

## Special Issue on Mobile Learning

Darren IWAMOTO, Ed.D., LMHC  
Chaminade University of Honolulu  
Honolulu, HI USA

Welcome to this special issue of GLOKALde, the official e-Journal of Udeewana (United Distance Education for Eastern Europe Western Asia Northern Africa) on mobile learning. Mobile technologies have increasingly gained popularity over the past few decades. In the late 1980's to early 1990's, personal digital assistants (PDAs) became mainstreamed and that generated excitement about the potential for mobile technology. Fast forward to the 21st century and mobile phone technology overtook PDAs and introduced us to the smartphone and a new way of obtaining information from the World Wide Web.

As technology advances our concept of teaching and learning can evolve. Learning is no longer focused on the possession of information, but rather, an emphasis on the ability to integrate and analyze information (Wen-Chun & Yeng-Hong, 2016). Classroom instruction now cultivates a student's ability to collect, analyze, and apply information to create new knowledge. Because of mobile technologies, students have the ability to learn without being restricted to time and place (Wen-Chun & Yeng-Hong, 2016). This lack of restriction opens the door to the concept of mobile learning (Poon, et al., 2012).

Popularity of mobile learning is growing in primary, secondary, and tertiary classrooms. Yet, it is a relatively new field that still lacks well-developed learning theories and evaluation methodologies (Traxler, 2007; Hargis, Cavanaugh, Kamali, & Soto, 2014). As educators, we are tasked with introducing new technologies, but we also have the responsibility of ensuring that these new technologies "can be integrated into effective, evidence-driven, innovative practices, so that the learner is empowered and enriched by the learning experience" (Melhuish & Falloon, 2010, p. 13).

This special issue on mobile learning brings together significant empirical research that investigates the effectiveness of mobile learning initiatives in higher education classrooms. These articles represent a diverse interdisciplinary approach to innovative mobile learning pedagogy/andragogy. The catalyst for generating scholarship of teaching and learning on the topic of Mobile Learning was due to a university initiative, where faculty applied to be part of a cohort on mobile learning.

The proposals were reviewed and ten faculty selected to receive iPad mini tablets, and associated development on their use and more importantly appropriate pedagogical methods on how to engage students.

The purpose of initiative was to provide faculty with the resources, information, and collaborative support needed to explore the possible advantages of integrating mobile learning devices in and beyond the formal learning environment.

The Center for Teaching and Learning invited faculty to apply for Mobile Learning pilot integrating an iPad tablet in appropriate, relevant and meaningful (ARM) ways. The primary outcome is to increase student engagement. Faculty committed to submitting a Scholarship of Teaching and Learning (Boyer, 1990) manuscript on how integrating an iPad in their discipline affected student engagement.

To receive an iPad Air 3 teaching tool, participants were required to attend all active, hands-on studios; integrate the iPad into their current learning experiences, and collect data on effectiveness of teaching and learning.

### **THE APPLICATION PROCESS**

Applications underwent a double-blind peer review process. Preference was given to applications who presented specific educational outcomes, procedures and time lines, a philosophy of assessment, and a method for sharing the results. The following questions were included in the application:

- ✓ Would you be able to integrate an iPad in your courses this summer or fall?
- ✓ Provide a brief brainstorm of ideas that you would hope to address with an iPad (100 words maximum).
- ✓ Reflect on the courses you intend to enhance with an iPad and identify what you perceive as assets for integrating in these courses (100 words maximum)?
- ✓ What do you see as challenges for integrating an iPad in these courses (100 words maximum)?
- ✓ Describe the specific areas that are most important for you to enhance with an iPad. (100 words maximum).
- ✓ How will you know if an iPad has enhanced your teaching and student engagement (100 words maximum)?
- ✓ How will you evaluate the impact of integrating an iPad? (100 words maximum).
- ✓ Briefly share your prior experience with an iPad (or iPhone) (100 words maximum).

All iPads will be equipped with productivity apps, such as Pages, Keynote, Numbers, iMovie, iPhoto, Neu annotate + PDF, Explain Everything, Creative Book Builder, NearPod Student, iBooks, Dropbox, iTunes U, Evernote, Edmodo, Wolfram Alpha and Mobilenoter.

