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CAO PERSPECTIVES: THE ROLE OF GENERAL EDUCATION OBJECTIVES IN CAREER AND TECHNICAL PROGRAMS IN THE UNITED STATES AND EUROPE

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CAO PERSPECTIVES: THE ROLE OF GENERAL EDUCATION OBJECTIVES IN CAREER AND TECHNICAL PROGRAMS IN THE UNITED STATES AND EUROPE

A DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE

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We certify this dissertation, submitted by the above named candidate, is fully adequate in scope and quality to satisfactorily meet the dissertation requirement for attaining the Doctor of Education degree in the Community College Leadership Doctoral Program.

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ABSTRACT

Globalization is changing the way students prepare for careers in the United States and Europe as competition for highly skilled workers is increasing among companies, regions, and nations. Success in this environment requires skills beyond the ability to perform job-related tasks. Skills of this nature are described as “liberal arts,” “basic” or “soft” skills or more broadly, “general education.” This international comparative study examines the processes used to identify, embed, and assess outcomes related to general education within career and technical programs in selected institutions in Europe and the Midwestern United States through the perceptions of their Chief Academic Officers (CAOs).

In this qualitative study, three community colleges were selected from the Midwestern United States and matched with three analogous institutions from the European Union offering career and technical programs. The CAO at each college participated in a semi-structured interview. Questions were asked related to the influence of cultural values and beliefs and the role of internal and external policies on the inclusion of general education objectives within career and technical programs. The content, delivery and assessment of those objectives, and future directions envisioned by the CAOs were also discussed. Interview results were triangulated with information from the college’s web sites and other documentation to support conclusions and recommendations.

The study found considerable agreement on the components of general education among CAOs on both continents but a broad variation on time spent on these components. Findings also included the growing influence of employers on the curriculum of career and technical programs, including general education content, and growing regional, national and international oversight on both sides of the Atlantic. The study offers recommendations for practice, dissemination of the findings, and further research.
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CHAPTER 1
INTRODUCTION

Globalization is changing the way students prepare for careers in the United States and Europe as competition for highly skilled workers is increasing among companies, regions, and nations. According to the Association of American Colleges and Universities’ (AACU) 2007 report, *College Learning for the New Global Century*, “the world is being dramatically reshaped by scientific and technological innovations, global interdependence, cross-cultural encounters, and changes in the balance of economic and political power” (p. 2). In his foreword to Edexcel’s 2009 report, *Effective Education for Employment*, Director Ross Hall states that “[current economic] conditions make the need for effective education for employment even greater” (Playfoot & Hall, 2009, p. 4). To prepare for this new work environment, large numbers of students in both the United States and Europe are enrolling in study programs to earn vocational credentials. Community colleges and similar institutions are important providers of this career and technical education. The American Association of Community Colleges (AACC, 2010) estimates that 8 million students enrolled in community colleges in fall 2009; a 2003 report from the European Union Association of Institutions in Higher Education (Kirsch, Beernaert, & Nørgaard, 2003) reported that 2.5 million students enrolled in “short-cycle” vocational degree programs across Europe.

In today’s competitive environment, being well prepared for a career requires abilities beyond career-specific skills (Raftopoulos, Coetzee, & Visser, 2009; Stumpf, 2007). Several terms refer to these abilities, including liberal arts, “basic” skills, and “soft” skills. In community colleges in the United States, these outcomes are most often collected under the umbrella of general education. US community college career and technical programs
traditionally include a core of general education courses (Stumpf, 2007). However, colleges in Europe are traditionally less likely to include specific general education courses within their vocational programs (Cohen & Brawer, 2003). Why do these approaches differ? What can academic leaders in the United States and Europe learn from each other to ensure that their graduates will be competitive in the global marketplace?

The term “general education” embodies a reality that is socially constructed within post-secondary institutions. By examining multiple sources of data that reflect this reality within the context of a sampling of analogous institutions, this study attempts to make visible the world of general education within programs intended for workforce preparation and to foster a more complete understanding of the implementation of this phenomenon in postsecondary institutions in the United States and in Europe.

**Statement of Purpose**

Outcomes related to general education—whether they are labeled liberal arts, basic skills, or “soft” skills—play a role in the design, delivery, and assessment of career and technical programs in the United States and Europe. Given the reality of globalization, it makes sense for educators in the United States and Europe to consider practices from outside as well as within their national borders. This international comparative study examines the processes used to identify, embed, and assess outcomes related to general education within career and technical programs in selected institutions in Europe and the Midwestern United States.

The purpose of this study is to compare the perspectives of selected Chief Academic Officers on integrating general education into postsecondary career and technical education programs designed to prepare students for the global workforce.
Need for the Study

Higher education has been regarded increasingly as what Canadian researcher Alex Usher (2009) refers to as a “social escalator” (p. 3). Accordingly, institutions in both the United States and Europe are being asked to do more—“to educate more students from ever-more diverse backgrounds, in more subjects, in more ways, in more fields of study; to do so in a fashion which is both unique at each institution while at the same time highly transferable, so as to encourage mobility in learning” (p. 3). A body of research has developed to investigate and illuminate the extent to which this is happening on both continents (Adelman, 2008; AACU, 2007; Bastedo, Batkhuyag, Prates, & Prytula, 2009; Gaston, 2010; Playfoot & Hall, 2009). This study contributes to this small but growing body of research and offers recommendations for further examination.

Guiding Questions

The guiding questions arising from the purpose of the study were as follows:

1. How do cultural beliefs and values regarding the purpose of education inform the role that general education objectives play in career and technical programs in US community colleges and similar institutions in Europe?

2. What specific internal and external policies exist related to the role of general education objectives in career and technical programs in US community colleges and similar institutions in Europe?

3. What are the commonalities and differences in content, delivery, and assessment of post-secondary general education outcomes for career and technical education programs in US community colleges and similar institutions in Europe?
4. What future directions are envisioned regarding the role of general education objectives in career and technical programs in US community colleges and/or similar institutions in Europe?

**Background and Significance**

Many differences exist between community colleges in the United States and similar institutions in Europe; however, common elements also exist. These common aspects include a focus on access and student success and an orientation toward the needs of local communities and industry (Boggs, 2008). On both continents, institutions evolved or developed to fill a perceived middle ground between secondary school and universities by offering vocational training as well as academic studies. Community colleges in the United States have embraced a comprehensive mission, including (a) providing courses that transfer to 4-year colleges, (b) career and technical education programs leading to certificates and associate degrees, (c) developmental education, (d) corporate training, and (e) community education (Cohen & Brawer, 2003). Arguably, two of their most important functions have been (and remain) transfer and career and technical education (Brint & Karabel, 1991; Cohen & Brawer, 2003; Diener, 1986). In contrast, Western European countries have tended to concentrate more on building vocational schools rather than comprehensive community colleges (Cohen & Brawer, 2003). Many countries in Europe also rely on a system of apprenticeship and on-the-job training to supplement vocational education received in secondary or postsecondary institutions (Cohen & Brawer, 2003).

Although career and technical education in Europe has developed along a different pathway than in the United States, it is still possible to discern similarities in educational problems and solutions on both continents. The history of institutions similar to community
colleges in Europe begins with the development of secondary schools in England and Western Europe during the sixteenth century (Anderson, 2004). Largely defined by their relationship to Europe’s ancient, Church-dominated universities, these secondary schools offered upper-class children the opportunity to prepare for a university education focused on preparing for the clergy or the practice of law. However, by the nineteenth century, some secondary schools in larger European cities were also offering evening classes in technical studies for working adults (Roach, 1991).

In the United States, community colleges appeared in the late nineteenth century and early twentieth century when an increase in the number of secondary school graduates created a greater demand for postsecondary education (Cohen & Brawer, 2003; Diener, 1986). Originally called junior colleges, these institutions were developed with the specific intent to provide the first 2 years of college-level coursework to secondary school graduates who could then transfer to a university (Diener, 1986). To reinforce the idea that junior colleges were intended as logical extensions of secondary schools, founding educators such as William Rainey Harper and Alexis Lange advocated following the model of European universities and secondary schools where “universities would be responsible for higher-order scholarship while lower schools would provide general and vocational education to students through age nineteen or twenty” (Cohen & Brawer, 2003, p. 7). In his 1917 address to the California Teachers Association, Lange argued that this vocational education should prepare students for “careers that occupy the middle ground between those of the artisan type and the professions” (Diener, 1986, p. 71).

Despite the early inclusion of career-specific training in the definition of the junior college, liberal arts courses intended for transfer to 4-year universities constituted the majority of course offerings until well into the 1960s (Cohen & Brawer, 2003). These liberal arts courses
formed the core of the colleges’ programs of general education. General education courses dominated curricula in the 1940s and 1950s, whereas what are now called career and technical programs occupied a subordinate position in community college curricula until the 1960s (Cohen & Brawer, 2003).

Data from the National Center for Education Statistics (1996) indicates that delivery sites and general education content for career and technical education in Europe differ from those in the United States. For example, training for nurses (both LPN and RN) is a staple of community colleges in the United States; however, in Austria, Germany, and the Czech Republic, nurse training is frequently offered at the secondary school level in specialized schools. It seems likely, therefore, that graduates of these schools would have an equivalent exposure to general education as a graduate of a comprehensive secondary school in the United States (with no postsecondary general coursework); as noted previously, graduates of community college programs might be assumed to have as much as 25% of their postsecondary experience in general education courses.

In 1999, 29 European countries undertook the challenge to reform and reconstruct their systems of higher education to increase consistency in degree offerings and enhance student mobility across national borders. Since then, the “Bologna Process,” named for the Italian city in which the project was initiated, has taken hold in Europe, Latin America, North Africa, and Australia. As Europe moves away from its traditional 5-year course of university study leading to a diploma roughly equivalent to a US Master’s degree, institutions and countries have designed “degree cycles” that may include a Bachelor’s degree with a “short-cycle” degree contained within, a second cycle degree, and finally a third cycle or doctoral-level degree. Within these degree cycles, discipline-specific competencies as well as competencies across the
disciplines similar to “general education” in the US system are articulated. Institute for Higher Education Policy Analyst Clifford Adelman (2008) stresses that this is not standardization of the curriculum; instead, “our European colleagues... have been far more sophisticated and concrete in the matter of generic capacities one expects will be developed in the course of higher education” (p. 37).

**Overview of Theoretical Framework**

The foundation for the theoretical framework for the study is built on the effects of globalization and the attendant emergence of a world culture as articulated by Robertson (1992). The value of human capital is the dominant theory. This theory will be subjected to critique by credentialist theorists who object to the upward pressure on educational credentialing.

**World culture theory.** To fully appreciate a comparison of the role of general education in career preparation programs in the United States and Europe, it is necessary to understand and view the situation through the theoretical lens of globalization and an emerging world culture. World culture theory, as articulated by Robertson (1992), is focused on an individual’s perception of the world as a single place. The issues of how to live in this single place, and how this place is to be ordered, are central to the theory. In essence, world culture theory operationalizes globalization as a process that requires all units to define an identity relative to the global whole.

**Human capital theory and credentialist critique.** An appreciation of how human capital theory relates to the principles of postsecondary career preparation programs, as well as a critique of these principles from a credentialist standpoint, set a tone for analyzing the perspectives of academic leaders on the role of general education objectives within those programs. The Organization for Economic Cooperation and Development (OECD, 2007)
describes human capital as competencies that can be developed in individuals to allow them to participate more fully in post-manufacturing economies. First introduced as a concept by Adam Smith (1776) in *The Wealth of Nations*, the human capital theory was first applied to the discipline of economics in 1964 by Chicago School economist Gary Becker. In the preface to the third edition of *Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education*, Becker (1993) references the 1992 presidential campaign during which then-candidate Clinton and former President Bush “did not even shy away from using the term ‘investing in human capital’ to describe the process of improving the labor force” (p. xix).

The theory of human capital appears to be the driving force behind Barack Obama’s call for every American to commit at least 1 year to postsecondary education or training (Obama, 2009a). In contrast, credentialist theorists express concern over whether post-secondary education is truly necessary to participate in the labor market (Walters, 2004), or if the upward pressure on educational requirements for specific career fields is simply a form of inflation and has no significant relationship to job performance.

These critical arguments from a credentialist viewpoint illuminate the ambiguous and sometimes contentious position that programs of general education occupy within career preparation programs. An underlying sociological tension exists between the association of education with elite cultural status (Collins, 1971) and Obama’s (2009a, 2009b) call for a universal commitment to postsecondary education. This tension is also felt as Europe’s ancient and venerable universities seek to broaden access and participation from traditionally underrepresented groups through the higher education reforms associated with the Bologna Process. In a report from the Working Group on the Social Dimension of the Bologna Process (2007), the Group describes that “strengthening the social dimension and enhancing mobility of
staff and students cannot be done within higher education systems alone” (p. 6). The ideal of developing human capital through education that is so clearly driving an agenda of worldwide change remains vulnerable to a nagging fear that the capacity for educational attainment may be uncomfortably tied to socioeconomic factors.

Relevance to the Field

This study offers information and insights for community college leaders in three ways. First, it advances cross-cultural understanding of the history and current context of general education as a component of career preparation programs in the United States and Europe, especially for individuals in the role of Chief Academic Officer (CAO). The study can also serve as a guide for effective practice for CAOs and other academic leaders. The design of career and technical education programs that incorporate general education objectives to prepare students to be successful in the global marketplace will be one area of significance. Assessing general education outcomes in career and technical education programs to ensure that graduates have acquired the skills to be successful in the global marketplace will be another important area. Finally, the study provides an opportunity to reflect on the value of outcomes related to general education from an academic standpoint in the United States and Europe.

Design

Denzin and Lincoln (2005) assert that “[q]ualitative research…consists of a set of interpretive, material practices that make the world visible” (p. 3). The qualitative paradigm is suitable for research that examines opinions, impressions, and behavior in naturalistic settings, or something about which little is known. This study explored the perceptions of academic administrators regarding general education objectives within career and technical education
programs in selected community colleges and analogous institutions in the United States and Europe.

A case study methodology was used to explore the perceptions of the study participants. Case study was selected based primarily on three factors: the focus on a contemporary issue or phenomenon within a real-life context, the purposeful selection of cases to show different perspectives on the issue, and the use of multiple sources of data to inform the presentation of the case (Yin, 2003). The study focused on the case of general education within postsecondary career and technical programs and explored how the reality of general education is perceived by CAOs and enacted within community college-analogue institutions from the United States and Europe. These institutions served as the bounded systems for the study of the phenomenon of general education as a component of career and technical programs intended to prepare students for the workforce. The findings positioned the views of the CAOs as well as the design and operation of the programs squarely within the context of each institution and its unique culture.

The institutions to be studied were purposefully selected to reflect both the commonality and the diversity of institutions offering short-cycle programs culminating in degrees or certificates indicating that the graduate is prepared to enter a particular career. Creswell (2007) calls this intentional selection of cases that show different perspectives on the phenomenon portrayed “purposeful maximal sampling” (p. 75). In this case, three institutions from Europe were paired with three analogous institutions from the Midwestern United States based on criteria including size, type, and programs offered. In addition to the purposeful sampling described above, convenience played a role in the selection of the institutions studied.

The interview participants were purposefully selected from among academic leaders at the institutions identified above. An individual holding the title of CAO or playing an analogous
role was interviewed from each institution. The role of CAO was selected due to this individual’s unique position as an institutional leader who is also intimately involved with academic programs on an operational level. Because of the probability of differing organizational structures in European institutions, some research was conducted to identify the most appropriate interview subject in each institution using the following criteria: (a) the individual reports directly to the CEO, and (b) the individual’s area of responsibility is academic content for career and technical programs.

**Data Collection**

Data collected for this study included interviews, field notes, and supporting documents. A primary focus of the study was a semi-structured interview with the CAO of each institution. The use of the semi-structured format safeguards the validity of the research while allowing the researcher some flexibility in asking probing questions. All interviews were conducted with English speakers. At one institution, an additional staff member who was a native English speaker assisted in clarifying questions and answers.

The interview data was used to gain insight into the importance to that individual of general education as a component of career preparation programs as well as the process of selecting, implementing, and evaluating the effectiveness of those elements of general education that are deemed to be valuable within the programs at his or her institution.

According to Yin (2003), “case studies are a form of inquiry that does not depend solely on ethnographic or participant observer data” (p. 11). In keeping with this important tenet of case study research, the interview data was supplemented by examining supporting documents, including websites, catalogs, and other documents that demonstrated whether or how the views
of the interviewees are enacted within the programs themselves. Field notes were also made and analyzed for each interview.

**Data Analysis**

Each interview was audio-taped and completely transcribed. Data from the transcriptions was then divided into meaningful segments (i.e., coded). The researcher then organized the coded data based on both *a priori* and emerging themes to reveal elements that led to generalizations from multiple perspectives. The findings from the thematic analysis were triangulated by a corresponding analysis of documents and field notes from interviews to support conclusions and recommendations.

**Assumptions**

Three important assumptions are at work in this study. The first (and most basic) is that the study participants were candid and thorough in their responses to the semi-structured interview questions. The second assumption is that community colleges in the United States and similar institutions in Europe are qualified to provide the education and training necessary to participate in the labor market. The third assumption is that foundational academic skills are necessary for an effective workforce.

The study participants are assumed to have been candid and thorough in their responses to the interview questions. This assumption is supported by their signatures on the informed consent form. The researcher’s assurance of anonymity and confidentiality was also intended to encourage honest responses from the participants.

The assumption that community colleges in the United States, along with similar institutions in Europe, are qualified to provide career and technical education leading to positive labor market outcomes for students was not tested in this study, except by a review of the history
of this sector of postsecondary education. It is therefore assumed that this type of education is valid and accepted for the purposes for which it is intended.

The final assumption related to this study is the presumption of the need for foundational skills in areas such as written and verbal communication and basic quantitative literacy for success in career and technical education as well as the workforce. These skills, which are associated with the idea of general education (whether they are identified as basic skills, soft skills, or liberal arts skills) are assumed to be a universal core component of successful preparation for the selected career fields. Although some justification from the literature based on research conducted with employers will be offered, this study will not fight the battle of whether such skills are truly needed by a global workforce.

Organization of the Dissertation

This study contains five chapters including this introductory chapter. Chapter 2 is a review of literature encompassing an overview of the development and current state of career and technical as well as general education in community colleges and analogous institutions in Europe and the United States. Chapter 2 also includes a detailed theoretical framework and an examination of recent scholarship on the topic. Chapter 3 describes the selection of methodology and design of the study. The findings are presented in Chapter 4. Chapter 5 includes discussion, conclusions, implications, and recommendations for practice, dissemination of the findings and further study.

Chapter Summary

The combination of education and globalization is extremely powerful. Education is now more important than ever, enabling students to operate more effectively in a global society. The challenge in globalizing education lies in the ability of educators to recognize the needed
skill sets for graduates to become globally employable. An understanding of the differing perspectives of CAOs in the United States and Europe on integrating general education into programs designed to prepare students for the workforce can assist community college leaders in the United States to ensure that their graduates are equipped to succeed in the global marketplace.
CHAPTER 2
REVIEW OF LITERATURE

Seldom in history have the issues of student access to—and success in—postsecondary education programs been more in the global spotlight. In the United States, on July 14, 2009, President Barack Obama, speaking at Macomb Community College, described community colleges as “a place where anyone—anyone with a desire to learn and to grow, to take their career to a new level or start a new career altogether—has the opportunity to pursue their dream” (Obama, 2009a, para 8). The American Association for Community Colleges estimates that enrollment in the nation’s community colleges increased nearly 17% from 2007 to 2009 (AACC, 2010). On October 5, 2010, a Community College Summit was held at the White House as record-breaking enrollments continued in community colleges across the country. Across the Atlantic in Paris, Richard Yelland, director of Education Management and Infrastructure for the Organization for Economic Cooperation and Development (OECD), opened the 2010 International Management in Higher Education Conference by saying, “[W]e must identify ways to achieve higher quality and better outcomes at a time of increased demand and declining resources” (cited in Lederman, 2010).

The purpose of this study was to compare the perspectives of Chief Academic Officers (CAOs) on the integration of general education objectives in career preparation programs in the United States and Europe. To provide an appropriate context for this study, the literature review presents an overview of issues surrounding general education and career preparation in community colleges and analogous institutions in Europe. First, it is important to consider the historical background as well as the contemporary context for general education as a component of career preparation programs, including a discussion of oversight and accreditation as well as
of the content, delivery and assessment of general education within career and technical programs. Finally, a brief introduction to the lens of world culture theory and a more comprehensive explanation of the theory of human capital provide a theoretical framework for the study.

Historical Background

Across the past three centuries, educational institutions on both sides of the Atlantic have evolved to meet the need for a workforce able to perform tasks that were not highly academic (i.e., demanded mental rather than physical labor). George Boggs (2008), past president of the American Association for Community Colleges, defines this special sector by “open access, a nonelitist orientation, a focus on the success of students in their learning, responsiveness to the needs of local communities and their industries, and a willingness to be creative and to avoid bureaucratic processes (2008, p. ix). Today, these institutions are called different names, such as community colleges, technical colleges, further education colleges, and higher professional colleges (Boggs, 2008). The development of these colleges in Europe and the United States is marked by cross-pollination of ideas from each continent, including university ideals, the industrial revolution, and the spread of democracy.

Europe

The history of institutions similar to community colleges in Europe begins with the development of secondary schools in England and Western Europe during the sixteenth century. Largely defined by their relationship to Europe’s ancient, Church-dominated universities, these secondary schools offered upper-class children the opportunity to prepare for a university education that would allow them to enter the clergy, and later, the law. However, by the nineteenth century, some of these secondary schools, especially in larger European cities, also
offered evening classes in technical studies for working adults (Roach, 1991). Educational historian Robert Anderson (2004) provided a detailed perspective on the traditional division between the secondary school and the university. Anderson (2004) argues that throughout the nineteenth century, European secondary schools struggled to establish a uniform identity; however, these schools were as broadly diverse as the communities they served. Although the traditional view is that these institutions focused strictly on a classical curriculum, Anderson suggests that secondary schools were actually “multifunctional, both in clientele and curricula” (p. 100) and included commercial and technical as well as classical courses. In addition, secondary schools were ideal for creating a class of “second rank intellectuals” (p. 105), including teachers, technicians, and other white collar workers.

While the main focus of educational expansion in Europe centered on the evolution of secondary schools and their complex relationship to the universities, two intermediary institutions, the English “Dissenting Academies” and the “Illustrious Schools” (i.e., Athenaea) in the Netherlands, emerged in the seventeenth and eighteenth centuries to play a role more analogous to the early twentieth century junior colleges in the United States. Although these institutions tend to play only a small part in the literature of the field, information about them can be found in history textbooks (Boxer, 1977; Grosjean & Murdoch, 2005), educational histories (Porrit, 1915; Wheale, 1999), and encyclopedias (Helicon, 2006).

Both Dissenting Academies and Illustrious Schools were rooted in the traditions of the Protestant Reformation and are considered among the first humanist educational institutions. The Dissenting Academies arose in England when the universities were closed to Protestants (Helicon, 2006). Intended to be a substitute for university studies, these academies provided a more rigorous curriculum than traditional secondary schools (Wheale, 1999). They also
broadened their focus beyond preparing students for the law or the clergy to offer a more general education in preparation for commercial careers (Porritt, 1915). In the Netherlands, the Illustrious Schools differed from Dutch universities in that they did not offer doctoral degrees or degrees in philosophy. In addition, they added an emphasis on vocational training (Grosjean & Murdoch, 2005). One of the functions of Illustrious Schools was to prepare young men between the ages of 16 and 20 for entry into a provincial university. Another function was to provide the equivalent of a university education for those who did wish to leave their native towns (Boxer, 1977).

In the nineteenth century, other pillars in the foundation of community college-type institutions can be identified, as well as an early illustration of the tension regarding the function and purpose of education for adults. In England, the university extension movement was related to the spread of democracy and was dedicated to assisting newly enfranchised laborers to participate effectively in the civic life of the nation (Goldman, 1999). On the other hand, according to educational historians Schapin and Barnes (1977), institutions known as Mechanic’s Institutes were intended to advance the scientific education of the working classes based on the belief that this education would render members of the working class more accepting of their role in the developing industrial society. A study from the European Association for the Education of Adults reports a variety of adult education efforts across nineteenth century Europe embodied in traditions such as folk high schools, worker’s education, and popular education (EAEA, 2006).

