

Editorial: ICT in education and in promoting health

Stewart Marshall

The University of the West Indies, Barbados, West Indies

Wal Taylor

Cape Peninsula University of Technology, Cape Town, South Africa

Welcome to Volume 4 Issue 2 of the International Journal of Education and Development using Information and Communication Technology (IJEDICT). In this issue we have articles on the use of ICT in education and in promoting health, from Australia, Brazil, Egypt, India, Jordan, Nigeria, Taiwan, Uganda and Zimbabwe, together with two reviews from Barbados and Trinidad. It also brings more postings to the blog by one of the editors – “CEDICT: Communication, Education and Development using ICT” - <http://cedict.blogspot.com/>

A large number of universities in the world offer programs/courses using e-learning in one form or another. Despite this, research on e-learning adoption suggests that it has not reached its full potential. The first three articles of Volume 4, Issue 2 look at different aspects of e-readiness and e-learning adoption in selected universities. The first article, by Lockias Chitanana, Daga Makaza and Kudakwashe Madzima, discusses the opportunities that exist and challenges that hinder the successful adoption of e-learning technology as a medium of instruction at selected universities in Zimbabwe. The findings and comments provided by their article - “The current state of e-learning at universities in Zimbabwe: Opportunities and challenges” - are expected to help universities develop their e-learning strategies. The participants for this study were university lecturers who were beginning to use e-learning. The research exposes a number of reasons for the limited successes, and the authors make several recommendations.

The second article is “An e-readiness assessment of Nigeria’s Premier University (Part 1*)” by Wole Michael Olatokun and Opesade, O. A. Their study investigated the preparedness of the University of Ibadan to benefit from the numerous opportunities offered by the adoption and use of ICT in carrying out university functions. Six research questions centered on eliciting the e-readiness objectives of the University and five e-readiness indicators namely: infrastructural availability, access to infrastructure, manpower availability, institutional ICT policy and regulatory framework, and ICT deployment in the university activities were assessed. An empirical case study research method was adopted. The study population mainly comprised six thousand, four hundred and thirty one academic staff and students. Based on the findings, several recommendations are made.

In the third article, Helen Madden-Hallett and Henry Wai Leong Ho examine the use of WebCT as a communication and learning facilitation tool in higher education. The case study described in “Catch Me I’m Falling. Using Technology to Assist Educationally Disadvantaged Students: A Case Study on the Western region of Melbourne, Australia” is based on students’ experience of using WebCT in an undergraduate business degree. A sample of 328 undergraduate students, drawn from four marketing subjects, was selected. Students from non-English speaking backgrounds made up almost half the respondents and they indicated that certain add-on features of WebCT would be of interest to them and assist them in their studies. The findings also indicated that students aged between 18 and 24 were more likely to use WebCT as a learning tool and socialising medium than students older than 24. Gender differences were also identified. In their article “Malaysian Smart Schools: A Fruitful Case Study for Analysis to

Synopsise Lessons Applicable to the Egyptian Context”, Hanan EL-Halawany and Enas Ibraheem Huwail seek to comprehend the ideological framework within which Malaysia has created its ICT mediated education. They see Malaysia as a rewarding case study as evidence reveals that Malaysia has managed to leapfrog using the opportunities that ICTs can offer. Their article tries to distill Malaysia's experience in this arena and extract lessons learned and innovative strategies and practices applicable to the Egyptian context.

Given the limited number of currently available resources in Jordan, the ministry of Education is implementing a newly developed online physics curriculum; this is being trialed in a number of experimental public schools. In the article “Jordanian physics students' utilization of online instruction and their attitudes towards it”, Akram Omari examines the teaching of physics online in one of the experimental public schools. The findings of this study revealed that student collaboration, reflective thinking, class management, active learning, and technology competence were student's negative online learning experiences. The students' negative experiences were caused by lack of cognitive, social and teaching activities. The findings can lead to further insights about how Jordanian teachers can link their efforts to student perceptions of the many initiatives they undertake, especially in using online technology for teaching and learning.

