Editorial: eLearning technologies and resources in the classroom

Stewart Marshall The University of the West Indies, Barbados, West Indies

Wal Taylor The University of the West Indies, Barbados, West Indies

Welcome to Volume 8 Issue 3 of the *International Journal of Education and Development using Information and Communication Technology (IJEDICT)* – the final issue for 2012. *IJEDICT* concentrates on articles concerned with the adoption and evaluation of knowledge tools and resources, especially in developing contexts. This issue brings articles from or about Barbados, Canada, Ghana, Tanzania, and UK.

This issue has a Guest Editorial by David Mathew and Andrea Raiker, who co-edit the University of Bedfordshire's *Journal of Pedagogic Development*. In the editorial - "Distance learning across continents: What is a 'Traditional Learner' anyway?" – David and Andrea explain that the journal seeks submissions from different parts of the world to form a picture of what constitutes contemporary pedagogy. It shares with *IJEDICT* a focus on identifying and strengthening the links between research and practice in ICT education and development.

Thomas Nagunwa and Edda Lwoga describe a case study "Developing eLearning technologies to implement competency based medical education: Experiences from Muhimbili University of Health and Allied Sciences". The article provides a background to eLearning and the early attempt to adopt it in 2006 at MUHAS, Tanzania, with its challenges leading to failure. Next it presents the strategic re-establishment of eLearning to support the new CBME introduced in 2009. Finally, the paper discusses the challenges faced during the implementation process and provides a discussion of lessons learnt. The article suggests that, in order to improve the quality of medical education in settings with limited resources, universities in developing countries should make effective use of innovative and emerging technologies relevant to their environments. Successful implementation of eLearning requires a strategic approach involving university management, academic staff and students. The approach should take into account significant issues including pedagogy, ICT infrastructure, appropriate technologies, human resources, eLearning policy, faculty and student training, integration of eLearning and information literacy as well as the university curricula and partnerships.

In their article, Charles Buabeng-Andoh and Fred Totimeh describe their study "Teachers' innovative use of computer technologies in classroom: A case of selected Ghanaian schools". Questionnaires were distributed to 273 teachers in fourteen schools comprising 5 urban schools, 5 semi-urban schools and 4 rural schools. Descriptive statistics, multivariate analyzes of variances, independent samples t-tests and multiple regression were used to analyze data. The study found that male teachers have more access to computers than the female teachers. Also a correlation analysis revealed high positive correlation between teachers' computer skills, computer experience and computer access. Finally, it was revealed that computer access was the strongest determinant of teachers' computer skills.

In the article "Open content for elearning: Cross-institutional collaboration for education and training in a digital environment", Stewart Marshall, Wanjira Kinuthia and Griff Richards describe a collaborative workshop to construct curricula using open educational resources (OER). A workshop brought together a team of educational professionals from Barbados, Canada,

Jamaica, Trinidad, and the USA, with goals to come to a consensus on the format of module specifications, select appropriate resources, and to report on the feasibility of the approach. The team produced course outlines and specifications for modules using OER. The following were noted: Use of OER sped the aggregation of content; they are not available for every topic; they vary in media and content quality; and OER that lack clarity of authorship and copyright are difficult to include in courses.

In "An approach to learning by construction", Emily Bagarukayo, Theo Weide and Henny Meijden describe an innovative idea for providing affordable, sustainable, and meaningful education for students in Least Developed Countries (LDCs). The authors show how a Digital Learning Environment (DLE) can play a central role in community development. The authors develop and validate an approach for introduction of an ICT education program for Higher Order Cognitive Skills (HOCS) improvement, building capacity and infrastructure in a LDC using the DLE tool. The proposed "Learning by construction" approach, as a mechanism for the effective integration of ICT in the educational process following Bloom's Taxonomy as a general framework for learning using the DLE is described. It combines sound educational approaches such as cognitive apprenticeship and situated learning with industrial design models to create an interdisciplinary solution that potentially results in job creators, not job seekers. The authors discuss how education itself also plays a role in the introduction of DLE.

As always, the emphasis in IJEDICT is on providing a space for researchers, practitioners and theoreticians to jointly explore ideas using an eclectic mix of research methods and disciplines, and we welcome feedback and suggestions as to how the journal can better serve this community. The journal now has a sister publication in the form of an online newspaper – "IJEDICT Weekly News" – which is published every Thursday at: http://paper.li/f-1325685118.

Stewart Marshall and Wal Taylor

Chief Editors, IJEDICT

Copyright for articles published in this journal is retained by the authors, with first publication rights granted to the journal. By virtue of their appearance in this open access journal, articles are free to use, with proper attribution, in educational and other non-commercial settings.

Original article at: http://ijedict.dec.uwi.edu//viewarticle.php?id=1586