**United States**

In the United States, community colleges appeared in the late nineteenth century and early twentieth century when an increase in the number of secondary school graduates created a
greater demand for postsecondary education (Cohen & Brawer, 2003; Diener, 1986). Originally called junior colleges, these institutions were developed with the specific intent to provide the first 2 years of college-level coursework to secondary school graduates who could then transfer to a university (Diener, 1986). To reinforce the idea that junior colleges were intended as logical extensions of secondary schools, founding educators such as William Rainey Harper and Alexis Lange advocated following the model of European universities and secondary schools where “universities would be responsible for higher-order scholarship while lower schools would provide general and vocational education to students through age nineteen or twenty” (Cohen & Brawer, 2003, p. 7). In his 1917 address to the California Teachers Association, Lange argued that this vocational education should prepare students for “careers that occupy the middle ground between those of the artisan type and the professions” (Diener, 1986, p. 71).

Despite the early inclusion of career-specific training in the definition of the junior college, liberal arts courses intended for transfer to 4-year universities constituted the majority of course offerings until well into the 1960s (Cohen & Brawer, 2003). These liberal arts courses formed the core of the colleges’ programs of general education. General education courses dominated curricula in the 1940s and 1950s, whereas what are now called career and technical programs did not begin to dominate community college curricula until the 1960s (Cohen & Brawer, 2003).

On both continents, institutions evolved or developed to fill a perceived middle ground between secondary school and universities by offering vocational training as well as classical studies. Today, these institutions have gained international attention for their potential to increase a country’s economic competitiveness and the standard of living of its people (Boggs, 2008).
Contemporary Landscape

According to Scottish education researcher David Raffe (2002), the opposition between academic or general education and career/technical or vocational education creates a need for highly context-specific definitions of both. Contextualizing these terms within the current US and European higher education systems sets the stage for a broader consideration of the content, delivery, and assessment of general education within community colleges in the United States and similar institutions in the European Union. A brief overview of relevant quality assurance and policy issues on both continents further contextualizes the core elements of the study.

Community colleges in the United States today educate almost half of all students enrolled in higher education (Boggs, 2008). Their four-fold mission to provide lower-level collegiate coursework, vocational training, remediation for underprepared students, and corporate and community education have made them a central feature of the American educational landscape (Cohen & Brawer, 2003). In turn, one of the central features of US community colleges has been the inclusion of comprehensive general education in vocational programs, a legacy from the colleges’ origins as extensions of the nineteenth-century high school as well as its original function to provide the first half of a university education. US community colleges participate in voluntary accreditation through peer review offered by six regional accrediting agencies. These agencies, which emerged in the 1890s, have evolved in response to increasing pressure from government and the public to hold institutions accountable for student achievement (Wolff, 2009).

The contemporary landscape of postsecondary education in Europe differs from that in the United States. Some of this difference can be attributed to the role of secondary education. Secondary education in the United States is largely characterized by the model of the
comprehensive high school, which consists of free public education through grade 12 and culminates in a diploma earned at roughly age 18. Historian William Wraga (1994) stated that “the comprehensive high school is…uniquely suited to serving the educational needs of a democratic society…[and] continues to serve as the dominant model for secondary education in the United States” (p. xiii). In contrast, according to Wraga (1994), Europe emphasized a dual system of secondary institutions where students are separated depending on their academic aptitude and/or career interests. Upper secondary schools offering preparation for university studies exist alongside institutions devoted to career and technical training, whose graduates enter directly into the workforce at age 18 or 19. As in the United States, quality assurance and accountability in higher education is a growing concern. To address this concern, individual European countries are strengthening government oversight of higher education as well as establishing overarching international quality frameworks (Wolff, 2009).

General Education

According to Cohen and Brawer (2003), general education as a component of postsecondary education, especially in community colleges, where most career and technical credentials are awarded (NCES, 2008), has received a greater emphasis in the United States than in the rest of the world. In contrast, Europe has focused primarily on vocational education in its postsecondary career and technical programs. However, recent higher education reforms in Europe have resulted in renewed consideration of the importance of general education in the higher education curriculum.

United States. In 1964, the American Association of Junior Colleges (AAJC) insisted that “time must be provided, even in a two-year program, for at least basic courses in languages, arts and social studies” (p. 14) and in 1988 reiterated the need for a “core curriculum” to be
integrated within the technical and career programs (AACJC, p. 19). However, attempts to define general education tend to reinforce its idealistic and fluid nature. In 1952, California researcher B. Lamar Johnson (1952) defined general education as follows:

That part of education which encompasses the common knowledge, skills and attitudes needed by each individual to be effective as a person, a member of a family, a worker, and a citizen. General education is complementary to, but different in emphasis and approach from, special training for a job, for a profession, or for scholarship in a particular field of knowledge. (p. 2)

Cohen and Brawer (2003) maintain that the liberal arts (which form the basis for most general education curricula) “provide contexts for understanding” (p. 317), rather than factual knowledge of subject areas. Their definition of general education is as follows:

[T]he process of developing a framework on which to place knowledge stemming from various sources, of learning to think critically, develop values, understand traditions, respect diverse cultures and opinions, and, most important, put that knowledge to use. It is holistic, not specialized; integrative, not separatist. (p. 330)

These are examples of the fluidity that characterizes the definition and enactment of the general education ideal. This fluidity has reinforced an ambiguous position for the liberal arts and general education within community college career preparation programs and created the double consciousness that has permeated and sometimes polarized today’s community colleges wherein the ideal of general education is articulated as a value and all but ignored in practice.

Path and Hammons’ (1999) study of general education in community colleges, subtitled “A Time for Reexamination,” cites the work of Tyler and McLauglin (1941), Reynolds (1946), and Johnson (1952); all of these researchers confirm that the development of programs of general education for community colleges has been inconsistent and haphazard. Path and Hammons go on to observe little improvement in studies from 1960, 1966, and even 1982, when Patricia Cross
wrote that “in thirty years of spectacular growth and momentum in community colleges, the relative position of general education has changed little” (p. 14).

**Europe.** The structural difference between the education systems on the two continents has implications for the inclusion of general education in career and technical programs. Slantcheva-Durst (2010a) compares European short-cycle programs and Associate’s degrees offered at United States community colleges by saying that “the great majority of short-cycle programs across Europe are of an occupationally related nature” (2010a, p. 107). In contrast, the Associate of Arts, designed to include subject-specific preparation analogous to the first 2 years of a liberal arts Bachelor’s degree, has no counterpart in Europe (Slantcheva-Durst, 2010a).

Europe’s traditional focus on vocational rather than general education is further substantiated by economists Krueger and Krishna (2003); these economists present data to indicate that in the 1990s, an average of 58% of European upper secondary students were enrolled in vocational programs versus less than 10% in the United States. At the postsecondary level, a greater percentage of US students were enrolled in university programs emphasizing general education; in Europe, more students were enrolled in primarily vocational non-university programs. The authors argue the possibility that the lack of emphasis on general education may impact the ability of the European workforce to adapt to rapid technological change in a globalizing economy.

In a 2003 essay, Italian Minister for Education Germana Verri echoes the theme of general education as an antidote for an increasingly volatile marketplace, saying “the labor market needs increasing numbers of people with the flexibility to change their jobs many times in their lives, and not people who have simply learned a profession” (p. 307). Verri argues that higher education should promote active citizenship not only in a national, but in a trans-
European society. Verri (2003) places general education and traditional academic values at the core of higher education and as essential to the development of human capital that leads to economic growth.

In a 2004 essay, Kirkwood-Tucker describes current efforts to create a “Europe of Knowledge” that will give its citizens “the necessary competencies to prepare them for the challenges of the new millennium and to give them awareness of shared values and a sense of belonging to a common cultural space” (p. 51). Programs named for great humanist thinkers such as “Socrates” (which develops the European dimension in higher education), as well as “Erasmus” and “Leonardo da Vinci” (which increase student exchange and mobility) promote education at a variety of levels designed to strengthen the concept of transnational European citizenship (Kirkwood-Tucker, 2004).

**Career and Technical Education**

On both sides of the Atlantic, large numbers of students are enrolling in programs of study that result in vocational credentials. Community colleges and similar institutions are important providers of this career and technical education. Although differences exist between the systems on the two continents, the intent of both is the same: to prepare students to enter directly into the workforce without completing a university degree.

**United States.** Contemporary postsecondary career and technical education (CTE) in the United States is dominated by its association with the Carl D. Perkins Career and Technical Education Act first authorized in 1984. The 2006 version of this legislation defines CTE as “organized educational activities that provide technical skill proficiency, an industry-recognized credential, a certificate, or an associate degree” (Section 3(5)(A)(ii)). Credentials awarded in postsecondary career and technical programs are certificates and applied Associate’s degrees.
Once designated as “terminal” degrees, applied Associate’s degrees in occupational areas are increasingly applicable for transfer to 4-year programs (Cohen & Brawer, 2006).

According to the National Center for Education Statistics, 460,197 Associate’s degrees were awarded in career and technical programs in 2006; this number amounts to 61.8% of all Associate’s degrees awarded that year (nces.ed.gov). In a 2008 issue brief, the Institute of Education Sciences examined data from US career and technical programs; according to this data, between 1997 and 2006, public 2-year institutions awarded the highest number of CTE credentials (NCES, 2008).

Rojewski (2002) states that the primary components of the CTE paradigm include curriculum, instruction and delivery options, assessment and evaluation, and employer demand. According to Rojewski, “historically, the conceptual framework of career and technical education has revolved around specific job training, [and] clear distinctions between academic and vocational education” (2002, p. 25).

Today, Rojewski believes that career and technical educators should focus on giving students a common core of knowledge as well as skills applicable to a specific content area or occupation. Harkin (2002) argues that from the Industrial Revolution through the knowledge economy, changes in technology have driven approaches to worker preparation. As technology has advanced, according to Harkin, employer demand has risen from an eighth grade education to a high school diploma, an increasing demand for postsecondary education, and finally the expectation of lifelong learning that characterizes today’s rapidly evolving workplace.

Europe. In response to the pressures of new technology and a demand for a skilled workforce, Western countries outside of the United States have tended to concentrate more on building vocational schools rather than comprehensive community colleges (Cohen & Brawer,
2003; Slantcheva-Durst, 2010b). At the postsecondary level, institutions providing vocational education are referred to as colleges of further and higher education in the United Kingdom, and higher professional schools in the Czech Republic and the Netherlands. Collectively, this sector is known as “vocational education and training” or VET (Cedefop, 2008). As an example, data from the National Center for Education Statistics (1996) indicates that training for nurses (both LPN and RN) is a staple of community colleges in the United States; however, in Europe, nurse training may be offered at the secondary level in specialized schools. Many countries in Europe also require apprenticeship and on-the-job training to supplement career and technical education received in secondary or postsecondary institutions (Cohen & Brawer, 2003).

Another applicable term is “short-cycle” higher education. Initially applied to any kind of postsecondary, non-university programs, the definition has been refined as short-cycle programs have become established in many countries as an intermediate step within a professional Bachelor’s degree (Slantcheva-Durst, 2010b). According to the OECD (2009, p. 45), about 15% of young adults across Europe were enrolled in short-cycle programs, most of which are vocational in nature.

**Accreditation and Quality Assurance**

In the United States, voluntary accreditation by regional accrediting agencies is the predominant method for demonstrating accountability in community colleges. In contrast, Europe is moving toward common international frameworks for quality assurance.

**Accrediting agencies.** In the United States, accreditation emerged in the early twentieth century as a method of ensuring institutional quality. Initially, 2-year colleges were accredited by nearby universities; however, by the 1930s, regional accreditation had become the established practice (Cohen & Brawer, 2006). Today, accreditation functions both to document an
institution’s quality and, in lieu of government monitoring, to grant access to federal funds in the form of student aid (Cohen & Brawer, 2006). From early on, defenders of the liberal arts have looked to regional accrediting agencies to ensure that some exposure to general education is maintained in career and technical programs (Cohen & Brawer, 2003). The websites of the six major accrediting associations (including the Middle States Association of Colleges and Schools, the New England Association of Colleges and Schools, the Higher Learning Commission of the North Central Association of Colleges and Schools, the Southern Association of Colleges and Schools, and the Western Association of Schools and Colleges) all contain references to the need to include requirements for general education and assessing their effectiveness as part of their accreditation standards. Each association differs in the level of prescription provided for general education standards, but all seem united in supporting the AAJC’s 1988 contention that “students come to the community college with narrow backgrounds, and for them, career education may mean only gaining skills for a specific job…Through lack of attention to general education, community colleges often exacerbate this tendency toward narrowness” (p. xx). To counteract this tendency, colleges have developed programs and systems intended to insure that their graduates from career and technical programs will be generally educated.

One of the largest accrediting agencies, the Higher Learning Commission of the North Central Association of Colleges and Schools, adopted its most recent statement on General Education in 2003, stating that “[t]hroughout its history, the commission has believed that quality undergraduate higher education involves breadth as well as depth of study” (www.ncahlc.org). In keeping with the spirit of voluntary accreditation, the commission upholds the right and responsibility of each institution to shape its general education requirements to fit within its organizational context, acknowledging that courses may be created, purchased, or
shared, offered through the curriculum or through experiential or off-campus opportunities. This statement offers colleges considerable latitude in developing general education programs.

**Bologna Process and European Quality Framework.** In 1999, 29 European countries voluntarily undertook the challenge to reform and reconstruct their systems of higher education to increase consistency in degree offerings and enhance student mobility across national borders (Adelman, 2008; Gaston, 2010). Since then, the “Bologna Process,” named for the Italian city in which the project was initiated, has taken hold in Europe as well as Latin America, North Africa, and Australia. The Bologna Process and its many associated reports and declarations have attempted to establish a multi-national system of quality assurance that recognizes national qualification frameworks for degrees at various levels.

According to a 2010 report from the European Union’s Executive Agency for Education, Audiovisual and Culture (EACEA), the majority of countries implementing the Bologna Process have focused on programs of study leading to the Bachelor’s or Master’s degree, while the integration of vocational and professional (career and technical) programs in this reform agenda has varied. This variability is largely attributed to the fact that vocational programs are of shorter duration and may not be contained within the prescribed first cycle (Bachelor’s level) degree recognized by the Bologna model (EACEA, 2010).

An ongoing and important aspect of the Bologna Process is the development of qualification frameworks. As Europe moves away from its traditional 5-year course of university study leading to a diploma roughly equivalent to a US Master’s degree, institutions and countries have designed “degree cycles” that include a Bachelor’s degree, a second cycle or Master’s degree, and finally a third cycle or doctoral level degree (Adelman, 2008). The first steps toward a framework of expectations for graduates with certain types of degrees (analogous
to Associate’s, Bachelor’s and Master’s degrees in the United States) are defined in the 2004 Dublin Descriptors. According to Adelman (2008), these descriptors offer five parallel learning outcome constructs:

- reference points of knowledge and understanding;
- contexts and modes of application of knowledge and understanding;
- fluency in the use of increasingly complex data and information;
- breadth and depth of topics communicated, along with range of audience for that communication; and
- degree of autonomy gained for subsequent learning (p. 16).

In the 2005 Bergen Communiqué, the European Ministers Responsible for Higher Education (representing the countries committed to the Bologna Process) formally adopted an overarching framework for qualifications in the European Higher Education Area (EHEA) comprising three cycles (including, within national contexts, the possibility of intermediate qualifications), generic descriptors for each cycle based on learning outcomes and competences, and credit ranges in the first and second cycles. (p.2)

According to the official website of the Bologna Process from 2007 to 2010, this qualification framework is intended to be the public face of Bologna qualifications in a global context.

An additional overarching framework, the European Qualifications Framework (EQF), was developed by the European Commission and adopted in April 2008 for use in EU countries, EU accession countries, and countries of the European Economic Area. According to the official website of the Bologna Process from 2007 to 2010, these two frameworks, while not identical, have been declared compatible for the purpose of developing related national qualifications frameworks. According to the 2008 report from the European Commission, the EQF is intended to unify different countries’ national qualification frameworks around eight reference levels, ranging from level one (analogous to a school leaving certificate) through level eight (analogous to a doctoral degree).
In March 2010, the second decade of the Bologna Process began with the official inauguration of the European Higher Education Area (EHEA) as envisioned in the original Bologna declaration of 1999. Forty-six countries are now participating in the process (Gaston, 2010). According to educational historian Paul Gaston (2010), the EHEA is intended to offer greater mobility across national borders, compatible systems of academic recordkeeping, and enhanced quality assurance across the participating countries.

General Education in Postsecondary Career and Technical Programs

In both Europe and the United States, being well prepared for a career today involves abilities beyond career-specific skills (Coetzee, Visser, & Raftopoulos 2009; Stumpf, 2007). These abilities are called many names, including the liberal arts, basic skills, and soft skills. In his 2002 thesis entitled Chief Academic Officers’ Perspectives on Workforce Development in Their Community College, Timothy Jackson interviewed eight community college CAOs to illuminate their viewpoints on workforce development within their specific college and in community colleges in general. An important theme emerging from Jackson’s study is the importance of differentiating between training and education. Specifically, Jackson’s findings indicate that among his interview subjects, “it became apparent that skill acquisition without general education was considered training, while occupational programs that include strong general education requirements were considered workforce education” (p. 72).

In 1990, Scottish educator John Raven investigated “The Barriers to Achieving the Wider Goals of General Education and their Implications for the British Educational Research Association.” Raven discovered that clarifying the issues around the topic of general education as a component of career and technical education has occurred only “in the course of skirmishes conducted in spare time on the sidelines of projects that were funded for other reasons” (pp. 285-
286). Raven’s research focused on the need for education to foster high-level competencies including (but not limited to) problem-solving and the ability to work well with others; this research uncovered barriers that did not relate to funding. Instead, these barriers related to the fundamental organization of academic institutions (both secondary and postsecondary) and the nature of educational research. In 2005, Raven succinctly expressed the need for educational systems to

develop the confidence and initiative required to introduce change, to nurture, and give people recognition for, the diverse, often idiosyncratic, talents they possess, and, while recognizing that mastering the formal knowledge on which they are based is a waste of time, to help people acquire the credentials that appear to control entry to jobs. (p. 293)

In short, postsecondary institutions in both the United States and Europe must find ways to foster the competencies associated with general education along with career-specific curricula. On both continents, this will involve consideration of the content, delivery, and assessment of general education within career and technical programs.

**Content.** Studies describing skills and competencies associated with general education have appeared on both sides of the Atlantic. Path and Hammons (1999) conducted a survey of Chief Academic Officers (CAOs) from 181 community colleges across the United States to determine the nature of the general education program offered in each institution and the CAO’s satisfaction with this program. This study provides an instructive view of late twentieth-century practice as well as an articulation of some trends and their implications for the future of general education in career preparation programs. The study identified six curricular areas (Communications, Arts and Humanities, Mathematics, Natural Sciences, Social Sciences, and Health, Physical and Family Education) and nine different approaches within the general headings of subject-centered, student centered, multi-disciplinary, and infusion.
In 2005, the American Association of Colleges and Universities launched an initiative entitled “Liberal Education and America’s Promise” (LEAP) to promote the ideal of a twenty-first century liberal education. In association with LEAP, in 2007, Peter Hart and Associates released a report entitled “How Should Colleges Prepare Students to Succeed in Today’s Global Economy.” For this study, Hart interviewed employers and recent graduates to determine the skills and knowledge individuals needed to be successful in today’s global economy. Among the major findings, Hart reported the following:

Employers and recent college graduates reject a higher education approach that focuses narrowly on providing knowledge and skills in a specific field; majorities instead believe that an undergraduate college education should provide a balance of a well-rounded education and knowledge and skills in a specific field. (2007, p. 1)

A March 2009 brief from the Institute for Higher Education policy discusses the integration of college competencies and workforce needs in the United States, Brazil, Mongolia, and the Ukraine. One area of focus for this report is basic skills (i.e., the skills that employers deem necessary for graduates to prosper in the workforce), including writing, reading, mathematics, and critical thinking (Bastedo, Batkhuyag, Prates, & Prytule, 2009).

Jessica Stumpf (2007) interviewed community college technical and general education faculty as well as employers to determine if programs leading to an Associate in Applied Science (AAS) degree developed the “soft skills” (i.e., critical thinking, interpersonal relationships, and ethical behavior) valued by employers. Her study, entitled Meeting the Needs: Does Technical College Meet the Needs of Employers, does not categorically answer that question. However, it does explore the views of the three constituent groups, as well as concludes that general education leading to the acquisition of “soft skills” should continue to be an important component of programs designed to prepare students for the workforce.
In the United Kingdom, Geoff Hall and Hugh David (2008) trace the development of adult Vocational Education and Training (VET) “From Demand-Led Skills to the Entrepreneurial College in England.” This essay focuses on the need for colleges offering Foundation degrees (which are roughly analogous to Associate’s degrees but with some important differences) to embrace innovation and creativity as components of learning in addition to specific career-related skills as articulated by qualifications frameworks.

In the Netherlands, college president Coen Free (2008) describes an ideal college as one that, among other characteristics, functions as a community of learners, equips its students with creativity and thinking skills, and “teaches students to function as good citizens in society” (p. 227). Free also emphasizes the importance of technology for students from the “net generation.” Students of this ideal college will earn diplomas and develop competencies that will prepare them for the international labor market as well as higher levels of postsecondary education.

In 2009, multinational education corporation Edexcel released a report entitled *Effective Education for Employment: A Global Perspective* (Playfoot & Hall, 2009), which considers the key challenges of developing workers to meet the needs of employers and economies across the world and how educators can develop solutions for truly effective employment education. Roundtable discussions with business, education, and policy leaders resulted in a study detailing a list of components of effective education for employment.

Table 1 summarizes key categories of general education identified in studies throughout this section of the literature review. Studies conducted under the umbrella of Liberal Education and America’s promise are identified as LEAP. Playfoot and Hall’s 2009 research conducted by for the international education corporation is identified as Edexcel.
Table 1

*General Education Categories from Literature*

<table>
<thead>
<tr>
<th>Category</th>
<th>Author(s)</th>
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<tbody>
<tr>
<td>Arts/Humanities</td>
<td>Path &amp; Hammons, 1999</td>
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<tr>
<td>Communication</td>
<td>Path &amp; Hammons, 1999; Bastedo, Batkhuyag, Prates, &amp; Prytule, 2009; LEAP, 2005; Edexcel, 2009</td>
</tr>
<tr>
<td>Creativity</td>
<td>Hall &amp; David, 2008; Free, 2008, Edexcel, 2009</td>
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<tr>
<td>Critical Thinking</td>
<td>Bastedo, Batkhuyag, Prates &amp; Prytule, 2009; Stumpf 2007; Free, 2008; Edexcel, 2009</td>
</tr>
<tr>
<td>Ethical Thinking</td>
<td>Stumpf, 2007; LEAP, 2005; Free, 2008</td>
</tr>
<tr>
<td>Health/Physical Education</td>
<td>Path &amp; Hammons, 1999</td>
</tr>
<tr>
<td>Innovation</td>
<td>Hall &amp; David, 2008; Edexcel, 2009</td>
</tr>
<tr>
<td>Internship</td>
<td>LEAP, 2005</td>
</tr>
<tr>
<td>Mathematics</td>
<td>Path &amp; Hammons, 1999; Bastedo, Batkhuyag, Prates, &amp; Prytule, 2009; LEAP, 2005</td>
</tr>
<tr>
<td>Science</td>
<td>Path &amp; Hammons, 1999; LEAP, 2005</td>
</tr>
<tr>
<td>Social/Cultural Studies</td>
<td>Path &amp; Hammons, 1999; LEAP, 2005; Edexcel, 2009</td>
</tr>
<tr>
<td>Technology</td>
<td>LEAP, 2005; Free, 2008</td>
</tr>
<tr>
<td>Working with Others</td>
<td>Stumpf, 2007; LEAP, 2005; Free, 2008; Edexcel, 2009</td>
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**Delivery.** Delivery of instructional content is a key activity for postsecondary institutions. Today, institutions have options for delivering general education content, including traditional course-based learning and embedding or contextualizing general education content into career-specific courses or modules. Technology has also impacted institutions’ choices for instructional delivery with some institutions moving instruction online, where students can learn at their own pace or as part of a structured course.

