Exploring Student Experiences:
Examination of Community College Career and Technical Programs

A Doctoral Thesis Presented

By

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Abstract

Career and technical education was once essential in an attempt to educate people for their respective careers. While the premises for a career and technical education remains career oriented, these programs have come under attack in the past several years, especially, the career and technical degree programs offered at community colleges. The opponents of community college career and technical degree programs argue that these programs are too narrow in scope and that they do not provide students a broad, general education. The opponents also argue that the career and technical degree programs offered at community colleges are contributing to the class segregation in America. The purpose of this study is to explore student and alumni experiences as they relate to the efficacy of career and technical education degree programs at different community colleges. The literature indicates that while higher education, in general, provides the best return for society, career and technical education contributes significantly to that return. This study indicates that the idea that a career and technical education does not develop the whole student appears to be false. Community colleges seem to put graduates in charge of their future. Based on the findings of this research study, it has been determined that additional research will be necessary to examine career and technical education at four-year technical colleges and to study the effect of a career and technical education in society.

Keywords: Vocational Education, Higher Education, Community College, Curriculum, Career Training, Career and technical education
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Chapter One

Statement of the Problem

American society often refers to community colleges as the communities’ colleges because they play an integral part in the communities in which they are established in by responding to the academic and training needs of the community. Sometimes, members of the community assemble at the community college campus to watch a performance in the school’s theater or to use the library (Leslie, 2014).

Students enroll at local community colleges for a host of reasons. They enroll in a degree program to continue their education on a full-time basis directly after high school, or they enroll because they have been laid off from their labor market jobs and are looking to be retrained in the form of continuing education courses or training for a new career. Some students also enroll in high school equivalency exam preparation programs offered at the community college.

Community colleges do play an integral role in the communities that they serve, but the education they provide is being criticized, specifically, the extent and lack thereof their careers and technical education programs. Opponents of career and technical training at community colleges have labeled these programs as being too narrow in breadth and scope and worth suspending (Fichtenbaum, 2015; Graff & Birkenstein, 2008; Katz & Rose, 2013). They also maintain that people do not need an education in order to be carpenters or office administrators. According to Ravitch (2013) even those students who enroll at a college to study business find the time to study literature, philosophy, music, and art, “They may for the first time in their lives, have the opportunity to think critically about society. These are the fruits of higher education, as distinct from career and technical education” (p. 83). Distinct from career and technical education in this context implicitly indicates that students who enrolled in a career and technical
program do not find the time to study literature, philosophy, music, and art because they are academically unable to participate in these types of courses (Doyle, 2009). Critics of community college career and technical programs claim that the career and technical education and knowledge from experience is secondary to an academic education. Opponents of career and technical programs argue that, in general, a career and technical education at a community college suppresses the success of the students in the program. In some instances, the students do not complete their program because they tend to withdraw from the college in order to accept a job offer. In other instances, the students earn a terminal degree and move directly to the workforce instead of transferring to a four-year institution (Kotamraju, 2012a; Ravitch, 2013).

An academic education tends to be an essential criterion for entry into the American corporates. A student will graduate from high school and then enroll in a four-year college or university program of study. Earning a college degree has always been considered to be a guarantee of earning gainful employment (Symonds, 2013). Guarantees like this are why the high schools across the nation tend to push a college preparatory education for its students. An academic education is a key to success in our society. Therefore, those students who cannot function in an academic setting tend to be sent to a career and technical school or are enrolled in career and technical programs within their high school. America’s K-12 system has “short circuited the production of workers for the middle-skill jobs, or those occupations that require some postsecondary training, but not a bachelor’s degree” (Hora, Benbow, & Oleson, 2016, p. 40). In addition, Hora et al. (2016) indicated that the “curricula issue begins in high school, where technical and vocational education has declined in favor of overly theoretical coursework meant to prepare students for college” (p. 42).
As recent as the early 2000s, career and technical education was considered to be a punitive measure for students who could not function in an academic setting (Lucas, Spencer, & Claxton, 2012). Career and technical education was considered to be less prestigious and less moral than an academic education. Higher education in the United States was initially developed to focus on the civic and moral goals of students. However, there is an increasing disconnect between the initial focus of higher education and the growing need for career and technical skills. This focus shift implies that the original focus of higher education is becoming obsolete and that the purpose of higher education is to serve only as job placement agencies (Lazerson, 2010). For as long as people have been earning an education, the idea that education is the creation of knowledge from experience has existed, and this is the premise of career and technical education. A connotation that career and technical education is second to an academic education has been discredited (Lagemann & Lewis, 2015; Stokes, 2015). As society becomes more aware of the benefits of career and technical education, there is no question that career and technical education is often a pathway to an academic education and successful career (Raffe, 2001).

In February 2012, President Obama announced that his administration was going to focus on career and technical training and education by allocating $69.8 billion dollars in his proposed budget to be used to bolster career and technical programs across several platforms. This policy initiative included a call for community college systems to retrain the long-term unemployed along with providing a broader career and technical education curriculum, which the administration viewed as a pathway for many underprivileged students to earn a higher education despite their poor socioeconomic status or academic abilities (Field, 2013). Obama indicated that the top objective of this program is to “train Americans with the skills employers need, and match them with good jobs that need to be filled right now” (Hora et al., 2016, p. 38).
Students around the country enroll in career and technical associate degree programs for various reasons. However, these students are not expected to transfer to a four-year institution to earn a bachelor’s degree, which potentially keeps academically unfit students out of universities (Townsend, 2001). In fact, some students who enroll at four-year institutions directly from high school tend to withdraw and then enroll at a community college (Townsend, 2001). While the reason for this phenomenon is vastly unknown, Doyle (2009) indicated that the factors contributing to this phenomenon could be academic preparation, family background, and possibly unobservable features such as motivation or ability. It is generally known that everyone does not pose the capacity required to complete academic programs successfully (Murray, 2009).

