



## **EDITORIAL**

## Some More Research on Technology-Enabled Learning

Santosh Panda

Indira Gandhi National Open University, New Delhi

This is the first issue of this year, and we have included twelve items dealing with various aspects of technology-enabled teaching, learning — one invited paper, four research papers, three case studies, two reports from the field, and two book reviews.

For every issue of the *Journal*, we have now an established practice of inviting an international expert in the field to contribute an invited paper on the broader theme of 'learning for development'. In the *invited section* of this issue, Aras Bozkurt analyses, through systematic review and biometric analysis — data mining and analytics (especially, text mining and social network analysis — t-SNE analysis) of the publications indexed in Scopus, the mapping of the impact of COVID-19 and the subsequent transition to the new normal. Three broad themes were identified and analysed — i) resilience, adaptability and sustainability in higher education, ii) psychological status and social wellbeing, and iii) the increasing use of online and hybrid modes of teaching-learning. The author underlines that, in the current pandemic context and its aftermath, the pedagogy needs to go beyond the teaching-learning activities to include trauma-informed pedagogies of care and empathy. Though there has been a significant shift toward online/blended/hybrid/hyflex modes of learning, there is a need to consider the instructional/learning design aspects (going beyond the 'techno-centric educational strategies') and learn from the ongoing practices and failures for us to be better prepared for the future.

In the first paper in the 'research articles' section, Kassim and Rampersad analyse the impact ranking for access in higher education with specific reference to the University of West Indies, viewed from the perspectives of participation and equity. The authors used a mixed-methods research to analyse the data for campus-based and distance education for the past twenty years, matched against the ranking matrix of the *Times Higher Education (THE)* ranking of universities. The authors argue for higher education institutions to consider to locate their institutional scope and system of interest and scale up their management of access and strategic use of data, and also align with the international ranking of universities and the UN sustainable development goals. In a related work on retention in higher education, Pant, Lohani and Pande report the findings of a research analysis on retention in MOOCs (in various universities in a state in India) by using a structural equation modelling approach. The learner variables identified by the authors could be useful to all those engaged in the design and offering of MOOCs — learner satisfaction, provision of credit transfer, contemporary relevance of courses, and localisation of content. In the next research study, Weibe, Crisostomo, Feliciano and Anderson report the effectiveness of offline digital technology, i.e., mobile learning labs (offline servers combined with digital libraries) for the education of children in the Indigenous communities in Guatemala. By using an instructional core model and mixed methods research, the authors reported



that besides the previously identified factors of improvement in standardised instruction, differentiated instruction, opportunities for practice, and learner engagement, four additional factors need to be considered for technology-enabled learning in remote communities — access to high-quality educational resources, teacher capacity-building, student technical skills and digital literacy, and sharing cultural knowledge. The authors suggest for future research to consider gender differences in context-specific learning outcomes in longitudinal studies. In the final paper in this section, Olha Fast and colleagues report their findings of a study on problems faced by 445 doctoral students during COVID-19 in Ukraine in 2020, and found that the science and physical education students faced more problems in comparison to those from the social sciences and humanities due to lack of a learner-friendly system of distance/online education, skills and competencies dealing with the new modes of learning, teacher competency in resource development and use, and prevalence of violation of academic integrity by students.

We have included three papers in the 'case study' section. Cooshna-Naik reports the findings of a research study on the use of word clouds (written tweets — reflective sharing of experiences) to support focused group discussion and the use of digital multimodal texts, which was found to be effective in ice-breaking and as an effective data visualisation tool in qualitative research data collection. In the next case, Hamaluba reports in a country-wide study at the Botswana Open University on the ICT skills of open schooling business students who were revealed to possess average e-learning skills and use of business-related software, though their familiarity with many types of computer-related software and tasks was very much appreciable. Constraints and therefore recommendations include: enhancing the ICT/e-teaching skills of teachers and instructors, development of understanding about and use of pedagogy of TEL, participatory teaching, and integration of ICT to course design and teaching-learning. In an interesting paper from STOU, Thailand, Kamolrat Intaratat reports the findings of a study on embedding communication and digital media to ODL to empower farmers of all levels and types to be smart farmers. Using data mapping (content analysis of four case studies) and interviews (focused group discussion) in this case-based study, the author reports that ICT integration with farming should take into consideration local/ contextual needs and problems, involvement of all stakeholders, and consideration of pedagogic and administrative aspects.