In addition to increasing student engagement, there were several faculty development goals for this mobile learning project, which included:

- Achieving individualized student learning consistent with "Post PC Era" trends;
- Aligning with effective backward design course model; and

- **Enhancing opportunities for cross-institutional collaboration between faculty members.**

The conceptual framework that will guide our aspirations is Puentedura's SAMR model (2012) because it describes the stages that an institution might experience on the path to redefining how it approaches education. The four steps of SAMR include:

- **Substitution: Technology acts as a direct tool substitute, with no functional change.**
- **Augmentation: Technology acts as a direct tool substitute with functional improvement.**
- **Modification: Technology allows for significant task redesign.**
- **Redefinition: Technology allows for the creation of new tasks, previously inconceivable.**

## **ARTICLE SUMMARY**

The first article, written by Dr. Janet Davidson and Dr. Jace Hargis, looks at the use of mobile learning, specifically Twitter and Kahoot, and its effects on student engagement. A major outcome from this study is a renewed perspective on determining the best measure of student engagement in a digital age and how to move beyond our traditional methods of assessment. The second article was written by Dr. Katrina Roseler and she reports on the impact that the open source learning management system (LMS) and Google Drive has on student engagement in science education investigations.

From this study, the author plans to modify current instructional practices to further support student engagement in future iterations of this course. The third article was written by Dr. Elizabeth Park and her study focuses on student engagement in online learning. This study found that student engagement with the course contents and peers were higher when the inquiry topic was relevant and meaningful to the pre-service teachers. The fourth article was written by Dr. Brooke Carlson and his focus was on moving critical thinking, writing, editing, and representation of literature into the digital realm. Subsequently, the study found that Twitter strengthens critical thinking and pushes students to think critically outside of the classroom.

The fifth article was written by Dr. Junghwa Suh and she explores ways to use social-networking mobile applications to expand learning outside of the classroom. The author confirmed that integrating mobile application as a learning tool may allow students to think, analyze and apply ideas beyond the classroom. These five scholarly articles exemplify key areas where mobile learning can positively impact curriculum development and the introduction of alternate student-focused pedagogy.

Although each of these articles could have been published separately, we felt that presenting them together in this special issue provides a benefit to GLOKALde's readership by providing consistent language, goals, and outcomes. We also felt

that this collection of articles provides a sample of the many possibilities mobile learning has on student engagement and academic performance.

#### **BIODATA and CONTACT ADDRESSES of the AUTHOR**



**Dr. Darren IWAMOTO** is an Assist. Professor of psychology at Chaminade University where he teaches undergraduate psychology and graduate counseling courses. Previously, Dr. Iwamoto spent 11 years working with high-risk adolescents and their families in various community mental health settings. Dr. Iwamoto is a licensed mental health counselor and a nationally certified counselor.

Dr. Iwamoto's publications are focused on active learning strategies, mobile learning, and social-emotional competency. He is presently involved in research pertaining to self-regulated learning and the relationship between social-emotional competency and various aspects of the learning process.

Darren IWAMOTO, Ed.D., LMHC  
Assistant Professor of Psychology  
Clinical Director, School Counseling  
Chaminade University of Honolulu  
3140 Waiālae Avenue  
Honolulu, HI 96816 USA  
Email: [diwamoto@chaminade.edu](mailto:diwamoto@chaminade.edu)

#### **REFERENCES**

Boyer, E. (1990). *Scholarship reconsidered: Priorities for the professoriate*. Princeton, NJ: The Carnegie Foundation for the Advancement of Teaching.

Hargis, J., Cavanaugh, C., Kamali, T., & Soto, M. (2014). A federal higher education iPad mobile learning initiative: Triangulation of data to determine early effectiveness. *Innovative Higher Education, 39*(1), 45-58.

Melhuish, K. & Falloon, G. (2010). Looking to the future: M-learning with the iPad. *Computers in New Zealand Schools, 22*(3), 1-16.

Poon, C. L., Lee, Y. J., Tan, A. L., & Lim, S. S. L. (2012). Knowing inquiry as practice and theory: Developing a pedagogical framework with elementary school teachers. *Research in Science Education, 42*, 303-327.

Puentedura, R. R. (2006). *Transformation, Technology, and Education*. Retrieved from <http://hippasus.com> on August 1, 2016.

Traxler, J. (2007). Defining, Discussing and Evaluating Mobile Learning: The moving finger writes and having write . . . . *The International Review Of*

**Research In Open And Distributed Learning, 8(2).** Retrieved from  
<http://www.irrodl.org/index.php/irrodl/article/view/346/875>

**Wen-Chun Wu, & Yeng-Hong Perng. (2016).** Research on the correlations among mobile learning perception, study habits, and continuous learning. *Eurasia Journal of Mathematics, Science & Technology Education, 12(6)*, 1665-1673.  
doi:10.12973/eurasia.2016.1556a