Chapter 33
Second Life for Assessing Postgraduate Learning: Student Perspectives

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ABSTRACT
This case describes how an assessment task for a postgraduate unit (Information Systems in Business) was developed and delivered using the virtual world platform Second Life. Students investigated and reflected upon the appropriateness of particular technologies for organizations and in particular for an insurance company. The assessment task was undertaken twice during 2010 and reflections from the students on their learning in relation to this task are included. The lecturer also reflected on the students’ learning and application of technology skills, and these two sets of reflections were triangulated with data collected in a survey of the two student cohorts. Emergent themes from the data included graphics and interface, ease of use, game versus virtual world, business context usefulness, and social network characteristics, and these are discussed. Implications for designing authentic learning and assessment tasks with virtual worlds in a higher education context are explored in this chapter. The authors conclude that virtual worlds are a suitable application to support students learning of content knowledge, providing the technology is constructively aligned with the curriculum.

BACKGROUND
Organizations typically use information and communication technologies (ICT) to achieve their strategic and operational objectives. ICT is also pervasive in education from preschoolers to tertiary learners, for example primary schools are trialing iPads to enhance learning and teaching (Goodwin, 2012). In some high schools, parents have been asked to supply iPads that are currently, or are about to replace textbooks (Feneley, 2012). These students are clearly ‘digital natives’ (Prensky, 2001). A digital native is someone that has grown up with technology and ‘speaks’ the language of the internet, mobile and smart devices, social media and a myriad of ‘apps’ (Prensky,
Digital natives should be able to seamlessly adapt to new technologies. However, there is a growing body of evidence that this assumption may not be appropriate (Selwyn, 2011). In a study of undergraduate students, Ng (2012) found that students do not easily make the transition from the use of technologies in their everyday life e.g. Facebook, YouTube, to the use of technologies for education. Research has shown that there are two key reasons why this transition may be difficult for students. The first is that students are not necessarily prepared to spend the time to transfer their technology skills to an educational context (McNeill & Diao, 2010). The second reason is that students do not perceive that there is a purpose behind engaging in these technologies (Ng, 2012). Therefore, in line with Selwyn, we agree that there is a growing need for adults and teachers to guide young people in their choice of technologies, to encourage ‘digital media literacy’ and most importantly to encourage the development of capacity in critical thinking about digital technology itself.

When considering the use of technology for achievement of good learning outcomes, one must preempt the selection of the technology with a consideration of the content to be covered and the method, or pedagogy, of learning and teaching. The TPACK model (Mishra & Koehler, 2006) “emphasizes the importance of the intersections between Technological Knowledge, Pedagogical Knowledge and Content Knowledge, and proposes that effective integration of technology into the curriculum requires a sensitive understanding of the dynamic relationship between all three components” (Bower, Hedberg & Kuswara, 2010, p. 180). The authors remind us that the technology component should be the “mediator of interaction and a means of representing content” (p. 196). The inherent focus on technologies in this Information Systems in Business unit offered an ideal opportunity to design an assessment task using a current technology and the use of a virtual world experience was selected as an appropriate choice to achieve the learning outcomes. Figure 1 represents the use of the TPACK model to describe how the chosen technology, pedagogy and content fit together to enable deep learning through this assessment task. The intersections between each of the domains, TPK, TCK and PCK will be discussed further throughout the chapter.

Context

The Information Systems in Business unit is taught in the Masters of Commerce stream at a metropolitan university in Australia. The challenge for teaching staff was to develop an assessment task that measured one of the key learning outcomes in this postgraduate unit. This learning outcome required students to “reflect on the appropriateness of particular technologies for organizations.” Engaging students to critically assess the implications of technology requires authentic assessment tasks that encourage self-reflection (Gikandi, Morrow & Davis, 2011).

Figure 1. The TPACK (Technological, Pedagogical and Content Knowledge) model of educational practice applied to the current study