## **Editorial Preface**

## Editorial Preface for the International Journal of Mobile and Blended Learning (IJMBL)

David Parsons, The Mind Lab, Auckland, New Zealand Kathryn MacCallum, University of Canterbury, Christchurch, New Zealand

Welcome to our second issue of the International Journal of Mobile and Blended Learning for 2020 (volume 12, issue 2). We have five articles in this issue by authors from China, the Middle East and the United States, covering a broad set of topics including game design, outdoor science learning, interactive courseware for blended learning and mobile apps for in-class learning.

Our first article in this issue is "Applying a Developmental Lens to Educational Game Design for Preschoolers" by Melissa Callaghan of Harvard University Graduate School of Education, USA, and Stephanie Reich of the University of California, USA. This article focuses on the relationship between educational game design and child development, since digital educational games should be tailored to capitalize on young children's learning capabilities. The authors provide a synthesis of the literature that connects features of digital educational game design to how young children learn. They connect learning and developmental science research to game design, offering insights into how best to design educational games for young users and how to select developmentally appropriate games for children.

Our second article is "Relationship between Use of an Online Courseware and Achievement in a Developmental Writing Course" by four researchers from Pearson in Boston, USA; Christine Leow, Yun Jin Rho, Ross Metusalem and Sara Kasper. Focusing on blended learning, this article looks at how systems can support student learning outside of class time. In this study, interactive, digital courseware was used for a developmental writing course at California State University. The impact of the courseware was evaluated through the contribution of its usage to student achievement, as measured by the results of a final written exam. These results indicated that the number of writing topics completed by students in the courseware was positively related to their exam scores, suggesting that interactive online courseware can be supportive of learning outside of class.

Article three is "Systematic Review of Outdoor Science Learning Activities with Integration of Mobile Devices" by Trina Kilty and Andrea Burrows of the University of Wyoming, USA. Learning outdoors with mobile devices has long been one of the most consistent themes in mobile learning, and the links to science learning in outdoor environments are naturally strong. This article looks at the literature around this powerful learning context, noting the key themes of science knowledge gain, affective domain gain, and scientific inquiry. Key components of scientific inquiry were noted, along with the benefits of integrating mobile devices for scientific inquiry skill development.

The fourth article in this issue is "Using Plickers in Formative Assessment to Augment Student Learning" by Zuhrieh Shana of Al Ain University of Science and Technology, Abu Dhabi, and Sara Abd Al Baki, of ABC Private School, Abu Dhabi. Student response systems of various types have long been used in the classroom, ranging from dedicated clicker devices to apps that run on mobile phones. Plickers are a response system that fall somewhere between the two but have the advantage, from an accessibility perspective, of not requiring students to have their own devices, using printed codes that can be read by a teacher's mobile device. The research reported in this article looked at the effectiveness of formative assessment using Plickers, compared to the use of a revision sheet for

the same purpose. The results indicated that both formative assessment tools helped improve student progress but the Plickers app had a greater positive impact than the revision sheet. The researchers concluded that continuous usage of Plickers in classes can help promote positive students' perception, improve performance and reduce gaps between high and low achievers.

Our final article is "Acceptance and effectiveness of Rain Classroom in linguistics classes" by Zhonggen Yu and Han Yi of Beijing Language and Culture University, China. Rain Classroom is a mobile learning app developed in China that can be accessed through the popular WeChat messaging app. In this article, the authors report on a questionnaire and interview base study that adopted a variant of the Technology Acceptance Model (TAM) as its analytical framework. The study indicates that Rain Classroom possesses significantly higher acceptance than traditional multimedia projecting systems and, in this particular study context, contributed to significantly higher linguistics knowledge gain.

We hope you enjoy the articles in this issue and continue to find the work published in IJMBL valuable and informative.

David Parsons and Kathryn MacCallum Editors-in-Chief, IJMBL