This observation coupled with our secondary schools insisting that high school students take college preparatory courses is creating animosity between institutions of higher education and society.

Past research has discussed career and technical education as a benefit to the society. However, little research exists that details the pathway associated with career and technical degree curriculum and implementation. In addition, little research discusses the efficacy of career and technical education degree programs at community colleges. The purpose of this study is to explore student experiences as they relate to the efficacy of career and technical education degree programs at community colleges.

**Significance of the Problem**

This study explores the perceived experience of students associated with community college career and technical degree programs. Career and technical education encompasses a wide variety of disciplines; therefore, there are many decision makers responsible for the facilitating policy.
Community college governance has become “disjointed” (Mallon, 2004, p. 63) because of the number of decision makers involved in the process. Lawmakers and college administrators could use the findings of this study to assist them in streamlining the decision-making process.

Additionally, this study provides significance to the students who are currently enrolled or who are interested in enrolling in career and technical programs because they will be able to weigh the pros and cons about whether to withdraw from a two-year degree program or to continue to a four-year degree. Given the escalating tuition costs and the alarming numbers of underemployed graduates (Gallagher, 2016), this study potentially provides students with a sense of direction, which will create greater involvement and commitment to their program of choice.

In a more broader sense, the more students earning a higher education is beneficial to our society overall (Murray, 2013). Higher education is not restricted to four-year degree granting institutions. Technical colleges, community colleges, as well as other institutions provide a level of training that enhances the employment capabilities of all of those who successfully complete a degree program. However, career and technical education includes a high level of contemporary processes and software use, which means that the curriculum for these programs must be consistently upgraded and changed in order to meet the hiring requirements of employers in the field.

Higher education is charged with numerous responsibilities, which stretches much further than educating students in specific disciplines. Higher education institutions “must recognize a direct responsibility for the civic learning of their students spread across the entire curriculum” (Lagemann & Lewis, 2015, p. 12). The national debate includes participants that believe that “real” education takes place in the workplace, without any regard for the civic learning that takes
Employers insist that colleges and universities need to do more to better prepare students for the job market (Hora et al., 2016). This debate includes the notion that career and technical education programs offer a false promise in the sense that these programs attract people who cannot be cultivated, and therefore, they will not succeed in the job market or academically (Herrnstein & Murray, 2010; Lazerson, 2010; Ravitch, 2013).

The career and technical education at the high school level is limited due to the school placing students in courses with students who are there simply because they have to be. Our K-12 educational system does not take career and technical education seriously, and it does not offer a large variety of subject areas (Symonds, 2013). This discussion is predicated on the idea that the K-12 educational system defines success solely in terms of going to a four-year college. Our community colleges provide students with an opportunity to experiment with a variety of vocations without the high price tag that comes with courses at technical schools and four-year institutions. Community colleges also provide career and technical students with a broad academic education as part of their program track. Many community colleges develop “deeply structured” (Wyner, 2014, p. 15) career and technical curricula, which integrates required general education courses. Courses such as humanities, mathematics, social sciences, and electives are all required. In most cases, community colleges offer remedial courses and student success courses. After seeing how successful students become after taking remedial and success courses, many community colleges make these courses mandatory (Goings & Margaret, 2013; Kotamraju, 2012b; Wyner, 2014).

In contemporary society, a career and technical education is no longer second to an academic education. Society benefits from those students who graduate with an academic education and from those students who graduate with a career and technical degree. Community
college career and technical degree programs often frame a career pathway for students enrolled in the program. There is no question that higher education in general benefits society at large and when people decide to earn an education, either an academic track or a career and technical track, their educational attainment will have an individual benefit as well as a societal benefit (Hoelscher, Hayward, Ertl, & Dunbar-Goddet, 2008).

Society is one aspect which influences the decisions people make in terms of enrolling in a higher education program. Another aspect that drives people to enroll in higher education is an individual’s choice. A person can exercise their choice of the type of education based on their perception of their needs, interests, and their abilities. Higher education has become a mechanism for those people looking to take advantage of their abilities, but research (Hoelscher et al., 2008) has indicated that people with vocational interests are attracted to the applied subjects. Therefore, if a person has the ability to go to law school to be a lawyer, but their interest lies with some other career choice, should they enroll in a law program based on their abilities alone. (Murray, 2009)

**Research Questions**

This study used the phenomenological tradition. This tradition facilitated the development of this study’s research questions. The phenomenological tradition is discussed in greater detail in Chapter Three.

The following central question and subsequent sub-questions guided the exploration of student and/or alumni experiences and the educational effectiveness of their career and technical education program at community colleges:
Central Question

How do currently enrolled students and alumni of community college career and technical education degree programs assess the efficacy of their educational experience?

While this central research question allowed for foundational phenomenological data, additional questions were developed to further define this study’s focus.

Sub Questions

A. How do currently enrolled students and alumni describe their community college career and technical program experience regarding their future education?