In 1999, Path and Hammons found that that the majority of career and technical programs relied on traditional subject-centered approaches to deliver general education, either assigning students a program of required courses; more often, these programs employed a “distributional” approach where students elect courses from an approved list. When CAOs were asked which approaches they preferred, a slight majority (51%) indicated that they would prefer an approach that differed from the one currently offered by their institution. According to Path and
Hammons, CAOs would prefer to switch from a traditional course-based approach to a non-traditional approach; however, CAOs cited concerns (including faculty resistance to change) to indicate why they did not make the switch.

According to Paula Zestzotarski’s (1999) study, “Dimensions of General Education Requirements,” one reason that this distributional model has maintained a high level of popularity is that it combines some assurance of curricular breadth with the ease of ordering from a Chinese food menu. For example, the students simply choose a course from list A, one from list B, etc. Path and Hammons (1999) found that in the average community college, students take three courses in communications, three in arts and humanities, and two each in mathematics, natural sciences, social sciences and health, physical and family education to complete their general education requirements. Assuming courses are three to four credits each, this program would total approximately 25% or more of the credits contained in a typical 2-year degree. However, these requirements are unlikely to be consistent across all degree programs. Zeszotarski (1999) states that 43% of colleges prescribe their general education requirements for non-transfer degrees on a program-by-program basis. Therefore, not only might the business major with a transferable ABA have taken a different number of general education courses than the business major who completes an AAB; even within the same degree, a graduate with an AAS in Nursing will be held to a different standard of general education than a student completing an AAS in Elementary Education.

Career and technical programs in Europe have been less likely to include a core of general education courses than similar programs in the United States (Cohen & Brawer, 2003). However, current reform efforts in higher education are fostering more consideration of basic academic skills and “key competences” as defined by the 2008 European Qualifications
Framework (EQF) and how these competences may be delivered within vocational education programs.

The higher education reform effort in Europe known as the Bologna Process includes a component known as “tuning” of student learning outcomes. These outcomes include learning across the disciplines or transversal skills similar to general education in the US system (Adam, 2008). The process of tuning involves consultation with stakeholders including faculty, recent graduates, and employers as to which learning outcomes are important and how they can best be delivered. A 2010 report from the European Commission specifically calls for the development of engaged citizens and innovative entrepreneurs through curriculum, work experience, and other active learning methodologies within vocational programs. A 2010 research brief from the European Centre for the Development of Vocational Training (Cedefop) stated as follows:

Active learning methods are increasingly promoted through written curricula analyzed in the case studies. This shift from teaching to learning is supported through the prescription of compulsory learning arrangements (e.g. interdisciplinary projects, work-based learning periods, etc.); through regulations concerning assessment methods; and through guidance and support materials for teachers and trainers. (p. 12)

However, the researchers found that learner-centered methods have not been widely adopted due to teacher resistance or other logistical barriers such as class size or time constraints.

Since the early 1990s, Europe and the United States have been experimenting with online delivery of all types of education. In 1999, Mason’s study entitled “European Trends in the Virtual Delivery of Education” found that despite the expectation that online education would provide access to the disadvantaged and disenfranchised, those who were signing up were disproportionately well educated and upwardly mobile. Mason also discovered that the diversity of approaches offered by technology-assisted learning allowed instructors to either cling to traditional teacher-centered pedagogy or experiment with learner-centered delivery of
instruction. Several years later, Kim and Bonk (2006) surveyed postsecondary instructors regarding their perceptions of online learning. Their findings indicated that, although educators surveyed found online education vastly inferior to traditional, face-to-face instruction, they fully expected that online offerings would be far superior to traditional courses within 10 years.

Assessment. According to Kuh and Ewell (2010), across the world the practice of “assembling and interpreting evidence of what students know and can do as a result of their tertiary educational experience is becoming much more common” (p. 14). Kuh and Ewell differentiate between the usage of the term “assessment” in the United States to refer to the practice of measuring the achievement of groups of students rather than individuals as it is more commonly understood in Europe. However, they also assert that “practice in all countries is rapidly converging” (p. 14). Ebersole (2007) asserts that in the United States higher education “assessment is often individualized to the student level with the results used in a formative manner” (p. 3). Assessment of learning outcomes related to general education in career and technical programs has become an important issue on both continents.

According to Ewell (2001), apprehension about exactly what and how much students are learning in US colleges and universities dates back to the mid-1980s. This apprehension gave birth to the assessment movement in US higher education. Today, as Ebersole (2007) states, “colleges must clearly document that they are assessing student learning at the course, program, and institutional level” (p. 6). Scholars such as Angelo and Cross (1993) first helped faculty to understand assessment as a process of measuring learning beyond formal evaluations expressed as grades. Their book, Classroom Assessment Techniques (1993), contains examples of assessment tools and techniques, as well as case studies and explanations of their use. Ultimately, Angelo and Cross believed that these techniques could be generalized from
individual classrooms to broader course and program levels. Banta and Associates (1993) collected a variety of assessment tools and methodologies along with case studies for their use in *Making a Difference: Outcomes of a Decade of Assessment in Higher Education*. Among her findings was the idea that assessment plans and tools that worked well in one institution did not necessarily translate to another.

In the European Bologna Process, references to learning outcomes did not occur until 2003; however, since then, these outcomes and their assessment have become a centerpiece of the ongoing transformation (Adam, 2008).

There is a strong move from focusing on input factors like the duration, location and the pedagogical content underpinning a qualification, towards what a learner knows and is able to actually do at the end of a learning process. (Adam, 2008, p. 5)

According to Adam (2008), individual teachers can use defined learning outcomes as the basis for delivering content and designing assessments; this process can be carried up to the program or qualification level. At the national and international levels, the identification and assessment of common learning outcomes can increase transparency of credentials and mobility for students.

In Europe, as in the United States, assessment of learning outcomes differs from grading. Adam (2008) states that assessment criteria refers to what a learner does to demonstrate achievement of the learning outcome, whereas a grade makes a qualitative statement (i.e., an evaluation of the achievement). The 2010 Cedefop study underscores the importance of assessment.

Assessment practices can exert powerful influence on teaching, on the taught curriculum and on education and training institutions ethos and organization. There is an inevitable tendency to devalue any learning aims (or learning outcomes) which are difficult to assess by the means currently available. (p. 119)
Globalization and World Culture Theory

This international comparative study is based in a theoretical framework made up of several distinct, yet related theories. In this framework, globalization and world culture theory are employed to support the rationale for comparing across continents. According to Suarez-Orozco and Qin-Hilliard (2004), “globalization is at the heart of any understanding of broad processes of social change taking place in disparate locales around the world” (p. 8).

To fully appreciate a comparison of the role of general education in career preparation programs in the United States and Europe, it is necessary to understand and view the situation through the theoretical lens of the current emerging world culture. World culture theory, as articulated by Roland Robertson (2000), is focused on an individual’s perception of the world as a single place. The issues of how to live in this single place—and how this place is to be ordered—are central to the theory. In essence, world culture theory operationalizes globalization as a process that requires all units to define an identity relative to the global whole.

In particular, the concept of global “emulation” is influential in the analysis of the ways in which academic administrators regard the inclusion of general education objectives in their career preparation programs. According to Robertson (2003), emulation refers to societies’ strategic adoption of ideas and technologies from one another as well as the notion of a level playing field, where common standards can be used to make comparisons between them. New York Times columnist and author Thomas Friedman popularized this notion in books such as The Lexus and the Olive Tree (1999) and The World is Flat (2006). In Friedman’s analysis, the level global playing field allows other nations to compete with the United States for jobs in the new knowledge economy. Evidence of this can be found in his examination of the field of education, and the need for that field to respond to the growth of technology that is “churning old jobs and
spawning new, more complex ones,” which makes “tertiary education more critical the flatter the world gets” (Friedman, 2006, p. 289).

This churning leads nations to evaluate the importance of their investments in education at the postsecondary level against each other. The Bologna process provides a model for institutional cooperation in defining universal qualifications to be portable across national borders. At the same time, monographs like Tough Choices or Tough Times (National Center on Education and the Economy, 2007) articulate a US perspective on the same issues. Both at home and abroad, policy makers are struggling to define what skills or qualifications tomorrow’s graduates, the owners of the human capital of the global culture, will need to succeed in the global workplace.

**Human Capital Theory**

Human capital theory supports the global development and spread of higher education, whereas the critique of the neo-Marxist credentialists questions its value. The Organization for Economic Cooperation and Development (OECD, 2007) describes human capital as a set of competencies that can be developed in individuals to allow them to participate more fully in post-manufacturing economies. The theory of human capital originated with economist Adam Smith (1776); in book two of The Wealth of Nations, Smith asserted that one of the natural divisions of stock consists of the following:

> [T]he acquired and useful abilities of all the inhabitants or members of the society. The acquisition of such talents, by the maintenance of the acquirer during his education, study, or apprenticeship, always costs a real expense, which is a capital fixed and realized, as it were, in his person. Those talents, as they make a part of his fortune, so do they likewise of that of the society to which he belongs. (para 17)

Chicago School economist Gary Becker is credited with the application of the term and the theory to the discipline of economics with the publication of his 1964 text entitled Human
Capital. In the second edition, *Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education*, Becker analyzed the return on investment in a college education that could be expected to accrue to individuals including white males, non-Whites, women, and rural persons. He also analyzed the benefits to society from investments in higher education compared to other types of investments. In the preface to the third edition of *Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education*, Becker (1993) references the 1992 presidential campaign during which then-candidate Clinton and former president Bush “did not even shy away from using the term ‘investing in human capital’ to describe the process of improving the labor force” (p. xix).

Improving the workforce continues to be a political focus today. In a March 2009 opinion piece in the *Wall Street Journal*, former US Secretary of Labor Robert Reich indirectly referred to human capital theory as the driving force behind what he terms “Obamanomics,” a “trickle up” theory that will use tax increases for the wealthiest Americans to (among other things) increase funding for Pell grants so that more children from low-income families can attend college. This focus on postsecondary education is a central tenet of what Reich (2009) described as Obama’s proposed large-scale investment in increasing the productivity of American workers.

An interest in improving productivity through attention to education is not confined to the United States. In Europe, the Bologna Process has engendered numerous articles and studies as international scholars seek to define the purposes of the process and its likely results (Adam, 2008; Gaston, 2010; Kirkwood-Tucker, 2004). Many of these studies draw on human capital theory to support their arguments. Another Chicago School economist, Jacob Mincer, introduced a model to quantify the return on investment in learning in his 1974 book *Schooling,*
Experience and Earnings. His equations form the basis of studies such as Robert Chase’s 1997 analysis of labor market returns on higher education in Slovakia and the Czech Republic. Chase, who is currently a professor of Economics at Johns Hopkins University, was a PhD candidate at Yale University when he studied the effects of the transition from a Communist to a post-Communist regime on the market value of a post-secondary education. Other Mincerian analyses of the value of higher education have been conducted in Greece (Stamoulas, 2006), Poland (Strawinski, 2008), Sweden (Backman & Bjerke, 2009), and across the globe; all of these analyses focused on a theorem that calculates the increase in earnings based on years of schooling for different groups.

Authors such as Jean-Jaques Paul (2006) of the Institut de Recherche sur l’Education/Sociologie et Economie de l’Education, CNRS/Université de Bourgogne in Dijon, France, are using models such as Mincer’s as a jumping off point to define a new measurement:

The stress on competencies leads [sic] to define education and human capital, no longer by a variable describing a process, the number of years, or even the degree, but by a set of variables describing the results of the educational process, i.e. the different competencies acquired by the educated workers. (p. 235)

Paul’s monograph describes a quantitative study of 36,000 graduates in 12 countries with the intent of establishing a relationship between specific competencies obtained through higher education and the labor market prospects of graduates attaining these competencies. In identifying the competencies most desired, acquired, and required, Paul articulates a new vision of human capital—one that is skill-based rather than credential-oriented.

Credentialist Critique

Studies such as Paul’s (2006) exemplify a potent challenge to the validity of human capital theory; namely, that studies supporting the theory tend to focus on attainment of the hallmarks of education (i.e., degrees and certificates) over the actual product of education (i.e.,
knowledge, skills, and attributes). Credentialist theorists express concern over whether postsecondary education is really necessary to participate in the labor market, or if the upward pressure on educational requirements for specific career fields is simply a form of inflation and has no significant relationship to job performance. Conflict theorist Randall Collins was one of the first to challenge this rise of “credentialism.” Collins asserted that traditional educational systems serve mainly to promulgate the existing social order. In his 1971 study “Functional and Conflict Theories of Educational Stratification,” Collins suggested that “the ‘demands’ of any occupational position are not fixed, but represent whatever behavior is settled upon in bargaining between the persons who fill the positions and those who attempt to control them” (p. 1007).

Therefore, the attainment of an academic credential might serve as a proxy for membership in a particular group rather than a representation of the technical skills or abilities that an individual has mastered.

In some critiques, a relative value is assigned to the credentials themselves, with 2-year degrees relegated to the bottom of the heap. While not considered credentialists, Steven Brint and Jerome Karabel echo some of Collins’ arguments in their 1991 book, *The Diverted Dream*. These authors contend that community colleges redirect aspiring low-income and minority students away from the study of the classical liberal arts that are seen as gateways to economic and social mobility and into vocational programs that maintain the status quo.

These critical arguments help to illuminate the ambiguous and sometimes contentious position that programs of general education occupy within career preparation programs. Underlying sociological tension exists between the association of education with elite cultural status (Collins, 1971) and Obama’s (2009a, 2009b) call for a universal commitment to postsecondary education. This tension is also being felt as Europe’s ancient and venerable
universities seek to broaden access and participation from traditionally underrepresented groups through the higher education reforms associated with the Bologna Process. The ideal of developing human capital through education that is so clearly driving an agenda of worldwide change remains vulnerable to a nagging fear that the capacity for educational attainment may be more closely tied to socioeconomic factors than some of us want to believe.

**Chapter Summary**

The history of community colleges and analogous institutions in Europe and the United States incorporates ideas from each continent, including university ideals, the Industrial Revolution, and the spread of democracy. As the institutions moved into the contemporary era, tensions between collegiate and vocational paradigms, between academic values and economic imperatives, as well as between soft and technical skills became marked. The challenge of globalization and the conflict between the perspectives of proponents of education to build human capital and those who argue against the expansion of credentialism are apparent in research on both sides of the Atlantic.

The purpose of the current study is to explore how this dynamic is experienced by Chief Academic Officers within three community colleges in the United States and three analogous institutions in Europe. The findings will not only reveal the perspectives of some specific individuals and how their views of general education are enacted within their own institutions; such findings will also provide a cross-cultural comparison of the principles involved. It appears from the literature review that some components of general education do emerge as universal: critical and creative thinking, problem-solving, and interpersonal relationships among them. Academic officers’ perspectives on how these components are integrated and assessed within
programs specifically designed to prepare students for the workforce will be the focus of this study.
CHAPTER 3
RESEARCH METHODOLOGY AND DESIGN

The term “general education” refers to a reality that is socially constructed within postsecondary institutions. While it seems clear from the literature that outcomes related to general education, whether they are labeled “liberal arts,” “basic,” or “soft” skills, generally play some role in the content, delivery, and assessment of career and technical programs in the United States and Europe. However, the means by which this is accomplished are less clear. Given the reality of globalization, it makes sense for educators to consider policies and practices from outside as well as within their own national and continental borders.

To fully appreciate a comparison of the role of general education in career preparation programs in the United States and Europe, it is necessary to understand and view the situation through the theoretical lens of the current emerging world culture. As the world continues to flatten, educators in the United States and in Europe are experiencing increasing pressure from government and the marketplace to develop resources related to human capital—in other words, to create a workforce that is prepared to meet the demands of the global marketplace. However, those same educators are also vulnerable to the charge that the attainment of hallmarks of education (e.g., degrees and certificates) has become more significant than the development of the skills and attributes needed for success on the job. Defining those skills and attributes as a series of competencies that can be taught and assessed within postsecondary career and technical programs can help to answer that charge. However, the extent to which this occurs depends on the underlying philosophies, policies, and practices related to general education that are embedded within the programs.
By examining multiple sources of data that reflect reality within the context of a variety of analogous institutions, this study attempts to make visible the role of general education within programs intended for workforce preparation. The study focused on the perceptions of Chief Academic Officers (CAOs) regarding the underlying philosophies as well as the processes used to identify, embed, and assess outcomes related to general education in career and technical programs in selected institutions in Europe and the Midwestern United States. It is hoped that the study will foster a more complete understanding of the realization of this phenomenon in postsecondary institutions in the United States and in Europe.

The purpose and driving questions were addressed through a qualitative, multiple case study approach that combined aspects of basic and applied research. Data was collected through interviews and document review and analyzed separately and across the multiple cases. Although this international comparative study was not intended as an evaluation of the effectiveness of program design or instruction, it is hoped that an exploration of how such programs are designed and evaluated in multiple settings in the United States and the European Union will not only foster a better understanding of the phenomenon but will influence institutional policy and practice on both continents.

**Purpose Statement**

The purpose of this study was to compare the perspectives of selected CAOs on the role of general education in postsecondary career and technical education programs designed to prepare students for the global workforce in the United States and Europe. Since the role of the CAO is to develop, interpret, and implement policies related to instructional programs, the opinions of these individuals are likely to be influential in the direction of the institution regarding general education outcomes.
Guiding Questions

Perceptions of CAOs were collected regarding the philosophy, policies, practices, and future trends related to general education within career and technical programs within their institutions. The intent was to ascertain both the vision and the reality, with an understanding that the envisioned implementation may be far from being realized. The guiding questions for the study were as follows:

1. How do cultural beliefs and values regarding the purpose of education inform the role that general education objectives play in career and technical programs in US community colleges and similar institutions in Europe?

2. What specific internal and external policies exist related to the role of general education objectives in career and technical programs in US community colleges and similar institutions in Europe?

3. What are the commonalities and differences in content, delivery, and assessment of postsecondary general education outcomes for career and technical education programs in US community colleges and similar institutions in Europe?

4. What future directions are envisioned regarding the role of general education objectives in career and technical programs in US community colleges and/or similar institutions in Europe?

Research Design

According to Yin (2009), the design of a research project is best described as a series of steps that, considered together, constitute a logical plan for traveling from here to there, with “here” defined as the research questions and “there” defined as a set of conclusions or answers to
those questions (p. 26). The driving questions above have situated the role of general education within career and technical programs at the heart of this study.

**Multiple Case Study**

A case study design was used to explore the perceptions of the study participants regarding practices related to general education within each institution. According to Yin (2009), a case study “investigates a contemporary phenomenon in depth within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident” (p.18). Moreover, Yin (2009) asserts that the selection of a case study methodology presupposes certain characteristics including the fact that there will be many variables of interest, the researcher will triangulate multiple sources of evidence to support findings, and that a theoretical framework will be developed prior to data collection and analysis.

Within the field of case study, variations exist. One variation is multiple-case design in which more than one case is included within a single study with all cases contributing to a deeper understanding of a central phenomenon; Stake (2006) calls this phenomenon the “quintain.” According to Stake, researchers “study what is similar and different about the cases in order to understand the quintain better” (p. 6).

For this study, a multiple case design was selected based on three factors: the focus on a contemporary issue or phenomenon within a real-life context, the purposeful selection of cases to show different perspectives on the issue, and the use of multiple sources of data to inform the presentation of the cases and the quintain. The study focused on the role of general education outcomes within postsecondary career and technical programs and explored how the reality of general education is perceived by selected CAOs and enacted within community college-analogue institutions from the United States and Europe. The driving questions defined the
quintain, while the institutions served as the bounded systems for this multi-case study of the phenomenon of general education as a component of career and technical programs intended to prepare students for the workforce. The study positioned the views of the CAOs and the design and operation of the programs squarely within the context of each institution and its unique culture. The sections below outline the steps taken to answer the driving questions including selection of sites and participants, data collected, and methods used to analyze the data.

**Qualitative Research**

Qualitative research is appropriate for studies that examine opinions, impressions, and behavior in naturalistic settings. The results, while specific to the sample studied, may be used to foster a more complete, holistic understanding of the topic studied. To effectively foster this holistic understanding, it was necessary to construct a detailed depiction of the role of general education outcomes within career and technical programs in the United States and Europe.

**Interpretive Paradigm**

According to Lincoln and Guba (1985), “paradigms represent a distillation of what we think about the world (but cannot prove). Our actions in the world, including actions that we take as inquirers, cannot occur without reference to those paradigms” (p. 15). Qualitative research utilizes a paradigm of naturalistic inquiry and interpretation to study complex phenomena in natural settings. Denzin and Lincoln (2005) assert that “[q]ualitative research…consists of a set of interpretive, material practices that make the world visible” (p. 3). The methods associated with qualitative research lead to a detailed, contextualized understanding of complex issues (Creswell, 2007).

This qualitative study, which explored the perceptions of administrators regarding general education objectives within career and technical education programs in selected...
community colleges in the United States and analogous institutions in Europe, combined aspects of both basic and applied research. According to Merriam (2009), basic research is motivated chiefly by a desire to enhance the body of knowledge about a phenomenon. In the field of international comparisons of curricula and instructional practices in community college-type institutions, the existing body of knowledge is scant, and currently under construction. A primary goal of this study, therefore, is to explore the phenomenon of general education in career and technical programs through the opinions, impressions, and experiences of individuals who are responsible for administrating the programs. The outcome of the exploration is an interpretive description of the philosophical underpinnings, institutional policies, actual practices, and future directions related to the role of general education in career and technical programs in six postsecondary institutions, as seen through the eyes of each institution’s Chief Academic Officer. A second important goal of the study is to provide observations and recommendations to guide policy and practice in US community colleges. This goal positions the study within the context of applied research, which is undertaken specifically to improve the way things are done (Merriam, 2009).

**Data Collection**

Data for the study was collected at six postsecondary institutions—three from the United States and three from the European Union. Interviews were conducted with the CAO or an analogous individual responsible for the academic content of career and technical programs. Additional data was obtained through a review of online and print documentation of policies and practices related to general education within career and technical programs.
Site Selection

According to Stake (2006), “[an] important reason for doing the multicase study is to examine how the program or phenomenon performs in different environments” (p. 23). Stake’s (2006) three main criteria for selecting cases are opportunities to study the quintain across a variety of contexts that are relevant, diverse, and complex. In this project, the institutions to be studied were purposefully selected to reflect both the commonality and the diversity of institutions offering programs culminating in degrees or certificates indicating that the graduate is prepared to enter a particular career. Creswell (2007) calls this intentional selection of cases that show different perspectives on the phenomenon portrayed “purposeful maximal sampling” (p. 75). In this case, three institutions from Europe were compared with three institutions from the Midwestern United States.

International institutions, all members of the European Union, include (a) a very large recently formed college system, (b) a very large independent, comprehensive community college, and (c) a very small private business college. The spectrum of European countries includes a Western European country, a continental European country, and a central European country.

Institutions from the Midwestern United States were selected to correspond roughly to the size, type, and programs offered of European institutions being studied and include a very large community college system, a large independent comprehensive community college, and a medium-sized community college. These pairings are intended to facilitate cross-case comparisons. This matching process presented some challenges. Initially, a private, for-profit institution that granted Associate’s degrees in the United States was to be included. The researcher identified three potential colleges to fit this criterion. The first turned out to be
unsuitable for comparison to any of the selected European institutions. Both the second and third colleges contacted declined to participate. Finally, another comprehensive community college in a Midwestern state was selected to replace the private institution.

This selection of cases also meets Yin’s (2009) criterion that the selection of cases in a multiple case study should allow for both literal (predictive of similar results) and theoretical (predictive anticipated differences) replication of results. Cross-case comparisons can be made between paired institutions and between European and US institutions as indicated in the table below. Pseudonyms were created to protect the identity of institutional participants.

