

Chapter 23

Breaking Away: How Virtual Worlds Impact Pedagogical Practices

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ABSTRACT

Technology is changing at a rapid pace, and information is becoming a more prominent feature in society. Advocates of educational technology contend that virtual worlds will revolutionize education. Many of these arguments in support of educational uses of technology emphasize the fact that virtual worlds have the potential to foster a more student-centered learning environment. This research involved the analysis of synchronous text chat and observational data collected from Second Life® (SL) continuing education courses at three different course levels – beginner, intermediate, and advanced. To support or refute these findings, unstructured interviews were conducted with SL course instructors and students. In general, the SL instructors relied heavily upon teacher-centered methods. However, the results of this study suggest that the use of student-centered approaches in virtual world – ones that draw from constructivist epistemologies – have the potential to create a more effective learning situation for the students.

INTRODUCTION

Technology is changing the ways in which information and knowledge are distributed within society. Some technology proponents claim we are in a participatory learning age where students are content producers and consumers (Brown & Adler,

2008). In an attempt to make the learning process more appealing to these students, educators are exploring the use of virtual worlds. Because virtual worlds support social and participatory learning activities, some scholars claim that these technology-enhanced spaces have the potential to alter the state of education (Ziegler, 2007). While

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predictions of innovative uses of technology in educational settings are pervasive, these endeavors typically do not lead to pedagogical changes (Collis & Moonen, 2008).

New technologies, including virtual worlds, are not neutral course containers, and their affordances can influence pedagogical practices. Institutions and instructors may also appropriate these media in ways that tend to manage and restrain their riskier aspects. In these environments, the borders created by the computer are established and maintained by the instructor (Selfe & Selfe, 1994). As Cousin (2005) observed in her assessment of virtual learning environments (VLEs), many electronic images and terms mimic those found in the physical academic world. Some scholars argue that users feel more comfortable facing an interface that resembles their daily lives and routines (Lakoff & Johnson, 1980). In SL for example, courses may be conducted in an auditorium, PowerPoint-like slides appear on a large, white screen on stage, and there is even a library staffed with reference librarians to assist students with their information needs. Terms such as inventory, folders, files, just to name a few are associated with the physical world, as well. At the same time, these duplicate worlds maintain the defined model and do not contest its hierarchical assumptions (e.g., Nunes, 1999), which can work against students and instructors.

According to the literature, more research is needed to elucidate the ways students and instructors use virtual worlds. This study begins to broaden the understanding of how virtual worlds such as SL are used for educational purposes at different learning levels—beginner, intermediate, and advanced. In addition, this research expands upon the current investigations of education in SL, many of which are based primarily on casual observations and student self-reports, by empirically assessing the pedagogical practices employed by the SL and the ways in which the technological affordances support those initiatives.

BACKGROUND

Teacher-Centered Learning Environments

Typically, the current school structure is based on a teacher-centered approach. In this environment, educators have stressed the importance of transmitting facts to learners with the hope that the information will transfer come test time. Therein lies the rub; the exchange value may be such that learners are able to perform well on tests and other assessment measures; however, this does not mean they will be able to activate that knowledge spontaneously. The physical world context is de-emphasized or completely severed, and as a result, the knowledge may lie inert and unusable outside the context of the classroom. Instead of developing knowledge or tools that will assist them in solving problems, learners passively acquire a collection of facts from an all-knowing teacher. With this approach, topics can change on a daily basis without providing adequate time for learners to obtain a deep and rich understanding of the material.

At this time, however, the teachers' perceived need to sacrifice deep understanding for broad material coverage overshadows the issue. The fear that valuable class time will be spent on initiatives that will not transfer is a real one. Therefore, teacher-centered educational approaches tend to focus on microcontext instruction methods where subsets of larger problems are examined. With this approach, topics can change on a daily basis without providing adequate time for learners to obtain a deep and rich understanding of the material. Stated another way, the emphasis is on lower-order thinking skills such as memorization and recall. Drill and skill techniques and the standardized tests that accompany them are often associated with this approach.

One theory that is often linked to teacher-centered approaches is behaviorism. According to theorists such as Skinner (1969) observable

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