Editorial

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Biographical notes: Kam Cheong Li currently serves as the Dean of the School of Open Learning, the Director of Research and Knowledge Transfer, as well as the Director of the Institute for Research in Open and Innovative Education at Hong Kong Metropolitan University. He has published over 200 refereed journal articles/book chapters/conference papers and eight monographs/textbooks, and co-edited 12 books. Besides serving as an editor for the *Asian Association of Open Universities Journal* and *SN Computing Science*, he is an editorial board member for the academic journal *Interactive Technology* and *Smart Education*. His research interests lie in open learning and technology in education.

Billy Tak-Ming Wong is a senior research coordinator and the Deputy Director of the Institute for Research in Open and Innovative Education at Hong Kong Metropolitan University. He has been involved in various research projects related to technology-enhanced education. His research areas include mobile learning, computer-enhanced learning and academic analytics.

Fu Lee Wang is the Professor and the Dean of the School of Science and Technology at Hong Kong Metropolitan University. He was the Vice President at the Caritas Institute of Higher Education and a faculty member at the City University of Hong Kong. He has over 200 publications in international journals and conferences and led more than 30 competitive grants. He was also the Chair of ACM Hong Kong Chapter and IEEE Hong Kong Section Computer Society.

Reggie Kwan is a Professor of Computer Science and currently the Provost of Hong Kong Metropolitan University. He served as the Chair of Computer Science at Montana Technological University, the Head of Computing and Mathematics at the Open University of Hong Kong, and the President of the Caritas Institute of Higher Education. Though trained as a computer scientist, he has been fascinated by e-learning and open and distance learning.

The widespread adoption of mobile and ubiquitous technologies has been a major feature of contemporary education. Relevant technologies such as mobile devices, social media, learning analytics, virtual and augmented reality, and artificial intelligence have been commonly used in educational practices. This reflects not only a global trend towards transforming teaching and learning through technological advances, but it also facilitates

personalisation of learning which emphasises tailoring learning to cope with the unique needs, interests, and strengths of learners. To address such important development, this special issue comprises a total of seven papers which examine various topics related to personalising learning in mobile and ubiquitous environments.

The first paper by Jia et al. presents the development and evaluation of a web-based intelligent system for tutoring and assessment of mathematics content. The system features the provision of a computerised adaptive test (CAT) which enables individualised and adaptive homework and assessment. The paper examines whether the CAT is comparable to traditional tests, and provides empirical evidence to prove whether it can be individualised and adaptive to every learner's knowledge trait and skill. The findings reveal pedagogical insights for optimising the CAT.

The paper by Cao et al. analyses the effects of a ubiquitous online-merge-offline teaching model on students' learning in open education. It illustrates the implementation of this model in a course, and reports students' acceptance of and participation in the course. The findings reveal the impacts of the model on students' learning interests, initiative and emotions, and offer pedagogical insights into effective ways to integrate live teaching with online contents guided by the model.

The paper by Chan investigates students' perceptions of using a mobile virtual reality application for English/Chinese bi-directional interpreting learning. It presents the use of a 'virtual interpreting practice' application and reports students' overall satisfaction, learning experience and outcomes. The study reveals the effectiveness of the application in enhancing students' interpreting and bilingual competence, learning motivation, and learning autonomy. Its findings also suggest the opportunities for situated learning in virtual immersive learning environments.

Nurani and Lee's paper reports a study on the transformation of workplace learning for middle-aged employees. The authors identified problems faced by this group of learners for using online learning tools such as fatigue, reduced involvement and interaction, as well as unfamiliarity with new technological features, independent learning and online learning strategies. Based on these findings, a number of workplace learning techniques were proposed that combine online and offline strategies to overcome the problems.

Chow et al.'s paper examines students' approaches to learning from physical to online environments during the pandemic. It found out salient changes in their learning strategies that were influenced by factors such as subject choices, study methods and contents, seeking of teachers' support, and sense of competition. The findings advance our understanding of how students have learnt online, and the importance of course instructors in students' deep learning in online courses.

Paredes et al.'s paper presents the development of a mobile application for promoting innovation among university students. The application features the incorporation of a personalised intelligent chatbot and a challenge-based learning approach. This paper reports the results of software testing which demonstrate the views of students on the functionalities of the application. It contributes to offering an innovative approach to learning that promotes knowledge acquisition through allowing students to put their knowledge into practice while addressing the demands of the job market.

In the paper by Gill et al., the use of immersive virtual reality for the teaching and learning of design history was studied. In particular, the study investigated students' affective-motivational factors and their preferences regarding interaction interfaces and learning presentations through the virtual educational environments. Its findings show the

critical factors affecting students' immersion and engagement, and the potential of immersive virtual reality for increasing students' intrinsic learning motivation.

The papers in this special issue highlight the potential of mobile and ubiquitous technologies to the development of personalised learning. They also open up new avenues for research in the field. We look forward to more fruitful research generated from the findings and insights of the work in this issue.