Chapter 2

Mobile Technology Integration and English Language Learners: A Case Study

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ABSTRACT

The purpose of this chapter is to report a case study examining the benefits and challenges of iPad use to help ELLs develop language proficiency. Based on the differentiated instruction framework, the author integrated iPads into a grade 4-5 ELL classroom and investigated learning impacts through classroom observations and interviews with the teacher and students. The findings of the study presented that iPad integration helped make learning engaging, provided various options appropriate for learners’ needs, and promoted learning outside of the classroom. Although important learning benefits were observed, several challenges were also reported such as a lack of appropriate ELL educational apps, a limitation of multitasking, and difficulties of monitoring students’ learning progresses.

INTRODUCTION

Classroom teachers across the United States are dealing with an increasing number of English language learners (ELLs) in their classes. From 1997 to 2008, the number of ELLs in K-12 schools increased by 51%, while general student enrollment increased by only 7.2% (The National Clearinghouse for English Language Acquisition, 2011). These ELLs share a wide variety of linguistic, educational, and cultural backgrounds. Some students have a strong academic background (e.g. high level math or science ability), while some have never been in school, significantly lacking background knowledge necessary for academic learning (Echevarria, Vogt, & Short, 2008). This indicates a strong need to provide differentiated instruction for ELLs in classrooms to meet the needs of diverse learners.

Differentiated instruction is defined as “using strategies that address student strengths, interest, skills, and readiness in flexible learning environments” (Hoover & Patton, 2005, p. 232). The language skills and content knowledge of ELLs vary widely, and the time required for these students to acquire new

skills differs. Thus, teachers need to customize instruction based on their students’ unique needs. This means teachers need to choose tasks that match their students’ readiness and create different levels of expectations for task completion, ensuring all learners successfully master what is expected of them (Tomlinson, 2001; Werderich, 2002). One way to differentiate instruction according to students’ needs and readiness is to use mobile technology such as iPads or smartphones. Thousands of free or low cost educational apps are available, and these apps can be effectively used for ELLs to improve their English proficiency (Pilgrim, Bledsoe, & Reily, 2012).

The purpose of this chapter is to report a case study examining the benefits and challenges of iPad use to help ELLs develop language proficiency. Based on the differentiated instruction framework, the author integrated iPads into a grade 4-5 ELL summer class and investigated the impacts and challenges of iPad integration through classroom observations and interviews with the teacher and students.

LITERATURE REVIEW

ELLs Teaching Principles

Virtually all schools in the U.S. have ELLs with unique learning needs, and a new policy change requires all teachers to be well prepared to effectively teach ELLs (Turkan, de Oliveira, Lee & Phelps, 2014). To help teach these students, scholars have suggested a fundamental knowledge base and various strategies to teach ELLs. Lucas, Villegas, and Freedson-Gonzalez (2008) presented six second language learning principles that are highly relevant to teachers of ELLs. The first principle is to understand the differences between conversational language proficiency and academic language proficiency. Some ELLs may be able to demonstrate high-level conversational language fluency because they can derive meanings not only from the word itself but also other contextual cues (e.g. facial expressions and gestures) during an informal conversation. However, academic language proficiency heavily relies on the language itself and understanding the language becomes more technical and abstract. Lucas, Villegas, and Freedson-Gonzalez (2008) claimed that, “second language learners develop conversational proficiency within 2 years of initial exposure to the language, but they need 5 to 7 years to develop academic language proficiency comparable to that of a native speaker of the same age” (p. 363).

The second principle is to understand how to assist ELLs with language input and output. According to Krashen (1982), in order to lead new learning, the quality and nature of the language input must both be considered. That means ELLs should have the appropriate access to comprehensible input that is just beyond their current knowledge of academic content and language level. Providing multiple speaking opportunities is also important. ELLs must be encouraged to produce meaningful output by engaging in various speaking situations.

Understanding the importance of social interaction (Vygotsky, 1978) is the third principle. When ELLs have direct and frequent interactions with students who are fluent in the language, they are exposed to more language and have more opportunities to produce meaningful output.

The fourth principle is related to understanding the roles of ELL’s first language ability (Karathanos, 2009). Researchers have claimed that the literacy skills that ELLs develop while learning their first language transfer to second language acquisition; in order to appropriately assist ELLs, teachers should...