B. How do currently enrolled students and alumni describe their community college career and technical program experience regarding their employability?

C. What factors led the students to enroll in a community college career and technical degree program?

Career and Technical Education Defined

Over time, career and technical education has taken on several names and multiple definitions. In the past, many institutions referred to career and technical education as “adult education” because career and technical education was popular for adults who were trying to change careers (Lindeman, 1989). “Concept based learning” was best for students who had substantial practical experience (Velde, 1999). Career and technical education has been defined as a school for work balance regarding non-academic skills and majors (Hanushek, Woessmann, & Zhang, 2011). School for work balance in this context refers to institutions providing the student with academic skills, and those skills are required to be a success at work. Field (2000) defined career and technical education as “life-long learning” and “any educational training that provides practical experience in a specific field or trade.”
In some cases, individual institutions are responsible for assigning their own definition to the term “career and technical education.” In many instances, community colleges use the term “technical” within the name of the school. These schools are presumed to be offering career and technical education for several specific industries or trades. Lazerson (2010) defined career and technical education as curriculum based, where the school focuses on “occupational curriculum” (p. 55) or employment-related curriculum, where the school is focused on a school to work program. These programs are designed to be “employment-related” (p. 55). Career and technical education could mean “required schooling” (p. 55). In this case, a student would be required to earn a degree to enter a particular field or industry.

Contemporary employers and institutions see value in working together to train students for a particular industry and trade. The responsibility to educate students while preparing them for industry and commerce is a shared responsibility between the education providers and the employers (Stokes, 2015). In addition, the collaboration between educators and businesses becomes essential for student success. Therefore, Stokes (2015) declared that “the combination of academic study and work preparation as a both/and rather than an either/or proposition” (p. 4).

With career and technical education being defined as a relationship, the meaning of this relationship as determined by individual institutions will continue to be ambiguous. Attewell and Lavin (2012) described the career and technical education as being career-orientated. The subjects typically included in a career and technical education program are business and management, education, health, engineering, computer science, and various other career-orientated subjects. Academic subjects include social and behavioral science, arts and humanities, biological science, mathematics, physical science, and other academic centered subjects.
As the vocationalization of higher education is discussed and debated, Altbach, Reisberg, and Rumbley (2009) suggested that terms such as “professionally orientated programs and institutions” (p. 96) will be used to describe the career and technical education. In some cases, the term “practical” (p. 96) education has been used to refer to career and technical education within the domain of higher education.

**Definition of Key Terms**

The following are the key terms that appear to be prevalent in the literature about community college career and technical programs. The researcher defined these terms in an effort to remove the ambiguity of their meaning and to provide the context in which these terms are used in this research.

**Career and Technical Education.** Career and technical education has been defined as “an education track associated with skill-based learning as opposed to general education, which is associated with concept-based learning” (Hanushek et al., 2011, p. 6). Contemporarily, what was known as vocational education is now referred to as career and technical education (Bray, Painter, & Rosin, 2011).

**Community College.** Sometimes referred to as technical community college, these institutions offer various certification programs and two-year associate degrees. The mission of a community college is to facilitate the academic transfer, provide adult basic education, and to provide career and technical education (Cohen & Brawer, 2003).

**Community College Student.** Community college career and technical students are defined as students who have enrolled in a career and technical education program on either a full or a part-time basis while working full or part-time, and while raising a family. These
students can be of either gender and are typically 25-years-old or older (Bragg, 2001; Cohen & Brawer, 2003; Lazerson, 2010).

**Technical Terminal Degree.** Shavit and Muller (2000) defined a technical terminal degree as a two-year career and technical associate’s degree. This degree implies that the holder has earned the highest level of academic training in the subject area. Hora et al. (2016) defined a technical terminal degree as a “skills infrastructure” (p. 10). The infrastructure includes a curriculum that will “actively engage students in problems that combine rigorous disciplinary concepts with authenticity, such that the newly acquired knowledge can be mapped onto real-world settings” (p. 8). It is a vocational concept that is sweeping the globe.

**Theoretical Framework**

A theoretical framework provides structure and organization to the ideas within a theory. Our ideology as a society has changed. It is no longer acceptable to presume that students who do well in high school will or should go to college. It is no longer acceptable for our high schools to insist that students enroll at a college after high school graduation (Lucas et al., 2012; Symonds, 2013). Colleges have become outcome driven in an attempt to visualize the specific skills that the students are learning within their program. Therefore, the goal of the framework is to provide a structure, which will develop contemporary curriculum, competency-based training, project-based assessments, and holistic career and technical education degree programs.

The theoretical framework used in this study is the path dependency theory. Ebbinghaus (2005) described path dependency as being increasingly popular throughout many of the disciplines in humanities and social sciences. Path dependency is a trail with many junctures along the way. Therefore, this theory can be applied to various scenarios, which students can use to get from one place to another. Student’s success in academics correlates with the path they
chose to complete their studies (Lazerson, 2010). This study’s section articulates the path dependency theory and how it frames the research topic. The researcher will define path dependency and then articulate the nuances between a path with and without dependency. Finally, the researcher will discuss how the application of this framework applies to the research topic.

**Path Dependency Theory Defined**

According to Ebbinghaus (2005), path dependency is the “evolutionary outcome of multi-actor collaborative interaction,” (p. 10) and that the more the path or instruction becomes entrenched, the less likely it will be for the path or institution to be replaced. The theory includes two constructs, which are important to understand to apply the theory. Ebbinghaus (2005) defined these constructs as a trail and a juncture.

