Chapter XXX

Developing Constructivist Learning Environments to Enhance eLearning

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Introduction

It is about twenty years since the conception of the Internet, yet in this relatively short time it has had a profound effect on many aspects of society including business, government, broadcasting, shopping, leisure, communication, and education and training. Its growth in the past few years has been near expontential and it has started an information revolution that will continue for many years to come. According to Internet World Stats (internetworldstats.com) as of January 2006 over 1 billion people were using the Internet (approximately one sixth of the world's population). Buying goods and services over the Internet is becoming commonplace and most organizations have recognized the potential of the Internet to market and sell to a global market. Inevitably, the Internet is having a significant impact on Higher Education, where eLearning has evolved from a marginal form of education to a more commonly accepted and increasingly popular alternative to more traditional face-to-face education (Connolly & Stansfield, 2006; Gundawardena & McIssac, 2004). Some faculty members are strong proponents of eLearning and believe online courses can provide educational opportunities to learners who would otherwise have to do without. They also believe that the quality of courses based on eLearning are comparable to traditional place-bound courses (Dutton, Dutton, & Perry, 2002).

While traditional education has been guided by the paradigm of didactic instruction, which views the learner as passively receiving information, there is now an emphasis on constructivism as a philosophical, epistemological, and pedagogical approach. Constructivism focuses on knowledge construction, not knowledge reproduction. Many researchers have expressed their hope that constructivism will lead to better educational software and better learning. This has led to the development of constructivist learning environments (CLEs) that guide and support learners to achieve their intended learning outcomes. Unfortunately, there are many examples of eLearning that simply reproduce the traditional learning environment and miss opportunities afforded by CLEs. In this chapter, we discuss the benefits of CLEs for eLearning and provide guidelines for developing CLEs that create authentic learning experiences. We discuss one such constructivist learning environment that we have used successfully to deliver three fully online Masters courses in Information Systems and provide some preliminary results from a three year quasi-experimental study.