Chapter XXXII
CTE Distance E-Learning Application:
A Learner-Centered Approach

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ABSTRACT

E-learning application within distance contexts is growing rapidly as a solution to the demands and needs of CTE learners in the 21st century. Effective and sustainable application begins with understanding the connective relationship e-learning enjoys with distance education. In conjunction with this link, pedagogical theory and practices successfully utilized within distance education are of relevance to CTE educators and practitioners if successful application is to be attained. This chapter delves into the prominent theories and practices of distance education centered on a learner-centered approach. Also discussed is the changing role of the instructor and learner within this pedagogical approach. Although challenges and barriers emerge with change strategies, CTE has distinct advantages for successful transition and application. Central to the learner-centered approach is the characteristics and capabilities of Web 1.0 and Web 2.0 technologies which continue to regulate and necessitate consideration of the learner-centered approach within distance contexts.

INTRODUCTION

The paradigm shift accompanying the application of e-learning in distance contexts within Career and Technical Education (CTE) reveals how the use of technology is impacting the nature of teaching and learning in the 21st century. The shift centers on the need for a learner-centered approach in pedagogy and the strategic use of information and communication technology (ICT) to facilitate learning. Defining and situating e-learning within the field of distance education (DE) is essential to

successful application within distance contexts. Researchers express concern that institutions of higher education are applying e-learning in distance contexts without a solid understanding of distance learner needs. Distance education strategies differ from traditional expository practices; therefore successful application beckons understanding of distance education theory and practice. The purpose of this chapter will be to review distance education theory and practice and present a review of the learner-centered approach for consideration by CTE educators and practitioners integrating e-learning.

This chapter begins with a review of distance education's generational timeline, theory and practice in an effort to understand DE's relationship with the learner-centered approach. Discussion continues with the influence distance brings to the roles and responsibilities of the instructor and learner. Awareness of individual, institutional and global challenges in distance application can assist CTE educators and professionals with transition strategies. In addition to CTE's attentiveness to DE learner-centered theory and practice, CTE is favored with distinct advantages which can potentially reduce transitional complications and favor success. This chapter proceeds with a brief description of the characteristics and capabilities of Web 1.0 and Web 2.0 e-learning technology and how these technologies are influencing CTE teaching and learning. This chapter concludes with a framework of relevant change strategies to assist in CTE's strategic use and application of elearning within distance contexts.

This chapter's discussion encompasses adult tertiary education and the use of e-learning in distance contexts to achieve educational goals and objectives. Within new distance online or virtual contexts, and in modes that combine traditional and distance delivery, an effort must be put forth to acknowledge learner needs and evolving technology's increasing accommodation of learner empowerment.

BACKGROUND

E-learning, a familiar term used in educational contexts today, often complicates effective application because of divergent understandings. While most generally agree that the "e" refers to electronic delivery or storage capability, the consensus blurs beyond this understanding (Bates, 2007; Frydenberg, 2002; Moore & Kearsley, 2005; Morrison, 2007; Salmon, 2000). Less recognized is the realization that e-learning can be any teaching and learning that is electronically mediated through technology including but not limited to Internet use (Adria & Campbell, 2007; Bates, 2005; Holmberg, 1995; Rosenberg, 2001; Wilson, 2007). The Internet's capability to transcend beyond information presentation to offer flexible course design and delivery has won favor and acknowledgement in higher education (Beaudoin, 1990; Harsh & Sohail, 2002; Morrison, 2007; Rosenberg, 2001; Peters, 2004; Wild, Griggs, & Downing, 2002).

E-learning can be both supplementary in nature (traditional contexts) and primary in distance contexts (online and virtual) (Rosenberg, 2001). As interest in distance delivery modes increases beyond the parameters of traditional DE provision, the use of e-learning for delivering CTE career educational courses and technical training is also growing (Holmberg, 1995; Rourke, Anderson, Garrison, & Archer, 2001; Zirkle, 2004). When technology compensates a physical separation between instructor and learner this is a form of distance education (Peters, 2004; Zirkle, 2004). Harsh and Sohail (2002) view distance education as "a pedagogical process that involves imparting knowledge beyond traditional educational borders […]". Researchers agree that this difference warrants the examination of pedagogical focus in application to ensure successful communication when mediating with technology (Bates, 2005; Diaz & Bontenbal, 2001; Peters, 2004; Wild, Griggs & Downing, 2002). E-leanring is a catalyst that reinforces a need to both redefine

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