**Path Dependent Trail.** One of the constructs associated with path dependency theory is identified as a trail. This construct includes the diffusion of the social norm process, and it can be defined as the repetition of basic decision making (Magnusson & Ottosson, 2009). Ebbinghaus (2005) identified the trail construct as an unplanned trail that “emerges through the subsequent repeated use by others of a path spontaneously chosen by an individual” (p. 5). Therefore, dependency on this trail becomes inherent in the social process.

**Path Dependent Juncture.** The other construct associated with path dependency theory is identified as a juncture. This construct includes the process of structuring alternatives, and it can be defined as sequencing institutional change (Magnusson & Ottosson, 2009). The juncture is interdependent, and it will structure the sequence of change within an institution (Ebbinghaus, 2005).
Embedded within the path dependency theory is the notion of neo-intuitionalism, which supports the social mechanisms, required to facilitate change. This sociological interpretation of institutions is predicated on the idea that path dependency theory includes neo-institutionalism and social mechanism (Peters, Pierre, & King, 2005; Thelen, 1999).

**Neo-Institutionalism.** Society will naturally develop a sociological view of community colleges and the programs that they offer. However, neo-intuitionalism, within the context of path dependency, is focused on the way the institution interacts and affects society, which in turn plays a role in the sociological view of the institution (Magnusson & Ottosson, 2009).

**Social Mechanism.** A social mechanism is an entity or factor, which works simultaneously within an organization and the relationship between them (Machamer, Darden, & Craver, 2000). In the context of path dependency, the entities include students, faculty, and staff interacting with the framework. This interaction of entities creates a social mechanism, in which students experience an event, where they are able to cite the cause of this event.

Path dependency theory creates a social process, which needs refining depending on its proposed application. The general definition of the theory does not change when applying it to this study. Path dependency was defined by Hathaway (2003) as “a means that an outcome or decision is shaped in specific and systematic ways by the historical path leading to it. It entails, in other words, a causal relationship between stages and temporal sequence, with each stage strongly influencing the direction of the following stage” (p. 104). Its relevance to career and technical education at community colleges is that this theory frames the way career and technical curriculum, policy, programs, and general practices are developed. Path dependency is predicated on the values of neo-classicalism, which includes the idea that the people who make up the organization act independently on the basis of full and relevant information (Weintraub,
Path dependency has been “used in a variety of contexts to describe separate, but related, phenomena” (Hathaway, 2003, p. 104).

Path dependency has been applied to numerous fields, including health care, law, and technology, but the theory has been applied predominantly to economics which can transcend other disciplines (Magnusson & Ottosson, 2009). Path dependency theory applied to law will guide the law scholars to concentrate on altering the path of a law and provide a mechanism to question and research the law, which creates the law’s path-dependent nature. The idea is that in order for laws to be created, they must have evolved from experiences and past events. Since evolution is constrained by history, the law is constrained by historic events (Hathaway, 2003, p. 106). To simplify this definition Hathaway (2003) likened path dependency to a tree. A single tree trunk carries multiple branches, although it is possible to turn around or to climb from one to another, the branch that a climber decides to start using to climb is the branch the climber intends to follow.

Economists are using the path dependency theory to explain the standard income theory. Levi (1997) and Arthur (1996) used path dependency to identify trends in history that contribute to variations and location patterns used for deriving the income theory. Krugman (1991) indicated that path dependency is “unmistakable in economic-geography” (p. 80). Concerning economic policy, Margolis (2009) noted that while there are several genuine causes of path dependency, “once policies are implemented, they are not easily unwound.” Therefore, “if governments reverse a policy action and thereby expropriate specific investments induced by those policies, investor responses to subsequent policy actions will be muted” (pp. 185-186).
Consequences of Path Dependency

The consequences of the path dependency theory are largely about the stability of the framework, and the consequences can be unintended or implicit. Path dependency is predicated on the evolution of existing theory (Hathaway, 2003). Therefore, the premise of the theory is based on an understanding of the past and how the past will influence the future. Pierson (2004) asked the following rhetorical question, how do past decisions shape the available alternatives to future ones? Eddington (2012) suggested that the “emphasis here is on timing and sequence of events” (p. 14). In addition to timing and the sequence of events, path dependency theory is conceptually too narrow, and that the idea of the past influencing the future is not inevitable (North, 2006). Also, path dependency is based on “equal starting condition” (Arthur, 1996, p. 8). An equal starting condition is not a practical component on which a theory should be based. Since path dependency is rooted, in-part, in the social process (Hathaway, 2003), this means that social issues includes socioeconomics, human and cultural capital interfere with the framework.

Path dependency has been described as more of a resource rather than a theory (David & Thomas, 2003). In economics, the extent of path dependency is virtually unknown because of the volatility in the economic system. However, if path dependency is to be used as a theory, it needs to be a systematic feature of the organization. With regard to the theory’s dynamic nature, David and Thomas (2003) indicated that “a system whose motion remains under the influence of conditions that are themselves the contingent legacies of events and actions in its history” (p. 15).

One of the more obvious consequences of path dependency according to Liebowitz and Margolis (1995) as cited by Magnusson and Ottosson (2009) is that the virtue of path
dependence becomes questionable when an actor is “well aware of more optimal choices, but still prefers the path-dependent choice” (p. 6).

