

Chapter 16

Reconceptualizing Learning Designs in Higher Education: Using Mobile Devices to Engage Students in Authentic Tasks

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ABSTRACT

This goal of this chapter is to provide a design and development roadmap for the adaptation of traditional classroom activities into engaging iPad-based digital learning activities. Reporting on an ongoing longitudinal case study, the chapter provides an overview of rationale and design considerations of the authentic iPad learning design implementation project, and the outcomes and improvements made over time. The iPad activities described provide further details of the approach taken and adaptations made. Since implementing iPad activities into this higher education environment several terms ago, the lecturer reports significantly higher levels of student engagement. Additionally, students report that the classroom activities in the post-graduate marketing course are authentic, transferrable, and are more engaging due the use of the iPad-based activities.

INTRODUCTION

With an increasingly connected global economy, university education continues to be challenged to provide students with opportunities to develop workplace skills. University administration and teaching staff are often concerned about the implications of the global economy, as more and more opportunities

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exist for students to select which institution they study at based on the types learning experiences they seek and the range of workplace skills they hope to graduate with. University lecturers are now, even more than in the past, expected to develop and implement a wide range of activities that prepare students for their working life and, at the same time, move away from the traditional lecture style of educational delivery towards more contemporary learning methods. In this educational environment, opportunities to implement classroom technologies that can engage students in authentic tasks, which are transferable to a digital workplace, are becoming more important. This chapter provides a design and development roadmap for the adaptation of traditional classroom activities to create engaging iPad-based digital activities which is informed by one lecturer's successes over the past three years.

Education trends in higher education over the past few years have increasingly pointed towards increased student collaboration using digital tools and resources. For instance, The New Media Consortium's (NMC) yearly Horizon Report, a well-respected report on key emerging technologies in education, has identified digital collaboration tasks and mobile computing as up-and-coming trends. The 2012 Horizon report (Johnson, Adams, & Cummins, 2012) identified mobile apps as one of the fastest growing mobile technologies in higher education. Always-on mobile devices, the availability of Wi-Fi and 3G networks, and the affordances of current mobile devices have made mobile software applications both powerful and very productive. The Horizon 2013 report makes note that tablet computing, with iPads and similar devices, has particular implications for higher education according (Johnson, Adams Becker, Cummins, Estrada, Freeman, & Ludgate, 2013). Specifically, the report outlines tablet-based learning activities as having carved out a niche in higher education. Higher education institutions have embraced tablet technologies and are developing software, best practice guidelines, and support systems for lecturers and students who want to utilize them in learning activities. The impact of educational technologies can be significant when incorporated meaningfully into classrooms, and the implementation described here in this chapter, is one example of successful iPad tablet computing in higher education.

The advantages afforded by iPads are numerous, and include high levels of mobility with immediate access to the WWW, appealing characteristics such as touch screens, access to apps, games and a wide range of media (Johnson, Adams, & Cummins, 2012; McCombs, S., & Liu, Y., 2011). iPads provide opportunities for greater engagement of students in learning activities that foster creativity and build skills in the use of digital media (Martin, Ostashewski, & Dickinson-Delaporte, 2013). Based on a survey of 36 universities in 2010-2011, Murphy (2011) proposed a six-point typology of the capabilities of these post-PC devices (PPDs) that includes iPads. Murphy's six-point typology includes utilizing PPDs in the contexts of course materials, enrolment and administration, content generation, research and material yielding, collaboration and engagement, and productivity enhancement. The use of iPads however, is still relatively new in higher education so that learning engagement and collaboration opportunities in the classroom have not yet been fully uncovered. In many higher education settings, tablet implementation issues surrounding the cost of equipment, management of devices, need for supportive classroom requirements, and institutional policies, present a range of barriers to their adoption (Colorado, 2012). In some cases, the willingness of lecturers to adopt iPads in their discipline area can be minimal, as in the case of a law school pilot documented by Jaworowski (2011). Regardless, when technologies become more accepted by staff and students in everyday life, their use for education seems to be inevitable. iPads, with their wide range of capabilities including the recording and display of multimedia, are ideally suited for complex learning tasks such as digital collaboration and artifact creation.

This chapter presents a detailed roadmap, informed by the adaptation of traditional classroom activities, for the creation of a series of mobile iPad activities supported by active learning methodologies.

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