

# Chapter 1.14

## Classroom-in-a-Box: Rethinking Learning Community Classroom Environment Needs within Three-Dimensional Virtual Learning Environments

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### ABSTRACT

This discussion focuses upon a theoretical understanding of the instructional architecture that supports learning communities within three-dimensional virtual world environments; specifically, within the Second Life world environment. This theoretical understanding provides the essential link between instructional imperatives, performance improvement and a community of learning within an instructional technology framework. Motivated by the shift from the Information Age known for the availability of information towards the Cognitive Age which emphasizes the ability to access, evaluate, organize, comprehend, apply, analyze, synthesize and innovatively represent information into an enhanced understanding and novel use, this

discussion offers the opportunity to directly address the learner's needs within the three-dimensional virtual learning environment, such as Second Life, through the design of a virtual learning environment classroom-in-a-box.

### INTRODUCTION

The publication of *The Blue Book: A Consumer Guide to Virtual Worlds* (Association of Virtual Worlds, 2008a, 2008b) suggests that virtual worlds are a growing phenomenon. Another indication of this trend is the use of Second Life by several businesses as a viable environment through which to interview technology-minded professionals (Athavaley, 2007). It is not a significant leap to expect the three-dimensional virtual world environment to become a more viable instructional environment that

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may further engage learners. As quoted by Martin and Crawford (2008), “Universities have also been testing the three-dimensional virtual learning environments as potentially successful learning communities that directly address the concerns related to the silo effect” (p. 546). Further indication of the acceptance of virtual worlds in education is TheActiveworlds.com, Incorporated, description of their product The Active Worlds Educational Universe, which states, “The Educational Universe is an entire Active Worlds Universe dedicated to exploring the educational applications of the Active Worlds Technology” (The Activeworlds.com, Incorporated, 2008, paragraph 1).

Distance education and online learning has grown and shifted over the previous fifteen years. It is only recently that researchers and developers have focused upon instructional potentials related to three-dimensional virtual learning environments. In this environment the active engagement of the learner may offer significant potential towards the success of learning communities. Before the introduction of three-dimensional learning environments, the primary course environment was textual in nature, with opportunities for the integration of supportive audio, video and interactive multimedia components for exhibition. Shifting from this text-based environment to a primarily virtual environment that more closely reflects the opportunities inherent within a more traditional community learning environment offers the learners the opportunity for a more autonomous, dynamic community of learning. Therefore, the engagement of the learner within a three-dimensional virtual learning environment, such as Second Life (Linden Research, Inc., 2008c), is imperative.

This engagement occurs through the design of a virtual learning environment classroom that the instructor can easily manipulate so as to meet the instructional needs of the learners. The design of a three-dimensional virtual learning environment classroom that supports the needs of the learners while emphasizing the instructor’s focus upon

learning objectives is difficult, at best. Thus, the ability to design and develop a manageable, transportable environment that offers the instructor an opportunity to designate different surroundings “on the fly” through the push of a button so as to meet the necessary instructional needs is a priority. The concept of a transportable learning environment architecture that can be obtained as a boxed product, opened within the previously designated building environment and then effortlessly set up by incorporating appropriate instructional elements is a timely and necessary product. This classroom-in-a-box articulation offers the instructor the ability to easily shift between different instructional tasks, such as classroom lecture, group work, research and study area, faculty office hours, casual discussions and advising. Further, the classroom-in-a-box allows for a more appropriate articulation of the different underlying philosophies of learning that most appropriately meet the subject matter’s learning objectives.

## **BACKGROUND**

To appropriately perceive the significance of a three-dimensional virtual environment classroom-in-a-box product, it is integral to discuss the shift from primarily textual information with bits and pieces of multimedia sparkle for exhibition towards a more autonomous, dynamic community of learning. The opportunity to directly address the learner’s needs is integral towards the enhancement of learning environments. Embracing the structural architecture within the three-dimensional virtual world environments supports the Web 2.0 phenomenon that engages the learners within social engagement opportunities. Further, the natural progression towards designing appropriate and successful holistic virtual classroom-focused instructional environments is related to learning communities that enhance and structurally arrange the available knowledge

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