Editorial: ICT and e-learning in secondary and tertiary education

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Welcome to Volume 9 Issue 2 of the *International Journal of Education and Development using Information and Communication Technology (IJEDICT).* This issue brings articles from or about Ireland, Jordan, Kenya, South Africa, Tanzania, Uganda and the USA.

In the first article - "Exploring students acceptance of e-learning using Technology Acceptance Model in Jordanian universities" - Amer Al- Adwan, Ahmad Al- Adwan and Jo Smedley focus on the investigation of students, who attempt to successfully adopt e-learning systems at universities in Jordan. The conceptual research framework of e-learning adoption, which is used in the analysis, is based on the technology acceptance model. The study also provides an indicator of students' acceptance of e-learning as well as identifying the important factors that would contribute to its successful use.

In their article, Geoffrey Kituyi and Irene Tusubira describe research to design "A framework for the integration of e-learning in higher education institutions in developing countries". Data were collected from 266 university students and staff of five universities in Uganda using a questionnaire. The requirements for e-learning integration were identified as; use of projection equipment; use of e-learning methods to teach and face-to-face method to administer tests and exams; harmonization of course content for e-learning and face-to-face during design phase; incorporation of 3D pictures, audio and videos in classrooms among others. The developed framework was validated for applicability using case studies in all the participating universities.

As with any technological changes, the spread of screen reading presents educators and students with a range of challenges and opportunities. In his article "Screen reading habits among university students", Tim Vandenhoek examines the general preferences and habits of university students when reading academic articles, specifically their use of annotations and other means of interacting with a text. An on-line survey was conducted and the views of 630 students analyzed. The data reveals several tensions in the preferences and habits of these students and suggests that a knowledge gap may exist which could hamper their ability to interact with digital texts. The article ends with teaching implications and opportunities as well as suggestions for further research in the area.

In "ICT in secondary school administration in rural southern Kenya: An educator's eye on its importance and use", Lazarus Makewa, Jackson Meremo, Elizabeth Role and Jesse Role investigated teachers' and administrators' perceptions on the importance of Information and Communications Technologies in secondary school. The researchers used a descriptive-comparative research design and found that there was a significant difference between the perceptions of teachers and administrators on the importance of ICT use in the following areas of secondary school administration: student administration, general administration and supervision of instruction.

Although a policy mandating the use of Open Source Software exists in the Western Cape province of South Africa, very few schools have adopted it. In their article "Exploring the factors

influencing the adoption of Open Source Software in Western Cape schools", Kevin Johnston, Shameemah Begg, and Maureen Tanner describe a study aimed at gaining insights into the factors influencing or inhibiting OSS adoption within the Western Cape Schools Environment. In-depth interviews were conducted with senior staff in the Department of the Premier, and the Department of Education, as well as users at school level. The Technology-Organisation-Environment (TOE) framework was employed to organise the data, while thematic analysis was used to uncover themes and patterns in the data. Significant factors that emerged as positive influences on the adoption of OSS included cost, performance and positive attitudes. The negative influences that emerged included compatibility lack of resources and time, and lack of support.

In their article, Alfred S. Sife and Ronald Bernard examine the "Persistence and decay of web citations used in theses and dissertations available at the Sokoine National Agricultural Library, Tanzania". Specifically, the study assessed the accessibility status of cited URLs, identified error messages and top level domains of inaccessible URLs, and calculated the half-life of web citations. Eighty-three theses and dissertations that were dated between 2007 and 2011 were stratified according to their years of publication and randomly selected for the study. The findings show that 58% of web citations were inaccessible. Collaborative efforts are thus required from various stakeholders in order to reduce the problem of URL decay.

The study described in "Quantity and quality of computer use and academic achievement: Evidence from a large-scale international test program" by Jehanzeb R. Cheema and Bo Zhang, used the Program for International Student Assessment (PISA) 2003 student survey comprising of 4,356 students. This study differs from past research in that it investigates the simultaneous effect of both quality and quantity of computer use on academic achievement in context of a large-scale probability sample which allows projection of our analytical results to the entire population of 15-year old high school students in the U.S.

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 two sister publications in the form of an online newspaper – "IJEDICT Weekly News" – which is published every Thursday at: http://paper.li/f-1325685118, and a daily, magazine style "ICT for Education and Development" at: http://www.scoop.it/t/ict-for-education-and-development.

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