We present two interesting 'reports from the field'. Sugata Mitra and Ritu Dangwal compared the learning outcomes/scores of college students in India who took normal examination without internet access (traditional examination) versus those who took examination with internet access, as against their standardised school examination scores. The authors reported that the specially designed test scores of those who had internet access increased significantly over their school examination scores than that of those who had taken traditional examinations (though the authors noted that the ranking of students change over a period of time irrespective of access to the internet in examinations). The authors suggest that there should be access to and use of the internet by students during examinations so as to assess diversified abilities beyond memorisation and recall/reproduction. In the next case, Gomes and Thomas present the effectiveness of virtual resources and graphic design platforms, etc., and virtual community mentoring in enhancing psychological development and wellbeing of middle school underachievers during the COVID-19 pandemic in India. The digital models can act as virtual

community tools through community stories/memes in developing community culture, imparting life-skills education, and internalising self-development skills among teenagers.

The two *book reviews* in the final section should contribute to our understanding on curriculum and new models of lifelong learning (reviewed by Dr Don Alcott Jr) as well as social justice in teacher education and development in Africa (reviewed by Dr Carol Hordatt Gentles). We hope the various papers relating to TEL should be of interest and be useful to our readers. At the end, I take this opportunity to sincerely thank Dr Tony Mays, the Editor, Dr Mairette Newman, the Book Review Editor, and Alan Doree, the Copy Editor for their commendable work and unstinting support to not only bringing out *Journal* issues containing quality papers but also expanding the wider indexing and dissemination of the *Journal* and its papers, including its coverage by Scopus. I also thank all our valued peer-reviewers (listed below) who have helped in enhancing the quality of the review process through their critical reviews and constructive suggestions.

**Acknowledgements:** We sincerely acknowledge the following scholars for their support to *JL4D* in peer-reviewing the papers submitted to the journal published in 2021.

- Dr Md. Shafiqul Alam
- Prof Mohamed Ally
- Prakesh V. Arumugam
- Anne A Aseey
- Mr Ashish Kumar Awadhiya
- Hyejin Bak
- Dr Jyoti Bawane
- Prof Sutapa Bose
- Dr Aras Bozkurt
- Dr Jane Cullen
- Dr D. V. M. De Silva
- Dr Irwin DeVries
- Dr Emily Dick-Forde
- Yunus Doğan
- Cahit Erdem
- Prof Karen Ferreira-Meyers
- Devive Grace Funcion
- Monika Gautam
- Prof Ranjith Kingston Gladstone
- Jenny Glennie
- Mrs. Ivy Veronica Gordon
- Mint Husen
- Kamolrat Intaratat
- Ariel San Jose
- Ngepathimo Kadhila
- Prof Shironica Priyanthi Karunanayaka
- Mr Gurumurthy Kasinathan
- Ayse Kizildag

- Jack Koumi
- Monika Lintang Laksmi
- Charis Limbo
- Prof Mpine Makoe
- Monica Mawoyo
- Hamisi Mfaume
- Luis Miranda
- Prof. Sugata Mitra
- Dr Godfrey Magoti Mnubi
- Prof Goolam Mohamedbhai
- Dr Joel S. Mtebe
- Sammy Muteti Mutisya
- Dr Revati Namjoshi
- R. Nandhakumar
- Fareed Mohamed Nawastheen
- Sin Fai Eric Ng
- Dr Maria Niari
- Joseph Njiku
- John Taiwo Okewole
- Dr Okoye
- Mr. Ismail Fatai Olawale
- Dr Don Olcott, Jr
- John-Jude Chukwuka Omeife
- Dr Margaret Funke Omidire
- Prof. Carolyne Omulando
- Dr. Offia Tugwell Owo
- Dr Iona Tuugalei Chan Mow
- Dr S. K. Pulist

- Poonam Punia
- Marianne Raley
- Mr Prabhas Ranjan
- Prog M. K. Salooja
- Dr Mohammad Issack Santally
- Mmabaledi Seeletso
- Jonathon Sequeira
- Mr Manoj Shakya
- Anshuman Sharma
- Dr Ramesh C. Sharma
- Santosh Panda Chief Editor, *JL4D*

- Francis Simui
- Dr Matt Smith
- Mamta Srivastava
- Almighty C. Tabuena
- Tshepo Teele
- Mrs Grace Apondi Titi
- Cathy Mae Toquero
- Prof Freda Wolfenden
- Afam Uzork

Cite this paper as: Panda, S. (2022). Editorial — Some more research on technology-enabled learning. *Journal of Learning for Development*, 9(1), i-iv.