

## EDITORIAL PREFACE

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This issue marks the beginning of the fifth year of publication for the International Journal of Mobile and Blended Learning, a period during which we have published 80 or so articles on mobile and blended learning from both leading and emerging researchers in the field. One of the mainstays of the journal throughout its development into the leading publication in its field has been its on-going relationship with the major mobile learning conferences, the Mobile and Contextual Learning conference series (mLearn) and IADIS Mobile Learning. From the 2012 IADIS conference, selected revised and extended papers are appearing across two issues, this one, and the following quarter (Volume 5, Number 2). Two of the papers included in this issue come from work originally presented at the conference, while the other two are regular papers. In this editorial I will confine myself to comments about the papers themselves. In the next issue, the conference chair and guest editor, Inmaculada Arnedillo-Sánchez, will be providing some reflections on the themes of the IADIS conference and the papers that have been developed from it.

The first paper in this issue is 'Conceptualising mLearning Literacy', by Wan Ng from the School of Education at the University of New South Wales. Digital literacies are seen as important enablers in the context of 21st century skills, and are therefore a fundamental component of contemporary education. Within this broader skill set, mLearning literacies are important to gaining benefits from mlearning

systems. Ng outlines the technical, cognitive and social-emotional components of mlearning literacy and considers both competencies and affective attributes. Central to these dimensions is critical literacy, which is needed to support meaning making in a world of digital resources. Ng concludes by suggesting that mLearning literacies are increasingly something that need to be fostered by educational institutions to help new generations of learners take advantage of mLearning resources.

Our second paper is 'A Methodology for Enhancing Mobile Learning through Content Semantics' by Glaroudis Dimitrios, Manitsaris Athanasios, and Kotini Isabella from the Department of Applied Informatics at the University of Macedonia. This paper concerns itself with tools to support the automated selection of appropriate learning materials for presentation on a mobile device. Whilst in the past there have been many tools that have enabled web content to be filtered in order to present it more effectively on the small screens of mobile devices, this work concerns itself not with the presentational aspects of the content but on its semantics. The authors describe the implementation of their system, indicating that the ability to mine content appropriately is to some extent dependent on the richness of the semantics of the underlying content, for example HTML files, which are inherently compatible with the semantic web, can be a richer source of semantic mining than PDF files. The authors suggest that by filtering content based on its semantics and relevance to the user, the sys-

tem improves learning material discovery and simplifies management, resulting in less effort and frustration for mobile learners.

The third paper, which is a revised and extended version of a paper first presented at the IADIS Mobile Learning Conference in 2012, is 'A Numerical Methods Course Based on B-Learning: Integrated Learning Design and Follow Up', by Francisco Javier Delgado Cepeda of the Physics and Mathematics department, Tecnológico de Monterrey, campus Estado de México, Mexico. This paper presents a blended learning (B-Learning) design for a Numerical Methods course for engineers, combining class, online and mobile activities to strengthen and to develop related abilities. This is a wide ranging and comprehensive paper, which embraces a number of tools within its blended learning strategy, and emphasises both problem based learning and project oriented learning, hence many of the tools described in the paper are very practical in their orientation, while the overall combination of tools encourages higher level skills of analysis and synthesis. This is the basis for the author's claims that 'overall the approach shows better results in high-level abilities when learning is based on technology.' Clearly this is something that reinforces the value of integrating technology into the suite of tools used for teaching and learning when aiming to develop both practical and higher level skills.

The final paper in this issue, which also comes from the 2012 IADIS conference, is 'Development of a Browser-Based Mobile Audience Response System for Large Classrooms', by Monika Andergassen, Victor Guerra, Karl Ledermüller, and Gustaf Neumann from Vienna University of Economics and Business. This paper addresses the on-going issue of how to best foster student interaction in the large

scale lecture. There have been a number of technical approaches to this problem such as dedicated hardware systems ('clickers') and various mobile phone based applications that use SMS. Unfortunately, as the authors point out, both of these types of solutions have their drawbacks, particularly financial ones. Therefore they have focused their own efforts on a web based system for supporting interaction during lectures. While the system described here is by no means unique in providing a web based interaction application for lecture halls, it is of interest from two perspectives. One is that it makes explicit a mechanism for defining the workflow of a particular interaction. The other is that it involves the real world modelling of wireless access to the system. The findings from this modelling are very insightful. Having been able to diagnose connectivity issues related to the physical environment, the authors are able to show that the technical infrastructure, something we often make assumptions about, can have a major impact on the participation of students in the learning process.

Taken together, the papers in this issue stress the close relationship between technology and learning. This relationship is founded on making sure that we have the appropriate technology, ensuring that learners have the appropriate digital skills to take full advantage of the technology, and providing them with the most appropriate context for the learning activities that they are undertaking. With this symbiotic relationship in place, we can promote mLearning literacies, give learning experiences that are appropriate and promote higher level skills, and engage learners in interactive learning processes.

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