# Chapter 109 Towards a Mobile Learning Pedagogy

**Scott E. Hamm** Abilene Christian University, USA

Jason Drysdale University of Colorado Denver, USA

> **Diana Moore** New England College, USA

## ABSTRACT

Mobile devices provide information access all the time and everywhere. The manner in which we access data has become a fulcrum of our social, vocational, and educational ethos. The developing mediums by which information is engaged are establishing themselves as a pervasive part of our ecology. People expect to be able to perform life tasks-work, study, and play-all the time and everywhere. This reality is transforming education and a 21st century pedagogy is emerging which necessitates a research-informed approach to the integration of theory and praxis. As mobility affords new and exciting ways to engender informal learning within the academy, we will explore an evidence-based pedagogy that augments, extends, and constructs learning as a result of mobility's affordances.

### INTRODUCTION

The terms and tools of higher education are in transition. Words long associated with the discipline are taking on new meaning. "Tablet" once represented lined paper bound with an unidentified gummy substance and stored under our desk along with a host of other educational tools. Phones were certainly not smart and usually sat on the teacher's desk or were affixed to the wall, and off limits to students. Now these words conjure up different images, new possibilities, and have become affixed in the social and educational ethos of our day. As smart phones, tablets, and other technologies become "a normative tool of global culture" (Hamm, Saltsman, Jones, Baldridge, & Perkins, 2013) the ways we administrate and integrate them within higher education have wide-reaching implications.

The introduction of new technology has always impacted culture, particularly education.

DOI: 10.4018/978-1-4666-8200-9.ch109

In March of 2012, Encyclopedia Britannica announced a discontinuation of the print version of the reference book bowing to free Internet resources and competition from now 11 year-old reference site Wikipedia (Pepitone, 2012). While the site's academic rigor is debated there is little debate that people find it useful as evidenced by 470 million new visitors per month (Wikimedia) and the resulting fiscal impact on Britannica's business model.

Students are increasingly tethered to their technology (Rideout, Foehr, & Roberts, 2010). Part of this "tethering" is the sense of connectivity that teens and young adults are constantly fostering in their desire to belong. A Pew Research Center study found that one in three teens sends more than 100 text messages a day, with at least 70% of 17 year olds texting daily (Lenhart et al., 2010). These "digital natives" were born with technology, are comfortable with it, and have high expectations regarding its presence and use in the classroom.

It is predicted that by 2016, 100% of K-12 students will use mobile handheld devices for education (EdTech, 2012). In 2012, the ECAR Study of Undergraduate Students and Information Technology reported that 62% (up from 55% in 2011) of students own a smartphone. This number is up from 55% in 2011. Almost twice as many students reported using it for academic purposes in 2012 (67%) than in 2011 (37%) (Dahlstrom, 2012). Smartphones give educators a natural portal into the lives of students. They increase learner engagement by extending the experience beyond the classroom; they allow students to stay in near constant connection with faculty and classmates; and they allow students to integrate learning within the context of their daily life.

We have all been in a restaurant or waiting area witnessing the rapt attention of a teenager with their device, barely noticing the world around them as thumbs rapidly poke the screen. Educators fear the loss of control and the challenges of bringing devices into the classroom. Market saturation and global habits, student preferences for engagement with technology, and educational affordances necessitate a strategic, evidence-based approach to a mobile pedagogy.

This chapter begins with a cadence similar to other approaches addressing mobile learning and education by examining the definitions, frameworks, and theory to appropriately situate the conversation. In doing so, the scholarship which precedes and informs the conversation is recognized. An exploration of the liminal space that mobile learning currently occupies examines some of the tensions between institutional and informal learning by gently challenging the "solid ground of education as transmission or construction of knowledge within the constraints set by a curriculum" (Sharples, Taylor, & Vavoula, 2007). Mobility affords new and exciting ways to engender informal and formal learning within the academy. In this chapter, current trends will be examined, a framework suggested, Abilene Christian University's mobile learning program will be examined, and evidence-based pedagogies and games-based will be examined. Finally, suggestions for further consideration, research implications and concluding remarks will close the chapter.

## BACKGROUND: MOBILE LEARNING AS MOBILE LIVING

In 2007, the iPhone was introduced as "a widescreen iPod, a phone, and an internet communicator" (Wong, 2007). The introduction of the iPhone was a convergence of entertainment, a legacy technology, and access to the Internet in a form that was highly mobile. These "mobile devices have fundamentally changed the relationship between information, time and space. Information is now portable, participatory, and personal" (Purcell, 2012). The user affordances of the smartphone have brought new capabilities to higher education reminiscent of Johann Gutenberg's printing press. 17 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/chapter/towards-a-mobile-learning-pedagogy/126165

## **Related Content**

#### Ecosystem Science Learning via Multi-User Virtual Environments

Shari Metcalf, Amy Kamarainen, M. Shane Tutwiler, Tina Grotzerand Chris Dede (2011). *International Journal of Gaming and Computer-Mediated Simulations (pp. 86-90).* www.irma-international.org/article/ecosystem-science-learning-via-multi/53156

#### An ARM Framework for F2P Mobile Games

Marisardo Bezerra de Medeiros Filho, Farley Fernandes, Felipe Matheus Caladoand André Menezes Marques Neves (2023). *Research Anthology on Game Design, Development, Usage, and Social Impact (pp. 286-306).* 

www.irma-international.org/chapter/an-arm-framework-for-f2p-mobile-games/315492

#### Research on Visual Art Design Method Based on Virtual Reality

Peng Li (2021). International Journal of Gaming and Computer-Mediated Simulations (pp. 1-10). www.irma-international.org/article/research-on-visual-art-design-method-based-on-virtual-reality/279053

#### How Interventions Might Improve Cognition in Healthy Older Adults

Elizabeth M. Zelinski (2013). International Journal of Gaming and Computer-Mediated Simulations (pp. 72-82).

www.irma-international.org/article/how-interventions-might-improve-cognition-in-healthy-older-adults/93029

#### **Executive Functions in Digital Games**

Elizabeth Boyle, Melody M. Terras, Judith Ramsayand James M. E. Boyle (2014). *Psychology, Pedagogy, and Assessment in Serious Games (pp. 19-46).* 

www.irma-international.org/chapter/executive-functions-in-digital-games/90516