**Path Dependency and Career and Technical Education**

The idea that higher education is not for everyone is prevalent in our contemporary society. More than half of the student population enrolled in a bachelor’s degree program will withdraw before earning their degree, and more than half of these students will enroll at a community college (Goings & Margaret, 2013). Murray (2009) thesis stated that not all people are born with the genetics to successfully earn a higher education, which is supported by the idea that “capacities and inclinations to learn are best understood in natural, semi-permanent traits such as intelligence, personality, and motivation” (Bloomer, 2001, p. 430). These are the traits humans are born with, and they cannot be altered. The implications of a path are higher for those who depend on it for success, but the implications of eliminating a path are detrimental to those who depend on it – the community, and the institution (Mavromaras & McGuinness, 2012).

The virtue of a career and technical education program is that it can act as a pathway for those who would otherwise not be able to attain a degree in higher education. Students who earn a technical terminal degree become participating members of society, which is, in part, the goal of higher education institutions (Raffe, 2001). The idea that a career and technical education program offered at the community college level is second to an academic education or does not develop students holistically or prevents students from transferring to a four-year institution is unfounded (Raffe, 2001). Path dependency theory offers students a safety net regarding earning a higher education. For some, this safety net is an opportunity to better their position in society, and for others, it is a stepping-stone to further education. Path dependency theory aims to
provide a structured meaning and identity to career and technical education curriculum, planning, financing, policy, and its overall integration in the society.

**Theory and Meaning.** Applying path dependency theory to career and technical education in such a way that it has a positive influence on career and technical curriculum, policy, planning, financing, and societal integration is a systemic effort. It will require the college to reduce the amount of disjointed governance and decision makers (Mallon, 2004). The path will create a structure, which must be in line with the college’s mission statement and vision for the future.

**Curriculum.** Path dependency provides a guide for curriculum design by framing path “stabilization” (Ebbinghaus, 2005, p. 17), which provides a structural component that students follow their program from beginning to end without changing the core principles of the institution or program.

**Policy.** A limited redirection of core principles as a matter of institutional policy is required to maintain the stabilization of the path and to facilitate dependency. Path dependency is predicated on the idea that the institution is entrenched in theory, which facilitates policy development that is in line with the path (Ebbinghaus, 2005).

**Planning and Financing.** Path dependency dictates that those programs providing stabilization should be funded to support the faculty and students operating within the curriculum. Failure to properly support this stabilization will result in path cessation, which will destroy dependency and create ambivalence within the faculty and the student bodies (Ebbinghaus, 2005).

**Societal Integration.** Contemporary curriculum and planning means that community college career and technical programs must structure themselves in a way that provides for
continuous program review and semi-annual peer-review from professionals working in the labor market within specific industries, which correlate to specific programs being offered at the college (Bragg & Ruud, 2007). Pathway dependency provides a “functional transformation” (Ebbinghaus, 2005, p. 17) into the new vocationalism and supports the theory to practice ideology.

Path dependency is predicated on historical processes and precedent, which is set along the path. Community colleges must use path dependency to validate the offering of career and technical degree programs and to articulate how the path has performed over time. The sociological-institutionalism perspective of path dependency has been said to provide validity and structure to the theory, “sociological-institutionalism perspectives provide strong tools for understanding continuity, but by stipulating and privileging particular mechanisms of reproduction” (Thelen, 1999, p. 387). Community colleges can reproduce aspects of career and technical programs that have proven to be successful while eliminating ineffective programs. To accomplish this and to successfully implement and support the path dependency theory, it is important to understand the two major initiatives required to contemporize and facilitate the theory. These two initiatives are new vocationalism and theory to practice integration.

**New Vocationalism**

Career and technical education plays an important role in the vitality of the states’ economies (Laanan, Compton, & Friedel, 2006). Community colleges are embracing this by relating to their efforts as the new vocationalism. Career and technical education could also be defined as the educational pedagogy that employers, unions, governments, and adults should recognize as life-long learning in contexts subject to continual and rapid change (Blunden, 1996). Community colleges are the primary providers for career and technical programs at the
post-secondary level in nearly every state (Laanan et al., 2006). Therefore, the institution must develop a culture which embraces the new vocationalism through the lens of path dependency theory. The new vocationalism paradigm frames career and technical programs such that they are rooted in the liberal arts in order to prepare well-rounded students via a “multidisciplinary education, but with careful attention to the student’s career prospects and needs” (Hora et al., 2016, p. 9).

Path dependency provides a framework for the new vocationalism. It will provide a platform for curriculum development, program organization, and the creation of remedial courses and support. Students enrolled in career and technical programs at community colleges score higher on standardized tests than their non-career and technical counterparts (Bragg & Ruud, 2007). These higher scores could be attributed to the idea that career and technical programs at community colleges are excellent programs with appropriate project-based assessments and application. Career and technical education is rooted in the foundations of our society, but they need to be maintained and updated regularly in order to maintain the program alignment with the industry standards. As Laanan et al. (2006) explained that “While there can be little doubt that career and technical education programs nationwide serve an important function of training workers for productive careers, it is also true that many career and technical programs are outdated and underfunded” (p. 3). The underfunding issue is the primary reason why career and technical education is viewed as substandard to an academic degree – schools simply cannot keep up with the continuous updating of industry related software and methods required in many of the career and technical trades. However, a community college, which embraces path dependency, will ensure that career and technical education programs are well funded and updated to serve the students enrolled in those programs and society. Path
dependency, in this case, will act as a precursor to financially supporting career and technical programing.

