### Chapter 7.8

### At the Intersection of Learning: The Role of the Academic Library in 3D Environments

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#### **ABSTRACT**

Academic libraries face challenges in meeting the information literacy needs of their off-campus students and providing comparable experiences as recommended by the Association of College and Research Libraries (ACRL). One approach to this dilemma is for the academic library to be an integral component of a 3D immersive virtual learning environment. This chapter proposes a conceptual framework that portrays the interplay of the key elements to consider when understanding the role of a 3D immersive virtual academic library. These key elements, including "library as place," presence/co-presence, the 3D environment, Presence Pedagogy (P2), and planned and serendipitous interactions intersect to enable the development of communities of practice and further learning. Examples from a 3D immersive virtual academic library are provided to demonstrate application of the framework.

#### INTRODUCTION

A group of students is clustered together looking for information on inquiry-based research models. Another student is asking a reference librarian for assistance using a specific database. When

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she finishes with the librarian, that student joins the group and shares what she learned. In another area, a faculty member is meeting with a librarian to plan an instructional session. Although readers will readily recognize these activities are occurring in an academic library, most will not realize that the library in this situation is a 3D immersive virtual environment.

Librarians and libraries have a track record of being early adopters of new technology. Library literature is replete with examples of experimentation and implementation of new technology such as real simple syndication (RSS), podcasts, screencasts, text messaging, clickers and other Web 2.0 tools. This has also been the case in the realm of 3D virtual environments where academic libraries represented some of the first 'islands" for higher education in Second Life (Hurst-Wahl, J. 2007; Luo, L2008). However, one may ask whether this presence is warranted and what the role of a virtual world academic library should be. After all, there are no physical stacks to browse and students can access the other "virtual library", a library's Web portal, through any browser, without traveling to the virtual world. What then is the added value or purpose of a 3D virtual library? Are these libraries needed to support learning?

The objective of this chapter is to propose a conceptual framework that can be used to explore and consider these questions. The background of the Appalachian Educational Technology Zone (AET Zone) 3D immersive virtual learning environment will be described first. This is followed by a conceptual framework to utilize in considering the value of an academic library in a 3D environment. The discussion will develop the elements of the framework using examples of actual practice from a graduate program that utilizes a 3D immersive virtual world academic library.

#### BACKGROUND

Over nine years ago, Instructional Technology faculty at Appalachian State University developed the Appalachian Educational Technology Zone (AET Zone) 3D immersive virtual environment. As this faculty was exploring a web-based delivery of their program, they were guided by the Reich College of Education conceptual framework, referenced in Chapter 1.

The faculty determined that the commonly used web-based classroom management platforms more closely resembled a traditional lecture style environment. This did not align with the college's social constructivist framework. These platforms also did not support the necessary interaction, communication, and collaboration thought to create deep and meaningful learning. Therefore, the faculty decided to develop a 3D immersive virtual world using the ActiveWorlds platform. The environment, known as the AET Zone, has been enhanced by the addition of Web 2.0 tools such as VOIP, wikis, and blogs. Since that time, numerous distance education graduate programs of study including instructional technology, library science, school administration, and higher education currently use this protected environment as well as a new Teleplace world. An academic library was part of the initial AET Zone and now occupies a space in "The Commons", the initial entry portal to the AET Zone where resources are available that are common to all programs of study (Purpur & Ochoa, 2008). A similar library is being constructed in a Teleplace environment. Both libraries are staffed by academic librarians. More detailed descriptions of the AET Zone 3D virtual immersive learning environment are provided in other literature (Bronack, Riedl, & Tashner, 2006).

### CONCEPTUALIZING ACADEMIC 3D VIRTUAL IMMERSIVE LIBRARIES

The Association of College and Research Libraries (ACRL) recommends in their guidelines that the academic library should provide for the information literacy needs of off-campus students. ACRL even goes so far as to suggest that distance learning students should have comparable experiences and develop the same information literacy competencies as on-campus students (ALA, 2000). For some institutions the main off-campus library support is provided by their web site which may

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