
Editorial

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Biographical notes: Simon K.S. Cheung is the Director of IT in the Open University of Hong Kong and the former Director of IT Services in the HKU School of Professional and Continuing Education. He received his BSc and PhD in Computer Science from the City University of Hong Kong, and his Master of Public Administration from the University of Hong Kong. His research interests are in the areas of software engineering and IT in teaching and learning, where he has published 12 books and over 100 refereed journal articles, book chapters and conference papers.

Fu Lee Wang is the Vice President (Research and Advancement) in the Caritas Institute of Higher Education. He received his PhD in Systems Engineering and Engineering Management from The Chinese University of Hong Kong. Prior to joining Caritas, he was a Faculty Member at the City University of Hong Kong. His research interests include e-business, e-learning, financial engineering and

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K.C. Li received his PhD on Curriculum Design and Applied Linguistics from the University of Hong Kong, and four MAs, an LLB and a first class honours BED in areas of Management, Laws and Language Education from various institutions in UK and China, including the University of London and Peking University. He has overseen undergraduate and postgraduate programs at the Open University of Hong Kong. Currently, he is the Director of the University Research Centre of the institution. His current research interest lies in innovative ways for distance and adult learning. He has chaired management committees of many high schools and has also served as an Honorary Chair Professor and a Visiting Professor of various tertiary institutions.

Jeanne Y.C. Lam is the Assistant Head of the Research and E-Learning Unit of HKU School of Professional and Continuing Education. She received her BSc in Computer Science and MBA from The University of Hong Kong, and MSc in Training & HRM from the University of Leicester and Doctor of Education from the University of Nottingham in UK. Her research interests include e-learning, blended learning and educational technology. Her expertise includes management and development of e-learning system, development of e-courses and multimedia design, and production of e-courses.

Reggie Kwan is the President of the Caritas Institute of Higher Education. Before joining Caritas to help build a Catholic university in Hong Kong, he was the Head of Computing and Mathematics and Intermittent Acting Dean of Science and Technology at the Open University of Hong Kong. Prior to that, he was a Professor and Chair of Computer Science at Montana Tech of the University of Montana from the mid-80s to late 90s. With his Bachelor's, Master's and Doctoral degrees in Computer Science and Computer Science Education, he has a wide range of research interests ranging from data compression, computer science education to e-learning. He has been on editorial boards of journals and has been active organising international conferences in computer science, education and e-learning. Even after becoming a full-time administrator, he continues to be active in contributing to the field of e-learning and has published over 100 publications.

Undoubtedly, technology has become an integral part in all aspects of education, broadly covering curriculum planning and design, content development and delivery, knowledge transfer and management, communication among learners and instructors, assessment and program evaluation. In a technology-enabled learning environment, students can learn in new and proactive ways. This aligns to the ideas of student-centred learning. Technology-mediated proactive learning is now one of the important topics in the field for further investigation. This special issue on technology-mediated proactive learning aims to explore how technology can be used to enable proactive learning so as to enhance learning effectiveness and enrich learning experience.

This Special Issue contains five refereed papers, which are mainly selected from the papers presented at *the International Conference on Technology in Education*, held in Hong Kong on 2–4 July 2015, with substantial expansion and revision.

Within the context of technology-mediated proactive learning, the first paper, “A case study from a Japanese flipped engineering research course”, investigates a flipped teaching model for engineering research courses. The focus is placed on the students’ perceptions of the usefulness of flipped teaching. From a case study conducted in a Japanese university, it is found that flipped teaching provides students with more opportunities to better prepare for coursework. It is also found that flipped teaching promotes interactive communication between instructors and students and encourages proactive learning.

The second paper, “The importance of online dictionaries in language learning: a case study on third language acquisition of basic German”, explores the ways in which online dictionaries can help students in language learning. Based on a case study of learning basic German as a third language, it is observed that students regard social influence and self-management as two important factors in shaping their motivation in the language acquisition, and that the students’ positive attitudes on using online dictionaries have exerted strong influences on their behaviours in the use of online dictionaries when completing assignments. The study also suggests that in order to improve the performance expectancy of using online dictionaries in language learning, one may consider improving the functionality of the online dictionaries.

The issues of gender differences on the attitudes of using IT for learning still remain controversial. The third paper, “Factor analysis of social context of statistics learning within an IT environment between student genders”, investigates how the nature of underlying influences for social interaction when using IT in statistics learning is affected by students’ genders. It is revealed that knowledge construction through social interaction is the key factor influencing learning between male and female students. According to the findings, female students raised more concerns about the significance of teachers’ assistance in the learning process, whereas male students were more serious about the expectations regarding performance.

The fourth paper, “Adopting and adapting open textbooks: school teachers readiness and expectations”, reports a study on how ready the school teachers are for using open textbooks and the kind of support required. Based on a survey conducted in primary and secondary schools in Hong Kong, it is found that the majority of teachers have limited familiarity with or experience in open textbooks. They regard the academic quality of textbooks and the availability of supplementary teaching materials as the most important factors to decide to use open textbooks or not. The preferred ways of using open textbooks also vary. It is also found that owing to the limited skills in image, video and web page editing, teachers experience difficulties in revising the open textbooks.

Big data and analytics are being practised increasing in higher education. In the fifth paper, “Academic analytics: a meta-analysis of its applications in higher education”, 24 cases of using analytics in universities and colleges are reviewed with respect to the types of data collected, the level of analyses carried out and the functions to be achieved. It is found that academic analytics is more oriented to teaching and learning while there is considerable room for development in the administration area. It is also found that the analyses place the focus on the use of readily available data. More comprehensive data collection and big data technique should be adopted so that the advantages and benefits of academic analytics can be fully utilised.

Finally, we would like to thank Professor Karl Koong, the Editor-in-Chief of the *International Journal of Services and Standards*, for his kind acceptance of publishing this Special Issue. We also like to express our appreciation to Mrs Barbara Curran for her efforts in assisting the publication of this Special Issue.