

## EDITORIAL PREFACE

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The International Journal of Mobile and Blended Learning enters its seventh year of publication with this issue, which includes four research articles and a book review.

Topics covered in this issue range from podcasts and student created video, through measuring cognitive load in mobile learning, to a mobile game to support peer educators of marginalised groups in India. As always, the sheer variety of coverage in this issue, characteristic of the journal as a whole, underlines the breadth and richness of research into Mobile and Blended Learning.

Our opening article is “Mobile Game Based Learning: Can it Enhance Learning of Marginalized Peer Educators?” by Anupama Roy (affiliated to the University of Nottingham, UK, when the research was undertaken) and Mike Sharples of the Open University (U.K.) This article describes a project that used an SMS based game to enhance the training of peer educators of MSM (Males having Sex with Males) groups in India. The mobile learning system used in the study was an existing game, Day of the Figurines. The original game is a multiplayer pervasive game played using text messages on mobile phones and a game board with figurines. The game play was modified in this project, reducing the role of the board and figurines and focusing more on the mobile tools. The authors point out that the learning activities undertaken in the study do not themselves require a mobile solution. However the value of the SMS game was its provision of an ‘*unthreatening space*’.

The online environment provided a safe way to communicate and learn in a society where same sex behaviour is stigmatised.

The second article is “Complex Mobile Learning that Adapts to Learners’ Cognitive Load” by Robin Deegan of Cork Institute of Technology (Ireland.) This article examines mobile learning from several perspectives; learning, usability and cognitive load theory. The author explains that cognitive load theory (CLT) considers three different types of load; Intrinsic Cognitive Load (ICL), due to the inherent difficulty of the task, Extraneous Cognitive Load (ECL), due to distractions not directly related to the task, and Germane Cognitive Load (GCL), which results in changes to our long term memory due to the task. It is this latter type which directly relates to learning. Deegan’s article reports on an experiment involving 104 participants who attempted a series of 10 mathematical problems on line. The subjects were divided into four groups, and given different combinations of user interface (one of which emulated a mobile application) and levels of distraction. Cognitive load was measured using a 9 point Likert scale. The article concludes with some reflections on the desirable balance between the cognitive load components of a mobile learning application and the overall ease of use.

Article number three is “Questionable Benefit of Visual and Peer Mediated Learning on Overall Learning Outcomes of a First-year Physiology Course” by Hardy Ernst, William

McGahan and John Harrison from the University of Queensland (Australia.) The purpose of the study reported in this article was to explore the effects that assignment tasks involving visual literacy and peer sharing had on learning in the tertiary setting. The subjects of the study were students enrolled in a basic physiology course. The students were required to explain how a disruption in homeostasis leads to a certain disease state. One cohort was required to do this as a written assignment. Another, subsequent cohort was asked to do this by creating a video resource. Implicit in the study is that this would be a constructivist and collaborative approach to learning, using mobile devices. Previous literature in mobile and blended learning would suggest that such an approach would be expected to improve learning outcomes. However, in this particular study, this did not prove to be the case. The authors suggest a number of reasons why this may have happened. For example *'It may be the case that unfamiliarity with technical aspects of video editing, and a negative attitude toward the task, negated the potential benefits to topic understanding, which creative visual literacy within the task may have mediated.'* They also suggest that their results demonstrate the necessity for full student participation in the sharing process if peer mediated learning is to be successful. Another, broader issue which we face in our research field is that we may be enhancing certain aspects of learning with innovative approaches, but these aspects are not the ones being assessed, if our assessment methods are not evolving in tandem. Clearly there is room for much more research in this area.

The fourth and final research article in this issue is "Podcasting as a Mobile Learning Technology: A Study of iTunes U Learners" by Fernando Rosell-Aguilar of the Open University (U.K.) Podcasting has been around now for well

over a decade, but changing technologies and contexts of use render it still relevant from a mobile and blended learning research perspective. This article describes an online survey of iTunes U users, comparing the responses of those who used static devices to play the material with those who used mobile devices. The results show that mobile device users were in the majority, and there were some differences in the use of podcasts between the two groups. The author suggests that different perceptions and practices are based on whether the users are formal or informal learners. Whilst the author acknowledges a number of constraints and limitations in this particular study, it is nonetheless an important contribution to our understanding of the role of podcasts in education in general, and their relationship to mobile learning in particular.

This issue is rounded off with a book review, by Margarete Grimus of Technical University Graz (Austria), of "Mobile Learning: Languages, Literacies and Cultures" by Mark Pegrum, published by Palgrave Macmillan in July 2014. In her review, Grimus highly recommends the book, saying that it is *'an excellent resource and provides a comprehensible introduction for anyone interested in the field of education. It also is highly recommended for organizations and policymakers involved in planning new ways of teaching and learning.'*

As the International Journal of Mobile and Blended Learning has become more established, it is rewarding to see that this field of research continues to generate interesting and insightful articles. I hope you continue to benefit from the work that we publish throughout 2015.

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