**Theory to Practice Integration**

Career and technical education programs attract a different type of person than academic programs, as Herrnstein and Murray (2010) explained that “people vary in their intellectual abilities and the differences matter to them personally and to society” (p. 47). It seems that students enrolled in career and technical programs have a considerable amount of trouble in their general education courses, which is expected and natural (Murray, 2009). Therefore, community colleges must update or revise their career and technical curricula to match the needs of the industry and install student support systems to ensure that those students with general education deficiencies maintain their path progress.

It is no longer accurate to say that a student in a carpentry program does not need to take classes in English literature or college level math. In fact, there was a time when employers were not interested in whether an employee could hold a discussion or write correctly. To employers, if a student did well in a carpentry core course, that is all that mattered. Contemporarily, this is no longer the case. In the recent years, many low-wage, low-skilled jobs were replaced with high-tech, high-skilled jobs. Many of these jobs require strong math, language, and science skills (Laanan et al., 2006). Today’s high-tech, high-skilled jobs are challenging today’s community colleges. Therefore, the community colleges must implement theory to practice integration while continuing to serve students who enroll with significant disadvantages such as jobs to make time for overcoming the remedial needs and children to raise. Therefore, what it has taken to achieve good student outcomes in the past is not the same as what it will take to achieve good student outcomes in the future (Wyner, 2014).
This mix of the theory to practice integration and the perpetual student disadvantages will force community colleges to ask society for help and coordination in designing innovative and contemporary curriculum and assessment. Therefore, employers must assist in the contemporary design of career and technical curriculum. In addition, path dependency demands an analysis of career and technical curricula every three years to ensure that the curriculum provides students with the education and training that the employers expect.

In general, depending on a student’s background and exposure, he or she will graduate from high school and may decide not to go to college or will enroll at a specific college in a specific program. Some students graduate from high school and enroll in a career and technical field because that is what they have been exposed to. Hora et al. (2016) noted that the location in which a person is raised, changes in culture, lifestyle, and exposure to technology “may have more to do with the skills an individual develops than anything that can be legislated or addressed through a new educational or training program” (p. 52). If a student does not do well in high school, but is familiar with heating-ventilation and air conditioning (HVAC) work or electrical work, he or she might enroll in the HVAC technician program offered at their local community college. These students will graduate from a program and work in the industry as an HVAC technician. Other students may work in a particular industry directly out of high school then decide to enroll in a career and technical program to enhance their job skills and performance, which is a typical path to higher education. The argument about community colleges offering terminal degrees in trades such as HVAC is that many of these students do not finish these programs because they withdraw within three semesters to work for an HVAC employer, which compounds the perceived benefits of career and technical education. Lazerson (2010) asserted that students withdrawing from a career and technical program before
completing it is one of the most obvious outcomes of career and technical education programs, and it contributes to the “decline in the civic, moral, and intellectual purpose of education” (p. 53). However, a community college with a strong pathway, which includes the integration of theory and practice, can mitigate much of the premature employment or withdrawal. Without path dependency, students lack the stability they need to feel secure, and the confidence required to finish their academic training (Hoelscher et al., 2008).

The fact that the student loan debt is at an all-time historical high is a direct result of students enrolling in colleges (Simon, 2013). Of course, defending the argument that people should not attend college is difficult, but Murray (2009) indicated that perhaps this is where our policy needs to change. Not all humans have the capacity to complete college level work. Therefore, the student loan crisis would not be as prevalent if we would be honest with ourselves. Murray makes this statement at the same time that society is questioning the virtue of community colleges’ career and technical programs. The role that these programs play in our society provides an essential path for students who would otherwise not earn a higher education.

**Conclusion**

Community colleges are the go-to institutions for students who want to further their education. Enrollment at these institutions is not limited to first-time students; in fact, many people with graduate degrees enroll at their local community college for professional development or for retraining. There is no question that “more education typically leads to higher economic return” (Laanan et al., 2006, p. 5), which is directly related to the theory of human capital. This theory argues that a more educated workforce leads to a strong economy, and therefore, investments in education are returned through the benefits to the economy and the society (Sweetland, 1996). However, these benefits will only come into effect if the students
complete their programs. With more students considering community college as an affordable pathway directly leading to a job or a path to a bachelor’s degree (Wyner, 2014), the institution must embrace its relevance and rapidly implement the new vocationalism through the lens of the path dependency theory.
Chapter Two

Review of Related Literature

College level study in the past was necessary to obtain a career. Employers would seek people who earned a two or four-year degree. These degrees were seen as a necessary credential to earn gainful employment in the United States. While this remains the case for some college disciplines, the value of career and technical degree programs is being diminished, and the value of higher education, in general, is being questioned. In the past as well as the present, in some cases, an academic education is crucial for success in our society. Today, simply earning a bachelor’s degree does not equate to economic stability. However, there is no question that college preparatory courses are continuously cited as the only way to get ahead in society, “The idea that four years of higher education will translate into a better job, higher earnings and a happier life has been pounded into the heads of schoolchildren, parents, and educators” (Lagemann & Lewis, 2015, p. 9). Therefore, those students that could not function in an academic setting would tend to be sent to a career and technical school or would be enrolled in career and technical courses offered within their high school curriculum.

