Chapter 10

iPad Usage and Appropriate Applications: K–12 Classroom with a 1–to–1 iPad Initiative

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ABSTRACT

Mobile learning, learning delivered or accompanied by any handheld or individual device that contributes to increasing knowledge or skills, has continuously become popular in educational systems in the 21st century. Apple’s iPad has been a popular mobile device that has been chosen for use in 1-to-1 learning environments. Research suggests that utilizing iPads in educational settings is beneficial due to its affordance, portability, ubiquitous access to information, ability to communicate with other iPad users, and the opportunity it offers to showcase creativity and individuality through various applications. Studies have found value in providing students with their own iPads. This chapter overviews both the benefits and concerns of iPad usage in K-12 classrooms. Furthermore, specific web and iPad applications are discussed. When educators take appropriate steps to create a controlled learning environment, concerns and limitations regarding mobile learning with an iPad can be diminished.

INTRODUCTION

Today’s educators consistently face the needs and challenges of embedding appropriate pedagogical and technological opportunities into curriculum and instruction (Purcell, Heaps, Buchanan, & Friedrich, 2013). However, every design of an educational system or adaptation of learning theory comes with predicaments, advantages, and disadvantages. In order to maximize learning, how to respond to the unique and diverse needs of current student populations has been a critical issue for every educational institute.

DOI: 10.4018/978-1-5225-0507-5.ch010
Twenty-first century learners are used to learning through collaborative and social means with peers, in addition to consistent use of technology (Murray & Olcese, 2011). This transition in learning aligns with the National Educational Technology Standards (NETS) for teachers and students published by the International Society for Technology in Education (ISTE) in 2008. The NETS for teachers suggest that educators must succeed in accomplishing the following: “facilitate and inspire student learning and creativity, design and develop digital age learning experiences and assessments, model digital age work and learning, promote and model digital citizenship and responsibility, and engage in professional growth and leadership” (International Society for Technology Education, 2008b). When teachers adhere to these, students are able to accomplish the NETS for Students that promote creativity, innovation, communication, critical thinking, and the use of technology systems (International Society for Technology Education, 2008a).

In addition to the ISTE Standards, the American Association of School Librarians (AASL) have published Standards for the 21st Century Learner that also promote critical thinking, and creating and sharing new knowledge, while pursuing personal and aesthetic growth (American Library Association, 2007). The AASL Standards acknowledge the importance of technology skills in learning and future employment. Students of the new generation must be able to share and learn from each other from face-to-face and technology modes. Along with the newly embedded Common Core State Standards emphasizing digital literacy and technology pedagogy (Dalton, 2012), it is vital for educators to implement the appropriate technologies into the classroom that enhance student learning while promoting creativity, collaboration, and critical thinking. In response to this, learning in schooling systems has slowly shifted to the practice of mobile learning. Amongst all the mobile technologies, Apple’s iPad is the most prevalent. Many applications are available to teachers and students in order to enhance learning.

The purpose of this chapter is to expand the current research regarding implementation of iPads into K-12 classrooms, aiming to seek a continuity in blended learning, connecting brick-and-mortar schools to virtual learning environments. Specific objectives of the chapter include the following:

1. **Mobile Learning:** Defining and describing the emergence of mobile learning and what role mobile technology plays in blended learning.
2. **Benefits of the iPad:** Describing overall advantages of using the iPad and benefits related to its specific practices in K-12 classrooms.
3. **Teacher Usage:** Listing various iPad applications and describing their usages that benefit teacher instruction.
4. **Student Usage:** Listing various iPad applications and describing their usages that benefit student learning.
5. **Concerns and Solutions:** Describing overall concerns that may exist among educators and school districts regarding a 1-to-1 iPad environment, and providing suggestions on how to combat these concerns.

**BACKGROUND: THE EMERGENCE OF MOBILE LEARNING**

In the blended learning environment, two separate learning platforms, face-to-face and online components, are merged together in the hope to benefit diverse learners (Agosto, Copeland, & Zach, 2013; Graham, 2006). Traditional face-to-face learning provides students with significant social benefits and immediate