Chapter 3
Constructing Transformative Learning Communities in 3D Immersive Learning Environments

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ABSTRACT

Programs that prepare leaders for the 21st century must do so with the intent of equipping them not only with traditional reserves of knowledge and theory but with a focus on application of the knowledge base to build the skills necessary for collaborative leadership resulting in a community of practice. School leaders must be prepared to transform their existing school culture by challenging current paradigms and fundamental principles of how schools have operated traditionally in an era when teachers were responsible primarily for the transference of discreet sets of knowledge with little or no emphasis on higher level thinking skills, group work, and informational literacy. Without this transformative shift, school leaders tend to fail in successfully implementing reform efforts geared toward developing schools ready to meet the challenges of the information age. This chapter will discuss how faculty in the department of Leadership and Educational Studies at Appalachian State University have utilized Presence Pedagogy to engage their students in tranformative learning for school leadership through cross-program collaboration in a 3D immersive learning environment.

CONSTRUCTING TRANSFORMATIVE LEARNING COMMUNITIES IN 3D IMMERSIVE LEARNING ENVIRONMENTS

Programs that prepare leaders for the 21st century must do so with the intent of equipping them not only with traditional reserves of knowledge and theory but with a focus on application of the knowledge base to build the skills necessary for collaborative leadership resulting in a community of practice. Effective leaders have the skills specifically to shape learning organizations into effective learning communities resulting in implementation of a shared vision. Shared or distributive leadership across many roles such as media coordinator, technology facilitator, curriculum facilitator, and teacher leaders may be challenging but essential to implementing true school reform (Timperley, 2005). To this end, higher education, like the K-12 settings for which its students are prepared to enter as leaders, must transform itself to meet the demands of this shifting paradigm of leadership (Bramming, 2007; Fried, 2007). The department of Leadership And Educational Studies (LES) at Appalachian State University has taken on this challenge through an interdisciplinary approach to build a cross-program Community of Practice (Wenger, 1998) of educational leaders who work collaboratively to transform teaching and learning in North Carolina. To this end, we have adopted a 3D immersive learning environment to deliver instruction and build community, and have developed a pedagogical framework that capitalizes on the affordances of this virtual environment. This chapter will describe our virtual environment and how we are currently using it to construct transformative learning communities to prepare school leaders.

The Role of Higher Education in Transforming Students into Leaders

Traditional means of training leaders through informational (lecture) style sessions both during and after graduate programs of study present challenges, as well as a means of, developing leadership through a transfer of knowledge. In fact, Johnson (2008) argues that shifts in mental models developed as a result of transformative learning experiences rather than the more traditional modes of knowledge acquisition through preparation programs, professional training or even on-the-job experience will separate effective leaders from their ineffective counterparts. Leaders who are capable of adjusting existing frames of reference to understand changing circumstances are more likely to make appropriate adjustments in strategy (Gilley, Dixon, & Gilley, 2008).

Graduate schools generally strive to prepare individuals to accept the responsibilities of specific roles within any given discipline with the primary goal of transforming current perspectives. Very few, if any, institutes of higher education expect students to exit their programs unchanged in either their points of view or reservoirs of knowledge. How this transformation takes place is embodied in multiple theories of adult learning, the keystone of all programs in higher education. Approaches to constructing adult learning experiences have been widely debated in terms of effectiveness with tension among those who fall on opposite sides of these debates (Fenwick, 2006; Inderbitzin & Storrs, 2008; Malcolm & Zukas, 2001).

Informational learning, one such approach, serves to increase an individual's pool of knowledge by providing more resources and skills upon which to draw without influencing the mental model or frames of reference. This type of learning does not intend to change basic assumptions but rather to reinforce those already developed. By engaging in activities that focus on specific disciplines or bodies of research, adult learners build reservoirs of skills and knowledge critical to

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