

Chapter XXI

Modeling the Model for Distributed Learning

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ABSTRACT

Increasingly, educators in a range of venues and institutions (e.g., K-12 schools, post secondary institutions, training facilities) are being called upon to teach online. Because it is relatively new, there appears to be no commonly held pedagogy specific to online teaching and learning. Further, these educators have little or no previous experiences to draw on, and they often feel there are no best practices to guide them in their work. This study proposes to investigate an innovative approach to online learning. It explores the impact this approach has on graduate student learning and their subsequent professional practice. This research is a qualitative case study of an instructional design model. Students enrolled in two graduate courses using this model were recruited to this study. They were given an open-ended survey and artifacts from their course work and online discussion forums were reviewed.

INTRODUCTION

Increasingly, educators in a range of venues and institutions (e.g., K-12 schools, post secondary institutions, training facilities) are being called upon to teach online. Because it is relatively new, there appears to be no commonly held pedagogy specific to online teaching and learning. Further,

these educators have little or no previous experiences to draw on, and they often feel there are no best practices to guide them in their work. Oblinger and Hawkins (2006) observe, “Developing and delivering effective online courses requires pedagogy and technology expertise possessed by few” (p. 14).

This lack of expertise highlights the need for the investigation of innovative approaches to online learning. In this chapter, therefore, we propose a model for online or distributed course design and test the usefulness of the model within an online graduate course context, during two sections of the course. Further, while the majority of the students were K–12 teachers, many worked in adult education and training situations. In this chapter, we use the term distributed learning to include both solely online and blended learning opportunities.

This study focuses on teaching and learning in a distributed environment and the impact they might have on students' ongoing professional practice. The objective of this research includes the following:

- To propose a conceptual model for situated learning within a distributed context,
- To propose an actual course model, built from the conceptual model,
- To gain an understanding of the effectiveness the model, and
- To gain an understanding of the potential impact of the model on the students' practice.

REVIEW OF THE LITERATURE

In 1997, the Globe and Mail estimates that the global market for technology-based distance learning is six billion dollars and will quadruple to twenty-six billion by 2006. For example, in the province of Alberta alone, twenty-three school districts have created online schools.

Online educators currently receive training and support through after-degree professional development initiatives (MacLaughlan, 2002), if they receive any at all. Many have simply started teaching online, learning technical skills along the way without formal consideration of an appropriate pedagogy for online teaching and learning (Haihuie, 2006).

Salmon (2004) recognizes “Successful online learning depends on teachers and trainers acquiring new competencies, on their becoming aware of its potential and on their inspiring the learners, rather than on mastering the technology” (p. vii). This will require a focus on the development of instructional design principles and learning theories (Kearsley & Blomeyer, 2004), understanding an emerging e-pedagogy (Good, 2001), and opportunities to experience what it is like to teach and learn online (Crichton & Li, 2004).

Within in the K-12 realm, it is important to note that schools with existing, and improving, technology infrastructures and curriculum mandates for ICT integration are shifting toward a blended model of learning to integrate and support learning technologies and incorporate new learning strategies that are student-centred, authentic, inquiry-based, and collaborative (ISTE, 2000). This shift has often resulted in increased pressure on teachers to build online courses, modify existing courses to include online components, and/or teach in a distributed environment that blends online with more traditional, face-to-face methods. It also requires a dramatic change in the roles and responsibilities of teachers (Coppola, Hiltz, & Rotter, 2002; Li, 2005; Reyes-Mendez, Torres-Velandia, Harrison, & Moonah, 2003). This shift requires teachers to re-examine their pedagogical beliefs and assumptions about learning (Becker & Riel, 1998). Palloff (2000) argues for the development of an e-pedagogy that involves a change in the traditional practices of teachers. Researchers note “Successful online learning depends on teachers and trainers acquiring new competencies, on their becoming aware of its potential and on their inspiring the learners, rather than on mastering the technology” (Salmon, 2004, p. vii).

As Robinson and Latchem (2003) note, in K–12 schools, post secondary institutions, and training facilities, online learning:

[...] is more than an alternative delivery system and its concerns are more than operational ones. Its planning and use soon confront fundamental

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