Editorial: Exploring adoption and use of ICT in learning

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Welcome to Volume 11 Issue 2 of the *International Journal of Education and Development using Information and Communication Technology (IJEDICT)*. This issue brings articles from or about Croatia, Finland, Germany, Ghana, Greece, Guyana, Italy, Ireland, Portugal, Serbia, South Africa, Tanzania, the Netherlands, Uganda, UK and USA.

In “Exploring the use of ICTs in learning and disseminating livestock husbandry knowledge to urban and peri-urban communities in Tanzania”, Angello describes a study which investigated the extent of use of ICTs by urban and peri-urban livestock keepers and how access and dissemination of livestock information could be improved through use of ICTs. Policy implications of the study include improvement of the telecommunications services and ICT infrastructure by the government.

The article "Interactive-GIS-Tutor (IGIST) integration: Creating a digital space gateway within a textbook-bound South African Geography class" by Fleischmann, van der Westhuizen and Cilliers, documents the development and tentative assessment of a geographic information system (GIS) plug-and-play tutor application in South Africa. This case study indicates that IGIST is a feasible option, and fosters a positive GIS attitude among learners and teachers.

In their article “Uncovering reading habits of university students in Uganda: Does ICT matter?” Mlay, Sabi, Tsuma and Langmia investigate how ICT can improve reading habits among university students. They also investigated the influence of home culture, school culture and disposable income on reading habit. This study provides a unique contribution through empirical evidence that ICT indeed impacts one’s reading habit.

Institutions in sub-Saharan Africa now spend a significant proportion of their limited resources on installing and maintaining Learning Management Systems (LMS). The article “Learning Management System success: Increasing Learning Management System usage in higher education in sub-Saharan Africa” by Mtebe investigates this question by analyzing the literature published on LMS usage from across the region. The article concludes by proposing strategies that can help institutions make more effective use of their LMS.

The two articles by Livingstone are based on research on staff perceptions about elearning practices at the University of Guyana. The first article “Administration’s perception about the feasibility of elearning practices at the University of Guyana” reports that the University’s administration generally believes that elearning practices are feasible and should be embraced, once key issues for their adoption are addressed. The second article “Teaching faculty’s perception about implementing elearning practices at the University of Guyana” reports teaching faculty is generally prepared to upgrade their teaching methods and embrace elearning as a viable alternative.

The article “Teachers’ ICT usage in second-cycle institutions in Ghana: A qualitative study” by Buabeng-Andoh and Yidana, investigates teachers’ use of ICT and the factors that affect their
ICT use. The results show they mainly use ICT for organizational and informative purposes. Teachers’ limited use of ICT in teaching is attributed to lack of technological resources (i.e. hardware, software and the internet) and school leadership support for the teachers in schools.

“Promoting teaching and learning in Ghanaian Basic Schools through ICT” by Natia and Al-hassan reports relatively low computer use at Primary Schools compared to the Junior High Schools. The ability of teachers to use computers to teach and research is weak due to lack of access to internet, electricity/power problem, inadequate number of computers and technical know-how.

In their article, Kisanga and Ireson looked at “Barriers and strategies on adoption of e-learning in Tanzanian higher learning institutions: Lessons for adopters”. Five major barriers were identified: poor infrastructure; financial constraints; inadequate support; lack of e-learning knowledge and teachers’ resistance to change. The study further describes best practice approaches used by the two HLIs to address each of the challenges.

The University of Pristina piloted blended courses in 2013 under the framework of the Tempus BLATT project. In their article “When going hybrid is not enough: Statistical analysis of effectiveness of blended courses piloted within Tempus BLATT Project”, Jovanovic et al describe the delivery of the courses in the framework of the project implementation and presents the effect the change in the methodology had on student performance as measured by final grade.

In the article “Poem Generator: A comparative quantitative evaluation of a microworlds-based learning approach for teaching English”, Jenkins uses a quasi-experimental design in order to measure performance gains in computational thinking and poetic thinking following a microworld-based intervention in English lessons. Preliminary findings reveal a distinct increase in computational thinking and poetic thinking performance for learners.

Bagarukayo and Kalema examined the nature and the extent of eLearning activities in South African (SA) universities. Their article “Evaluation of eLearning usage in South African universities: A critical review” reports that the level of eLearning usage and adoption varies in different universities due to several challenges. They give an overview of studies conducted in eLearning in SA universities, highlighting challenges and best practices.

The article “A narrative approach to studying the diversification of inquiry learning across instructional settings” by Rutten et al, conceive of a narrative as ‘talking through’ a lesson in which a teacher supports inquiry with technology. By subsequently coding these narratives, they studied the functions that tools can fulfill related to certain learning activities and instructional settings. They created a template by distilling the coded functions of these tools.

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