Chapter 10
Impact of Virtual Learning Environments on the Future of Adult Education and Training

David Deggs
University of Arkansas, Fayetteville, USA

Kenda Grover
University of Arkansas, Fayetteville, USA

Kit Kacirek
University of Arkansas, Fayetteville, USA

ABSTRACT

The use of distance education technologies has become more common in adult education and training programs over the past few decades as educators and trainers have made great strides to utilize these technologies to meet the increasingly demanding needs of adult learners. Meanwhile virtual learning has become a popular form of distance education, although it has only been implemented to a limited scope within adult education and training compared to other areas of education. This chapter explores the advances that have occurred with distance education technologies including standardized course management systems, investments in technology systems, and refinement of instructional delivery methods. The chapter also explores future trends that are likely to emerge regarding the use of virtual learning for adult education and training and also provide guidance to adult educators and trainers who plan to utilize virtual learning.

INTRODUCTION

Distance education has increasingly become a more common instructional method for delivering programs to meet the education and training needs of adult learners. Distance education programs which have utilized web-based technologies have grown tremendously over the past few decades among both adult education and training programs, including enrollment in degree programs offered by colleges and universities. This growth has been cited in the literature and acknowledged by national education organizations (Moosavar-

Rahmani & Larson-Daugherty, 2007; Ellis, Ginns, & Piggott, 2009)

There are many challenges facing distance education today including increased enrollments, changing faculty roles, training needs for faculty, and securing financial support (Howell, Williams, & Lindsay, 2003). Increased popularity of web-based instruction has caused many of these challenges (Bullen, 1999) and as a result the Internet has emerged as the dominant form of distance-education media. The end result has been identified need for "learning and teaching strategies that exploit the capabilities of technology" (Howell, Williams, & Lindsay, 2003, pp. 11-12). Programs must respond to these challenges, meet learner demand, and properly utilize the technology or chance loosing students to other institutions (Kroder, Suess, & Sachs, 1998).

Meanwhile virtual learning environments (VLEs) have become more popular in other areas of education and are also becoming somewhat more common for use in meeting training needs. Vander Valk (2008) stated that virtual environments hold great promise for educational institutions. Virtual environments provide opportunities for collaborative learning, development of learning communities, and virtual training, as well as "exciting possibilities in the areas of experiential learning and prior learning assessment" (p. 210). However, virtual reality (VR) is somewhat novel to the fields of adult education and training, as evidenced by its limited use to date, the possibility of using computers to create virtual worlds and simulations was acknowledged two decades ago by Bricken (1990):

Computers are not only symbol processors, they are reality generators. Until recently, computers have generated only one dimensional symbolic strings. Text and numbers. Text is a code which, when read, generates images of reality in our minds. (Introduction section, para. 3)

Bricken stated that virtual reality was in the "unique position of being commercially available before being academically understood" (Introduction section, para. one). Adult education and training programs are likened to other fields of education where virtual education has yet to be implemented to its fullest potential. Today, many adult educators and trainers are striving to implement existing distance education and other technologies into teaching and learning processes. Thus there is limited time to explore the use of virtual reality, despite the opportunities and benefits it can provide. Furthermore, it is likely that misunderstandings about the proper use of virtual learning environments could likely account for the lack of utilization of the technology into adult education and training programs.

WHAT WILL BECOME OF DISTANCE EDUCATION?

Approximately one decade ago Eastmond (1998) stated that the challenge for adult learning via internet-based distance education was to move adult students, faculty, advisers and courses to higher technologies. At that time "higher technologies" consisted of e-mail and web-based applications. Eastmond cautioned that these "high-tech environments are less familiar to most adults, requiring some skill with computers, and challenge educators to rethink their instructional approaches" (p. 34). Although advances have been made and institutions and organizations have made investments in distance education technologies, the development and implementation of distance education programs for adult learners has not reached an optimal level. Harroff and Valentine (2006) stated that web-based adult education may have yet to gain adequate support among some institutions in order to ensure that the quality of instruction remains effective. Harroff and Valentine also stated that demand and competition could prompt organizations to invest in resources

13 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/impact-virtual-learning-environments-future/46572

Related Content

Applying Web 2.0 Technologies to Traditional Teaching
Royce Ann Collins (2011). *Encyclopedia of Information Communication Technologies and Adult Education Integration (pp. 308-321).*
www.irma-international.org/chapter/applying-web-technologies-traditional-teaching/46581

From Theorizing in the Ivory Tower to Creating Change with the People: Activist Research as a Framework for Collaborative Action
Denisha Jones (2017). *International Journal of Adult Vocational Education and Technology (pp. 29-41).*
www.irma-international.org/article/from-theorizing-in-the-ivory-tower-to-creating-change-with-the-people/181501

Continuance Intention to Use Bilibili for Online Learning: An Integrated Structural Equation Model
Xindi Liuand Zhonggen Yu (2023). *International Journal of Adult Education and Technology (pp. 1-24).*
www.irma-international.org/article/continuance-intention-to-use-bilibili-for-online-learning/322387

Heterogeneous vs. Homogeneous Groups: Methodology for Class Instruction for Post-Secondary Business Education Courses
Theodore E. Davis (2012). *International Journal of Adult Vocational Education and Technology (pp. 40-50).*
www.irma-international.org/article/heterogeneous-homogeneous-groups/62982

A Framework for Developing Pre-Service Teachers' Web 2.0 Learning Design Capabilities
Matt Bower (2012). *Developing Technology-Rich Teacher Education Programs: Key Issues (pp. 58-76).*
www.irma-international.org/chapter/framework-developing-pre-service-teachers/61917