In the article “Information and Communication Technologies (ICTs) to develop teachers' global awareness”, Shiang-Kwei Wang, Sarah McPherson, Hui-YIn Hsu and Mengping Tsuei describe a project that explored uses of ICTs, such as wikis, blogs, and e-mail to facilitate knowledge exchange between in-service teachers in New York City and in-service teachers in Taipei, Taiwan. The project purposes were (1) to increase participants' awareness of international cultures in an educational context (2) to enhance cross-cultural interaction between the two countries, and (3) to provide participants opportunities to use ICT tools. The findings show that both groups of participants gained important perspectives on global education, increased knowledge of each other's culture and its impact on education, and increased competence with ICTs. Participants also demonstrate the ability to develop strategies to add global dimensions to the curriculum and instruction.

The article “Learning to Research in Second Life: 3D MUVES as meta-research fields” by Suely Fragoso, Gustavo Fischer, Ana Lucia da Silva, Henrique Freitas, Guilherme Land, Guilherme Loesch, Lucas Trindade, Pauline Mariani, and Yentl Delanhesi is perhaps a strange one to include in this journal as the use of Multi User Virtual Environments (MUVES) such as *Second Life* will undoubtedly require more bandwidth than is available in many developing countries. The reason for its inclusion is that we occasionally need to look at what will be possible when we are able to overcome the current, hopefully short-lived, digital divide. The article describes an experiment in teaching ethnographic techniques for applied research in consumer behaviour in on-line communities. The activity took place between March and June of 2007 and involved seven final year undergraduate Communications students. Evaluation of the process sought to identify the benefits and drawbacks in the use of MUVES for teaching in general and for the teaching of research techniques in particular. The conditions of access to *Second Life* in Brazil are also identified and discussed. The authors also present some possibilities for future teaching and research in online environments.

Three of the articles in this issue are concerned with health and related services. “An assessment of the effectiveness of radio theatre in promoting good healthy living among rural communities in Osun State, Nigeria” by Olaniyi Sofowora describes a study to assess the effectiveness of radio theatre programmes in promoting good healthy living among the rural communities in Osun State, Nigeria. The research objectives stated for the study are to:

- Find out the perception of the rural communities about the popular radio theatre programme,
- Investigate the extent to which the radio theatre programme has achieved the objectives for which it was designed and the extent to which it has helped to influence the health habit of

the rural communities, and

- Examine whether or not it is an effective method of promoting healthy living among the rural communities.

The sample for the study was made up of 240 rural communities in Osun State. Seventy-six percent of the sample rated the radio theatre programme as an effective method for promoting healthy living.

The role that ICT plays in improving the efficiency and effectiveness of healthcare delivery has been well established. However, the effectiveness on current immunization systems, the political, social, economic and technology challenges have not been investigated fully. The article “Enhancing healthcare delivery through ICTs: A case study of the Ugandan immunisation system” by Agnes Semwanga Rwashana and Ddembe Willeese Williams investigates the potential role of ICTs in enhancing and improved understanding of immunization health care problems. The article presents a qualitative model to present the status of the current immunisation system in Uganda and proposes a framework of how ICT can be used to enhance immunisation coverage.

About one-third of Urban India (71 million) lives in metropolitan cities. Urbanisation is associated with increased incomes, improved health, higher literacy, improved quality of life and other benefits, at the same time it results in strain on the physical and social infrastructure. The job profiles in the mature urban areas are driving the need for an effective, efficient and economic urban service provider. The Urban Local Bodies (ULB) i.e. Municipal Corporation and Urban Development authorities play this role and the use of ICT via e-governance initiatives is gaining momentum in the provision of the urban services to the growing number of urban customers. As described in “Prioritizing Urban Service Management Initiatives” by Praful Gharpure, for a user of urban services, there are some basic requirements which are “Critical to Quality” (CTQs) for the service under consideration. These link to “Voice of Customer” (VOCs) in all process improvement initiatives. The improvement measures for current processes need to be based on the needs of the end user. This article analyses the needs of the end-user and carries out a comparative analysis of the initiatives implemented to gauge the extent of fulfillment of customer needs across the top Indian cities.

This issue finishes with two book reviews. Anna-May Edwards-Henry reviews the book *Risk, Complexity and ICT*, edited by Ole Hanseth and Claudio Ciborra, and published by Edward Elgar in 2007. The second review is by Ed Brandon - “Review of *The Power of Greed: Collective Action in International Development*” – a book by Michael Rosberg, published by The University of Alberta Press in 2005.

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=581>