

# Chapter 7

## Workforce Competencies and Career and Technical Education

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### ABSTRACT

*The need for workforce ready students can be met through the use of Career and Technical Education (CTE) programs. Identification of workplace skills that are rewarded and required by employers will foster relationships between CTE programs and workforce employers. These relationships will also impact economic growth, school-to-work efforts, and the global workforce. This chapter addresses the workforce competencies of business and industry and CTE programs as well as addressing shortfalls in these areas. Future trends are also identified in regards to workforce competencies in CTE programs.*

### 7.1 INTRODUCTION

Current workforce needs anticipate more than a high school diploma or GED to be competitive in the workplace. Workforce skills and career options are and can be reinforced through CTE programs. High school CTE students are more likely to remain in school than those enrolled solely in academic programs (Earning, Learning, and Choice, 2004). Traditional curriculum high school students interested in engaging, experiential activities can often find successful

experiences through CTE programs. Developing marketable and competitive skills through CTE programs is an excellent way to meet workforce development needs.

The purpose of this chapter is to identify the role CTE programs have in preparing the workforce; the importance of retaining high school students through graduation; workforce competencies needed in business and industry and career and technical education; and, the issues that will challenge and shape CTE programming. The chapter is organized using the following sections: background, workforce competencies, proposed solutions, trends, and a conclusion.

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## **7.2 BACKGROUND**

A skilled workforce is the key to a viable and healthy economic local, regional, national and global position. Competing internationally is dependent on the skills of our workforce (Adult Learning, 2008). Heinrich, Jordan, and Smalley (2005) emphasized the need for quality mathematics education since U.S. high school students, when compared to students from other countries, were not competitive in mathematics knowledge. It is unrealistic to expect students, who only complete basic high school requirements to be sufficiently ready to meet progressive workforce needs. The role of education has remained constant as Venn (1970) stated “We must accept the belief that it is a responsibility of education to help young people find a meaningful role in society in which they can make increasing contributions and accept increasing responsibilities” (p. 16).

Career and Technical Education (CTE) programs can serve as a retention option to keep some students from dropping out of high school. CTE programs can be a conduit to specific fields and allow flexible curriculum content (Benson, Johnson, Taylor, Treat, Shinkareva, & Duncan, 2004; Peters, 2008). These programs are geared to prepare students for both employment and college experiences and can provide a workforce with skills necessary to gain and sustain employment. CTE is part of the larger secondary school reform effort (Peters, 2008) and exposes and attracts students to academic areas and can also aid in keeping students in school (Salopek, 2007).

It is important that Career and Technical Education administrators recognize that students can achieve academically through a wide range of learning experiences. CTE courses supplement required coursework and promote increased student involvement and interest. Emphasis is on “CTE leadership that maintains the secondary delivery system and improves or initiates the relationship with the adult CTE student, economic development initiatives, and postsecondary occupational

education” (Career and Technical Education Administration, 2006, A-1).

Advisors or counselors also influence students to participate in CTE areas as possible career paths. High school teachers can draw parallels between academic coursework and the world of work (Peters, 2008). The competency-based education (CBE) model is often associated with secondary and postsecondary workforce education and begins with an assumption of providing instruction to students and an analysis of the task to be taught. Gray and Herr (1998) listed CBE characteristics as:

- The goal is to teach essential outcomes.
- Outcomes are described in behavioral, observable, or criterion-referenced learning objectives.
- Outcomes are taught in a prescribed sequence.
- Instruction is focused on learning objectives.
- Assessment is defined by the behavioral objectives and usually in the form of demonstration or application.
- A minimal level of competence is established which all students must obtain before continuing to the next behavioral objectives.
- Students or clients are provided with frequent/timely feedback regarding their performance.

Contextual learning is an educational philosophy and strategy that centers on assisting students to find meaning in their education. The major task of the teacher is to broaden the student’s perceptions so that the meaning of the task becomes evident and understandable. Learning needs to be connected to the larger meaning in life such as how it relates to real-life issues and actual life roles (Parnell, 1995). Career and workplace information typically comes from a variety of sources such as employer partnerships, community members, and

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