EDITORIAL

Editorial: Diversity in the field of education and information technologies

Arthur Tatnall

This issue of Education and Information Technologies has seven quite different articles, again showing the diversity of this field. One article relates to student pathways, three investigate different aspects of the online experience for students, two more look at the issues involved with use of computers in different aspects of school education while another proposes a curriculum to support learning about large Enterprise Information Systems.

An article by Pavlo D. Antonenko, *et al.*, titled *Understanding student pathways in context-rich problems,* describes the ways that students' problem-solving behaviors evolve when solving multi-faceted, context-rich problems within a web-based learning environment.

Kathy Seddon, Keith Postlethwaite and Geoff Lee have written on *Understanding the experience of non contributory online participants (readers) in National College for School Leadership online communities.* This article explores the range of participation taking place in an online community and focussed on participants who defined themselves as not actively contributing to the online discussion. Whilst recognising that an individual community member's degree of participation might simply reflect their choice, the study looked to see if there were any systems or personal barriers to prevent active participation. Also considering an aspect of the online learning experience, an article by Karel Kreijns, *et al.*, investigates Social Presence—the degree to which 'the other' in a communication appears to be a 'real' person. Titled *Measuring perceived social presence in distributed learning groups*, the article reports on the construction and validation of a self-reporting Social Presence Scale to determine perceived social presence in distributed learning groups using computer-supported collaborative learning environments. The third related article by Ian Toppin on *Video lecture capture (VLC) system: A comparison of student versus faculty perceptions* looks at how a VLC system in a university was implemented to address issues relating to retention, and to reverse the trend of high drop, failure, and withdrawal rates.

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Another quite different article looks at *A computer card game for the learning of basic aspects of the binary system in primary education: Design and pilot evaluation*. This article is by Maria Kordaki who presents the design, features and a pilot evaluation study of a computer card game to facilitate the learning of basic aspects of the binary system by primary level pupils. At the other end of the school curriculum, a paper by Douglas D. Agyei and Joke Voogt is on ICT and mathematics education in Ghana, titled *ICT use in the teaching of mathematics: Implications for professional development of pre-service teachers in Ghana*. This paper reports on a study conducted to explore the feasibility of ICT use in mathematics teaching at senior high school levels in Ghana.

In a quite different vein, an article by Yacine Atif, *et al.*, is titled *Enterprise Systems: Curriculum design and assessment*. In this article the authors present a curriculum that prepares students for supporting large Enterprise Information Systems. They outline a curriculum implementation that prepares students for the pervasive EIS landscape in meeting corporate needs.

While diversity of articles reflects the nature of this area, it is our intention to produce more special issues on specific topics related to Education and information Technologies. We plan to have a special issue at least once each year. Last year we had a special issue on university Information Systems curriculum and we soon plan to have another on Software Engineering education. There are many more topics that would be most suitable for a special issue, and if the reader has one in mind, and is prepared to guest edit it, then I invite him or her to contact me (Arthur.Tatnall@vu.edu.au) to discuss the feasibility of such an issue. Special issues could range through all aspects of Education and Information Technologies including issues relating to primary or secondary school classrooms, teacher training in ICT, university curriculum, online learning, ICT and education management, professional education, research methodologies for investigating this area, and many more.