Chapter 8
Using Virtual World Technology as a Faculty Development Tool in Higher Education

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ABSTRACT
Higher education institutions are constantly challenged with the task of educating a technology savvy generation of students. Colleges must be able and ready to meet the needs of these digital-age students. What are the perceptions of college faculty of using virtual world technology as a teaching tool in the classroom? The purpose of this chapter is to explore how virtual world environments can be used as a faculty development tool in order to encourage the use of virtual worlds as a teaching tool in the classroom. This chapter references research from a mixed methods study exploring college faculty perceptions of the adoption of virtual world technology into the classroom, which in turn, provides insight to the willingness of higher education faculty to adopt this type of technology. In addition, the final section of the chapter includes a suggested guide on how to create a virtual world faculty development workshop based in Linden Lab’s Second Life.

INTRODUCTION
Using different instructional delivery methods allow the learner to absorb instructional content in a way that fits the individual learner. Today’s college students have been immersed in digital technology as long as they can remember. However, perhaps many higher education faculty are still not speaking the same digital language as their students. On the other hand, the issue may be that the pedagogical and epistemological beliefs of faculty who are not as technologically savvy as the students in their classrooms, affect the teaching methods used in the higher education classroom today. Faculty perceptions and beliefs can impact whether or not an instructional technology is used in the classroom. Creating faculty development workshops in using and implementing virtual world technology in the classroom is one way to educate faculty on incorporating different teaching techniques to engage students about the subject taught.

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BACKGROUND

Virtual learning environments offer opportunities for faculty to engage students in learning in an immersive way, simulating reality: “Delivering course material via a virtual environment is beneficial to today’s students because it offers the interactivity, real-time interaction and social presence that students of all ages have come to accept in our gaming rich community.” (Hodge, Tabrizi, Farwell, & Wuensch, 2007, p.105) Multi-User Virtual Environments (MUVEs), such as Linden Lab’s Second Life, allow users to create their own character (avatar) and explore different simulated environments. Additionally, educators who have used Second Life in the classroom feel the students are more interactive and expressive in Second Life than they are compared to traditional online platforms (Appel, 2006).

While some of the literature does not specifically address the use of virtual world technology, it may be reasonable to presuppose that the same concerns that faculty have in regards to adopting new technology in general, could apply to virtual world technology. Immersion in the learning environment appears to have a positive affect on learning outcomes. Duncan (2005) states: “The greater the immersion of self in the learning process, the higher the intrinsic rewards derived from the experience.” (p.891) Kluge and Riley (2008) support the theory that colleges will need to consider adopting immersive methods of teaching in order to perhaps engage today’s college students. Furthermore, the authors point out that, “digital technologies not only change what students should learn, but what students can learn” (Kluge & Riley, 2008, p.128). Coffman and Klinger (2007) agree with Duncan (2005) and Kluge and Riley (2008) in that students tend to be more engaged in learning, when virtual world technology is used, since virtual world technology supports constructivist learning. Thus, it appears that using interactive technology (such as virtual world technology) as a teaching method is potentially a viable option to engage students in learning in an immersive way.

On the other hand, faculty perceive that there are barriers and challenges to adopting new technologies in general, which can possibly reflect on the potential to adopt virtual world technology as a teaching tool. Ertmer (2005), suggests that if faculty perceive there are barriers to an adoption of an innovation (such as virtual world technology) or have had a negative past experience with a technology innovation, then potentially that negative experience could possibly transfer to another technology innovation in the future. In addition, accessibility issues can be problematic when adopting emerging technologies in the college classroom. Unreliable and slow Internet connection, are cited as challenges in using virtual environments (Duncan, 2005; Kluge & Riley, 2008). Additional challenges include creating classes in virtual environments, which require knowledge and skills that many faculty in today’s higher education institutions do not possess, thus supporting the theory that the learning curve for faculty might be a high one (Kluge & Riley, 2008). Liability issues, such as students possibly being subjected to undesirable behavior by other participants in the virtual world, cost issues, and learning management issues, are all perceived challenges for faculty in using virtual world technology, such as Second Life, in their classes (Kluge & Riley, 2008).

Reigle and Matejka (2005) suggest that some educators feel that virtual worlds, such as Second Life, is not conducive to convey academic content and that perhaps virtual worlds “have no connection to the real world” (p.6). Beggs (2000) performed a study with 348 university faculty on their “use of technology, factors influencing their use of technology, and perceived barriers to the use of technology in the classroom.” (p.4) The results of Beggs’ (2000) study showed that faculty perceive six challenges that potentially hinder the adoption of new technology in the classroom: a lack of time; accessible equipment;
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