Chapter 79

Post–Secondary Students Using the iPad to Learn English: An Impact Study

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ABSTRACT

The use of mobile technology in language learning has increased considerably, with an unprecedented adoption of mobile tablets in K-12 and higher education settings. Despite the number of recent small-scale studies that have found increased student motivation and engagement in learning as a result of using mobile tablets, there is a need to further examine the impact of these devices on student learning. This paper describes a study of 370 high-school graduate students learning English as a second language using the iPad in an intensive academic preparation program. The study utilised an online survey and student exam scores at the end of the 16-week treatment. Results of the self-reported data showed increased student motivation and engagement in English learning activities. Results were correlated with self-reported data and regression analysis models demonstrated that use of the iPad for specific English learning tasks correlated with better exam performance.

1. INTRODUCTION

Over the past two decades, mobile technology has been widely adopted in educational contexts across the world mainly due to the ubiquity, portability and increasing affordability of wireless mobile devices. Mobile devices provide students with the ability to use technology in appropriate contexts and ensure students have access to the social and cultural resources they need to develop and sustain meaningful engagement in the learning process (Casey, 2009). Mobile learning has been advocated...
as individual, collaborative and situated learning that leads to increased motivation and engagement (Ryu & Parsons, 2009).

As was the case with the adoption of earlier electronic devices in education (i.e., desktop computers and laptops), educational initiatives in the first stages of mobile technology adoption are so focused on “getting mobile devices into the hands of learners that the question of how, precisely, this technology will improve learning outcomes is sidelined” (Shuler, Winters, & West, 2013, p.30). Educators have cautioned that access to the devices alone is not enough to support learning outcomes as technology of itself and in itself is not sufficient to lead to learning outcomes. Research studies of the perceptions of teachers and students on mobile learning found that positive teaching and learning outcomes occurred when adequate support was provided for integrating and best using mobile devices for teaching (de Winter, Winterbottom & Wilson, 2010; Rossing, Miller, Cecil & Stamper, 2012). The nature of the applications used with the mobile devices is also crucial. Liaw, Hatala and Huang (2010) in their study found positive perceptions associated with mobile learning when applications are highly interactive and are used to promote learner autonomy.

While “there is a dearth of research in the area of mobile learning given that the use of mobile devices as a learning tool is still in its beginning stages” (Cavus & Ibrahim, 2009), most of the existing studies address mainly issues of implementation and student motivation and engagement. With regards to the long term impact of mobile devices on student learning outcomes, “despite over fifteen years of research, mobile learning has so far failed to have a significant long-term impact on education” (Shuler, Winters, & West, 2013, p.7). The present study sought to address this gap by examining not only student attitudes and motivations towards the use of mobile devices for learning but also further investigating how use of the mobile devices correlates with student performance in an effort to measure efficacy.

2. MOBILE-ASSISTED LANGUAGE LEARNING

Mobile-Assisted Language Learning (MALL) is a relatively young field of study that emerged in the mid-1990s and focused on the use of mobile devices for teaching and learning languages. The field has often been criticised for its lack of consensus in defining what constitutes a ‘mobile device’ making the field appear “volatile, inconsistent and haphazard” (Traxler, 2009, p.6). Regardless of its shortcomings, MALL remains a popular field of research and study given that learning with mobile technologies is seen as “central to the educational landscape of the twenty-first century” (Pachler, Bachmair & Cook, 2010, p.72) and mobile devices are heralded as enablers of “just-in-time, just-enough, on-demand personalized learning experiences, seamlessly integrated within our everyday activities” (Vavoula & Karagiannidis, 2005, p.534) and having the potential to redefine knowledge, learning and education (Traxler, 2007).

In a recently published literature review of over 350 published works relating to MALL, Burston (2013) reports that “by far the most frequently occurring type of MALL publications are project implementation descriptions” (p. 157). Among the topics dealt with in MALL studies are: considerations of technical specifications of custom designed mobile applications, mobile device ownership, pedagogical and instructional design, teacher training, and infrastructure for the implementation of mobile learning. When it comes to researching the impact of mobile devices on student learning, MALL studies fall short by reporting mainly on student attitudes and motivational effects of mobile devices (Burston, 2013). Viberg and Grönlund (2013) also note the lack of work on theory, as opposed to reporting the outcomes of small scale studies.

Research studies on mobile language learning that address impact beyond issues of motivation are few. Among these studies, vocabulary learning remains by far the most researched language skill.