Chapter 9
Challenges with Knowledge Construction in an E–learning Environment

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ABSTRACT

Knowledge construction, or new knowledge creation, is believed to be a way to allow learners to gain an in-depth knowledge and a greater control over the materials they are learning. E-learning technology platforms, that facilitate e-collaboration among learners, represent a way to foster knowledge construction. This chapter however, explores challenges facing knowledge construction especially when looking at “Culture” and how it affects two different learning philosophies or paradigms. This chapter elucidates some of the challenges and offers a new direction for accommodating different learners’ needs.

INTRODUCTION

E-learning, which addresses the use of electronic media in learning/knowledge dissemination, is rapidly becoming the norm in education and global corporate training. Universities and organizations are continuously supplementing traditional learning with new technologies. The role of technologies in education and especially in e-learning has resulted in customized corporate training and online universities such as: American InterContinental University Online, Capella University, DeVry University, Kaplan University, University of Phoenix, Walden University, and Westwood College Online (Olaniran, 2007a). Furthermore, various courseware; such as IBM Lotus’ Learningspace, Blackboard, WebCT, Netware, and others; are employed to support teaching and learning (Horton & Horton, 2002; Sun, Williams, & Liu 2004). E-learning is attractive to corporate travelers, expatriates, traditional and non-traditional students. However, as corporate e-learning solutions continue to explode and gain

DOI: 10.4018/978-1-61520-937-8.ch009
popularity in the sphere of global e-learning, there are concerns about the quality of learning taking place along with its cultural appropriateness. Cost savings is one of the major advantages to e-learning, but a question remains whether it is producing concrete results.

BACKGROUND

It has been argued that the central concern in a technology-mediated environment is how to leverage technology in a way that provides the most effective stimuli to improve knowledge acquisition (i.e., Benbunan-Fitch & Arbaugh, 2006; Olaniran, 2007a). This begs the question of how technologies help foster knowledge and knowledge construction, especially in an e-learning environment. After all, technologies do not inherently possess knowledge. However, technologies can be used to transmit and develop knowledge and learning in an individual self-paced or collaborative/group-based asynchronous and synchronous environments. Furthermore, as e-learning discussion continues, the issue of culture awareness of technologies that facilitate e-learning is gaining traction (e.g., Kawachi, 1999; Olaniran, 2007a, 2007b, 2008; Van Dam & Rogers, 2002). The idea of culture aware technology signifies the importance of culture, which represents the ways of knowing, and different values and beliefs that drive behaviors (Gudykunst & Kim, 2003).

MAIN FOCUS OF THE CHAPTER

The goal in this paper is to explain how knowledge construction (KC) occurs within the context of e-learning and to present some cultural challenges facing KC in e-learning. To achieve this goal, the chapter will discuss the learning paradigms (i.e., objectivist and constructivist) guiding KC in an e-learning environment. The chapter will then explore the role of culture in knowledge construction and e-learning and especially the challenges it poses to KC and collaboration in e-learning. The blog will be used as an example.

Issues, Controversies, and Problems in Knowledge Construction and E-Learning

Information systems and technology scholars have been looking at how information technologies influence the learning process. The investigation of technologies on learning is two-fold; to understand various technologies and to understand the role technology plays on learners’ cognitive processes in both self and group collaboration. Specific studies have focused on the role that courseware and other computer-mediated learning platforms play in improving or replacing traditional classrooms and how technology affects knowledge acquisition (Alavi, 1994; Leidner & Fuller, 1997; Benbunan-Fich, & Arbaugh, 2006). A number of scholars however, have questioned the delivery or knowledge transmission function and the use of collaborative learning methods (Benbunan & Arbaugh, 2006; Olaniran, 2007a; Sun et al, 2004). Contributing to the issue of knowledge acquisition and knowledge construction is the dichotomy in two learning paradigms (i.e., objectivist vs. constructivist) and their appropriateness to e-learning.

Objectivism is based on knowledge transmission or information delivery to students. On the other hand, constructivism is based on knowledge construction or the individuals’ perceived reality (Sun et al., 2004). Benbunan-Fich and Arbaugh (2006) addressed the distinction between objectivism and constructivism paradigms when suggesting that the best way to distinguish between the two is to look at objectivism as a mechanism for delivering information concepts; whereas, constructivism focused on the varieties of information sources and interactions that learners use in the process of knowledge construction. In other words, constructivism focuses on knowledge creation, while objectivism focuses on knowledge