Chapter XII
The Impact of E-Learning on CTE from an Adult Education Perspective

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ABSTRACT

This chapter provides an alternative approach to career and technical education (CTE) and the use of e-learning technologies. The authors suggested that, by shifting our emphasis in education from the development of people to meet occupational and economic needs to the development of people as individuals, they might become more successful in meeting occupational and economic goals. Based on lifelong learning, we concentrated on experiential learning, critical reflection, transformative learning, and learning communities as best educational practices. Having established the pedagogical basis for lifelong learning, they will then focus on the impact of e-learning and how it can be used to foster and develop these practices. The authors then discuss how these technologies can be used to help create lifelong learners and a learning society. The authors conclude with a discussion of two groups of CTE learners and how the use of e-learning technologies may help meet their learning, career and life goals.

INTRODUCTION

Having spent the last decade or two in the field of computer application training and adult education as instructional designers, instructors, and education managers, we recognize the potential for e-learning technologies to assist in career and technical education. However, it seems that the incorporation of these technologies, in conjunction with advances in adult education theory, has not yet been realized.

We often ask our youth, starting at a very young age, what they want to be when they grow up. The usual answer, in our experience, is based on an occupation or job. "Me" is not seen as an acceptable or desirable answer. We indoctrinate our youth to become "something" that will contribute to the economic aspects of our society. Our institutional systems of education also separate learners from the society in which they are supposed to be immersed. Our educational institutions create an artificial society where learners are often unable to relate what they have learned to what they are tasked to do once they leave the institution.

Ian's experience in the field of technical education over the past decade has also demonstrated to him that our methods of training in technology separate the learners from the application of the technology in the same way that our educational systems separate the learners from their lives. Typically, in his experience, people are taught to use a technology in isolation from the environment where it is used. Computer labs are created seating 20 to 30 participants, and the technology is demonstrated and applied to generic examples of how it is used. How often is a technology taught in a workplace while the learner is working to complete a task? While this type of teaching and learning does occur, it is often an individual mentoring type experience, not one put forth by our formal education and training institutions. These institutions tend to teach a skill, a set of competencies or a particular subject, not a person or individual.

What if the focus of education is changed? What if the goal is to create well- rounded individuals who become an integral part of society, with adaptability and thinking skills that allow them to function and change as society and economics change, thereby creating a whole person rather than a productive member of society? By looking at adult learning theories (Merriam et al., 2007), we may discover a new goal for education. Some of the theories to be used may include lifelong learning (Jarvis, 2004), experiential learning (Dewey, 1938), critical reflection (Brookfield, 2000), and transformative learning (Mezirow, 1997).

In this chapter we will establish the current focus of career and technical education (CTE) as being based on meeting job and skill requirements and driven by economic supply and demand requirements. We will then provide an alternative CTE focus on the development of individuals as lifelong learners in a learning society through the examination of current adult educational research, theories, and pedagogy.

BACKGROUND

In the search for modern delivery mechanisms and methods for career and technical education (CTE), a review of legislative acts that have shaped, and continue to shape CTE, provides some insight and direction.

The Morrill Act of 1862

This act allocated federal funds to establish colleges for the common person that would deliver training largely focused on agriculture and the mechanical arts. As a result, millions of farmers and workers that formerly had been excluded from higher education, could now take advantage of the learning opportunities created by the state land-grant institutions, "a development that could not help but reshape the nation's social and economic fabric" (Morrill Act of 1892). Today, as these same