Chapter 4

A Brief History of eLearning

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ABSTRACT

The purpose of this chapter is to explore prior research associated with the history of eLearning. While issues related to the eLearning, technology and innovation adoption, the online environment, the role of faculty in online environments, and preparing faculty for online instruction are important, it is prudent to examine the history of this innovation in order to chart the future of such practices.

INTRODUCTION

Investigation into faculty adoption of eLearning for the purpose of quality teaching and its implications for training and faculty development, policy, and leadership, not only draws upon academic foundations, but also advances practice aimed to explore the technical, cognitive, and aesthetic basis of signifying human interaction as mediated by technology. This chapter will center upon several interrelated topics to explore the historical developments of eLearning.

MAIN THRUST

Historical Perspectives of eLearning

The origins of eLearning as currently practiced in higher education stem from the insightful work of Suppes (1964) and Bitzer (1962). While others such as Porter (1959) and Uttal (1962) were also active early in this field (Fletcher, 2002), only Suppes and Bitzer clearly situated the use of technology within a broader educational agenda (Suppes, 1964, 1966, 1986). It is important to note that there is no single evolutionary point of which the eLearning originated nor is there a single agreed definition of eLearning. Since the 1960s, eLearning has evolved
in different ways affecting Business, Education, the Training sector, and the Military (Fletcher & Rockway, 1986) in different ways. eLearning means different things in different sectors. In the higher education sector, “e-Leaning” refers to the use of both software-based and online learning, whereas in Business, Higher-Education, the Military and Training sectors, it refers solely to a range of on-line practices (Campbell, 2004). Our focus for this paper is e-learning in higher education.

In the 1960s, there were few educational applications of computers in universities. It was thought that the high cost of technology would prevent its ubiquitous uptake as an educational tool. Suppes (1964; 1966) argued that:

“in the future it would be possible for all students to have access to the service of a personal tutor in the same way that ancient royals were once served by individual tutors, but that this time the tutors would be in the form of a computer.” (Suppes, 1964; 1966).

Further, he argued that the single most powerful argument for the use of computers in education is individualized instruction and the dialogue that it supports. This was not an idle conjecture, but was based on Bloom’s (1984) research that demonstrated that one-on-one tutoring improved student achievement by two standard deviations over group instruction. Individual tutorials, Suppes (1964; 1966) argued, were also a core aspect of the university and computers would embrace and extend this through the use of virtual learning environments.

Suppes work (1964; 1966; 1986) and teaching was confined to structured fields and views of knowledge, with “drill and practice” approaches. Further, Suppes was concerned with both producing better learning, and learning how to be a better teacher with computers. Contemporary critiques of his approach often overlook the lack of viable alternative paradigms at that time, something that Suppes was aware of. His research found that computer mediated instruction produced profound effects on learning, and identified changes in students’ understandings ranging from simple to complex. While his use of computers was essentially as a tool, he foresaw the potential for wider applications of computers in education. His research led to the foundation ground work for computer assisted learning.

With Suppes foundation work on computer assisted learning (1964; 1966; 1986), it was not until Blitzer (1962) who created PLATO, a time-shared computer system, can to address concerns about student literacy. According to Blitzer (1962) PLATO could be used to develop and deliver computer-based education, including literacy programs. It allowed educators and students to use high resolution graphics terminals and an educational programming language, TUTOR, to create and interact with educational courseware and to communicate with other users by means of electronic notes – the forerunner of today’s conferencing systems (Bitzer, Lichtenberger & Braunfeld, 1962). Woolley (1994) argues that as well as PLATO’s advances in Computer Assisted Instruction, its communication features were equally innovative and were the foundations of today’s conference and messaging systems:

“Two decades before the World Wide Web came on the scene, the PLATO system pioneered online forums and message boards, email, chat rooms, instant messaging, remote screen sharing, and multiplayer games, leading to the emergence of what was perhaps the world’s first online community.” (Woolley, 1994)

Comparing e-learning practice over time is problematic and fraught with a host of methodological concerns (Charp, 1997; Herrington, Reeves & Oliver, 2005; Mortera-Gutiérrez, 2006; Nicholson & McDougall, 2005; Pilla, Nakayama, Nicholson, P., 2006; Thomson, 2005). Table 1 provides an historical perspective based on macro-