Table 2

*Research Sites*

<table>
<thead>
<tr>
<th>European Union</th>
<th>United States</th>
<th>Institution type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benedict College</td>
<td>Hunt College</td>
<td>Very small to medium, located outside of major metropolitan areas</td>
</tr>
<tr>
<td>Peak College</td>
<td>Fieldstone Community College</td>
<td>Very large, located in a large metropolitan area</td>
</tr>
<tr>
<td>City Municipal College</td>
<td>Garden State Community College</td>
<td>Very large multi-campus systems, city and statewide</td>
</tr>
</tbody>
</table>

In addition to the purposeful sampling described above, convenience played a role in the selection of the institutions to be studied. European institutions were selected where either the researcher or a colleague had contacts, while analogous US institutions within driving distance of the researcher’s home were selected to minimize the scope of required travel. (See “Limitations and Delimitations” for further discussion on this topic.)
Participant Selection

The interview participants were purposefully selected from among academic leaders at the institutions identified above. The primary unit of analysis for the study was the role of general education outcomes within career and technical programs; however, the primary data source was interviews with individuals. An individual holding the title of Chief Academic Officer (CAO) or playing an analogous role was interviewed from each institution. The role of CAO was selected due to this individual’s unique position as an institutional leader who is also intimately involved with academic programs on an operational level. Because of the differing organizational structures in European institutions, some research was conducted to identify the most appropriate interview subject in each institution using the following criteria: (a) the individual reports directly to the CEO, and (b) the individual’s area of responsibility includes academic content for career and technical programs.

Interview Protocol

A primary aspect of the study was a semi-structured interview with the CAO of each institution. The use of the semi-structured format safeguards the validity of the research while allowing the researcher some flexibility in asking probing questions. The study was cross cultural. Therefore, a semi-structured format was also appropriate given the likelihood that probing or clarifying questions would be necessary to ensure understanding between the researcher and the interview subject. Based on the expert review, diligent attempts were made to pose the questions in culturally neutral terms; however, some terms and concepts needed to be defined prior or during the interview. All interviews were conducted in English with English speakers. During one interview, the CAO was joined by a colleague who was a native English speaker who assisted in clarifying the conversation. The interview data was used to gain insight
into the importance to that individual of general education as a component of career preparation programs as well as the process of selecting, implementing, and evaluating the effectiveness of those elements of general education that are deemed to be of value within the programs.

**Document Review**

According to Yin (2003), “case studies are a form of inquiry that does not depend solely on ethnographic or participant observer data” (p. 11). In keeping with this important tenet of case study research, the interview data was supplemented by supporting documents that demonstrated whether or how the views of the respondents are enacted within the programs themselves. Documents examined included the institutions’ catalogs and websites. These public documents provided information about the colleges’ history and governance structure as well as program offerings and requirements, including general education requirements. Several CAOs also supplied internal planning reports outlining their institutions’ assessment procedures.

**Expert Review**

The design of this study, including the interview protocol, demographic survey, and plan for collecting supporting documents, was reviewed by a panel of experts. This panel was made up of two individuals who have held or currently hold the position of CAO in a community college. Both have significant international experience in the field of higher education. The panel reviewed the study’s purpose and driving questions to effectively critique the study’s design and offer feedback on the selected interview questions. Based on feedback from the expert review, the researcher adjusted the study design to clarify and simplify the direction of the inquiry, and then made some significant alterations to the language to reduce cultural bias.
Demographic Survey

To facilitate the development of a profile for each case, interview participants completed a brief survey documenting their demographic background as well as educational and professional experience related to their current positions prior to the interview. Data from this survey was used to enrich the brief profile of each institution and its CAO in Chapter 4.

Data Analysis

The data for the study was collected through interviews and document review. This material was coded based on both *a priori* and emerging themes to provide findings that will address the guiding questions arising from the purpose of the study.

Coding and Theme Identification

Each interview was audio-taped and completely transcribed. Data from the transcriptions was then divided into meaningful sections, or coded. According to Auerbach and Silverstein (2003), coding is a method by which researchers can discover patterns within collected text based on relevance to each of the guiding questions for the study. The process began with reviewing the transcribed interview to identify those points relevant to the research purpose and questions. After the relevant statements were identified, they were grouped by repeating ideas. Primary themes were identified that were related to the essence of the guiding questions (e.g., philosophy, policy, enactment, and future directions). Some themes emerged that were unrelated to the guiding questions. These findings were noted and their potential significance considered in the preparation of the final report.
Cross-Case Synthesis

According to Yin (2009), a synthesis of data from two or more cases is likely to produce findings that are more robust than a single case study. In analyzing this multiple case study, each case was coded individually before any cross-case analysis occurred. Once the data from all six individual cases was coded, word tables were created containing data from each case; the data in these tables supported common themes, whether *a priori* or emergent. Comparisons among the six cases were made based on the findings related to the guiding questions. Themes that emerged across two or more cases were analyzed and reported separately.

Triangulation

In quantitative research, reliability and validity are important tests of the transferability of research results. In qualitative research, Golafshani (2003) suggests that these concepts be replaced with the congruent values of trustworthiness and rigor, with a goal of increasing generalizability. Data triangulation is a method of demonstrating trustworthiness and rigor. For this study, data was triangulated through the review of relevant documents, participant review of interview transcriptions, and the researcher’s field notes, which included observations and reflections gathered at the site. This information establishes a comprehensive audit trail that can be reviewed by other researchers wishing to test the generalizability of the findings.

Limitations and Delimitations

At the outset, the researcher understood that the selected topic was large and complex, and as such was subject to several limitations. Among these were limited time provided within an accelerated doctoral program in which to conduct a broad international study, potential participant language barriers, and perhaps most important, the inability of the researcher to fully comprehend all aspects of the cultures of postsecondary education in three foreign countries.
In part to offset these limitations, the researcher has made several delimiting choices. The researcher purposefully selected institutions in three European countries and a specific region of the United States. This purposeful selection helped to make the study manageable during the allotted time while still providing a variety of cases to be studied. In addition, the study focused on the perspective of the CAO to the exclusion of students, instructors, and other stakeholders (e.g., governments or employers). This international comparative study was not intended as an evaluation of the effectiveness of program design or instruction, but rather as an exploration of how such programs are designed and evaluated in multiple settings in the United States and the European Union.

**Subjectivity: The Researcher as Instrument**

According to Yin (2009), a researcher who is “the type of person for whom one tentative answer leads to a whole host of new questions, and...these questions eventually aggregate to some significant inquiry about how or why the world works as it does...is likely to be a good asker of questions” (p. 70). As her family, friends, and colleagues will attest, this researcher is indeed that type of person. Her teaching background, involvement in a cross-disciplinary review of general education at a community college, and international experiences all inform the development of this research project.

The researcher has taught English at the developmental and college levels for nearly 20 years; for 14 of those years, the researcher taught in a community college setting. As chair of her college’s Instructional Standards Committee, she was charged to oversee a comprehensive audit of the college’s eight degree programs to determine the intended and actual general education content included within each degree. The audit focused closely on programs leading to applied degrees (e.g., AAS, AAB); at this college, such degrees were less likely to require general
education coursework. The questions and issues considered—often hotly debated—by that committee were the genesis of this research project.

During June of 2007 and 2008, the researcher participated in the Global Academy for Leadership Development sponsored by the Chair Academy. In this academy, the researcher met her counterparts at community college-like institutions in the United Kingdom, the Netherlands, Canada, and South Africa. In addition, her college participated in a Fulbright Administrator Exchange in which a principal from the Czech Republic spent 6 weeks on campus. The researcher had many opportunities to speak with this individual about postsecondary education in that country. Casual questions and observations about commonalities and differences within the various systems began to accumulate and eventually coalesced into the purpose and driving questions for this study.

**Ethical Considerations: Protection of Human Subjects**

The research undertaken for this study involved soliciting the views and perceptions of CAO regarding the philosophy, practices, and polices associated with general education within their institutions. A statement of informed consent was obtained from each interview subject. This statement outlined the nature of the study and stressed the voluntary nature of participation. The researcher determined that the risks to the participants were minimal because the subjects were acting as official representatives of their institutions and that the information they were asked to share is a matter of public record. Nonetheless, diligence was exercised to safeguard the subjects’ rights to privacy, confidentiality, and their ability to withdraw from the study at any point in the process. The names of the participants and the names and locations of their institutions were disguised by pseudonyms created by the researcher. Participants were offered
the opportunity to review transcripts of their interviews and records are held in a locked cabinet and/or in password-protected computer files.

Chapter Summary

In summary, this qualitative study compared the perspectives of selected CAOs on the role of general education objectives in postsecondary career and technical programs in the United States and Europe. The study utilized a multiple case study approach to address the guiding questions related to the underlying philosophies, policies, and practices in each institution. Data was collected through interviews and document review; it was analyzed separately and across the multiple cases to make visible the world of general education within each institution.
CHAPTER 4

FINDINGS

The findings of this qualitative study of the role of general education within postsecondary career and technical education programs offer information and insights for community college leaders on both sides of the Atlantic. Findings are presented on the values and beliefs as well as national, regional, and institutional policy environments influencing the inclusion of general education in career preparation programs. Findings also include an exploration of the design of career education programs on both continents, including content, delivery, and assessment of general education outcomes to ensure that graduates have acquired the skills to be successful in the global marketplace. Finally, data are presented on future trends and an emerging theme.

The purpose and guiding questions of this study were addressed through a qualitative, multiple case study approach. Data were collected through interviews and document review; data were analyzed separately as well as across the multiple cases. In this chapter, each institution is profiled briefly; findings related to the content, delivery, and assessment of general education within each college are summarized, followed by a brief portrait of each interview respondent. The cross-case findings related to each guiding question are then organized thematically and grouped by continent within each theme. Finally, findings are presented related to an emergent theme: changing student populations. Although not specifically related to any one guiding question, all six respondents noted the broad impact of this topic on the content and delivery of general education within career and technical programs.
Purpose

This qualitative research project was intended to provide guidance for community college leaders in setting policy regarding the content, delivery, and assessment of general education objectives in programs intended to prepare students to enter the workforce. The purpose of the study was to compare the perspectives of Chief Academic Officers (CAOs) on integrating general education into postsecondary career and technical education programs designed to prepare students for the global workforce.

Guiding Questions

The guiding questions arising from the purpose of the study were as follows:

1. How do cultural beliefs and values regarding the purpose of education inform the role that general education objectives play in career and technical programs in US community colleges and similar institutions in Europe?

2. What specific internal and external policies exist related to the role of general education objectives in career and technical programs in US community colleges and similar institutions in Europe?

3. What are the commonalities and differences in content, delivery, and assessment of postsecondary general education outcomes for career and technical education programs in US community colleges and similar institutions in Europe?

4. What future directions are envisioned regarding the role of general education objectives in career and technical programs in US community colleges and/or similar institutions in Europe?
Research Protocol

A multiple case design was selected for this study focused on the role of general education outcomes within postsecondary career and technical programs. The study positioned the views of the CAOs and the design and operation of the programs squarely within the context of each institution and its unique culture. According to Stake (2006), “[an] important reason for doing the multicase study is to examine how the program or phenomenon performs in different environments” (p. 23). For this qualitative study, six institutions (three from the European Union and three from the United States) were identified as study sites. Those in the European Union were selected based on contacts the researcher had previously made with educators overseas. The colleges in the United States were selected to correspond roughly with the European colleges in size, type, and programs offered. Initially, a private, for-profit institution that granted Associate degrees in the United States was intended to be included; however, none of the institutions contacted agreed to participate. Ultimately, another US comprehensive college was selected to replace the private institution. The final selections include a US and an EU system made up of formerly independent colleges, a US and an EU college (both of which are noted for innovation), a comprehensive community college located in a rural area of the United States and a privately owned business college in the European Union. The privately owned college is an outlier in many respects, but was retained in the data due to its unique location and the fact that it is representative of sub baccalaureate career and technical training offered in the country. All three US colleges are located in the North Central Association’s Higher Learning Commission accrediting region.

Chief Academic Officers (CAOs) were selected as interview participants due to their structural positioning as college leaders who are also closely in touch with academic matters.
The group of CAOs who participated included four men and two women. One participant was under 45, two were between 45 and 55, and the final three participants were older than 55. All participants were White. Time in the position ranged from 1 year to 18 years.

**Institution and Participant Profiles**

Profiles of participating institutions, including a broad outline of the content, delivery, and assessment of general education in career and technical programs are provided below. (Pseudonyms are used.) Each institution’s size, type, and number of career and technical programs offered are included. A brief background of history, funding, and governance structure was obtained from the institutions’ websites or from personal communication with college representatives including interview participants and members of their staff. Enrollment figures from 2009 to 2010 were verified with study participants. Although Carnegie classifications are not used in Europe, these classifications are used to define the size of each institution for ease of discussion and comparison. Chief Academic Officers (referred to by pseudonyms) who were interviewed completed a short demographic questionnaire including age, ethnicity, time in the position, as well as educational and professional background. These responses were used to sketch a brief portrait of each participant while preserving anonymity.

**Hunt College**

Hunt College is a medium comprehensive community college located in a fairly remote region of a Midwestern state. It is one of 20+ independent community colleges in the state. The college was founded in 1962 and is governed by a seven-member Board of Directors elected by county residents. In 2009-2010, 4,995 students were enrolled. The college offers 36 postsecondary career and technical programs, mainly in business and technology, as well as a nursing program. In fall 2009, 60% of incoming Hunt students declared a major in one of these
career and technical programs. According to the Integrated Postsecondary Data System (IPEDS), Hunt’s three-year graduation rate for students entering in 2006 was 21%.

Rather than being specific to any one career preparation program, Hunt College’s general education program applies to students in all Associate in Applied Science (AAS) degrees across the institution. Required competencies include written and spoken communication, social and behavioral sciences, natural sciences and mathematics, and humanities. A document from the college’s website indicates that programs have the option of embedding general education outcomes within a course or series of courses within the program; however, according to the CAO, this does not often happen. Instead, students take a total of five general education courses which make up about one third of the degree programs. A written communication course, a social or behavioral science course, and a mathematics or natural science course are required, whereas the other two courses are elected from the general education disciplines. Some of Hunt’s general education courses are offered online.

Assessment of general education objectives at Hunt is overseen by a team of faculty and administrators. This team assesses general education across all programs at the classroom, program, and institutional levels using locally developed tests, rubrics, and surveys as well as ACT’s Collegiate Assessment of Academic Progress (CAAP). Career and Technical program faculty include the entire general education program as part of their learning outcomes and monitor the results as part of the college’s program review process.

Hunt’s CAO, Dr. Starz, had held that position for 2 and one half years at the time of the interview. His title is Vice President of Instruction and Student Learning; he reports to the president of the college. Starz holds an EdD in Educational Administration. His career
background includes experience at a private 4-year university as assistant vice president and vice president.

**Benedict College**

Benedict College is a very small career-oriented postsecondary institution located in a small industrial city in central Europe. The college was founded in 1993 and is privately owned and operated. In 2009-2010, 350 students were enrolled in career programs in International Business and the Tourist Trade. Upon completion, students receive a “Certified Specialist” certificate; many students go on to complete a Master’s of Business Administration degree at a university. Official graduation rates were unavailable for Benedict.

Benedict College offers specialized postsecondary career preparation programs for students who have graduated from high school and completed maturity exams in their native language, one foreign language, mathematics, and history. These four exams demonstrate students’ mastery of what is considered general education; there are no required courses or credits in these subjects at the postsecondary level. Instead, any instruction in general subjects such as communication, geography, and mathematics occurs within the context of the career preparation program. For example, accounting is an important component of the international business curriculum, whereas business correspondence is required in the native and foreign languages in both business and tourism courses. Although students at Benedict are expected to be proficient in a foreign language (typically English) and mathematics when they enter the college, the college does offer assistance such as tutoring to students who are weak in these areas to enable them to meet the expectations of their coursework.

There is a government-approved curriculum for each program at Benedict. Students are assessed in each subject through written and oral exams administered by each teacher about five
times per semester. Students also complete a 25- to 30-page thesis and must defend this thesis as well as complete oral exams in a foreign language and their specialty area. These final exams are conducted by a committee made up of the college’s president, vice president, the student’s homeroom teacher, and two teacher/examiners—one in the foreign language and one in the specialty area. Each program also includes practical training consisting of a 4-week apprenticeship in the fourth semester and a half-year on-the-job training program in the final year. Students’ progress in practical training is assessed through written and oral reports as well as evaluations from the employers with which they are placed. According to the CAO, this combination of classroom instruction plus practical training and oral examinations is typical of the country’s postsecondary career colleges. The college is inspected every 6 years by a team of auditors from the country’s Ministry of Schools for the purpose of continuing accreditation.

Benedict’s CAO is also the college’s principal, Dr. Snow. Snow has been in her current position for 5 years and reports directly to the college’s founder. Prior to becoming principal, she earned a PhD and was a teacher and a vice principal at the college. Although Snow speaks English, she was joined during the interview by Mr. Brown, who has been a teacher at the college for 16 years. A native English speaker, Brown participated in the interview to clarify any confusion due to language differences.

Fieldstone College

Fieldstone is a very large comprehensive community college located in an industrial region of a Midwestern state. Its home city has a population of 130,000; moreover, it is adjacent to a city of over 1 million. Founded in 1954 and first accredited in 1970, the college is governed by a seven-member board of directors elected by county residents. It is one of the largest community colleges in the state and ranks among the top Associate’s degree-granting institutions.
in the United States. In 2009-2010, 24,343 students were enrolled at Fieldstone; in fall 2009, approximately one third of the students had declared a major in one of the college’s over 150 career and technical programs. The IPEDS three-year graduation rate at Fieldstones for the 2006 cohort was 14%.

The general education program at Fieldstone is designed to ensure that all graduates, including those in career and technical programs, meet five common degree outcomes in the areas of mathematics, communication, technology, thinking skills, and diversity. Coursework required to meet these outcomes varies by degree type. According to the college catalog, Associate of Applied Science (AAS) recipients are required to elect courses from five disciplines including English (one course must be in composition), natural science, social science, arts and humanities, and wellness. (One of the English courses must be in composition). This translates into 18 credit hours, or 29% of the minimum hours required in an Associate’s degree program. All courses that can be used to satisfy common degree outcomes are taught within the college’s division of Arts and Sciences. According to Mills, some career and technical programs require a certain course in a given area that meets the needs of the program; however, that is the exception rather than the rule.

At the time of the interview, Mills stated that Fieldstone relied solely on student outcomes in the form of successful course completion to demonstrate mastery of its general education objectives. The college has compiled a curriculum warehouse where all course objectives and learning outcomes are listed; faculty are responsible for assessing student learning and reflecting their achievements in course grades. However, Fieldstone is currently participating in the North Central Association’s Higher Learning Commission Assessment Academy and has undertaken a project to review the effectiveness of its current process of
measuring its common degree outcomes. The project will examine course objectives and student outcomes in the top 20 courses taken at Fieldstone to determine whether students who successfully complete a subset of those courses can be said to have achieved the college’s common objectives for degree recipients. According to Mills, the outcome of this project may influence the direction of Fieldstone’s assessment processes in the future.

Fieldstone’s CAO, Dr. Mills, had held the position of Provost and Vice President of the Learning Unit for 1 year at the time of the interview. He reports to the college president. Mills holds an EdD in Educational Leadership and has been with the college since 2002. Prior to entering academia, he held a number of managerial positions with major manufacturers.

**Peak College**

Peak is a very large career-oriented community college located in a Western European country. Founded in 1992, it has the distinction of being that country’s first community college. Situated in an industrial region with approximately 140,000 residents, the college is also 1 hour from the country’s capital. Thirteen thousand students were enrolled in credit-bearing programs in 2009-2010. The college houses career and technical programs in 24 departments divided into the broad areas of Health and Human Services, Technical and Industrial Studies, and Economics and Culture. Graduation rates for Peak College were unavailable.

At Peak College, career preparation courses are organized according to levels one through four, which correspond to the country’s national qualification frameworks. (See more on this topic in Chapter 2.) All levels and programs incorporate some general education objectives including native language communication skills, mathematics, and soft skills related to employability. Required competencies, including general education and soft skills, are defined within the national curriculum for each program and beginning in 2013, graduates will
complete national examinations in native language skills and mathematics. Salt estimates that 40% of each program is devoted to general education, although this may vary across departments and levels. Delivery of general education can vary also. According to Salt, general education and employability skills are more likely to be embedded within career-specific instruction at the lower qualification levels, while at level three and higher, students are more likely to take a stand-alone class in language or literature.

Assessment at Peak College is a tripartite process carried out by a dedicated internal unit that oversees all examinations. Content is taught by faculty, while staff from the department of examinations either create or administer all exams. These exams may be written, oral, or a practical demonstration of competencies defined in the curriculum.

Peak’s CAO, Ms. Salt, had been vice president at the college for 18 years at the time of the interview. In her position, she reports to the college’s board. Aside from earning a degree and teaching at the primary and secondary levels, Salt ran her own business for 10 years.

**Garden State College**

Garden State College is a very large comprehensive community college system made up of 14 regions and 23 campus sites across a single Midwestern state. Established as a vocational college in the 1960s, Garden State was accredited as a single community college in 1994. The college is governed by a 14-member board of trustees appointed by the state’s governor. Trustees who represent each region are required by law to have knowledge or experience in the state’s educational system or one of its diverse industries and to understand regional economic development needs. In 2009-2010, 166,555 students were enrolled at the college. The college offers more than 140 career and technical programs. In fall 2009, 83% of students had declared
one of these programs as their major. According to Garden State’s web site, the three-year graduation rate for the 2006 cohort was 8%.

At Garden State, career technical programs lead to Associate of Applied Science (AAS) degrees. According to the college’s website, general education within these career and technical programs is expressed mainly in the language of credit hours and a set of required courses. Each program requires at least 15 hours of general education coursework, including, at a minimum, a course in writing, communication, and mathematics. A review of core curriculum guides on Garden State’s website suggests that one English course, English Composition, is common to all programs. Although one communication course, Introduction to Public Speaking, is found in most programs, some programs specify a different communications course or list a communications elective. Cane stated that programs are allowed to dictate general education courses that support their curriculum. This seems particularly evident in math, where several different math courses are specified in the various programs; many programs simply require a math elective. Science and social science courses are also common. Sometimes a particular course is specified, but at other times students are allowed to elect courses within a department.

In the nine AAS programs delivered via distance learning, the general education requirements are still specified by credit hours and required or elective courses within departments.

For assessment of students’ achievement in the general education components of career and technical programs, Garden State relies on the American College Testing (ACT) company’s Collegiate Test of Academic Proficiency (CAAP). As part of an overall strategy to ensure that the college’s graduates are globally competitive, Garden State has established baseline and target scores for CAAP Writing Skills, Mathematics, Critical Thinking, and Science, which are posted on its website. All prospective degree recipients take one or two of these tests as part of a
capstone course in each program. According to Cane, the provost’s office is responsible for monitoring program quality through a college-wide program review process. Demonstrating a process for assessment of student learning, including student learning in general education, is an important aspect of maintaining accreditation. In its most recent Higher Learning Commission self-study and team visit process, Garden State identified a need to strengthen its assessment of general education outcomes and is currently responding to this need in its ongoing planning processes.

Garden State’s CAO, Dr. Cane, had held the position of Provost for 2 years at the time of the interview. Originally an English instructor, his administrative background spans three decades and includes experience in research and technology at various colleges and related professional organizations.

City Municipal College

City Municipal College is a very large college of further and higher education located in an industrial city of 3 million in the United Kingdom. The college is made up of three formerly independent institutions that were merged in 1995 and then merged with a neighboring college to become one college in 2007. The governing body is made up of 15 individuals who represent public and private business and community interests. In 2009-2010, 48,000 students were enrolled. City Municipal offers over 1,000 full-time and part-time further education courses in 20 career and technical areas. In 2009-2010, 80% of the college’s students were enrolled in career and technical programs. According to the CAO, the completion rate for these programs in 2009 was 72%.

City Municipal offers career and technical programs leading to national qualifications in both further and higher education. These qualifications are organized by level. A national
diploma (level three) or higher national diploma (level five) are the qualifications most analogous to an A.A.S. degree in US community colleges. According to the college’s web site, a diploma represents 37 credits, or 370 hours of instruction.

