Chapter 23

Affordances and Challenges of Using iPods to Support Learning by English Language Learners at the Middle School Level

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ABSTRACT

While mobile devices have become very popular for communication and entertainment, there is a lack of research about how these devices can contribute in educational settings. This chapter describes an effort to use iPod touch devices as a teaching tool in middle school English Language Learner classes. The authors explore the affordances of the iPod touch as well as the challenges of implementing an iPod based project so as to gain a better understanding of the potentials offered by mobile devices for learning purposes. The authors report in this chapter their research from the perspective of the teachers and the instructional technologist involved with this project, and then discuss future plans based upon the findings.

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INTRODUCTION

With the growing availability of mobile devices, educators are increasingly interested in examining the learning benefits that mobile devices can offer to students, in and out of the classrooms, for information access, communication, and collaboration, as well as creating multimedia products.

The goal of this chapter is to describe a mobile learning project and discuss the affordances and challenges in implementing iPod devices with English Language Learners (ELL) at two middle schools. In this context affordance refers to a property of an object in the environment that suggests a particular type of action through the way it is designed (Bishop, 2007; Gibson, 1986; Norman, 1999).

This mobile learning project took place in a medium-sized school district in south central Texas, U.S.A with a 2010 enrollment of about 17,000 students in grades K-12 and covering an area of about 600 square miles. In the district, Spanish is the primary language spoken at home for about 90% of ELL students, while the remaining ELL students speak a variety of other languages at home. In September 2009, the district purchased enough iPod touch devices for every ELL student in grades 6 to 8 so each ELL student can have his or her own device. This mobile initiative was district-wide and all middle schools were required to use the iPods in ELL classes and as a support tool for content classes. The iPod touches were distributed to approximately 100 students across all five middle schools in the district. The implementation team consisted of five teachers, the district instructional technologist, and the district bilingual/ELL coordinator. The goal of this iPod project was to provide ELL students with resources to boost their English language proficiency and provide additional support for their content area classes. In 2010, two teachers were selected for this study for having integrated the iPods in their classes during the prior year. To assess the affordances and challenges of using iPods, the school district collaborated with the university researchers to conduct classroom-based research.

The aim of this study is to investigate the use of mobile devices in an educational setting. While there is considerable enthusiasm for using mobile devices in education, little is known about whether such devices can facilitate learning for ELL students. ELL students represent distinct academic challenges in language acquisition. They often enter schools with different levels of English proficiency because of varying degrees of exposure to the English language. Helping ELL students succeed in regular classrooms often presents unique challenges. We take an in-depth look at how two ELL teachers use iPods in their teaching during the 2010-2011 school year.

Multiple interviews with the teachers who implemented this project and reflections from the instructional technologist who provide support to these teachers are the main data sources for this chapter. The researchers worked closely with the two teachers, their respective schools, and the district instructional technologist (who is also a member of the research team). The close collaborative effort provided a first-hand perspective on how the teachers and their students use the iPods in teaching and learning.

BACKGROUND

Mobile Technology Affordances

Literature has indicated that mobile technology provides educators a unique combination of affordances unparalleled by other classroom technology such as desktop computers and interactive whiteboards (Sharples, 2000). The key word in the term mobile devices is “mobile.” Students can use the devices at the mall or on the bus, giving them the flexibility to learn anywhere and anytime, both in and out of school (Peng, Su, Chou,
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