In the past, the academic world considered career and technical education to be a punitive measure for students that could not function in an academic setting. Career and technical education was considered a second opportunity to an academic education, and it was thought that those students who earned a career and technical education would not advance in society. As the benefits of career and technical education are examined, this thought process tends to be incorrect (Claxton, 2015; Crawford, 2011; Lucas et al., 2012).
Career and technical education offered at the community colleges is criticized for being too narrow in scope and breadth (Field, 2013). It seems that when students think of schooling in purely utilitarian and rich in credentials, they have every reason to get away with as little effort as possible as long as they obtain the credentials necessary for employment, which is contributing to the “dramatic decline in the civic, moral, and intellectual purpose of education” (Lazerson, 2010, p. 53). This sentiment is compounded further because career and technical programs are not developing the student holistically, leaving the student without a practical education after he or she graduates from the program. Community college career and technical faculty must compel students to engage in reading, writing, independent research, problem-solving, and cognitive analysis in an effort to develop the whole student while understanding that students are typically growing emotionally and morally (Braxton, 2009).

Historically, it was the obligation of the individual employers to focus on workforce development, and not on higher education (Stokes, 2015). Originally, career and technical courses had great sponsorship from private manufacturers, and other industries would champion courses to improve the knowledge of workers (Benavot, 1983). These programs would also generate support from the political arena, which would bring economic support. The idea behind supporting career and technical education was that if business owners could enhance the labor of their employees, then profits would rise, and unemployment would decrease.

By the end of World War II, career and technical education had become a legitimate element in education policy in the United States. Students enrolled in career and technical programs were typically from a working class background (Benavot, 1983). Career and technical education appealed to the increasing population and was viewed as practical education. Proponents of career and technical training hailed the idea because of industrialization.
Opponents demonized the program and labeled it as a program for the uncultivated. In the 1960’s, the American community college changed. During this time, the number of two-year institutions increased, as did their enrollment (Cohen & Brawer, 2003). It was at this time that community colleges nationwide decided to take on career and technical programs, thereby reinventing themselves and now servicing working adults as well as traditional students. Cohen and Brawer (2003) described traditional students as those students who attend college during the day and on a full-time basis. At the time, the general population viewed these community colleges as last resort institutions for high school students that did not do well academically (Carnevale, 2010; Pincus, 1986). In the 1970’s, the enrollment numbers for career and technical programs were equal to the enrollment numbers for collegiate programs. It was during this time that the Department of Education labeled career and technical training as “career education” (Cohen & Brawer, 2003, p. 51). In the 1930’s, secondary career and technical education institutions taught small engine repair, book-keeping, and basic agriculture. Junior colleges at the time taught technical laboratory work, office skills, and electronics repair. Today, community colleges operate in every state, and about half of the American college population is enrolled in community colleges (Cohen & Brawer, 2003). Community colleges offer a variety of collegiate, career, and technical programs in an attempt to serve a diverse climate of students and industries.

**Organization of the chapter**

Chapter Two is organized in the following manner. First, the researcher discusses the contemporary career and technical programs offered by community colleges. This section includes competency-based training and student retention. Following contemporary programing is a discussion about the argument that community college career and technical degree programs
offer a false promise. The researcher ends the review with a discussion about the association between the labor market and career and technical education, which includes a statement about the nuances of career and technical education and on the job training.

**Community College and Contemporary Career and Technical Education**

Community colleges had evolved dramatically from the time when they offered only an education to prepare students for entry-level careers, which typically required less than a bachelor’s degree. Contemporary community colleges are offering career advancement, vocational, academic, certification, and high school equivalency courses. In addition, many community colleges offer transfer tracks. This transition has shifted toward broader preparation, which develops career and technical students holistically (Levesque, Lauen, Teitelbaum, Alt, & Librera, 2000). This evolution in community college paradigm is essential to understanding the purpose and future of the community college system in the United States.

Industries associated with career and technical trades have criticized career and technical training programs because they saw these programs as a way for the college to attract less than competent students to satisfy the schools’ financial goals. Today, community colleges have responded to this criticism by indicating that they do not offer career and technical training. Instead, they offer a career and technical education in which students can earn a two-year degree after the completion of rigorous industry respected coursework. A career and technical education program in the contemporary community college system includes the same standards concerning general education requirements required of all students enrolled at the college (Keiser, Lawrenz, & Appleton, 2004), which were developed specifically to fulfill the purpose and future mission of the community college. A focus group session conducted across three cities revealed that employers credited community college career and technical programs as
“most credible teaching and training entities. Graduates of these programs are considered to be more ambitious, motivated, disciplined, physically accessible, and literate” (Osterman, 2011, p. 130).

Education in the United States has become result driven, and society is questioning the value of a college education. Our society is questioning the abilities of our college graduates. Questions about the efficacy of college-level learning, in general, are being pondered at the secondary school level before high school graduation (Arum & Roksa, 2011). High schools are over assessing their students with standardized tests and mandatory curricula. Therefore, secondary career and technical education has taken a less prevalent position against these new standards. These measures are detrimental to the student’s ability to explore careers while in high school, which is causing ambivalence between high school career and technical program graduates.

