Chapter I
Utilization of Distance Education in Career and Technical Education (CTE) Teacher Education

Chris Zirkle
The Ohio State University, USA

Edward C. Fletcher Jr.
The Ohio State University, USA

ABSTRACT

Distance learning opportunities have rapidly burgeoned in educational environments across disciplines. The result of its growing use has been felt by the career and technical education (CTE) teacher education community. This chapter examines the literature and implications regarding the implementation of distance education in the delivery of CTE teacher preparation programs, along with the issues and challenges it brings. First, a brief historical account of distance education in institutes of higher education is provided. Secondly, a review of the research on distance education's presence in (CTE) programs is discussed. Thirdly, future trends are articulated for CTE teacher educators, CTE teacher candidates, and CTE researchers.

INTRODUCTION

Technology has changed the methods by which education is delivered. Students enrolled in distance education, particularly those programs using telecommunications technology, can have almost the same instructional contact and interaction as students in traditional settings (Galusha, 1998). These technological changes have also driven the growth of distance learning opportunities, as

students who are time bound due to job or travel difficulties and cannot attend a class at a specific time, or place-bound due to geographic location, can now access courses and degree programs at their convenience (Zirkle, 2003).

Colleges and universities across the nation are facing several changes affecting the nature of courses and degree programs they offer. Legislative calls for ease of access, affordability, and increased numbers of students enrolled in post-secondary education have caused institutions to focus more efforts on new technologies to deliver courses and degree programs. As the technical skills shortage in the United States continues to grow, these issues have begun to affect career and technical education programs as well.

As the teacher shortage also continues to be felt across the country (U.S. Department of Education, 2008), these same educational institutions are exploring the feasibility of offering all or part of their teacher education programs through distance learning methodologies. This issue is of particular interest for career and technical education teacher education, which has seen nearly two decades of decline in the number of institutions offering career and technical education teacher education programs (Bruening, Scanlon, Hodes, Dhital, Shao, & Liu, 2001a; Camp, Case, Dean, & Fannon, 1998; Hartley, Mantle-Bromley, and Cobb 1996; Lynch 1996; Pucel and Flister 1997; Zirkle, 2004; Zirkle, 2002).

Purpose/Objectives

This chapter will focus on examining the issue of the utilization of distance education methodologies in career and technical education teacher education programs, and will center on two basic research questions:

- To what extent are colleges and universities utilizing distance education in the delivery of their career and technical education teacher education programs?

- What are the significant challenges and opportunities experienced by colleges and universities as they utilize distance education in the delivery of their career and technical education teacher education programs?

BACKGROUND

Although the Internet and other technologies have increased interest in distance education, it is not a new phenomenon. Researchers agree that the first form of distance education was the correspondence course (Zirkle, 2003). In the United States, both the University of Chicago and the University of Wisconsin were offering correspondence programs before the beginning of the 20th century. Instructional films appeared in 1910 and by the 1920s motion pictures were used for education, and radio also was used extensively to provide educational content to remote areas of the country. In 1922, the station WHA at the University of Wisconsin was one of the first educational institutions (along with WLB at the University of Minnesota) to be granted a license in the new "limited commercial" category for broadcasting (Wisconsin Public Radio, 2008). In the early 1930's the University of Iowa began transmitting instructional courses. World War II slowed the use of these technologies as an instructional medium, but military training efforts had demonstrated the potential for using audiovisual media in teaching (Wright, 1991). Educational television began to prosper and expand in the early 1960s, as 53 stations affiliated with the National Educational Television Network, whose purpose was to share films, began to coordinate broadcast scheduling (Hull, 1962). However, concern began to surface regarding the quality of instructional programming delivered via television. In 1967, the Carnegie Commission concluded "the role played in formal education by instructional television has been on the whole a small one…With minor exceptions, the total disappearance of instructional

11 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/utilization-distance-education-career-technical/19958

Related Content

Interdisciplinary Studies in Built Environment Education: A Case Study
Gerard Woodand Song Wu (2010). *Interprofessional E-Learning and Collaborative Work: Practices and Technologies (pp. 316-335).*
www.irma-international.org/chapter/interdisciplinary-studies-built-environment-education/44452

Small-Group vs. Competitive Learning in Computer Science Classrooms: A Meta-Analytic Review
Sema A. Kalaianand Rafa M. Kasim (2015). *Innovative Teaching Strategies and New Learning Paradigms in Computer Programming (pp. 46-64).*
www.irma-international.org/chapter/small-group-vs-competitive-learning-in-computer-science-classrooms/122195

ERP Education: Hosting, Visiting, and Certifying
Andrew Stein, Paul Hawkingand Brendan McCarthy (2007). *Enterprise Systems Education in the 21st Century (pp. 41-51).*
www.irma-international.org/chapter/erp-education-hosting-visiting-certifying/18493

The Impact of E-Learning on CTE from an Adult Education Perspective
Ian Gordon, Don Quickand Linda Lyons (2009). *Handbook of Research on E-Learning Applications for Career and Technical Education: Technologies for Vocational Training (pp. 155-165).*
www.irma-international.org/chapter/impact-learning-cte-adult-education/19969

Paradigm Shifts in the Pedagogical Approaches: Andragogy-Heutagogy-Synergogy
Deepika Tiwari (2018). *Business Education and Ethics: Concepts, Methodologies, Tools, and Applications (pp. 343-362).*
www.irma-international.org/chapter/paradigm-shifts-in-the-pedagogical-approaches/186583