Chapter 11
Planning for and Managing iPads in a PreK–4th Grade Independent, Co-Educational Elementary School

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ABSTRACT

This chapter chronicles the planning and classroom management practices of the first-year implementation of a 1:1 iPad initiative in a suburban, co-educational, independent, PreK-4th grade elementary school in the United States that was examined through a mixed methods QUAL → QUAN case study. Findings demonstrate that the school's administrators and teachers engaged in pre-planning activities prior to the implementation of the iPad initiative, teachers viewed the iPads as tools in the planning process (iPads were not perceived as the content or subject to be taught/learned), and teachers flexibly employed different classroom management techniques and rules as they learned to integrate iPads in their classrooms. Additionally, the findings reveal the need for continuous formal and informal professional development that offers teachers multiple and varied opportunities to share their planning and classroom management practices, build their confidence and expertise in effective integration of iPads, and learn with and from one another.

INTRODUCTION

Since its 2010 release, the iPad, a form of tablet computer, has become increasingly popular with consumers of all ages in large part due to its ease of use, portability, and low cost when compared to laptops. Schools all over the world have been investing in these devices, many seeking to realize one-to-one (1:1) initiatives to provide technology-immersed teaching and learning anytime, anywhere consisting of a "robust access ratio of one computer to one student" (Bebell & O'Dwyer,

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2010, p.6). Two other defining aspects of 1:1 computing initiatives involve enabling students to access the Internet and using computing devices to complete academic tasks (Penuel, 2006). These factors make it possible for students and teachers in schools to transition from occasional, supplemental uses of technologies for instruction and learning, to more frequent uses, fostering access to an increased array of resources, support for student-centered learning, communication, and technological literacy.

Although research examining iPads in P-12 schools is in its infancy, there is an established research base from which to build that examines the use of laptops, tablet computers, and other handheld technologies (which can include mobile devices or personal digital assistants, also known as PDAs). Research has revealed the benefits of ubiquitous access to computers in the classroom such as providing opportunities for teachers and students to build technology literacy skills, access and use a large array of resources, communicate, collaborate, and interact with each other in increasingly constructivist learning and teaching environments (Bebell & O'Dwyer, 2010; Gulek & Demirtas, 2005; Penuel, 2006); improved research analysis skills, problem solving and critical thinking skills, increased student engagement, motivation to work independently, and class participation and interaction with others (Lei & Zhao, 2008). Thus, a resulting question is whether portability realizes additional benefits.

Portable computing devices foster myriad opportunities for teachers to provide flexible access to computers in that they can organize activities requiring a 1:1 ratio at any time, and they can respond immediately to learning opportunities where a computing device would be valuable (Newhouse, 2008). There has been heightened media interest in the use of the iPad to improve the reading, writing, and content-area skills of students in P-12 general education classrooms (Bebell, Dorris, & Muir, 2012; Kennedy, 2011; Pierce, 2011; Quillen, 2011), develop the language skills and augment the vocabularies of English language learners (Demski, 2011), and help children with special needs communicate and learn in ways they previously could not (Herbert, 2010; Shah, 2011). Administrators and teachers alike have high hopes for iPads to help them differentiate instruction to address individual students' needs (Bestwick & Campbell, 2010; Engel, 2011) and boost students' test scores (Takahashi, 2011); however, research has yet to catch up to substantiate or refute these claims.

Projections of exponential growth in numbers and use of mobile devices, such as tablet computers, in classrooms (Johnson, Adams, & Cummins, 2012; Wainwright, 2013) suggest a pressing need to understand the associated planning and classroom management involved in using these devices with a pedagogical purpose. This chapter presents a case study chronicling the planning and classroom management practices of teachers who implemented a 1:1 iPad initiative in a suburban, independent, co-educational PreK-4th grade school in the United States.

BACKGROUND

Technological innovations and initiatives have a history of complexity and implementation difficulties either because the technology was unusable by teachers, the school lacked a comprehensive plan to implement it well, or the culture of the school was not supportive of the adoption (Penuel, 2006). Successful 1:1 computing initiatives are those that take a holistic approach including, but not limited to leadership and commitment; thorough and long-term planning; technology-infused curricula designed to be current, relevant, and engaging; and ongoing and embedded professional development (Learning Cultures Consulting Inc., 2006).

Thorough and long-term planning should be a studied and organized process with the development of a time line from initial planning to implementation, including when the initiative will