Second Life as a Surrogate for Experiential Learning

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ABSTRACT

Second Life is increasingly being used as a venue for education, especially for delivery of online instruction where social presence and community building are essential components. Despite its robust 3-D modeling tools and powerful scripting language, many educational uses of Second Life are limited to passive forms of content delivery that often mimic some variety of Victorian style lecture setting. This article demonstrates a series of exercises designed around a more active learning model for my geography courses based on Kolb’s (2005) theory of experiential learning. Active class exercises encourage hands-on interaction with components of the virtual world, but are linked explicitly to real subject matter content. By providing fun pre-exercise training and promoting learning by discovery, the exercises are designed to encourage the four fundamental components of the experiential learning environment: involvement, reflection, analysis, and problem solving. Beyond providing an excellent educational environment, such approaches can act as surrogates for real-world experiences that are either impossible or logistically problematic.

Keywords: Active Learning, Experiential Learning, Geographic Education, Multi-User Virtual Environment (MUVE), Second Life

INTRODUCTION

Online college and university courses are proliferating at a pace that far exceeds that of higher education in general. It is estimated that during the fall term of 2007, 3.9 million students were taking at least one course online, with roughly 20% of all United States higher education students taking an online class. This constituted a 12.9% growth in online courses compared to a 1.2% increase in higher education enrollment overall (Allen & Seaman, 2008). This trend is placing a renewed sense of urgency on educators who must satisfy often wildly different learning styles in a medium that places constraints on instructional design. Some see it as critical that we meet the needs of particular learning communities whose traditional styles of learning might not be obviously amenable to online delivery, such as those involving hand-on experiences. In fact, many disciplinary specialists, especially those in the sciences, point out the limitations of online learning to address such experiences as an objection to online learning in the first place. Among these disciplines is my own field of geography, a field that, although becoming increasingly technological, is still rooted in field trips, first hand observation, data collection, analysis, description, and prediction. Kolb (1984) most often categorized such learners as
“assimilators,” whose learning is best facilitated by experiential forms of education. Research by Healy and Jenkins (2000) suggests that, by and large, geographers are assimilators, and that as such, they are best served by experiential forms of education.

Like many disciplines that rely on experiential learning, geography has developed a set of well-established forms of experience that have served the needs of the traditional learner. Such experiences include hands-on map exercises, field trips, extended field camps, and various forms of strategy games that simulate planning scenarios or changes in the earth’s environments. One might recall games such as SimCity and SimEarth – both of which have been used in the geography classroom. Instrumentation has also played a major role in geographic experiential education where students use thermometers, wind vanes, and sling psychrometers to measure weather variables, or collect soils, vegetation, tree core, pollen, water or other environmental variables for later laboratory analysis. Most recently, faculty have employed high-end statistics software (e.g., SAS and SPSS), CAD and other graphic software, GPS equipment, and remote sensing and Geographic Information Systems (GIS) software to analyze pre-selected study areas or even to pursue project-based learning exercises.

Developing meaningful experiential learning situations is often difficult even in the real world (Fuller et al., 2003), as exemplified by the logistics of providing vehicles and living accommodations during extended field courses (Haigh & Gold, 1993) or by the expense of using high-end scientific instruments such as scanning electron microscopes for examining viruses, and mass spectrometers for performing chemical analyses. For some disciplines, such scenarios might prove impossible. Imagine, for example, trying to create an international business that students could operate including the development of products, marketing, capitalizing, etc. The financing alone would be prohibitive. Circumstances might also limit or even prohibit the development of experiential learning scenarios under normal conditions – for example where the experience might require the study of landforms that do not occur within a reasonable distance or where access to samples involves travel to ocean depths. The venue of education itself, most notably the online delivery of courses, often severely limits development of experiential content.

Perhaps because of the perceived difficulties of delivering experiential learning online, it is still a small portion of distance delivery despite the use of experiential learning modules in traditional postal forms of distance learning. This situation must be reversed in an age when both an aging workforce is being decimated through retirements, and where job skills change so quickly. If online education is going to be effective at providing students with real world working knowledge, and if it is going to adapt to the rapid changes in workforce skills and demands for teamwork, then incorporation of experiential forms of learning is essential.

Nearly a decade ago, Mclaughlin and Luca (2002) demonstrated the use of asynchronous communication tools to enhance professional management skills for multi-media developers. The formation of a collaborative learning community, focused on real-world problems, relied on the use of a listserve and a community website for sharing information. Students were able to develop relationships with a client online, create design problem solutions, and develop a project brief.

One critical factor in this successful experiential opportunity was the ability to work on large real-world or “real-world-like” problems in a project-based learning approach. Additionally, the workforce is increasingly demanding team formation and team-based collaboration as an integral part of everyday work. Despite the availability of an increasing array of online collaboration tools such as websites, shared documents, blogs, wikis, and many others, the formation of a true learning community relies on social presence that is largely lacking from such text-based tools or traditional learning management systems. While there are tools such as VoiceThread, SlideShare, Skype, Animoto, and many others that allow different forms of
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