There are specific assessments for competency at each level in essential skills, and further education colleges are required by a national body to set targets for student enrollment and retention in essential skills courses. Assessments may include observations, portfolio evaluation and examinations. In addition to the assessments specified for essential skills in literacy, numeracy and information technology, key skills related to employability may also be assessed within the context of the vocational program. The college also has a quality unit composed of administrators and lecturers who are released from teaching to conduct internal reviews.

City Municipal’s Chief Academic Officer, Dr. Black, had held the position of Deputy Director for Curriculum Programs for six years at the time of the interview. In this position, he reports to the Director of the college. Initially a history lecturer, Black has held various management positions in further and higher education over his 30-year career.

**Cross-Case Findings Related to Guiding Questions**

Within this multiple-case study, each case contributed to a deeper understanding of the central phenomenon, the role of general education in career and technical programs, which Stake (2006) referred to as the “quintain.” According to Stake, researchers “study what is similar and different about the cases in order to understand the quintain better” (p. 6). The guiding questions defined the quintain, while the institutions served as the bounded systems for this multi-case study of the phenomenon of general education as a component of career and technical programs intended to prepare students for the workforce.
Aspects of the quintain (outlined in the guiding questions) included values and beliefs related to the role of general education in career and technical programs, the impact of national, regional, and/or institutional policy in the inclusion of general education in career and technical programs, as well as the content, delivery, and assessment of general education objectives. The study also explored future trends and emerging issues faced by the colleges on both continents. For each guiding question, cross-case findings were organized thematically and grouped according to continent. Initial broad *a priori* themes were identified from the review of literature; these themes were further refined as the researcher analyzed the individual responses.

**Cross-Case Findings Related to Guiding Question One**

Guiding Question One: How do cultural beliefs and values regarding the purpose of education inform the role that general education objectives play in career and technical programs in US community colleges and similar institutions in Europe?

Interview responses from all participants touched on the importance of education, especially postsecondary education, to students and society in general as well as a strong relationship between the needs of the marketplace and the purpose of education. Additionally, all respondents alluded to the sometimes problematic nature of the “business” of education itself.

**Individual and Social Benefits**

Responses from CAOs on both continents demonstrated the educators’ view of postsecondary education in general and general education in particular, as positive for students and society. CAOs at the colleges in the United States focused primarily on the contributions that educated individuals can make to their communities at various levels. At Hunt College, CAO Dr. Starz believes that they are “serving a greater need in our community by providing people with these skills.” For Mills, a key outcome of general education is creating individuals
with “just a broader perspective. The ability to think and problem-solve…to come up with creative solutions to problems that may arise.” Cane states the following:

This is both an individual and State interest in that we exist in a democracy that depends upon a reasonable level of education and understanding of analytic ability and ability to read. Democracy depends upon an educated populace.

In Europe, the CAOs also focused on the social and economic benefits of general education. At Benedict, where general education is not specifically taught, Snow recognized the benefits of a broad education in preparing students either for a job or further education. CAO Salt at Peak College identified education’s role as a potential social equalizer: “[I]f you look at society, opportunities, then we as schools are supposed to, not to enlarge, but to close the gap.” At City Municipal, projects that reach out into the community help put previously disengaged individuals on the ladder to further education and become part of a “suitable workforce for the present and the future,” according to Black.

**Employment Emphasis**

Black’s emphasis on becoming part of the workforce was delivered by all six respondents. The respondents were asked, “What is the primary purpose of career and technical education at your institution?” All responded with some variation of preparing students for the workplace. The majority described a strong relationship between general education objectives and the demands of today’s workplace. One US college and all three EU colleges also reported actively engaging with business and industry as they prepare students for their future careers.

In the United States, all three CAOs feel that general education makes the difference between finding a job and building a career. At Hunt College, Starz wants to assure students that “completing any of these career programs positions you for immediate employment with your
newly acquired skill.” Mills at Fieldstone and Cane at Garden State both agree that job readiness is paramount. According to Cane, the following is true:

Employers often will tell us: “We’re really not so concerned about the specific skills you give them even if it’s nice that they know how to do X, we need them to be able to read, write, cipher, get along with others AND know how to learn.”

In some cases, as Mills noted, career readiness may include education beyond the community college level. Administrators at Fieldstone College have “worked very hard over the last several years to try to find more and more transfer opportunities for our Associate of Applied Science degrees. We really are trying to set students up if they want to go on with their education, they can.” Mills was also the only US CAO to cite a project that actively engaged potential employers in designing a career and technical program to meet their needs.

We did training for technicians on fuel cells. That was a collaborative project with a chemistry, an automotive, and two electrical faculty members (one from our academic side and one from our training side). That was a good project. The four of them put the curriculum together, interfaced with the customer, and delivered the training as well.

Colleges in the European Union also embrace job readiness as a primary purpose of career and technical education; the majority of CAOs referred to general education as an important aspect of career preparation. CAOs at those colleges also cited more direct engagement with employers in developing and revising programs to meet their needs. At Benedict, the college administrators concentrate on preparing students for careers in international business and tourism. Snow stated the following:

We are very concentrated to feedback of companies. So every year, we ask our partners; tell us if we do good work or what are the changes, what do you need? What are your requirements? Sometimes we invite them to the school and ask. Sometimes we send them a questionnaire and every year students who are in practical training have to write some reports about the things, and the companies have to write evaluations of the students.
At Peak College, CAO Salt stated that “the labor market is the most important guide for our curriculum. That’s why we have all these qualifications.” While a national committee creates general qualifications for an employment sector (e.g., health care), Peak works with local and regional employers in designing its own curriculum for each program. “This we have to design with employers. We have [national] committees and the committees help us. But this is our obligation.” Due to the focus of their funding organization, City Municipal College very strongly focuses on education for employment and makes considerable efforts to engage employers in designing and evaluating its programs. CAO Black stated the following:

We do try as far as possible to have employer advisory groups, the sector skills bodies as kind of spokespeople now for the employers across the [country]. It’s quite funny to attend a meeting in the department with the universities and the employers and you’re being told what’s going to be on your course. There’s a particularly strong representative of a caring sector skills council who sat there and told the two universities, ‘This will be on your course, and this will be on your course.’

CAO Black went on to cite an example of employer feedback responses that led to a surprising change in a program’s curriculum.

We had employer, stakeholder, and student feedback and they come up with a couple of things they wanted. One of them that was interesting was a return to Basic, Cobalt, and the like for some of the industries still use them.

City Municipal ended up re-incorporating instruction in this legacy software in its programs to accommodate employer needs.

**Education as a Business**

In underpinning societal benefits and preparation for employment, the CAOs acknowledged the perpetuation of education as a business or industry in and of itself as a less-touted purpose of postsecondary education. Interview responses included references to the relationships between the various educational sectors (i.e., secondary, community college,
university) as well as views of the faculty’s role in driving innovation in instructional delivery and assessment, especially as related to general education objectives.

**Relationships between sectors.** Alignment between the various sectors of education was of some concern on both continents. In the United States, only CAO Cane expressed that alignment between secondary and postsecondary education was an accountability issue at Garden State. However, all three US CAOs discussed concerns related to students who plan to transfer from a community college to a 4-year college or university and two out of the three differentiated sharply between career and technical programs and those intended for transfer. Both CAOs Starz and Cane indicated that different standards for general education applied to programs intended for transfer at their institutions. Starz indicated that graduates completing an Associate in Arts (AA) degree at Hunt College must take up to 60% of their program hours in general education (as opposed to 33% for career and technical students). CAO Cane distinguished between the two but also stated that “[T]he general education program for transfer is an elaboration of a set of skills that can be boiled down to soft skills that employers want.” Only CAO Mills specifically cited transfer as an aspect of career and technical education at Fieldstone College that is growing in importance. “We’ve made some good progress with our local partners. We’ve also got 3+1 agreements with [some partners]. These are still relatively new in the scheme of things.”

In the European institutions, the difference in roles between secondary and postsecondary programs is more specifically delineated than in the US colleges. At Benedict, there is a clear understanding of the distinction between what can be taught at colleges versus universities. For example, Snow stated the following:

[Foreign] languages, this is very important and very typical for colleges. At universities, everybody knows languages, they cannot teach. This is the feeling at universities, but not
at colleges. It’s not true that everybody knows, so we have special classes, a lot of lessons in languages.

At Peak College, the Western European country is moving toward national examinations for secondary graduates prior to admission to postsecondary programs, whereas students who attend City Municipal College in the United Kingdom have experienced a tracking system that dictates educational pathways for children as young as 11. According to Black, some individuals are “sort of sucked into that [academic] stream and don’t consider vocational, it’s almost second class. Career education, second class. Primary goal is the university.” There was little discussion of mobility between these sectors, except at Benedict College, where Snow stated that students “are well-prepared” to pursue a Master’s degree at another college or university if they choose to do so.

**Role of the faculty.** The tendency of education to perpetuate itself as an industry is also reflected in the CAOs’ views of the role of the faculty as the drivers of innovation. On both continents, career and technical faculty are considered by the CAOs experts in their content areas. At Hunt College, CAO Starz acknowledged the following:

> Although [career and technical faculty] see the value in incorporating general education, they have that tension of feeling certain that students do not have enough time to spend in courses maximizing their acquisition of appropriate skills.

Cane expressed concern that activities like contextualizing general education into career and technical courses “tend to require greater sophistication from faculty because they need to know not only their technical specialty but also pedagogical stuff related to gen ed.” On the other hand, Mills stated that “I’ve been a little surprised and delighted with just how engaged [faculty have] been” in the process of improving overall student success at Fieldstone. At Hunt, where faculty have been participating in workshops to promote collaborative teaching and learning, Starz has found the following:
Because it was run as a cohort during the entire year was the collegiality that was promoted because we had faculty from all these different areas coming together in a way they don’t normally do and share what’s working, what’s not, having the conversations, creating that space for them to support each other, learn from each other has been tremendous value.

In Europe, two out of the three CAOs highlighted the sometimes problematic role of the faculty in driving innovation. At Peak College, CAO Salt feels that faculty sometimes lack awareness of the magnitude of change in the needs of students and the expectations of society.

We don’t ask them to professionalize because we want them to, but because the parents want it, the government wants it, business and industry want it. So the awareness that it’s not you that decides but its society.

At City Municipal College, Black acknowledged the following:

We have had to sort of re-educate people into improved teaching & learning methodologies. There’s always a difficult day with diehard teachers, particularly older ones. I find teachers taught within the last 15 years have been used to frequent observations during their course and are quite open to peer group observation. There’s another cohort of staff who are older than that whose background is ‘the classroom is an autonomous domain’ and they resent observation.

However, Black has worked to promote an atmosphere of collegiality related to instructional improvement that is having some positive effect.

With an inspection recently we had the word “outstanding” used six times in the feedback. They were extolling things like project learning, stretch of the students, and then you have to say to yourself that within the organization part of our task is to set into good practice to others.

Summary of Findings for Guiding Question One

In response to interview questions related to guiding question one regarding the impact of cultural values and beliefs on general education in career and technical programs, respondents identified values such as the benefits of social and economic mobility for individuals and society in general, along with responsiveness to the demands of the workplace, as positive beliefs and values regarding the purpose of education. Beliefs and values related to the educational system
as a business, including relationships between sectors and the role of the faculty in delivering and assessing general education objectives also appeared in the interview responses.

Cross-Case Findings Related to Guiding Question Two

Guiding Question 2: What internal or external policies exist related to the role of general education objectives in career and technical programs in US community colleges and similar institutions in Europe?

The policy environment surrounding the role of general education objectives in US community colleges and similar institutions in Europe is characterized by both internal and external guidelines and requirements. All colleges report an internal structure governing inclusion and assessment of general education objectives in these programs. External requirements differed on each continent; institutions in the United States were more likely to be influenced by regional accreditation requirements while European institutions reported more structured government regulations.

Internal Monitoring

In the United States, while all three colleges reported policies requiring general education to be included and assessed within the programs, the level of structure varied widely from college to college. At Hunt College, each program must submit a matrix listing program learning outcomes and how they will be assessed. Career-related outcomes are typically assessed by program faculty through a program review process overseen by administrators, while general education is assessed by a college-wide group. At Fieldstone College there is considerably less structure. CAO Mills reported that all programs have a required set of general education courses. Outcomes for both general and career-specific courses are assessed within those courses by the faculty. Finally, Cane stated that Garden State “has been mostly a
decentralized system for most of its history” where each branch campus developed its own guidelines for inclusion and assessment of general education. Now, however, his office has established a college-wide system of program review. While CAO Starz was proud of Hunt’s policy work in the area of general education and program assessment, both Mills and Cane acknowledged that their institutions have some distance to travel in these areas in satisfying the criteria established by their accrediting body.

In Europe, internal standards are more intensively influenced by external regulations. At Benedict College, committees of instructors teaching a common subject work together to design curricula and to assess students’ achievement according to a nationally regulated process. At Peak College, a Department of Examinations employing the equivalent of 25 full-time employees oversees every exam in the college. At City Municipal, CAO Black leads an internal quality unit made up of instructors who are released from teaching duties. The monitoring process includes classroom observation by senior staff and managers that are not always popular; however, as Black stated “I think it’s a quality imperative. I would rather go in and find somebody teaching brilliant lessons or not teaching brilliant lessons than have the Inspectorate come in and find it for me.”

**External Requirements**

The three US colleges participating in this study were selected from within the Higher Learning Commission accrediting region of the North Central Association of Colleges and Schools. The varying policies on inclusion and assessment of general education within the three institutions reflect the voluntary nature of higher education accreditation in the United States. Accrediting bodies like the HLC provide guidance and criteria that are open to interpretation by
individual colleges. Therefore, it is not unusual to find colleges positioned at various points along a continuum of policy and practice in areas such as general education.

At the time of the interviews, all three of the colleges had received similar feedback from the HLC on the quality and scope of their assessment activities. CAO Starz reported an intentional effort to “make our assessment plans very visible to people that want to know what’s going on in the occupational programs.” At Fieldstone College, CAO Mills acknowledged that “we don’t have a real rigorous program assessment,” but the college has undertaken a project to examine the outcomes and the objectives of their 20 most-enrolled courses and mapping those to the college’s common degree outcomes. At Garden State, CAO Cane stated that a recent HLC evaluation indicated that “[W]e’re not very good on identifying and assessing the outcomes of our gen ed programs.” The college is currently engaged in a review of general education as part of its 2013 strategic plan.

In contrast to the United States, institutional policies in Europe are more strongly influenced by national policies or regulations. At all three of the colleges, programs are required to report learning objectives for career and technical programs, including general topics if they are components of those programs. Moreover, oversight by the government is expected. At Benedict College, program quality is monitored and exam procedures are mandated by the National Ministry of Schools, which operates with the force of law behind it. A comprehensive report (including identification of course and program learning outcomes) is required every 6 years. At Peak, the large department dedicated to examination procedures allows them to be prepared for government inspections. According to CAO Salt, “Every year [inspectors] check approximately 1/3 of all exams.” Salt admits to being envious of the United States system because “the examination, nobody worries about that” due to the traditional autonomy of higher
education in the US; however, she also acknowledges that a positive aspect of the system in her country is that “it guarantees the quality of your diploma. We are used to that.” At City Municipal, CAO Black described the scrutiny the college receives from its funding unit:

They look at all aspects of the course against the government standards. IQRS (Improving Quality: Raising Standards) is the document by which the departments set their quality standards from the Inspectorates. They measure against set standards in things like the quality of teaching and learning, quality of resources, quality of a lot of statistical mapping and leadership and management. Essentially we all operate against those.

Summary of Findings for Guiding Question Two

The policy landscape in the United States colleges differs from the environment in Europe. Institutions on both continents have internal policies that are influenced by external agencies. In the United States, the level of rigor of internal monitoring is primarily dictated by the institution and the criteria for voluntary accreditation. The colleges in the European Union have designed their internal systems to be responsive to the government agencies that have legal and fiscal authority over them.

Cross-Case Findings Related to Guiding Question Three

Guiding Question 3: What are the commonalities and differences in content, delivery, and assessment of postsecondary general education outcomes for career and technical education programs in US community colleges and similar institutions in Europe?

In question three, the construction of the question dictated the identification of the broad a priori themes of content, instructional delivery, and assessment. Within each of these, more specific themes emerged, including the division of general education content into academic and employability components, challenges related to allocating time to delivery of general education, trends in delivery methods, and the importance of assessment.
General Education Content

CAOs at institutions on both continents expressed a similar understanding of the components that should comprise “general education,” which CAO Cane at Garden State referred to as “a set of skills and abilities that students need to have in order to be truly educated” and CAO Black at City Municipal defined as “essential skills.” During the interviews, these components were articulated in an employment context by all six respondents. For CAO Starz at Hunt College, general education makes the difference between preparing for a job and preparing for a career:

It’s taking a longer view where somebody acquires the skill to get the job and functions well and then perhaps after awhile, this person aspires to maybe a leadership role within that occupation in the fact that they’ve acquired some communication skills, written and oral. They have an understanding of some of the social issues and so on.

CAO Mills at Fieldstone College sees general education “rounding out” his career and technical students, while Cane feels that his students at Garden State who want to succeed in the workforce must be able to do the following:

[They] need to be able to read, write, do analytic work that’s critical thinking (which is really a component of reading), do quantitative analysis, work together in teams, be able to speak in public, make presentations.

At Benedict College, CAO Snow believes her students’ writing and speaking abilities help to prepare them for the environment outside of school, whereas CAO Salt at Peak College tells her students that “outside of this door, you will be judged by the way you write, you will be judged by the way you speak…we know that.” Finally, for Black’s students at City Municipal College, “[T]he package is clearly math, English, and [technology]. But there is the working with others, the problem solving, and the responsibility of your own learning or your own daily work pattern.”
**Academic components.** In the academic arena, all respondents identified communication in the students’ native language and basic mathematics as core competencies. The three US respondents also specifically defined both written and verbal communication as important academic aspects of general education while the two EU respondents who touched on speaking skills did so more in the context of employability.

A majority of respondents on both continents mentioned social and cultural studies as important. In the United States, Starz stated that “understanding of social and cultural dynamics and issues is important and also an awareness of national, international, more the global issues.” CAO Mills’ listing of general education topics included psychology, sociology, and other social sciences, whereas according to CAO Cane, general education should “involve critical thinking, awareness of sociopolitical, economic, cultural diversity and systems across the world. Each general education program that I’ve ever seen has some variety of those.”

In the European Union, global awareness and cultural competence are more likely to be integrated into instruction in career-specific courses than offered as stand-alone coursework as they are in the United States. In fact, CAO Snow stated that general education subjects are not taught at Benedict College. “We accept graduates from high school who have this general education [in history, math and language], and then we prepare them for a career.” However, students at Benedict are required to study a foreign language to prepare them for the global workplace. According to CAO Black, at City Municipal, entrepreneurship and awareness of cultural diversity are equally as important as the key skills of literacy, numeracy, and technology for students in career and technical programs.

**Employability components.** Employability components commonly identified as important on both continents included personal effectiveness and skills related to working with
others (including awareness of diversity and cultural competence). In the United States, CAO Cane listed time management and working together in teams as important skills related to general education, while Salt cited national qualification documents stating that students in health care programs will be assessed on their abilities to collaborate with and persuade others, show sympathy and empathy, and present at meetings. Black’s students develop their abilities to make decisions, manage their own time, and work with others as part of their career and technical programs. CAOs Mills and Black also cited problem-solving as an important skill related to general education. Table 3 illustrates specific topics identified by each respondent as important in his or her own words. Shading within the table indicates groupings identified by the researcher.

Table 3

Critical General Education Components

<table>
<thead>
<tr>
<th>Category</th>
<th>Component</th>
<th>Starz (US)</th>
<th>Mills (US)</th>
<th>Cane (US)</th>
<th>Snow (EU)</th>
<th>Salt (EU)</th>
<th>Black (EU)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Written and Verbal</td>
<td>Communication (native language)</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Communication</td>
<td>Public speaking</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reading</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Writing</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mathematics/Science</td>
<td>Mathematics</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Numerical literacy</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Quantitative analysis or reasoning</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Science</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social/Cultural Studies</td>
<td>Critical thinking</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Diversity</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fine arts/Humanities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Foreign languages</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>History</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
In the opinion of the CAO; this table does not reflect inclusion in all CTE programs at the colleges studied.

**Instructional Delivery**

Delivery of instructional content—both general and career-specific—is the core of day-to-day activities of institutions on both continents. In terms of general education content, the administrators of each institution have made choices regarding how much time to devote to these topics and in what format to deliver the information.

**Time devoted to general education.** As described in the institutional profiles earlier in this chapter, the colleges devote varying amounts of time within their career and technical education (CTE) programs to general education topics. Table 4 summarizes this information:

Table 4

<table>
<thead>
<tr>
<th>Institution (Continent)</th>
<th>Instructional time (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hunt (US)</td>
<td>33%</td>
</tr>
<tr>
<td>Fieldstone (US)</td>
<td>29%</td>
</tr>
<tr>
<td>Garden State (US)</td>
<td>30%</td>
</tr>
<tr>
<td>Benedict (EU)</td>
<td>0%</td>
</tr>
<tr>
<td>Peak (EU)</td>
<td>40%</td>
</tr>
<tr>
<td>City Municipal (EU)</td>
<td>15%</td>
</tr>
</tbody>
</table>

*Based on average program length as reported by the CAO.*
Each of the three US community colleges devotes one third or slightly less of the instructional time within CTE programs to general educations. In his interview, CAO Cane stated that 15 to 18 hours of general education in Associate’s degree programs “used to be a requirement [for accreditation] but it no longer is.”

In contrast to the US colleges, reported instructional time devoted to general education varied widely across the three EU institutions. Benedict College, with 0% of its career and technical programs devoted to general education, is an exception to the general trend. In their interviews, both CAOs Snow and Brown articulated a difference between the country’s secondary and postsecondary curricula; general education falls within the purview of secondary schools. According to Snow, “[W]e are college and [students] have finished their general education.”

Several respondents also referred to challenges related to balancing general and career-specific instruction in career and technical programs. Findings regarding these challenges can be divided between external requirements and faculty/student resistance.

External requirements from governing or accrediting bodies can limit the amount of time devoted to general education within career and technical programs. In the example of Benedict College above, the college is effectively prevented from explicitly including general education in their programs based on the country’s curriculum frameworks. In the case of City Municipal College, instructional hours per qualification level are defined by a national framework that is divided into weekly instructional hours of 17 2/3 for full-time students. Black, City Municipal’s CAO, estimated that about 15 hours per week are devoted to career-specific instruction, whereas the remaining 2 2/3 focus on general education.
Faculty and student attitudes present a challenge to the inclusion of general education in career and technical programs on both continents. While none of the respondents indicated that faculty and student resistance was significantly impacting time devoted to general education in their career and technical programs, they did refer to steps taken or needed in overcoming this resistance. At Hunt College, CAO Starz expresses the challenge for his faculty in this way:

The challenge the faculty feel, that teach in these degree areas, is getting enough hours developing the skill specific to their program. And so although they see the value in incorporating general education, they have that tension of feeling certain that students do have enough time to spend in courses maximizing their acquisition of appropriate skills. The way that works out for us is about one-third.

At Peak College, CAO Salt stated that the key to moving her faculty forward in delivering quality instruction in general education areas is developing their awareness of the following:

It’s only 1/3 of your profession that you’re good at [your subject] and you’re a good teacher. There are 2/3 of different competencies. [One] is the awareness of the world around you and second one is the awareness that you are part of a team. It’s not your own responsibility, it’s the team responsibility. And once you do that, you can have your professional and academic freedom but within the boundaries of the team. I think that’s a good development.

Student resistance can also be a challenge to allocating time to general education within career and technical programs. According to CAO Cane, “there’s no question that students tend to want to be focused on a set of career skills.” Even at Benedict College, where foreign languages are taught within the context of a student’s career program, students want to disregard more general aspects of instruction. According to Brown, who is a foreign language instructor, the following is true:

Everybody is looking for a good job. Education seems to be second. Some of them actually don’t know what they need in life, in their future. So we try to give them an array of possible skills which they might need, and they won’t need all of them, but eventually, it will come in handy.

