
Editorial

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Biographical notes: Lorna Uden is Emeritus Professor of IT Systems in the Faculty of Computing, Engineering and Technology at Staffordshire University. Her research interests include technology learning, HCI, activity theory, knowledge management, web engineering, multimedia, e-business, service science and innovation, mobile computing, cloud computing and problem-based learning.

Welcome to V7N1 issue of *IJLT*. There are six papers in this issue. The first paper is ‘Communication is key: the role of communication in the diffusion of a learning management system into a higher education environment’, by Dennis Beck and Erik W. Black. This paper discusses the types of communication channels used to effectively disseminate information on a learning management system (LMS) in a university environment. It discerns the most advantageous communication channels used for different types of adopters, and stage of LMS adoption. It uses Rogers’ diffusion of innovations framework to discuss a communications strategy by which agents of change can educate their peers and decision makers regarding a chosen technology. The strategy examines the role of communications in the knowledge, persuasion, decision, implementation, and confirmation stages of the innovation-decision process. Problems include overstating communication, negative evaluations, and ignoring in communication through dedicated employees, a transparent organisational and policy structure, and the increase of resources to the project. It then concludes by proposing a strategy for successful communication during the diffusion process. More research is needed to validate the role of communication in the diffusion of learning management systems in higher education.

The second paper is by Pierre Gorissen, Jan van Bruggen and Wim Jochems, titled, ‘Usage reporting on recorded lectures using educational data mining’. Most research on the use of recorded lectures by students is based on surveys. In contrast, this study analyses the interactions of students with the recorded lectures. The aim is to offer more support for navigating the parts of the recorded lecture that students want to view. In their paper, these authors reported an analysis of students’ use of recorded lectures at two Universities in the Netherlands. The data logged by the lecture capture system (LCS) is used and combined with collected survey data. We describe the process of data pre-processing, where multiple data sources are combined; after which, the data is cleaned, removing outliers and data not relevant to the research. The analysis shows that recorded lectures are viewed to prepare for exams and assignments. The data suggests that students who do this have a significantly higher chance of passing the exams.

To further analyse the use of recorded lectures by students, the authors used a process of educational data mining. Educational data mining is the process of using large-scale educational data sets to better understand learning and to provide information about the learning process. The study found evidence that studying the recorded lectures during exam preparation increases the chances of passing the exam. However, the research was not able to determine whether the availability of recorded lectures changes the way students study or whether it improves their exam scores. This will require further research.

The third paper is, 'The use of e-books in New Zealand primary schools', by Katie Bainbridge and Brenda Chawner. This study examined the extent to which e-books are being used in New Zealand primary schools, what influences teachers to use them, and what obstacles prevent their use in this context.

The findings of the study show that survey respondents are very interested in using e-books, but only 30.3% (23) are actually using them. There is a negative correlation with their use to the number of computers available. Some of the main obstacles, besides lack of knowledge about them, include the extra time required to plan lessons around them, a lack of training on how to use them effectively in the class and a scarcity of material that is supportive of the curriculum and teaching goals including lesson plans. The main impediments to use identified by respondents were a lack of awareness of e-books and how to acquire them, the need for more training in using e-books, and the need for better quality materials which support the curriculum and include lesson plans. Further studies are needed to see how other countries attitudes are toward the use of this new technology.

The fourth paper is, 'Setting the stage for embodied activity: scientific discussion around a multitouch tabletop display' by Anne Marie Piper, Whitney Friedman and James D. Hollan. According to these authors, multitouch tabletop displays are a promising technology for supporting small group discussion and learning activities. Based on a view of human activity as multimodal, distributed, and embodied, these authors examine the pedagogical affordances of interactive tabletop technology, how it supports small group scientific discussion, and compares it with use of traditional paper-based study materials. These authors analysed video data from a five-week study involving 20 students from a university neuroscience course. Their analysis illustrates subtle, but important differences in how students exploit their hands, bodies, and environmental resources depending on the medium. The authors also discuss several characteristics of multitouch tabletop displays that make them particularly well-suited for supporting embodied conceptualisations during science learning.

The fifth paper is by Evangelos Kalampokis, Efthimios Tambouris, Maria Zotou and Konstantinos Tarabanis. In their paper, 'The enterprise architecture competence framework', these authors proposed an enterprise architecture (EA) competence framework (EA-CF) that provides a holistic view of EA competencies and overcomes existing limitations. The EA-CF enables interoperability with other generic competence frameworks and differentiates between three sectors (namely public sector, private sector and academia). EA-CF comprises a conceptual model that describes EA competencies as well as data (i.e., skills and knowledge) that populate the model.

There are three important outcomes of this research study that meet the authors' initial objectives. First, the results contribute to the literature by reviewing and synthesising prior, relevant works and presenting them in a structured manner. Second, the conceptual model of EA-CF enables interoperability between EA competence models and other generic competence frameworks as well as among EA competence models.

Third, the proposed framework also differentiates between three sectors, namely employees in both private and public sector and academia. These authors argue that the proposed list of EA competencies can contribute to the development of new and the improvement of existing EA training and education programmes, with the adaptation or the creation of new curricula and educational content and the implementation of competency-based learning strategies that foster the development of skills and attitudes. Future work towards this would include the implementation of specific cases in EA courses and training programmes where EA-CF will provide information regarding knowledge, skills and attitudes that are needed for the development of EA competencies. The implementation results gathered will serve in the accumulation of concrete data and the corresponding configuration of EA-CF in order to successfully underpin EA education and training. Another useful future approach would address the identification and thus the augmentation of the EA-CF with other competencies that should be taught in the EA domain along with the ones that are already part of the educational process in order to more holistically foster the development of future enterprise architects.

The last paper is, 'A qualitative assessment of providing quality electronically mediated feedback for students in higher education' by Dave Lees and Victoria Carpenter. The purpose of this paper is to provide an assessment of the feasibility of electronically mediated marking and feedback for students in higher education in order to improve the quality of the feedback given. This paper reports on the feasibility of providing feedback on written assignments by marking electronically using the comments function on Microsoft Word and also providing verbal feedback via use of a hand held digital voice recorder. The students (post graduate part-time business students) were surveyed as to their response to this feedback. The paper reports the feedback from both the tutor and the student perspective and examines the impact on the experience of both groups. The results were positively in favour of the use of audio feedback, but are different from results in other studies in that it is concluded that a combination of both typed and verbal feedback was preferred by the students.