

Chapter XV

Online Pedagogical Effectiveness in Adult Contexts

Kathryn Dixon

Curtin University of Technology, Australia

Robert Dixon

Curtin University of Technology, Australia

ABSTRACT

A longitudinal study of students in the Training and Development program at Curtin University of Technology has been undertaken in an attempt to develop a framework which describes the dimensions of pedagogical effectiveness in online teaching and learning. The research began in 2004, and data have been collected from the sample group of students in the program from 2004–2007. As a result of analysis and review of the findings, the Online Pedagogical Effectiveness Framework (OPEF) emerged incrementally. The new framework challenges the traditional importance placed on the centrality of teaching skills and the need for student interaction in online teaching and learning, which according to this study, diminished over time. This has ramifications for the interchangeability of the roles of teacher, learner, and instructional designer peers and colleagues.

INTRODUCTION

This chapter reports on a longitudinal research project into online learning practices that has been conducted in an Australian university over the past three years. The sample for the research

comprised adult learners who have been enrolled in the Training and Development Program at Curtin University of Technology. Training and Development has been delivered fully online through the use of the learning management system WebCT since the late 1990s and is cur-

rently the only fully interactive online program in the Faculty of Education. The average age of the student cohort is 39 years, and they are attracted to participate in part time study as most are in full employment as educators in the public sector, industry, or private enterprise. The skills and knowledge gained through the undergraduate and postgraduate components of the course enable participants to qualify for training positions and to enhance their career prospects in their various workplace contexts.

As part of an overall evaluative approach towards the delivery and content of the Training and Development Program, the researchers decided to focus upon elements of pedagogical effectiveness and, in doing so, searched for available models and frameworks that shed light upon potential good teaching and learning practice in online environments. The study began in 2004 and used as its conceptual framework the Effective Dimensions of Interactive Learning on the Web model (Reeves & Reeves, 1997). The survey which was administered to the sample group (n=42) mapped the dimensions of philosophy, learning theory, goal orientation, task orientation, motivation, teacher role, metacognitive support, collaboration, cultural sensitivity, and flexibility on a five-point Likert scale against 15 principles of pedagogical effectiveness expressed in the Australian report authored by Brennan (2003) and funded by the National Centre for Vocational Education and Research (NCVER). These principles included the need for a learner-centred environment, constructivist approaches to teaching and learning, high quality materials design, teaching and learning strategies that develop cognitive skills, high levels of interactivity between all participants, guaranteed and reliable forms of access to the technology, engagement with online materials and learning experiences that encourage synthesis and analysis. It also incorporated the need to present opportunities for deep learning, consistent levels of feedback, and thoughtful matches between materials, learning

styles, and learning contexts. Furthermore, the report indicated a need for a model of delivery that includes thorough planning, monitoring, reviewing, and evaluating course materials and student progress and a range of navigational choices for students. Finally, it extolled the necessity for teachers who are imaginative, flexible, technologically sound, committed, responsible, and expert communicators.

The sample group contributed to three stages of the research from 2004–2007. At each stage, both quantitative and qualitative data were gathered and analysed through the administration of the instrument that was based upon the emergent Online Pedagogical Effectiveness Framework (OPEF). This new framework developed as a result of combining the work of Reeves and Reeves (1997) and the effectiveness dimensions outlined by Brennan (2003). One of the main objectives of this chapter is to describe the process that began in 2004 which has helped to illuminate various strengths and weaknesses of the online environment which is produced by the Training and Development Program. The research has helped to articulate an enhanced alignment of the units of study to improved pedagogical practice.

Currently, in Australia, the higher education sector is becoming increasingly scrutinised by both federal and state governments in terms of educational content as it relates directly to graduate outcomes. Increasingly, teaching and assessment practices in higher education have come under scrutiny as needing to be improved. Universities in Australia, and indeed in other western countries, such as the United Kingdom, the United States, and Canada, are now operating with reduced government funding (Currie, Thiele, & Harris, 2002). As a result, exploring alternative ways to boost traditional revenue sources has become imperative. International full fee-paying students have become a key source of alternative funding. Australian universities have been successful thus far in enticing overseas students onto their campuses. With university education reported

17 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/chapter/online-pedagogical-effectiveness-adult-contexts/19845

Related Content

Feature-Based Multimedia Semantics: Representational Forms for Instructional Multimedia Design

M. May (2008). *Multimedia Technologies: Concepts, Methodologies, Tools, and Applications* (pp. 435-464). www.irma-international.org/chapter/feature-based-multimedia-semantics/27098

Distinctions Between Games and Learning: A Review of Current Literature on Games in Education

Katrin Becker (2011). *Gaming and Simulations: Concepts, Methodologies, Tools and Applications* (pp. 75-107). www.irma-international.org/chapter/distinctions-between-games-learning/49375

A Real-Time 3D Visualization Framework for Multimedia Data Management, Simulation, and Prediction: Case Study in Geospatial-Temporal Biomedical Disease Surveillance Networks

Nathaniel Rossol, Irene Cheng, Iqbal Jamal, John Berezowski and Anup Basu (2011). *International Journal of Multimedia Data Engineering and Management* (pp. 1-18). www.irma-international.org/article/real-time-visualization-framework-multimedia/54459

SSIM-Based Distortion Estimation for Optimized Video Transmission over Inherently Noisy Channels

Arun Sankisa, Katerina Pandremmenou, Peshala V. Pahalawatta, Lisimachos P. Kondi and Aggelos K. Katsaggelos (2016). *International Journal of Multimedia Data Engineering and Management* (pp. 34-52). www.irma-international.org/article/ssim-based-distortion-estimation-for-optimized-video-transmission-over-inherently-noisy-channels/158110

A Novel Research in Low Altitude Acoustic Target Recognition Based on HMM

Hui Liu, Wei Wang and Chuang Wen Wang (2021). *International Journal of Multimedia Data Engineering and Management* (pp. 19-30). www.irma-international.org/article/a-novel-research-in-low-altitude-acoustic-target-recognition-based-on-hmm/276398