



Chapter V

Using E-Learning to Promote Excellence in Polytechnic Education

Maggie Beers, British Columbia Institute of Technology, Canada

Abstract

This chapter describes the participatory role faculty members have played in the first year of a five-year initiative that uses e-learning to promote educational excellence in learning, teaching, and research at a polytechnic institute. It argues that faculty engagement will ultimately determine the success of this e-learning initiative and, as such, faculty need to be active members in a collaborative process informed by participatory design. As this chapter outlines, faculty have used constructivist learning principles to create the educational vision that drives the initiative and provides its focus. They have participated in decision-making processes on the management team and advisory committee, and have piloted tools, learning approaches, and technical and educational support structures to inform the institute-wide implementation of this vision. This chapter aims to provide a model to inform the strategic direction of other institutes implementing similar e-learning initiatives and, therefore, concludes with preliminary lessons learned from year one.

Introduction

In the spring of 2005, the British Columbia Institute of Technology (BCIT) launched its five-year Technology Enabled Knowledge (TEK) Initiative to promote best practices in learning, teaching, and research. This initiative was intended to provide the technical infrastructure, Web-based collaboration tools, educational support structures, and faculty release time to enable its 47,000 learners to engage in exemplary e-learning, as defined by Massy and Zemsky (2004).

TEK has prompted BCIT to rethink how it delivers and supports its core operations at a time when emerging technologies can enable learning approaches that lead to educational excellence. Faculty support and participation will determine the success of this e-learning initiative, so the faculty need to be active members in a collaborative process informed by participatory design. Faculty members have developed the Initiative's educational vision, and they inform the direction of the Initiative through representation on the TEK management team and an established Faculty Advisory committee. In addition, faculty pilot tools, learning approaches, and support systems through funded Grassroots Projects to inform an institute-wide implementation. Through their engagement, faculty members promote a stronger culture of innovative teaching and learning with the use of educational technology.

This chapter describes the central, participatory role faculty members play in first, defining the educational vision that drives the TEK Initiative; second, informing managerial decisions to achieve this vision; and third, piloting tools, learning approaches, and technical and educational support structures to inform an institute-wide implementation of this vision. It concludes with a discussion of preliminary lessons learned from year one.

Context

British Columbia Institute of Technology

As a polytechnic, BCIT maintains close ties with industry and conducts applied research. Its programs are designed in consultation with leading employers in related industries, and students are expected to apply facts and theories to practice. Research conducted at BCIT is focused on activities with industrial or commercial relevance, where partnerships lead to benefits for the Institute, business and industry, and students (BCIT, 2005).

16 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/using-learning-promote-excellence-polytechnic/25614

Related Content

A Constructivist Approach to Game-Based Language Learning: Student Perceptions in a Beginner-Level EFL Context

James Yorkand Jonathan William deHaan (2018). *International Journal of Game-Based Learning* (pp. 19-40).

www.irma-international.org/article/constructivist-approach-game-based-language/196610

Mitigation of Cognitive Bias with a Serious Game: Two Experiments Testing Feedback Timing and Source

Norah E. Dunbar, Matthew L. Jensen, Claude H. Miller, Elena Bessarabova, Yu-Hao Lee, Scott N. Wilson, Javier Elizondo, Bradley J. Adame, Joseph Valacich, Sara Straub, Judee K. Burgoon, Brianna Lane, Cameron W. Piercy, David Wilson, Shawn King, Cindy Vincentand Ryan M. Schuetzler (2017). *International Journal of Game-Based Learning* (pp. 86-100).

www.irma-international.org/article/mitigation-of-cognitive-bias-with-a-serious-game/188613

Behavioral Evaluation of Preference for Game-Based Teaching Procedures

Leonardo Brandão Marquesand Deisy das Graças de Souza (2013). *International Journal of Game-Based Learning* (pp. 51-62).

www.irma-international.org/article/behavioral-evaluation-preference-game-based/77315

E-Learning and Virtual Science Centers: Designing Technology Supported Curriculum

John Falco, Patricia Barbanell, Dianna Newmanand Suzanne Dewald (2005). *E-Learning and Virtual Science Centers* (pp. 292-307).

www.irma-international.org/chapter/learning-virtual-science-centers/9089

Upload, Download, Overload!: An Empirical Study of Online Design and Organization Factors that impact Learning Outcomes and Reports of Overload

Lena Paulo Kushnirand Kenneth Berry (2013). *Cases on E-Learning Management: Development and Implementation* (pp. 71-102).

www.irma-international.org/chapter/upload-download-overload/68095