At City Municipal College, CAO Black noted the following:
[Students don’t always] perceive the essentials skills as a core part of their course. The work seen isn’t crucial so part of our battle is being within the integration to say that for example in the apprenticeships that we run, there’s a full framework, which is your vocational qualifications plus the relevant essential skills. There’s been a move toward more integration.

**Delivery methods.** City Municipal College’s move toward more integration of general education topics into career and technical programs is part of a trend observed on both continents, although it seems to be more frequently practiced in Europe. Table 5 illustrates the delivery methods described by the CAOs for the most common general education topics included in career and technical programs in their institutions.

Table 5

*General Education Delivery Methods*

<table>
<thead>
<tr>
<th>General education area</th>
<th>Stand-alone coursework</th>
<th>Contextualized within CTE</th>
<th>Independent learning</th>
<th>Technology-assisted or online</th>
</tr>
</thead>
<tbody>
<tr>
<td>Written communication</td>
<td>Hunt, Fieldstone, Garden State (US) Peak, City Municipal (EU)</td>
<td>Peak Benedict (EU), Fieldstone Garden State (US)</td>
<td>Benedict (EU)</td>
<td></td>
</tr>
<tr>
<td>Verbal communication</td>
<td>Hunt, Fieldstone, Garden State (US)</td>
<td>Benedict Peak City Municipal (EU)</td>
<td>Benedict (EU)</td>
<td></td>
</tr>
<tr>
<td>Mathematics</td>
<td>Hunt, Garden State, Fieldstone (US) Peak, City Municipal (EU)</td>
<td>Hunt Garden State* (US) Peak, City Municipal (EU)</td>
<td>Benedict (EU)</td>
<td></td>
</tr>
<tr>
<td>Social/Cultural studies</td>
<td>Hunt, Fieldstone, Garden State (US)</td>
<td>City Municipal (EU)</td>
<td>Benedict (EU)</td>
<td></td>
</tr>
<tr>
<td>Foreign language</td>
<td>Benedict, Peak(EU)</td>
<td>Benedict (EU)</td>
<td>Benedict (EU)</td>
<td></td>
</tr>
<tr>
<td>Critical thinking/Problem</td>
<td>Hunt**, Fieldstone**</td>
<td>Garden State(US)</td>
<td>Benedict (EU)</td>
<td></td>
</tr>
</tbody>
</table>
To a limited extent

**Within mathematics and science courses**

Stand-alone coursework appears to be the most common delivery method for general education topics at the colleges on both continents. In fact, for the two most-cited general education topics, written communication and mathematics, four of the five institutions offer stand-alone coursework. CAO Salt explained that at Peak College, written and verbal communication are offered both in stand-alone courses and contextualized in career and technical coursework.

Especially when they have to reach a higher level, they don’t go for the embedded. Because if later on the inspection comes and you have to show how you tested, it’s very hard. We must have proof, so part of [language] can be tested, embedded, but many departments take the safe route and do it separately.

Contextualization, where instruction in general topics such as mathematics or writing is embedded or integrated within career-specific instruction, appears to be more common in the European institutions. Peak College and City Municipal College are the two institutions who most contextualize general education topics within career and technical coursework; however, both CAOs acknowledge that the process is challenging. Salt made the following statement:

We used to do a lot of embedded and then the government found out that 50% of the population is not able to write a good letter, which scared them very much. Now we are back in the central examination and back in teaching [language] and math.
At City Municipal College, CAO Black explained that general education topics are contextualized in career-specific instruction through a collaborative process between instructors. For example, the essential skills tutor would work very closely with the vocational tutor and would say, over the next semester we’re doing these five assignments and the students would be required to build or design something. And the essential skills tutor would know then there was a need for volume to be taught. So if you’re going to do volume measurement as a practical skill you need to understand the concepts relative to the vocational application. Actually we won a national training award for a project with Bombardier, the aircraft builders where our essential skills took place in a glass cubicle on their shop floor so people were doing geometric angles. If you measure 45 degrees on an 8” × 14” sheet of paper it’s not much but if you transpose that onto 150 meters of steel, it makes a big difference.

According to CAO Black, assessing students’ achievement on the general as well as the career-specific skills is the responsibility of the vocational instructor, but faculty resistance can be a challenge here. “They think: ‘I’m limited time-wise here to get my subject across. This is kind of an imposition.’” CAO Cane from Garden State College in the United States stated the following:

[Contextualization of general education into career and technical instruction] seems to work pretty well and could be done better. The problem is that tends to require greater sophistication on faculty because they need to know not only their technical specialty but also pedagogical stuff related to gen ed. And it usually takes a lot of investment in curriculum changes. The best programs integrate gen ed within, and contextualize within the career technical course specific stuff, and that works better. It’s a better way to do it. It’s just highly labor intensive.

Aside from stand-alone courses and contextualization, few options for delivering general education topics were utilized at these six colleges. Independent learning is cited by one college. At Benedict College, no general education topics are included within their two major career preparation programs, international business and tourist trade. Students are offered opportunities to consult with faculty or tutors outside of class for assistance in writing or mathematics. Brown, a foreign language instructor, states the following:
We do not teach writing. Writing or taking notes, composition, keyboard, looking for information on a computer is their own individual work. We do not control that. It is optional, it depends on the students. They have scripts, textbooks, independent work on the computer, research, things like that.

While some respondents touched on technology-assisted or virtual learning as important tools, no respondent indicated that these methods were used to deliver instruction in any specific general education area. At City Municipal College, CAO Black stated that digital tools such as podcasts and Moodle are used to individualize both career-specific and general instruction. At Fieldstone, Mills mentioned technology and virtual learning in the context of their ability to engage students in career-specific topics. While Mills acknowledged that today’s students are comfortable in the online environment, he also wondered, “How do you get to the kinesthetic piece online?”

### Assessment

Table 6 identifies whether student attainment of general education objectives is measured at the course, program, or institution level and whether the measurement is done internally or by an external agency.

**Table 6**

<table>
<thead>
<tr>
<th>Level/Measures of Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>College</td>
</tr>
<tr>
<td>Hunt (US)</td>
</tr>
<tr>
<td>Benedict * (EU)</td>
</tr>
<tr>
<td>Fieldstone (US)</td>
</tr>
<tr>
<td>Peak (EU)</td>
</tr>
<tr>
<td>Garden State (US)</td>
</tr>
<tr>
<td>City Municipal (US)</td>
</tr>
</tbody>
</table>

*Benedict does not offer general education instruction*

**Only in health career programs**
Hunt College is the only one of the US colleges where the CAO reported assessing student learning in general education at the course, program, and institution levels using both internal and external measures. The two EU colleges that measure student learning in general education also report measuring at the course and program level using both internal and external measures. This is consistent with findings from Guiding Question Two, which indicated that institutions in Europe are more regulated and receive more rigorous scrutiny from their governing bodies than institutions in the United States from their accrediting associations. Table 7 illustrates the specific assessment methods employed by participating college to measure general education learning outcomes.
Table 7

Assessment Methods

<table>
<thead>
<tr>
<th>College</th>
<th>National standardized exams</th>
<th>In-house exams</th>
<th>Portfolio reviews</th>
<th>Oral exams</th>
<th>Practical exams</th>
<th>Surveys</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hunt (US)</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Benedict (EU)*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fieldstone (US)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peak (EU)</td>
<td></td>
<td>x</td>
<td></td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Garden State (US)</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>City Municipal (EU)</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Benedict does not teach general education

In the United States, CAO Starz at Hunt College reported using the greatest variety of assessment methods to measure student learning in the general education component of the college’s career and technical programs. CAO Starz stated the following:

The assessments we do are not targeted toward occupational programs solely, its students in all programs. They conduct three levels of assessment: the classroom, program and institutional levels. Various methods are used to do these assessments. We have in-house surveys we have developed; we use some standard assessment instruments.

The standard instruments to which CAO Starz referred are Collegiate Assessment of Academic Proficiency (CAAP) tests developed by the American College Testing (ACT) company. CAAP tests were developed specifically to measure student learning in general education and can also be used as a value added measure. Cane reported using CAAP as the primary and perhaps only current measure of learning in general education at Garden State.

This is one place where our college isn’t very good. Since it’s not focused on gen ed overall, we don’t do a very good job of gen ed assessments, specifically at the end of programs. The gen ed assessment that we do use is the CAAP test. It’s kind of a random assessment of the college’s impact on the student’s gen ed skills. Which is different than: Did they learn the gen ed skills and competencies that we wanted in any particular career program?
At Fieldstone College, CAO Mills reported that the college relies on in-house, end-of-course assessments in the Arts and Sciences courses identified as general education requirements to measure student learning in general education. Therefore, a passing course grade in an English class would indicate that a student had mastered the written communication content of the general education requirements.

The two colleges in the European Union who report measuring general education objectives (Peak and City Municipal Colleges) use a variety of methods to do so. At Peak College, CAO Salt described an assessment method called a “Master Proof” in which the student demonstrates competency in both general and career-specific topics by actually performing a skill (e.g., making an oral presentation of a treatment protocol in front of an examiner). However, instructors at Peak also use end-of-course, in-house examinations in language and mathematics classes to demonstrate mastery of general education topics. According to CAO Salt, choice of assessment methods can be a fluid process:

We have moved away from [evaluating] small tasks because we have thousands and we cannot control the quality anymore. We brought back the number of exams. We’re learning every day because what you want to make sure is every student has equal opportunities and is judged equally.

At City Municipal College, the college does not award its own credentials. Instead, credentials are awarded by a partner university or other educational agency (referred to as the “awarding body”), which may be responsible for assessment methodologies. CAO Black made the following statement:

There are clearly measureable tasks with performance indicators built in to the program. Sometimes [measurement is] by end test sometimes by examination, sometimes by portfolio of evidence. The awarding body generally has an external evaluator who would come at various times of the year and sample portfolios.
City Municipal College also has an internal verification system and measures formative outcomes throughout the program, which is an aspect of assessment that CAO Black contends is often missing from external evaluation.

We’re always trying to find ways of measuring progress. It’s interesting recently the Education and Training inspectorates have started to mention again, distance traveled, rather than just pure specified outcomes. I think that’s an interesting concept, but it’s one that they struggle with because everybody is interested in statistics, percentages and figures. Therefore, it might be useful to be able to say that Trevor has progressed from a starting point of here and reached a point here, but hasn’t completed a qualification. For example, our measurement of achievement in our training programs, which are government-sponsored programs, the outcomes in Catering may be achieving a food qualification and relevant essential skills, but if a student came on and acquired skills and got a job, they’re a failure or deemed to be a failure because they have not completed the specified qualification.

**Summary of Findings for Guiding Question Three**

With the exception of Benedict College, which offers no general education instruction, colleges on both sides of the Atlantic identified similar general education topics that are included in their career and technical programs. These topics included traditional academic skills (e.g., mathematics and written and verbal communication in the students’ native language) along with skills more commonly associated with employability, including personal effectiveness and skills related to working with others. Minimum time within the career and technical programs devoted to general education topics ranged from 0% to 40%, with the three US colleges hovering around one third and the colleges in the EU varying from 0% to 40%. On both continents, students commonly experience general education in stand-alone, discipline-based courses; however, in Europe the content is more often contextualized within career-specific instruction than in the United States. Finally, with the exception of Hunt College, the colleges in the United States were less likely to assess student learning in general education at the program level in career and technical programs and used fewer assessment instruments than their counterparts in Europe.
Cross-Case Findings Related to Guiding Question Four

Guiding Question Four: What future directions are envisioned regarding the role of general education objectives in career and technical programs in US community colleges and/or similar institutions in Europe?

When asked about future directions that may impact general education in career and technical programs, CAOs on both sides of the Atlantic identified increasing expectations for students’ skill levels and the need for more meaningful engagement with employers as important. In addition, some respondents identified a need for more professional development for faculty and some acknowledged the increasing role of technology in postsecondary education.

Increasing Expectations

The colleges in both Europe and the United States have noted the trend toward increasing expectations for students in career and technical programs. According to CAO Starz, over the last 2 years Hunt has increased the rigor of its general education requirements for students in all programs, not just career and technical programs.

What we did was change, prior to that we had a one size fits all. So we had a general education slate of courses that applied equally to all three programs: AA, AS, and AAS. I was new to the college in February of 2008. In my estimation the one size fits all was not serving us very well. Within all three, we have added a bit more rigor. We now require higher levels of math courses for gen ed than prior to this change. The minimum level now is intermediate algebra is the lowest for any of the degrees where before it was the basic algebra that was sufficient.

At Fieldstone College, CAO Mills recognized a need for the college to ensure that students are able to meet its standards.

We are in the midst of making a transition from access to success. Not that student success hasn’t always been important, but I do feel like we’re giving it more emphasis than we used to. Actually in the recent past, the last couple years, we’ve looked at putting in math Compass scores for some of our IT (Information Technology) courses, recognizing the importance of the ability to do math in some of our higher-level IT courses. It’s not just about getting students in your class; it’s about how many students
are there in the end, and did they pass the class. The other thing that’s changing obviously, the education requirements are much more intense. You frankly have to be sharper. You have to learn more to be successful in those roles because you have to be multi-skilled now, you can’t just be a specialist.

The importance of helping students acquire the skill levels they will need resonates with CAO Salt at Peak College, who feels that colleges and students must prepare for a future where the following occurs:

All the big industries moved to Korea or wherever they went. We are facing an economy of serving, of paperwork, etc. The competition is big; we have to compete in IT with India. We have to prepare for a bigger world and we all know if you can’t speak and write properly, you are handicapped.

CAO Cane at Garden State also noted rising expectations for student skill levels, and also questioned whether colleges are doing enough to respond.

Maybe the ability to learn becomes more important because jobs change so often. The ability to change, maybe deal with ambiguity. I think there’s something about the workforce that requires somebody that’s more adaptable. I don’t know if there’s a conscious effort to address that additional flexibility, adaptability in a gen ed curriculum. I just don’t know if that’s the case or not.

At City Municipal College, CAO Black has also noted increasing expectations for students and the need for colleges to respond by increasing the rigor in the curriculum.

I would like to do some research on the correlation between entry qualifications and the end. There is an assumption that weaker students don’t succeed. I would advocate however, that some of the better students don’t succeed because they’re not stretched enough.

**Employer Engagement**

Four of the six CAOs cited continuing or increased efforts to involve employers—not just in helping to design or offer feedback on career and technical curricula, including general education skills—but in actually delivering some of the instruction themselves. At Benedict College, CAO Snow focused on the importance of the practical training that students complete as...
part of their programs, which gives them real work experience and the college direct feedback on the performance of their students.

During their second year, they have a 4-week apprenticeship as the first step. In their final year, or sixth semester, they have a half-year program. They can go abroad, for example, to USA sometimes. Now we have five students in Greece. Today they wrote us that everything is okay. Eight are in Germany in companies and in hotels and travel agencies.

At Fieldstone College, CAO Mills cited Fieldstone’s participation in a large-scale evaluation of career and technical programs that will provide information that they currently cannot access as to how well they are serving employers as well as students.

Much like every other college, we have very good relationships with our industry partners and we listen to them and we change our programs based on their guidance. But at the end of the day, how well are we really meeting their needs? One thing we’re really excited about is our participation in a 10-year longitudinal study [by an external evaluator]. We’ve never done that. To follow our graduates for 10 years is going to be very powerful for us. Where our whole premise is education is good, and having an education is going to make your life more enriched, at least financially, a job, that sort of thing, this will tell us if in fact that’s true.

At Garden State College, CAO Cane referred to the importance of workplace knowledge in understanding the importance of general education in career and technical programs.

Line workers have to get up in factories and make presentations all the time. People don’t know that until you’ve been in a factory and regularly been asked to explain a process, teach a process to somebody else. Those are the same kinds of skills that you need to succeed in the academic environment.

CAO Black stressed the importance of direct contact with the workplace in helping students understand the role of general education within career preparation programs.

What we’ve seen for example, former students who have gone on to run their own business. They’ll come in and say, I hated math and can’t do sums, but I realized if I wanted to own my own business I had to do the books. That spurs [current students] on because they can see it’s not purely fictitious, it’s a real-life person standing in front of them. We do try as far as possible to have employer advisory groups, the sector skills bodies; kind of spokesperson now for the employers.
CAO Black also cited a number of current and future projects where the college is engaging directly with employers, and where students are going into the workplace to learn on the job.

Consider the following example:

City Municipal did a project that won a national award with a large company which was around young people, from 19-26 developing engineering skills, engineering manufacturing skills. We’ve done a fair amount of that but I think there’s more of that of what’s required.

Faculty Professional Development

Several of the CAOs emphasized a need for continuing professional development for faculty in ensuring that teaching and learning keep pace with the increasing demands on the curricula for career and technical programs, including general education curricula. At Hunt College in the United States, faculty from across the college have been participating in a training program that has emphasized two things: “develop strategies to enable students to be more engaged in their own learning and to improve the content literacy skill of students so they understand how to attack a textbook, maximize the learning out of a textbook.” At Peak College in the EU, CAO Salt focused on the importance of team building among faculty.

We are moving towards and we are moving very fast toward the team responsibility. It’s not your own responsibility, it’s the team responsibility. And once you do that, you can have your professional and academic freedom but within the boundaries of the team. I think that’s a good development.

At City Municipal College, also in the EU, CAO Black described an extensive program of continued professional development focused mainly on keeping career and technical instructors current with developments and expectations within their occupational focus; CAO Black also discussed the need for a more informal development process to keep faculty updated on developments in teaching and learning.

I had meetings with all our program areas recently and I can look back and say, remember when you were a young teacher and you’d come home at night and over your
You’d reflected on your day’s lesson and that went better than I thought, or gee, I thought that would’ve taken much longer to get through but I flew through it. I’m not sure that we still do that enough as a course, so if 4 to 5 members of a course team sitting around a room saying, I did this thing this morning and it went really, really well with a normally difficult group. Somebody else picking up on that and saying maybe I could use that.

**Role of Technology**

The increasing use of technology to deliver general education instruction was cited as a future trend by one CAO on each continent. At Fieldstone College in the United States, CAO Mills indicated that colleges may as well embrace the future.

The technology piece, the entertainment piece, some people resent that a little bit, but I think that’s just a fact of life. I think we need to recognize that it is going to be an expectation. If we look at our growth of online instruction, it’s just off the chart. We’re going to see more of that as younger students come aboard. They’re comfortable in that environment.

At City Municipal College in the European Union, CAO Black talked about moving beyond typical online instruction and enhancing the virtual learning environment with elements like podcasts and Moodle: “We’re trying to move staff into the world that students live in.”

**Summary of Findings for Guiding Question Four**

Chief Academic Officers at colleges on both continents are seeing a need to raise their expectations for students who complete career and technical programs, largely as a reflection of the demands of the workplace. Along with increased expectations, the CAOs cited the need to continue and expand their efforts to engage with employers to improve career and technical programs and ensure that students who complete them are successful in their careers. In addition, some CAOs from both continents weighed in on the importance of professional development for faculty and the increasing role of technology in delivering instruction in career and technical programs.
Cross-Case Findings Related to an Emerging Theme: Changing Student Populations

The student population in community colleges and like institutions in Europe is changing. CAOs on both continents have observed a marked increase in diversity among their students. Older students, ethnically diverse students and students from lower socioeconomic levels are making up larger proportions of the student body in all six colleges.

Colleges on both sides of the Atlantic are seeing older students enrolling in career and technical programs to train for a new career in the faltering global economy. At Fieldstone College, CAO Mills observed “[W]e’re getting students back who didn’t ever want to go to college or see themselves as college material.”

A growing proportion of ethnically diverse students from today’s multicultural societies also present challenges to colleges. In the region served by Peak College, 60% of the population is made up of immigrants. The college serves a large number of adults who do not speak the country’s native language, which puts them at a significant disadvantage. According to CAO Salt, “[W]hat you see is that the gap is broadening. Language is the biggest issue. If you don’t speak the language, that’s it, you are out.”

At City Municipal College, large numbers of students from a disadvantaged socioeconomic background who enroll in its career and technical courses are unprepared for the basic expectations of the workplace. Black noted that, “we had two generations previously who maybe have never worked. The students are the only ones in their house getting up in the morning. It’s very difficult then to install a work ethic into those young people.” The colleges have responded to this influx of underprepared students by stepping up efforts to help them achieve academic readiness and even serving as liaisons between students and potential employers.
The CAOs also expressed some significant upsides to having these new “atypical” students on campus. All six of the colleges provide some sort of developmental education to help students raise their level of academic preparation. At Benedict College, where students must have passed national qualifying exams before enrolling, CAO Snow noted that there are still students who need extra help.

If some of them are weaker, or in different levels and they need some help, we have special help for them in languages, some special lessons for them about grammar. Teachers have some consultations for individual lessons for people who need it.

At Garden State College, CAO Cane has identified a specific discipline where students often need extra help.

Students confronted with remedial courses leave our institutions in disproportionate numbers. They don’t want to take remedial math. In some cases we have been able to do the hard curriculum work of incorporating math teaching into an automotive course. Or into a welding course, something like that.

For non-native adult students at Peak College, CAO Salt reported that the college is focusing on “language, language, language…I like it, I support it and I think it’s very important.” At City Municipal College, students who do not meet proficiency expectations for their selected program can be referred to extra instruction. According to Black, “all students who come in to college with a level 2 qualification in English and math, would have diagnostic tests for essential skills and then would have a program to match whatever that diagnostic revealed.”

Aside from academic assistance, colleges attempt to increase students’ employability skills as well as their potential for employment. According to Cane, who was part of the first generation in his family to attend college, “[W]e’re not educating people with skills so they can be drones in our factories, but active participants in their communities and the democratic process.” For CAO Black at City Municipal College, that means working directly with
employers to prepare disadvantaged students for entry-level jobs. For example, a large company recently announced plans to build a call center in a disadvantaged neighborhood:

[The people are] working class, highly unemployed, and none of them may be able to get a job in there because they haven’t any skills. The department came to us and said, if we build you a call center, can you train them? That was a very good example because we put these guys through some sort of training so when they did present, they weren’t a fish out of water.

While they acknowledge the challenges that these students bring, the CAOs also see advantages to having older, multicultural, less-prepared students in their institutions. At Fieldstone College, CAO Mills observed that “In some cases, those 45 year olds are highly motivated because this is a chance of a lifetime and other cases they’re resentful that they’re even here in the first place because this wasn’t part of my plan.” At Benedict College, CAO Snow noted that “sometimes some students go out of school to practice and then come back. That’s different because now they know what they need and they are more concentrated.” At Garden State College, CAO Cane sees an intergenerational value to the phenomenon of older students returning to college.

In fact there’s a woman who got up at the last graduation who talked about that. She’s 35 years old, had a job in the factory, factory closed. We retrained her as a Biomed technician of some kind and she spoke and said ‘This is really important. It changed my life but most important, it changed the lives of my kids. Now they’re going to go to college and they wouldn’t have thought of it otherwise.’

Changing student populations at the colleges are impacting the colleges’ activities to prepare students for future employment. CAOs on both continents report that more and better remedial instruction, including second language acquisition, efforts to equip students with the skills employers need, and in some cases, assistance to students in finding employment are being used to assist these “atypical” students.
Chapter Summary

For this qualitative study, CAOs from three comprehensive community colleges in the United States and three analogous institutions in Europe were interviewed on site. Each case was analyzed separately before cross-case analysis was begun. This analysis included the interview itself, each institution’s website, and supporting documents provided by the CAO or members of his or her staff. In some cases, follow-up correspondence with staff members provided further information for the individual case analyses. These individual analyses support the cross-case findings related to the four guiding questions and one emerging theme, which were presented throughout the chapter.

For guiding question one, which focused on the impact of cultural values and beliefs on general education in career and technical programs, respondents cited the benefits of social and economic mobility for individuals and society and responsiveness to the demands of the workplace as positive beliefs and values regarding the purpose of education. Beliefs and values related to the educational system as a business, including relationships between sectors and the role of the faculty in delivering and assessing general education objectives, appeared problematic on both sides of the Atlantic.

