from these cases should be read in relation to the detailed analysis by Sir John reported in the first invited paper, and should contribute to our understanding and preparations for effective post-Covid educational and teaching-learning provisions and processes.

There are five brief papers in the '*notes from the field'* section, in which the researchers and practitioners have reported the critical contexts and operations of education and training at the time of COVID-19: i) use of OER by nurse educators at the 'Nurses International', a USA-based NGO by Ewing, Chickering, Bruner, Keating, Berland and Frank, ii) supporting university teachers for smooth movement toward distance education in Quebec/Canada by Cathia Papi, iii) use of Finnish pedagogy in online education for primary schools in Brazil by Joshi, Scheinin, Miranda and Piispa, iv) use of modern educational technology for remote learning in higher education in Cameroon by Gracemary Moluayonge, and v) synthesis of emerging evidence on learning continuity during COVID-19 by McBurnie, Adam and Kaye. These reports and findings, along with a critical review by Professor Don Olcott of the book by Mark Nichols 'Transforming universities with digital education: Future of formal learning' (Routledge, 2020) shall be significantly useful to our ongoing endeavours in dealing with COVID-19 and rebuilding/reorienting our teaching-learning-training strategies.

While COL has been promoting and putting into practice the policy-capacity-technology as a theory of change model for technology-enabled learning (Sankey & Mishra, 2019), capacity building (of both teachers/trainers and learners) has emerged as the most prominent prerequisite to effective implementation and utilisation of TEL, and this focus will become more prominent in the times to come (Panda & Mishra, 2020). As Altbach and De Wit (2020) visualised, the post-Covid scenario of teaching-learning will bring in more pressure on the management and the faculty attitude toward online and blended learning; and therefore, capacity building (continuing professional development) and long-term teaching-learning plans are precursors to deal with the new normal. I am reminded of two of Sir John's authoritative discourses—'independence versus interaction' and 'the iron triangle' of access-cost-quality—which are going to come to centre-stage of reflection and renewed implementation during and post-Covid.

In the post-Pandemic setting, it is visualised that the most desired strategy could be resource-based self-learning, collaborative engagement, with personalised scaffolding/mentoring in which organisational vision and technology are to be prominent players. More will depend on our collective understanding of 'learning', and how this will be facilitated within the broader contour of 'education'. While we need to go beyond the strategic remote teaching to more organised blended teaching-

learning, 'pedagogy' in one form or the other is going to take the centre stage. As against a teacher-/content-focused pedagogy which is technologically deterministic, a leaner-focused pedagogy is pedagogically determined and aims at 'developing' the learner (Kirkwood & Price, 2013). During COVID-19, many theoretical stances/frameworks for pedagogy of online learning have appeared—for instance, folk pedagogies of Jerome Bruner applied to synchronous online learning (Henriksen, Creely, & Henderson, 2020); a 'new pedagogy' comprising blended learning and many related variables (TeachOnline.Ca, 2020), among others.

While 'technology' has been the prime concern at the time of COVID-19, 'pedagogy' has resurfaced as the critical factor in self-direction, collaboration, resilience, and learning with confidence (Panda, 2020). This involves a journey—a 'shared journey' between teachers and learners (Young, 2020). Such pedagogies need to consider the voice of the students, teachers' knowledge and beliefs, learning outcomes, experiencing, scaffolding, eclecticism, meta-cognition, diversity-but-inclusivity (Husbands & Piarce, 2012). The Pandemic has also motivated (and, at times, compelled) teachers and instructors to dismantle the fixed notion of delivery (like F2F which has traditionally been considered as superior) to a preferred and desirable 'blended learning' which involves, besides the traditional technologies and methods/processes, such newer developments like flipped classroom, MOOCs, game-based learning, augmented virtual reality, gesture-based learning, and educational robots (Kinshuk et al, 2016), and many more. The new phase of blended learning would focus on a learner-centred teaching-learning approach and 'development' of the learner through active engagement in the context of learning application—construction and further reflection on the process will need personalised scaffolding.

No food is good unless it is tasty, fully digested, maintains health, ensures mental peace, and derives positive energy to move further. While policies and institutional provisions are prerequisites, it is the actual process of doing it which is crucial—the actual awareness and understanding, positive attitude, confidence, involvement and engagement, and reciprocity (individual as well as social construction) within a situated context as also in the networked/connected world. However, a more critical and reflective discourse would suggest that EdTech/TEL needs to address some critical issues (Selwyn et al, 2020) and to relook into the convergence of computational and social sciences (with specific reference to critical data studies, anticipatory studies, and critical design); and some significant policy, pedagogy, research, and practice issues raised by Panda and Mishra (2020).

I must thank Dr Tony Mays and Dr Sanjaya Mishra, editors, and Dr David Porter (senior advisor and book review editor) for excellent work and support this year and for assembling this COVID-19 issue of *JL4D*. We do hope that all the papers included in this issue shall arouse interest and motivate for further reflection and necessary action, which is crucial during- and post-Covid 'learning for development'.

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