

## Guest Editorial Preface

# Special Issue of Revised and Extended Papers from the 14th World Conference on Mobile and Contextual Learning

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The role that mobile technology can play in the enhancement of the learning experience cannot be overstated. Mobile technologies have started to make significant contributions to teaching and learning by providing personalised, contextual learning experiences.

Do you still remember the words: “Just in Case,” “Just in Time,” and “Just for Me”? There is no question that the developments in handheld devices over the past decade have exploded into a plethora of possibilities. Mobile phones, for example, have evolved from slow and bulky devices to smaller, sophisticated and ubiquitous smartphones. Contemporary mobile technologies now include various types and sizes of mobile devices, as well as complex and sophisticated systems, software and applications. In the past we categorised devices, and argued whether a laptop is a mobile device or not, but today technology that can fit in your pocket can open up a whole new world of (learning) opportunities. So, now we can really break down the physical barriers imposed on us by space and time and create an environment “Just for Me.”

Mobile learning emerged as a new concept towards the end of the previous millennium as educators started exploring the use of mobile technologies in teaching and learning environments. A few pilot projects emerged in the early 2000s, not only in developed countries but also in developing countries and rural settings. In recent years many projects assisted in the maturation of mobile learning, and much has already been done to integrate mobile learning into mainstream education. However, we believe that mobile learning is still in its infancy and we are merely seeing the tip of the iceberg.

The organisers of the fourteenth annual conference on mobile and contextual learning wanted to pay tribute to the developments that brought mobile learning from its infant steps in the early 2000s to more maturity in 2015, while simultaneously paving the way for the broad and open waters ahead with new developments and progress in mobile learning, and emerging ambient technologies, hence the conference theme of: “The mobile learning voyage: from small ripples to massive open waters.”

This special issue of the International Journal of Mobile and Blended Learning (IJMBL) contains four revised and extended papers (plus a closely related article) from the 14th World Conference on Mobile and Contextual Learning (mLearn 2015) held on a cruise ship called Splendour of the Seas, which departed on 17 October 2015 from Venice for a round trip in the Adriatic and Mediterranean waters and returned to Venice on 24 October 2015. This well-established conference series extends the theory and practice of learning and mobility in converging technological environments. It fulfils the

need for stimulating critical debate on and research into theories, approaches, principles, applications and the implementation of mobile learning.

The five papers in this special issue cover a range of aspects of mobile learning, from case studies in inquiry-based science learning, to the didactical principles applied in mobile learning to enhance learning, as well as discussions on supporting students in developing countries and in indigenous education. Each of these revised and extended papers has undergone full double blind peer review, prior to being selected for this special issue.

The first paper was not actually from mLearn 2015, but foreshadows the concerns of the keynote address of John Traxler at the mLearn 2016 conference in Sydney, concerning the role of education in identity transformation and acculturation, and we think it makes a great opener for this special issue. With his paper, *Learning with Mobiles in Developing Countries: Technology, Language & Literacy*, John addresses the challenges of mobile learning in developing countries and highlights one specific and fundamental component, namely the role of language and literacy as they interact with the mobile technology. He highlights the important point that culture, language and digital literacy plays a significant role in the success of (mobile) learning, especially in developing countries. John's contribution is a fitting reflection of his role as a long standing member and official of the International Association for Mobile Learning (IAmLearn), which is responsible for the mLearn conference series.

In *The Sense-it App: A Smartphone Sensor Toolkit for Citizen Inquiry Learning*, Mike Sharples, Maria Aristeidou, Eloy Villasclaras-Fernández, Christothea Herodotou and Eileen Scanlon describe the design and formative evaluation of a sensor toolkit for Android smartphones that supports inquiry-based science learning. Through their scientifically sound analysis it is revealed that the Sense-it toolkit can be adopted for engaging science investigations, though the practical issue of calibrating sensors on personal devices still needs to be addressed. As a past president of mLearn, it is again fitting that we should have a contribution from Mike Sharples in this special issue.

The advantages of having mobile technology to deliver educational curricula to remote and underserved Indigenous communities in the North of Canada is the topic under discussion by Siomonn Pulla. In his paper *Mobile Learning and Indigenous Education in Canada: A Synthesis of New Ways of Learning* he describes how mobile learning can be integrated successfully into a context of existing practices, beliefs, experiences, and values related to Indigenous epistemologies and pedagogies. He emphasizes the continuing need for culturally relevant teaching modalities that work for Indigenous learners, as well as the importance of linking formal and informal learning opportunities.

Kathryn MacCallum, Stephanie Day, David Skelton and Michael Verhaart explore how learning theories enhance and better support existing learning practices in their paper *Mobile affordances and learning theories in supporting and enhancing learning*. The exploration and adoption of appropriate pedagogies that enhance learning is crucial for the wider adoption of mobile learning. In their paper they examine, through three cases studies, how collaborative learning, connectivism and experiential learning were used to frame the use of the technology and how the various affordances of the technology were harnessed to enhance and better support existing learning practices.

The original conference version of the final paper in this special issue of the IJMBL, by Lydia Mbatia, was voted "Best Paper" at the Conference. In her paper *Creating Awareness around Rhizomatic Principles in mLearning: A Means to Improving Practice*, she explores the rhizomatic principles in mLearning practice. A literature review revealed that an understanding of the application of mLearning in facilitating the achievement of specific learning objectives, is still limited. The challenge for educators is to create learning environments based on sound didactical principles. The purpose of her study was to address this limitation through highlighting rhizomatic principles in mobile learning practice using an integrated research synthesis.

As the official journal of the International Association for Mobile Learning (IAmLearn), which is the custodian of the mLearn conference series, IJMBL is proud to bring you this special issue. We hope that reading these high quality papers will inspire you to make your own submissions to

future mLearn conferences, and to support the mobile learning research community by becoming a member of IAmLearn.

May these contributions pave the way for the broad and open waters ahead with all the new developments in mobile devices and learning, and break down the physical barriers imposed on us by space and time to create a special teaching and learning environment “Just for Us!”

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*IJMBL*