Responses related to guiding question two regarding the influence of policy, indicated that the policy landscape in the United States colleges differs from the environment in Europe. Institutions on both continents have internal policies that are influenced by external agencies. However, the US colleges are more autonomous and appear to be granted more latitude by their accrediting bodies than the colleges in the European Union who are overseen by government agencies who have legal and fiscal authority over them.
Guiding question three focused on the content, delivery, and assessment of general education objectives within career and technical programs. Examples of content included traditional academic skills such as mathematics and written and verbal communication in the students’ native language, along with skills more commonly associated with employability, including personal effectiveness and skills related to working with others. On both sides of the Atlantic, students are likely to experience general education in stand-alone, discipline-based courses; however, in Europe the content may also be contextualized within career-specific instruction than in the United States. The selected colleges in the United States were less likely to assess student learning in general education at the program level in career and technical programs and used fewer assessment instruments than their counterparts in Europe.

In response to guiding question four, which focused on future trends, CAOs at colleges on both continents report the need to raise their expectations for students who complete career and technical programs, largely as a reflection of the demands of the workplace. In addition, the CAOs cited the need to continue and expand their efforts to engage with employers to improve career and technical programs. Some CAOs from both continents weighed in on the importance of professional development for faculty and the increasing role of technology in delivering instruction in career and technical programs. Finally, changing student populations was a clear emerging theme across the colleges. These new arrivals are impacting the colleges’ activities to prepare students for future employment.
CHAPTER 5
DISCUSSION, CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

Students preparing for careers in the knowledge economy need abilities beyond career-specific skills (Raftopoulos, Coetzee, & Visser, 2009; Stumpf, 2007). Statements from the six Chief Academic Officers (CAOs) who participated in this international comparative study support this premise. Outcomes related to general education, whether they are labeled “liberal arts,” “basic,” or “soft” skills play a role in the design, delivery, and assessment of career and technical programs in both the United States and Europe. Given the reality of globalization, it makes sense for educators on both sides of the Atlantic to consider practices from outside as well as within their national borders.

This study compared the perspectives of CAOs on integrating general education into postsecondary career and technical education programs designed to prepare students for the global workforce. Although career and technical education in Europe has developed along a different pathway than in the United States, it is still possible to discern similarities in educational problems and solutions. The questions that guided this research were as follows:

1. How do cultural beliefs and values regarding the purpose of education inform the role that general education objectives play in career and technical programs in US community colleges and similar institutions in Europe?
2. What specific internal and external policies exist related to the role of general education objectives in career and technical programs in US community colleges and similar institutions in Europe?
3. What are the commonalities and differences in content, delivery, and assessment of postsecondary general education outcomes for career and technical education programs in US community colleges and similar institutions in Europe?

4. What future directions are envisioned regarding the role of general education objectives in career and technical programs in US community colleges and/or similar institutions in Europe?

**Background and Context**

Denzin and Lincoln (2005) assert that “[q]ualitative research…consists of a set of interpretive, material practices that make the world visible” (p. 3). This qualitative study was designed as a multiple case study in which each case contributed to a deeper understanding of the central phenomenon: the role of general education in career and technical programs. Stake (2006) referred to this phenomenon as the “quintain.” Six postsecondary institutions, three from the European Union and three from the United States, were purposefully selected as study sites. Data were collected from interviews with each institution’s CAO. Aspects of the quintain for these cases included the following: (1) values and beliefs related to the role of general education in career and technical programs; (2) the impact of national, regional, and/or institutional policy in the inclusion of general education in career and technical programs; and (3) the content, delivery, and assessment of general education objectives. The study also explored future directions and emerging issues faced by the colleges on both continents.

In this study, six institutions offering short postsecondary career and technical education (i.e., 2 years or less) were compared within and across the two continents. The institutions’ varying sizes from very small (350 students) to very large (166,555) dictated differences in the number of programs offered. On both continents, the colleges offer pre-baccalaureate credentials
intended to prepare students to enter directly into the workplace. However, the United States today is more likely to offer these credentials form a comprehensive community college, whereas European students are more likely to earn these credentials from an institution dedicated to vocational or technical preparation (Cohen & Brawer, 2003).

All three of the US institutions selected for this study are public comprehensive community colleges located with the North Central Accrediting region. According to the National Center for Education statistics (NCES, 2008), 2-year public colleges offered 58.4% of career and technical credentials in 2006. The three US colleges in this study had varying levels of enrollment in career and technical programs, including 33% of students at Fieldstone, 60% of students at Hunt, and 83% of students at Garden State. Career and technical credentials offered by these colleges include the Associate of Applied Science (AAS) and Associate of Applied Business (AAB) degrees as well as certificates of achievement. All three of these community colleges also offer transfer-oriented Associate’s degrees including the Associate of Art (AA) and Associate of Science (AS), which are not typically offered at European institutions (Slantcheva-Durst, 2010b).

The three European institutions selected for the study represent a diversity of institution types, including a very small, privately owned career college (Benedict), a very large career-oriented community college (Peak), and a very large public college of further and higher education (City Municipal). The credentials offered at these institutions vary according to national policy. At Benedict, students completing one of the three programs offered receive a “Certified Specialist” certificate, whereas students at Peak and City Municipal are awarded credentials at various levels that correspond to the European qualifications framework. This is “a common European reference framework which links countries’ qualifications systems
together, acting as a translation device to make qualifications more readable and understandable across different countries and systems in Europe” (European Commission, 2008, p. 3).

Credentials offered by Peak and City Municipal Colleges range from level three, where competencies overlap with vocational secondary schools, through level five, which is considered a “short-cycle” higher education degree (Slantcheva-Durst, 2010b). It was not clear whether Benedict College in central Europe has aligned its credentials yet with the European qualifications framework. City Municipal differs from the other two colleges in that it does not award its own credentials. Instead, its credentials are awarded by a sponsoring university, which may differ for each program.

**Discussion**

The CAO at each of the six institutions participated in a semi-structured interview to determine his or her perspective on cultural beliefs and values related to general education, the policy environment surrounding career and technical programs, and content, delivery and assessment of general education within career and technical programs. The CAOs also predicted future directions and emerging issues related to general education in career and technical programs.

**General Education Values and Beliefs**

According to Cohen and Brawer (2003), general education as a component of postsecondary education has received a greater emphasis in the United States than in the rest of the world, while Europe has focused primarily on vocational education. However, recent higher education reforms in Europe have resulted in renewed consideration of the importance of general education in the higher education curriculum. Study participants’ responses from both continents suggest a general agreement with Italian Minister of Education Germana Verri that
“the labor market needs increasing numbers of people with the flexibility to change their jobs many times in their lives, and not people who have simply learned a profession” (2003, p. 307).

**Globalization and world culture theory.** This comparative study of the role of general education in career preparation programs in the United States and Europe reveals aspects of an emerging world culture as articulated by Robertson (1992). An individual’s perception of the world as a single place is a central tenet of Robertson’s world culture theory. The issues of how to live in this single place, and how this place is to be ordered, flow from this central tenet. As both the United States and Europe struggle to cope with recovery from a global recession, it seems clear that this theory is relevant to findings from this study. This study examines the perceptions of individual CAOs regarding the role of general education objectives within career and technical education programs. A comparison of the findings throughout the study suggests that, although there are some differences across state and national borders, these individuals share similar perceptions and concerns about the majority of issues addressed in the guiding questions.

Evidence from the literature review and the interview data suggests that there is cross-pollination from both sides of the Atlantic in discussions about program design and assessment. Overall, study findings support Robertson’s theory that globalization is recreating the world of postsecondary career and technical education as a single place, or, as Maya Angelou expressed so aptly in her 1999 poem, “Human Family,” “we are more alike, my friends, than we are unalike.”

**Human capital theory.** Chief Academic Officers on both continents view postsecondary education in general and general education in particular as positive for students and society; moreover, the CAOs expressed that view in terms consistent with Becker’s (1993) articulation of
the theory of human capital. In this work, Becker (1993) analyzed the return on investment in a college education that could be expected to accrue to individuals as well as the benefits to society from investments in higher education as compared with other types of investments. All of the CAOs directly or indirectly cited improved ability to participate in the labor market based on skills derived from general education. All six of the interview subjects also focused on the contribution that educated individuals could be expected to make to society as employees. US CAOs were somewhat more likely to mention the value of an educated populace to a democratic society, including CAO Cane at Garden State. Cane explained that “we exist in a democracy that depends upon a reasonable level of education and understanding of analytic ability and ability to read.”

Underpinning societal benefits and individual preparation for employment, the CAOs acknowledged that the perpetuation of education as a business or industry in and of itself is a less-touted purpose of expanding postsecondary attainment of career and technical credentials. This concern appears to echo that of neo-Marxist and credentialist theorists (Brint & Karabel, 1991; Collins, 1971); such theorists question the rhetoric of human capitalists. Instead, they posit that the true purpose of career and technical education is to reinforce the existing social order by keeping workers with these less prestigious credentials at the bottom of the social ladder. CAO Black at City Municipal in Europe was the one CAO who acknowledged this concern explicitly.

Some people don’t consider vocational, it’s almost second class. Career education: second class. Primary goal is the university. We have picked up a lot of those students almost as retrieval ethos. That kind of has been a driver at the college over the years.

Both CAOs Starz and Cane from the United States indicated that different standards for general education applied to programs intended for transfer at their institutions, with the transfer
programs including significantly more general education than the career and technical programs. Despite these challenges, the tone of the interviews and related literature was slanted in support of the human capital viewpoint, in keeping with a broad national and international emphasis on broadening educational attainment (Lederman, 2010; Obama, 2009a, 2009b).

An offshoot of the human capital-based belief that education (particularly general education) benefits both individuals and society is an emphasis on the value of education for employment. Evidence from literature (Hall & David, 2008; Hart, 2006; Playfoot & Hall, 2009) and all six interviews suggests that employers are influencing the educational process in career and technical programs beyond simply offering industry expertise. The CAOs were asked “What is the primary purpose of career and technical education at your institution?” All six of the CAOs responded that the primary purpose is preparing students for the workplace; moreover, the majority described a strong relationship between general education objectives and the demands of today’s workplace. The US CAOs interviewed felt that the abilities developed by general education defined the difference between a job and a career. According to CAO Cane at Garden State, general education can be “boiled down to a set of skills that employers want.” In Europe, the colleges are actively engaging with employers to determine what type and level of communication and computation skills should be required in particular career roles (e.g., as a nurse or a travel agent).

**Policy Landscape**

Although the policy environment for postsecondary career and technical programs in the European Union differs from that in the United States, issues of note were remarkably similar. Study participants described the growing influence of regional, national, and international oversight, tensions within their own institutions, and challenges to providers of career and
technical education as a sector as common policy concerns. It is clear from both the literature review and the interview data that colleges on both continents are struggling to keep abreast of rapid changes in the policy landscape, particularly as it relates to assurance of successful student learning.

The extent of government oversight reported by the CAOs of the European institutions differs from than that reported by the US CAOs. In Europe, the national government approves curriculum; in the case of Peak and Benedict Colleges, the government mandates and oversees assessments. In the United States, all three CAOs acknowledged the likelihood of more stringent government regulation in the near future; however, the colleges are still primarily overseen by regional accrediting bodies. This results in different attitudes toward compliance with government mandates, with CAOs at the US colleges more likely to dictate the pace of change based on the colleges’ internal readiness. The European CAOs report that they must respond quickly or lose their funding or operating license.

**Increasing external oversight.** In the United States, accreditation functions both to document an institution’s quality and, in lieu of government monitoring, to grant access to federal funds in the form of student aid (Cohen & Brawer, 2006). Accrediting bodies provide guidance and criteria that are open to interpretation by individual colleges. The three US colleges participating in this study were selected from within the Higher Learning Commission (HLC) accrediting region of the North Central Association of Colleges and Schools. Traditionally, the commission has upheld the right and responsibility of each institution to shape its general education requirements to fit within its organizational context, offering colleges considerable latitude in developing and assessing general education programs. However, at the time of the interview, all three US colleges (Hunt, Fieldstone, and Garden State) had received
feedback from the HLC that they needed to increase the rigor and scope of their assessment activities. In 2009, the HLC itself came under scrutiny from the federal government, which is likely to result in closer oversight of colleges from the commission (Lederman, 2009).

Participating institutions in the European Union are already accustomed to a greater degree of oversight and regulation by their national government than has been experienced in the United States. All three of the colleges are required to report learning outcomes for career and technical programs, including general topics if they are components of those programs. As CAO Salt at Peak College explained, this scrutiny “guarantees the quality of your diploma. We are used to that.” Aside from national oversight, colleges in the European Union are part of the Bologna Process, an international effort to establish the European Higher Education Area (EHEA). This area represents a multi-national system of quality assurance that recognizes national qualification frameworks for degrees at various levels. An additional overarching framework, the European Qualifications Framework (EQF), was developed by the European Commission.

**Internal tensions.** Chief Academic Officers on both sides of the Atlantic cited policy-related tensions operating within their institutions. Increases in external oversight, especially of student learning outcomes, tend to cause corresponding increases in expectations of college personnel. Moreover, faculty roles and workload are particularly affected by these changes. As assessment of learning outcomes related to general education in career and technical programs has grown in importance on both continents, faculty responsibility, and sometimes resistance, has been attached to this issue.

In the United States, according to Ebersole (2007), “[C]olleges must clearly document that they are assessing student learning at the course, program, and institutional level” (p. 6). To
achieve this goal, the level of structure imposed by each college can vary widely. CAOs from two participating US colleges indicated that they rely on standardized tests such as the Collegiate Assessment of Academic Proficiency (CAAP) for at least some (Hunt College) or nearly all (Garden State) of their general education assessment activities. Other assessment activities are conducted or overseen by faculty. However, sometimes, as at Fieldstone College, faculty involvement does not extend beyond the traditional role of assigning end-of-term grades; in contrast, scholars such as Angelo and Cross (1993) assert that assessment should be a process of measuring learning beyond formal evaluations expressed as grades. According to CAO Starz at Hunt College, while faculty may see value in additional activities related to the inclusion and assessment of general education within their programs, they still “have that tension of feeling certain that students do not have enough time to spend in courses maximizing their acquisition of appropriate skills.” As CAO Cane at Garden State noted, innovative techniques for assessing and delivering instruction require a level of pedagogical understanding and an investment of time and effort that may be very rare for busy faculty members.

In the European Union, CAOs also described tensions surrounding the faculty’s role in driving innovation in delivery and assessment of general education within career and technical programs. At Peak College, CAO Salt feels that faculty sometimes lack awareness of the magnitude of change in the needs of students and the expectations of society; at City Municipal, CAO Black acknowledged that “[W]e have had to sort of re-educate people into improved teaching and learning methodologies.”

**Challenges for the sector as a whole.** Community colleges in the United States and similar institutions in Europe occupy a middle ground between secondary schools and universities, overlapping some dimensions of each. In the United States, remediation for
students who are unprepared for college-level work balances the provision of courses intended for transfer (Cohen & Brawer, 2003). Career and technical programs that lead to immediate employment are provided by community colleges, but also by non-profit technical colleges and for-profit career colleges, as well as in some secondary schools. In Europe, career and technical programs are somewhat more likely to be provided at the secondary level, or in colleges of further education, while short-cycle higher education degrees are just beginning to proliferate (Slantcheva-Durst, 2010a).

Growing numbers of underprepared students on both sides of the Atlantic seeking postsecondary credentials further challenge the community college sector’s traditional roles. As the global economy worsens, large numbers of students from a disadvantaged socioeconomic background who enroll in its career and technical courses are unprepared for the basic expectations of postsecondary education or the workplace. As CAO Mills (of Fieldstone College) observed, “[W]e’re getting students back who didn’t ever want to go to college or see themselves as college material.”

At the same time that numbers of underprepared students are increasing, expectations for student performance are also rising. The selected colleges in both Europe and the United States have noted the trend toward increasing expectations for students in career and technical programs. CAO Cane at Garden State (US) expressed rising expectations as a consequence of the modern, global workplace: “Maybe the ability to learn becomes more important because jobs change so often. The ability to change, maybe deal with ambiguity. I think there’s something about the workforce that requires somebody that’s more adaptable.”
Content, Delivery, and Assessment of General Education Objectives

The content, delivery, and assessment of instruction are at the center of any educational program. In considering the role general education should play within career and technical programs, educators should consider the nature of the content, how to allocate time effectively, and the function of assessment.

**Academic and employability content.** Studies describing skills and competencies associated with general education have appeared on both sides of the Atlantic (Bastedo, Batkhuyag, Prates, & Prytule, 2009; Free, 2008; Hall & David, 2008; Path & Hammons; 1999; Playfoot & Hall, 2009; Zezsotarski, 1999). CAOs at the selected institutions on both continents expressed a similar understanding of the components that should comprise “general education,” which CAO Cane at Garden State (US) referred to as “a set of skills and abilities that students need to have in order to be truly educated.” CAO Black at City Municipal College (EU) defined general education as “essential skills.” Although all six participants expressed the significance of these skills in an employment context, a clear division between “academic” content, including communication in native and foreign languages, quantitative reasoning and social and cultural studies, as well as “employability” content (e.g., personal effectiveness and skills related to working with others) still lingers. A new process called “tuning” involves stakeholders (including faculty, recent graduates, and employers) has been developed as part of the Bologna Process; through tuning, European and some US colleges are identifying learning outcomes that promote the development of engaged citizens and innovative entrepreneurs through curriculum, work experience, and other active learning methodologies within career and technical programs (Adelman, 2008; Lumina, 2010).
Allocating time for general education. The participating colleges devote varying amounts of time within their career and technical education (CTE) programs to general education topics. The colleges in the United States devote roughly one third of the instructional time (denoted by credits) to general education, largely in stand-alone courses. The European CAOs reported more varied amounts of time, ranging from zero hours or credits at Benedict College to 40% of instructional time at Peak College. The amount of time that can or must be devoted to general education is sometimes dictated by external requirements. For example, the CAO at Benedict College reported that in her country, students must complete their general education during secondary school. At City Municipal, in the EU, instructional hours are set based on national qualification frameworks. In the United States, the Higher Learning Commission accrediting body formerly set 15-18 credit hours as a requirement for general education within applied Associate’s degrees. However, at the time of the study it had discontinued this practice; therefore, the colleges set their own requirements.

Some of the colleges have increased the time available to deliver general education instruction by contextualizing general education content into the career and technical curriculum. This integration of general education topics into career and technical programs is part of a trend observed on both continents, although it seems to be more frequently practiced in Europe. According to research conducted in the United States by Path and Hammons (1999), CAOs would prefer to move away from a traditional course-based approach to a non-traditional approach; however, these CAOs cited concerns (e.g., faculty resistance to change) to indicate why they did not make the switch.

The function of assessment. Assessment of learning outcomes related to general education in career and technical programs has become an important issue on both continents.
Assessment experts Kuh and Ewell (2010) differentiate between the use of the term “assessment.” In the United States, this term refers to the practice of measuring the achievement of groups of students; in Europe, this term is more commonly understood as referring to individuals. However, Kuh and Ewell also assert that “practice in all countries is rapidly converging” (p. 14). Findings from this study suggest that the selected colleges in the United States were less likely to assess student learning in general education at the program level in career and technical programs and in general used fewer assessment instruments than their counterparts in Europe. Despite evidence from literature that assessment of learning outcomes should differ from grades (Angelo & Cross, 1993; Banta, 1993; Ebersole, 2007; Kuh & Elwell, 2010), selected colleges on both continents reported frequent use of exam and end-of-course grades to assess general education outcomes.

The participating colleges in the United States were most likely to measure general education outcomes at an institutional level than the colleges in the European Union. US CAOs were also most likely to express concern over the utility of the data provided by those assessments. According to Cane, the use of the Collegiate Assessment of Academic Proficiency test (CAAP) at Garden State College does not indicate whether students learned “the gen ed skills and competencies that we wanted in any particular career program.” Colleges in the EU use a greater variety of instruments to measure outcomes at the program level. At Peak College, CAO Salt described an assessment method called a “Master Proof” in which the student demonstrates competency in both general and career-specific topics by actually performing a skill (e.g., making an oral presentation of a treatment protocol in front of an examiner). City Municipal College has an internal verification system and measures formative outcomes throughout each program.
Despite a perception on both continents that general education is intended to furnish students with the skills they will need for successful careers (Hart, 2008; Playfoot & Hall, 2009), general education content is still perceived by the CAOs participating in the study as roughly divided between academic content and employability skills. This division between the academic and employability components of general education has implications for instructional delivery as well. Most colleges on both continents offer the content classified as academic in stand-alone courses. Courses in communication (written and verbal) and mathematics are most common; these courses are required in career and technical programs at four out of the five colleges. Contextualization of general education content into career-specific curricula is a trend on both continents; the trend is more pronounced in the college in Europe, while adoption of online delivery remains slow. Most of the selected colleges in both the US and the EU rely on final or exam grades to document student learning outcomes in general education at the course and program level. Faculty and student attitudes present a challenge to the inclusion of general education in career and technical programs on both continents. None of the respondents indicated that faculty and student resistance significantly impacted selection of content, time devoted to general education in their career and technical programs, or assessment; however, they did refer to steps they had taken or needed to take in overcoming this resistance.

**Future Directions in General Education**

Chief Academic Officers on both continents predicted that future trends related to the inclusion of general education in career and technical programs would continue along the trajectory outlined by current conditions. Specifically, study participants at colleges on both continents anticipate that expectations for students who complete career and technical programs will continue to increase due to the demands of the workplace. All of the CAOs also cited the
need to continue and expand their efforts to engage with employers to improve career and technical programs and ensure that students who complete them are successful in their careers. On both continents, some CAOs weighed in on the importance of professional development for faculty and the increasing role of technology in delivering instruction in career and technical programs.

**Challenge of increasing expectations.** Chief Academic Officers at the selected colleges in both the United States and the European Union noted that today’s career and technical graduates are expected not only to have higher skill levels; these graduates are actually expected to have more skills, and the CAOs expect this trend to continue into the future. Participants noted that colleges have begun increasing the level of rigor in their programs, with a corresponding increase in attention to student success. As CAO Mills stated, “[Students] have to be multi-skilled now.” At Fieldstone College in the United States, where Mills is CAO, the college is increasing entry skill requirements for some courses; at Hunt College (US), CAO Starz reports that the college has increased the expected levels of math and other subjects required for graduation. Some concern exists among the participants regarding whether colleges are currently doing enough to prepare students for the competitive environment they will face.

**Importance of employer engagement.** To prepare students for this competitive environment, CAOs cited continuing or increased efforts to involve employers—not just in helping to design or offer feedback on career and technical curricula, including general education skills—but in actually delivering some of the instruction themselves. CAOs on both continents reported partnerships with local and regional employers to offer student internships, evaluate program outcomes, and design effective assessments to ensure that students are prepared for what they will encounter in the workplace.
One important finding, reported by participants on both continents, was the value of exposing students to program alumni who are currently working in the field. According to CAO Black at City Municipal College (EU), a former student’s testimony about how improving his math skills helped him as a business owner “spurs [current students] on because they can see it’s not purely fictitious, it’s a real-life person standing in front of them.” CAO Cane, from Garden State College in the United States, agrees that students do not really understand how much the skills needed in the academic environment overlap with those needed in the workplace. Employer engagement can help to bridge that gap.

**Need for faculty professional development.** The study participants identified an ongoing need for continuing professional development for faculty to ensure that teaching and learning keep pace with the increasing demands on the curricula for career and technical programs, including general education curricula. Areas where study participants indicated that professional development might be helpful to faculty included team building, how to contextualize general education objectives into career-specific curricula, and broader adoption of technology-assisted instructional delivery methods. Professional development programs described by the study participants ranged from large-scale interdisciplinary projects to informal discussions between colleagues.

**Role of technology.** The increasing use of technology to deliver general education instruction was cited as a future direction by one CAO on each continent. Since the early 1990s, Europe and the United States have been experimenting with online delivery of all types of education. While several of the CAOs at the selected colleges touched on technology-assisted or virtual learning as important tools, none reported the use of technology-assisted delivery in any specific general education areas. This reinforces studies that indicate that adoption of
technology-assisted learning is proceeding at an uneven pace (Kim & Bonk, 2006; Mason, 1999).

Conclusions and Implications

Chief Academic Officers on both continents view postsecondary education in general and general education in particular as positive for students and society. Likewise, all agree that employment is the primary goal of all postsecondary career and technical programs. These findings suggest conclusions and implications for postsecondary educators.

General Education Values and Beliefs: Conclusions

Currently, development of human capital is an ascendant value in the culture of postsecondary career and technical education both for instructional leaders and the businesses that will employ the graduates of these programs in the United States and Europe. Employers are moving beyond their traditional role as technical experts and are articulating the specific soft skills students will need to move into viable careers. This employer engagement in program development will continue and increase if institutions remain committed to career preparation in this era of global recession.

General Education Values and Beliefs: Implications

As the United States and Europe both work to develop their competitive advantage in a global marketplace, postsecondary career and technical programs will continue to focus on the development of human capital. The findings from this study indicate that skills related to general education will be increasingly defined by employers; these skills will play an increasingly important role in career and technical programs on both continents. As a result, postsecondary faculty can no longer assume that they are the only recognized content experts in traditional academic areas such as writing, mathematics, or social/cultural studies. Employers and students
are likely to demand that this content be made relevant to specific careers and to the workplace in general.

This growing emphasis on career preparation and workplace relevance of postsecondary curricula may also draw attention from critics who argue that credentials have less meaning than competencies in the global marketplace. Global emulation has expanded well beyond the United States and Europe. Emerging economies are now able to provide skilled workers at lower wages. Engagement with and recognition from influential employers may be an important means by which postsecondary educators can preserve and promote the value of the credentials offered by their institutions.

**Policy Landscape: Conclusions**

Colleges on both continents are struggling to keep abreast of rapid changes in the policy landscape. Oversight at all levels is increasing; policy-related tensions pose challenges for postsecondary educators in both the United States and Europe.

External oversight and demands for accountability in postsecondary education are increasing and will doubtless continue to increase in both the United States and the European Union. CAOs will find themselves in the roles of coach, cheerleader, and taskmaster in relationship to faculty responsibilities related to meeting these increasing demands. Growing numbers of underprepared students as well as increasing expectations for student performance from employers and other stakeholders present challenges to all postsecondary providers of career and technical programs and are likely to continue to do so.

**Policy Landscape: Implications**

The study findings indicate that postsecondary educators must learn to cope with increasing regulatory oversight and scrutiny from stakeholders. This will have implications for
every aspect of career and technical programs, from how programs are devised and structured to how outcomes are measured and reported. Chief Academic Officers in the United States and their counterparts in Europe bear much of the responsibility for overseeing accountability within instructional programs. In preparing for even greater demands, it will be increasingly important for CAOs to understand the requirements of stakeholders outside of the college such as government and accrediting agencies as well as business and industry representatives and communicate these requirements to the faculty. Inside of the college, CAOs will need to work closely with institutional research, development, and finance officers to implement systems for tracking and reporting outcomes as well as financing needed program improvements.

Regulatory oversight of postsecondary career and technical programs is increasing along with student and stakeholder expectations of results from those programs. However, the population of underprepared students is increasing at the same time, which places even more pressure on educators. Supporting the success of these underprepared students will involve policy considerations within institutions and programs. An example of this type of policy implication is found at Fieldstone College in the United States, where an assessment of mathematics skills is now required to enter courses that were previously open to all students. Other examples include increasing developmental education offerings to help underprepared students get up to speed. Colleges will also need to increase efforts to equip all students with the skills employers demand and even assist students in finding employment.

**Content, Delivery, and Assessment of General Education Objectives: Conclusions**

Career and technical programs in postsecondary institutions in both the United States and Europe must find ways to foster the competencies associated with general education alongside
career-specific curricula. This involves consideration of the content, delivery, and assessment of general education as components of these programs.

Despite a perception on both continents that the primary purpose of general education is to furnish students with the skills they will need for successful careers (Hart, 2008; Playfoot & Hall, 2009), the CAOs participating in this study still perceived general education content as roughly divided between academic content and employability skills. This division between the academic and employability components of general education affects instructional delivery; most of the selected colleges offer content considered “academic” in stand-alone courses whereas employability skills were more likely to be contextualized into career-specific curricula. Most of the selected colleges in both the US and the EU rely on final or exam grades to document student learning outcomes in general education at the course and program level.

Content, Delivery, and Assessment of General Education Objectives: Implications

The perceived distinction between academic and employability content as components of general education within career and technical programs has clear implications for the delivery and assessment of these components within the programs as described above. This distinction also has philosophical implications involving the general perception of each type of content by faculty, students, and other stakeholders.

Content that is considered academic (e.g., mathematics or communication skills) is likely to be “owned” by faculty trained in that content area. Academic content is more likely to be delivered in stand-alone courses, and therefore less likely to be contextualized within career and technical curricula. While academic subjects have traditionally dominated curricula at US community colleges (Cohen & Brawer, 2003), students and employers may question the relevance of this content as it is conventionally delivered and assessed.
Conversely, content that is considered to contribute to employability is more likely to be contextualized within career and technical curricula in some programs. However, even then, it can be vulnerable to accusations of irrelevance. CAOs who participated in this study reported resistance from both students and faculty regarding the time spent on general education topics at the perceived expense of career-specific instruction.

Guidance and input from employers who are actively engaged in career and technical programs may help to narrow the distinction between academic and employability content and mitigate resistance to incorporating content outside of career-specific skills. CAOs can urge faculty to draw on employers’ experience in developing assessments, as CAO Salt mentioned in her description of “master proofs” that students perform at Peak College in the European Union. Internships or other opportunities for students to experience direct contact with the workplace have the potential to demonstrate the relevance of general education to career areas.

**Future Directions in General Education: Conclusions**

Chief Academic Officers at the selected colleges tended to see future trends as amplifications of their current concerns. Study participants identified increasing expectations for students’ skill levels and the need for more meaningful engagement with employers as important. In addition, some respondents identified a need for more professional development for faculty; moreover, some respondents acknowledged the increasing role of technology in postsecondary education.

The study findings indicate that colleges offering career and technical programs are being challenged to ensure that students who complete those programs are prepared to be successful in the workplace. In many cases, colleges are increasing the rigor of their programs by either raising skill requirements for entry into courses or programs, or by increasing the levels of skill
expected from those who complete the programs. The importance of employer engagement was a recurring theme; CAOs at the selected colleges expect it to continue to be so in the future. Continuing professional development for faculty will be important in ensuring that programs meet the needs of students and other stakeholders and that faculty members remain current with new developments in delivering and assessing general education within career and technical programs.

**Future Directions in General Education: Implications**

Increasing the level of challenge offered to students in career and technical programs has implications that cut across institutions, especially in the light of other conclusions and implications discussed earlier. Supporting growing numbers of underprepared students in increasingly rigorous programs will require increased human and financial resources unless colleges move to limit enrollment based on academic preparation.

Increasing engagement with employers has the potential to assist colleges in assuring that programs are relevant to business and industry; however, this engagement may come at the price of sharing control of career and technical curricula. Employer engagement carries implications for CAOs who must redefine their roles to encompass partnerships with external stakeholders.

Providing professional development for faculty is not a new development in postsecondary education. However, in times of funding constraints, increasing amounts of any activity may impact program costs for institutions and their students. Innovations such as designing active learning projects, contextualizing general education into career and technical courses, opening up their classrooms to increased oversight, or moving more instruction into a virtual environment might be difficult for longtime faculty who are unfamiliar with newer methods. Well-designed professional development programs may help.
Increasing the capability to deliver instruction, including general education instruction, in a virtual environment is a future trend that has broad implications. CAOs must help to keep faculty abreast of developments and encourage adoption of new methods. This is a challenging task in the face of the skepticism regarding online learning, which still exists on both sides of the Atlantic.

Overall, the implications of future trends related to the inclusion of general education objectives in career and technical programs as articulated by the study participants can be reduced to two words: continuing changes. Changes in regulatory specifications and expectations for accountability from students and employers will beget changes in faculty workloads and the ways in which programs are designed, delivered, and assessed. Investment in the resources of time, money, and expertise will be needed for colleges on both continents to keep pace with these continuing changes.

**Recommendations**

The conclusions and implications of the study findings suggest three recommendations for CAOs to consider for practice. The scope of the study and potential generalizability of the findings give rise to three recommendations for dissemination of the findings, while the continued rapid pace of change in the field of higher education on both sides of the Atlantic dictates three recommendations for further research.

**Recommendations for Practice**

Although many differences are apparent between community colleges in the United States and similar institutions in Europe, common elements also exist. These commonalities include a focus on access and student success and an orientation toward the needs of local communities and industry (Boggs, 2008). This study explored the perceptions of CAOs
regarding the role of general education objectives in community colleges and analogous institutions in the United States and Europe. Based on the findings, the following recommendations for improvement of practice enumerated below are offered to colleges and their CAOs on both sides of the Atlantic.

1. Prepare the college community for increasing demands for accountability to stakeholders including state, regional, national, and international regulatory agencies.

   Chief Academic Officers at community colleges in the United States and similar institutions in Europe will face increasing pressure from stakeholders at many levels. Colleges in the European Union are already more accustomed to regulatory oversight from external agencies. Colleges in the United States are beginning to experience shift from peer review and voluntary accreditation to state and federal mandates on issues such as assessment of learning outcomes and standards for gainful employment. CAOs can play an important role in keeping the college community abreast of new regulations and ensuring that internal quality standards meet or exceed external requirements. CAO Black at City Municipal College (EU) expressed this as “a quality imperative. I would rather go in and find somebody teaching brilliant lessons or not teaching brilliant lessons than have the Inspectorate come in and find it for me.”

2. Engage with business and industry partners when developing curriculum for new programs or revising existing programs for continued viability.

Researchers on both sides of the Atlantic have articulated an increasingly important role for employers in the design, delivery, and assessment of career and technical programs in community colleges and analogous institutions (Hall & David, 2008; Hart, 2006; Playfoot & Hall, 2009; Stumpf, 2008). Four of the six CAOs who participated in the study cited continuing or increased efforts to involve employers not just in helping to design or offer feedback on career
and technical curricula, including general education skills, but in actually delivering some of the
instruction themselves. By working with employers and industry representatives to ensure that
the general education content offered in the programs will meet their current and anticipated
needs, educators can also investigate alternative delivery options. Contextualization of general
education content with career-specific instruction and technology-assisted delivery are emerging
practices that have not yet been widely adopted. CAOs can provide leadership and support to
instructional designers and faculty willing to adopt new practices in these areas.

3. Provide professional development for faculty to ensure that teaching and learning
keep pace with the new developments and increasing demands.

Chief Academic Officers from both sides of the Atlantic emphasized a need for
continuing professional development for faculty in ensuring that teaching and learning keep pace
with the increasing demands on the curricula for career and technical programs, including
general education curricula. On both continents, CAOs consider career and technical faculty as
experts in their content areas. However, the CAOs also expressed concern that innovations such
as designing active learning projects, contextualizing general education into career and technical
courses, opening up their classrooms to increased oversight, or moving more instruction into a
virtual environment might be difficult for longtime faculty who are unfamiliar with newer
methods. CAO Cane at Garden State, CAO Black at City Municipal (EU) and CAO Salt at Peak
College (EU) alluded to the need for instructors to update their teaching skills. CAO Cane
expressed concern that activities like contextualizing general education into career and technical
courses “tend to require greater sophistication from faculty because they need to know not only
their technical specialty but also pedagogical stuff related to gen ed.”
Well-designed professional development programs have the potential to engage and support faculty in developing and implementing new ideas. At Hunt College (US), CAO Starz described the benefits of a program where “we had faculty from all these different areas coming together in a way they don’t normally do and share what’s working, what’s not, having the conversations, creating that space for them to support each other, learn from each other.” At City Municipal College, CAO Black tries to structure faculty meetings to resemble “when you were young teachers and you’d come home at night and over your cocoa you reflected on your day’s lesson.” Ultimately, as CAO Salt said, faculty must become aware that change is required “not because we want them to, but because the parents want it, the government wants it, business and industry want it.”

**Recommendations for Disseminating Study Findings**

Higher education has been regarded more and more in the light of what Canadian researcher Alex Usher (2009) refers to as a “social escalator,” and institutions in both the United States and Europe are being asked to do more—“to educate more students from ever-more diverse backgrounds, in more subjects, in more ways, in more fields of study; to do so in a fashion which is both unique at each institution while at the same time highly transferable, so as to encourage mobility in learning” (p. 3). This study contributes to a growing body of research that has developed to investigate and illuminate the extent to which this is happening on both continents (Adelman, 2008; AACU, 2007; Bastedo, Batkhuyag, Prates, & Prytula, 2009; Gaston, 2010; Playfoot, 2009). The findings and recommendations for future research will benefit practitioners and scholars in community colleges in the United States, the European Union, and across the international higher education community.
4. Share the findings with the study participants and their institutions.

Copies of the completed study will be provided to the participating sites via e-mail to the presidents of those colleges. It is hoped that the presidents will share the findings with practitioners on their campuses. Copies will also be provided to the interview participants, some of whom have moved on to other institutions since the interviews were completed.

5. Prepare a plan to present the findings at regional, national, and international meetings of scholars and practitioners and publish in peer-reviewed journals.

Findings from this study will be of interest to faculty and administrators at community colleges and other higher education institutions in the United States, Europe, and elsewhere who wish to share information across international borders. Proposals will be prepared for appropriate meetings. Publications such as Community College Journal of Research and Practice and Journal of General Education and other appropriate venues will be identified by the researcher in the upcoming academic year.

6. Consider publication in non-scholarly venues of interest to community college practitioners.

The findings of this study may be appropriate for publication in an article or editorial format in news publications such as The Chronicle of Higher Education, Community College Times, or similar journals. Online publications such as InsideHigherEd are another potential outlet to reach a broader audience. Finally, social media networks such as blogs or Twitter would allow the findings to reach a broad audience and generate potentially productive dialogue.

**Recommendations for Further Research**

This study provided an impression of the values and belief underpinning polices governing the inclusion of general education objectives in career and technical programs as well
as a brief overview of the content, delivery, and assessment of those objectives in selected US community colleges and similar institutions in Europe. Recommendations for further research can be grouped into three broad areas: (1) consider other perspectives, (2) broaden geographic scope, and (3) incorporate emerging concerns.

7. Consider other perspectives.

This study included only the perspectives of CAOs, who were selected based on their unique role as administrators who remain intimately connected with instructional policy and practice. Considering similar guiding questions from the point of view of faculty members, students, representatives from business and industry, or government agencies would enrich the discussion and provide further context for the findings. A group of faculty members or students could generate a sharper focus on classroom practices for delivery and assessment of instruction. Employers could present a more detailed look at selected content areas and their relationship to students’ potential employability, including an exploration of how community colleges might enhance the value of the credentials they offer. Representatives from government or other funding agencies would provide valuable insight for practitioners at all levels within institutions.

8. Broaden the geographic scope.

Institutions similar to community colleges are gaining in popularity across the globe. According to Boggs (2008), in this “increasingly global society and economy, education and training beyond customary compulsory primary and secondary education is now seen as essential to a nation’s competitiveness and the standard of living of its people” (p. ix). Asian nations including China, Hong Kong, Thailand and Vietnam, South and West Africa, North and South America, and Australia have developed institutions characterized by affordability, accessibility,
and flexibility. The values, beliefs, and policies related to general education as a component of career and technical programs may take different forms in these diverse cultures.

9. Incorporate emerging concerns.

This study was conceived in June of 2008 and conducted over a period of months ending in June of 2010. Analysis of the findings is therefore limited with respect to rapidly changing conditions in higher education in the United States and Europe in late 2010 and into early 2011.

In late October 2010, the United States Department of Education released a draft of new rules for program integrity (Epstein, 2010). Although widely acknowledged as being primarily aimed at the growing for-profit postsecondary sector, the new rules are expected to increase state and federal oversight of all career and technical programs in the United States. An analysis of the impact of these new rules, including the pending definition of “gainful employment,” would provide a valuable extension of the findings of this study.

Finally, the theoretical framework for this study was based on a dynamic tension between the value of higher education in developing human capital and the critique of theorists who claim an overemphasis on credentialing. In the first half of 2010, arguments in favor of human capital were ascendant with the selected CAOs in both the United States and the European Union. However, as the year draws to a close, more and more discussion of a higher education “bubble” has emerged in the press, insinuating that college credentials may come at a higher cost than they are able to return in the marketplace (Wood, 2010). The question of the value of general education as a component of career and technical programs sits squarely in the middle of the debate between higher education as a guarantee of employment and higher education as an intrinsic human value. Revisiting the guiding questions with a similar group of CAOs within the next 5 years could generate new insights into this ongoing debate.
The question of the value of general education as a component of career and technical programs sits squarely in the middle of a current and ongoing debate between higher education as a guarantee of employment and higher education as an intrinsic human value. In an increasingly globalizing society that demands ever-increasing levels of accountability from institutions and performance from students, decisions related to what and how students learn are increasingly important. CAOs must remain aware of the evolving policy landscape, guide these decisions in concert with employers and other stakeholders, and ensure that faculty are prepared to deliver and assess career and technical curricula that meet students’ and society’s needs.
References


BIOGRAPHICAL SKETCH

Jennifer Ballard Schanker is currently a faculty member in English and Department Chair for Transitional Studies at Lake Michigan College in Benton Harbor, Michigan. She chairs the college’s Student Success Steering Council and serves as Project Director for the Achieving the Dream and Breaking Through initiatives. Previously, Schanker has been a faculty member at DePaul University and Columbia College in Chicago, Illinois.

Schanker holds a Bachelor’s degree from Kalamazoo College in Kalamazoo, Michigan and a Master’s degree in English literature from DePaul University in Chicago, Illinois. She earned certification as a Developmental Educator at the Kellogg Institute at Appalachian State University in Boone, North Carolina and attended the Chair Academy Global Leadership Training in Belfast, United Kingdom and S’Hertogenbosch in the Netherlands.
## Relationship Between Guiding and Interview Questions

<table>
<thead>
<tr>
<th>Guiding Questions</th>
<th>Interview Questions</th>
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<tbody>
<tr>
<td><strong>Guiding Question 1:</strong> What determines the content, delivery and assessment process for post-secondary general education outcomes in career and technical education programs?</td>
<td>a. Please list some subject areas, topics or skills that you would identify as “liberal arts,” “general education” or “soft skills”?</td>
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<td></td>
<td>b. Which, if any, of these subjects are taught in your institution’s career preparation programs (courses)?</td>
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<td>c. Are any of these subjects taught in stand-alone courses (modules)? Which? Why?</td>
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<td></td>
<td>d. Are any of these subjects embedded in career-specific courses (modules)? Which? Why?</td>
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<td></td>
<td>e. Approximately what percentage of a program (course) is devoted to these general topics?</td>
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<td>f. How do you determine if a student has learned or mastered these general topics?</td>
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<td><strong>Guiding Question 2:</strong> Are there any specific institutional policies related to the role of general education objectives in career and technical programs?</td>
<td>a. Are your programs (courses) required to list or officially identify outcomes for completers?</td>
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<td></td>
<td>b. Are general education outcomes required in all of your career and technical programs (courses)? Which outcomes? Why?</td>
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<td></td>
<td>c. Are general education outcomes measured in your career and technical programs (courses)? When? How?</td>
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<tr>
<td>Guiding Question 3: Are there tenets of educational and cultural philosophy which underpin the role that general education objectives play in the content, delivery and assessment of career and technical programs?</td>
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<tr>
<td>a. What do you feel is the primary goal of career and technical education in your institution? Why this goal?</td>
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<td>b. Do you consider general education to be an important component of your career and technical programs? Why or why not?</td>
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<td>c. What role do you hope that knowledge gained from general education will play in the work and life of your graduates?</td>
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<tr>
<th>Guiding Question 4: What are some future trends regarding the role of general education objectives in career and technical programs?</th>
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<tr>
<td>a. Have you observed any recent changes related to teaching general education in career preparation programs (courses) at your institution?</td>
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<tr>
<td>b. Do you feel any changes are needed related to teaching general education in career preparation programs (courses) at your institution?</td>
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<tr>
<td>c. Have you observed any recent changes related to assessing learning of general education in career preparation programs (courses) at your institution?</td>
</tr>
<tr>
<td>d. Do you feel any changes are needed related to assessing learning of general education in career preparation programs (courses) at your institution?</td>
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Appendix B

Participant Demographic Survey

Date: _________________________

Participant Name: _________________________

1. **Age Group:**
   - [ ] 25 – 35 years
   - [ ] 36 – 45 years
   - [ ] 46 – 55 years
   - [ ] Over 55 years

2. **Ethnicity:**
   - [ ] Asian or Pacific Islander
   - [ ] American Indian or Alaskan
   - [ ] Black, non-Hispanic
   - [ ] Hispanic
   - [ ] White, non-Hispanic

3. **Current Position:**
   - Institution: __________________________________________________
   - Job Title: __________________________________________________
   - City/State: __________________________________________________
   - Number of years in current position: _________
   - Immediate Supervisor’s Title: ________________________________

4. **Briefly describe your educational preparation and job experience prior to your current position.**

   **Education:**

   **Experience:**

Thank you for taking time from your busy schedule to complete this questionnaire. Your thoughtful responses will provide substantive depth and clarity to this study and will aid in providing necessary context.
APPENDIX C

Informed Consent Letter

Thank you for agreeing to participate in this study that will take place from October, 2009 to July, 2010. This form outlines the purposes of the study and provides a description of your involvement and rights as a participant.

I consent to participate in a research project conducted by Jenny Schanker, a doctoral student at National-Louis University, located in Chicago, Illinois.

I understand the study is entitled CAO Perspectives: The role of general education in post-secondary career and technical programs in the US and Europe. The purpose of this study is to identify and compare the perspectives of Chief Academic Officers on integrating general education into post-secondary career and technical education programs designed to prepare students for the global workforce in the United States and Europe.

I understand that my participation will consist of an audio recorded interview lasting 60 to 90 minutes. I understand that I will receive a copy of my transcribed interview at which time I may clarify information.

I understand that my participation is voluntary and can be discontinued at any time until the completion of the dissertation.

I understand that my anonymity will be maintained and the information I provide confidential. I understand that only the researcher, Jenny Schanker, will have access to a secured file cabinet in which will be kept all transcripts, audio recordings, and field notes from the interview(s) in which I participated.

I understand there are no anticipated risks or benefits to me, no greater than that encountered in daily life.

I understand that in the event I have questions or require additional information I may contact the researcher: Jenny Schanker, Address, Phone, or E-mail.

If you have any concerns or questions before or during participation that you feel have not been addressed by the researcher, you may contact my Primary Advisor and Dissertation Chair: Dr. Martin Parks, Address, Phone, or E-mail.

Participant’s Signature: ___________________________ Date: ____________

Researcher’s Signature: ___________________________ Date: ____________
APPENDIX D

Recommendations from Expert Review

Two expert reviewers were asked to provide input on the semi-structured interview questions prior to the study. Both have served as Chief Academic Officer in community colleges and have experience in the field of international higher education. Expert A was serving at the time as a Vice Chancellor of Academic Affairs at a branch campus of Garden State College. Expert B is the director of a nationally recognized higher education policy center. Each suggested substantial changes to the format and content of the questions which were incorporated as described below.

Expert A was the first to review the questions. This expert expressed concerns regarding the organization of the interview as well as the relationship between the guiding and interview questions. The original interview questions each addressed multiple guiding questions. The interview was loosely structured to flow from specifics of current and future content, delivery and assessment through policies, and finally values and beliefs. Based on Expert A’s review the protocol was altered to include multiple simplified interview questions directly related to each guiding question. The order of the interview was also changed to open with an exploration of values and beliefs, move through policies and finally to specifics of content, delivery and assessment, ending with future directions.

Expert B was the second to review the questions and focused on the attention to specific educational terminology that would be crucial in an international study. This expert pointed out uses of language that implied assumptions based on policies and practices common in the United States. After this review, questions were revised to reduce bias and reflect a more neutral stance. More importantly, feedback from Expert B served as a reminder that an inquiry of this nature
should make every effort to reflect multiple cultural contexts in order to remain as balanced and objective as possible.