Any discussion about the value of higher education is rooted in the debate about the return on investment. The principle question is, will students graduate from career and technical educational programs and offer a return to society (Lagemann & Lewis, 2015)? This return, of course, is the student’s ability to contribute to society after graduation. Public funds are used to support educational institutions. Therefore, the public has an invested interest in the return to society. Community colleges recognize that the industry was not happy with the career and technical education being offered at the secondary level (Keiser et al., 2004), and their response was to offer a rigorous curriculum in career areas that the community needed the most. A community college is funded publicly, and therefore their curriculum must always reflect what the community is looking for or what the community is in need of (Wyner, 2014).
In 2008 and beyond, labor market workers were being laid off in record numbers. In many communities, if the largest employer closes or lays off droves of employees, the local community college usually responds with retraining programs. These retraining programs are short-term solutions with the intention of reintroducing these workers into the modern workforce, and these programs usually include computer skills and technology. Career and technical retraining programs are not the same as a career and technical education program. They do not offer the same rigorous curriculum, but these programs do offer students an opportunity to take a college-level course, which they may not otherwise have had a chance to take. These courses get them to college, and in many cases, they decide to enroll in closely related career and technical programs (Kane & Rouse, 1999). This exposure to higher education is, in part, the purpose of community college career and technical programs and the community college in general. They give students an opportunity to better their position in the society. High schools are not doing a good job in preparing students for four-year institutions, and not every student can earn an academic education (Carnevale, 2010; Conley, 2010; Rosenbaum, Deil-Amen, & Person, 2007). Therefore, community colleges provide the training required for these students to be a good return for the society (Murray, 2013).

The idea that career and technical education is the same as career development is a perpetual debate. The general view is that the students cannot learn career skills in an academic setting. Many career and technical education programs require that students complete an internship, which will provide some career competencies coupled with an academic foundation in the subject matter. With respect to the traditional teaching and learning model, where students arrive on campus and sit in a lecture hall or lab, the rhetorical question would be which aspects of the learning environment show the evidence of a relationship with the nature of and the degree
to which career competencies are used by the students (Kuijpers, Meijers, & Gundy, 2011), and this seems to be more prevalent in contemporary society.

Community college presidents rebuff the idea that community colleges are career and technical schools: “Community colleges are the communities’ college and they provide the education and training that is requested by the community and by the industry” (J. Sbrega, personal communication, March 2015). Community colleges are not job placement agencies. However, all community colleges have a job placement or career service center on campus (Floyd & Skolnik, 2005). That office is responsible, in part, for assisting students with the development of their resume, job searching skills, and other essential tools and procedures necessary to obtain gainful or entry-level employment. It is of course not a surprise that employers will recruit candidates via on-campus placement procedure. This partnership is the foundational reason why community colleges and their career and technical curriculum will continue to be an important part of our communities (Soares, 2010).

**Competency Based Training.** A significant problem that is plaguing career and technical education, in general, is that community colleges seem not to use competency based training (CBT) (Wheelahan, Maton, & Moore, 2010). While four-year technical colleges offer associate and bachelor degrees to full-time and part-time students, these schools have the resources to spend on CBT (Yorke, 2006). CBT is recognized as a model of learning and teaching that includes outcomes (based on industry and academic standards), and curriculum (a clear path of study that has been approved by the institution and professionals). CBT includes delivery for a clear understanding of the subject matter to include hands-on and co-op opportunities, assessment-for-learning to demonstrate competence and functionality of CBT, and

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a record of competence gained as the learners progress through the curriculum (Harris et al., 2001). The idea of using CBT to help students progress through their curriculum correlates with the fundamentals of path dependency (Hanushek et al., 2011).

CBT is a theory, and each institution interprets CBT differently. It is clear that community college career and technical programs do not have the same resources available as the technical colleges do. There are many definitions of competency based training, but “A widely accepted definition of CBT does not currently exist” (Gonczi & Hager as cited in Hanushek et al., 2011, p. 14). Therefore, a community college could insist that they have a CBT policy in place for their career and technical education program, but it could, and most likely will present differently than the CBT presented by a technical college.

Employers are looking for employees that are flexible and adaptable to increased production. However, this also means that employees must be working and studying, which makes community college programs more appealing. Career and technical education is intended to supplement on the job training, increase productivity or act as a learning foundation including exploration, but career and technical programs must be developed and aligned with employer expectations in mind, study and work can no longer be “polarized” (Boud & Garrick, 1999, p. 12). While learning at work has its benefits, new technology, and information cannot always be learned or taught at work. Therefore, employers are looking to career and technical programs to supplement that information. Suddenly, we are back at the original reason as to why career and technical education programs exist – to increase worker and employee production.

On the other hand, Boud and Garrick (1999) wrote that surprisingly dialogue between those who have studied learning and those who need to understand the learning implications of work does not exist. This lack of dialogue is problematic when it comes to curriculum
development especially in the career and technical subjects. Community college faculty and administrators who do not understand the learning implications of work are less willing to cooperate regarding the assisting in the curriculum development phase of career and technical programs.

**Student Retention.** Contemporary society has experienced a change in the way we promote and relate to higher education. Many students graduate from colleges and universities and have trouble finding jobs, and not to mention careers. There was a time when educators would tell students that the only way to get a career was to attend a four-year institution of higher learning; and that it was the only path to economic success in the United States. As a society, we now realize that time has changed and that there are alternate methods of finding and securing a career (Roberts, 2010).

Career and technical education serves a specific group of individuals; those individuals are interested in career and technical subjects. Even if a person is theoretically capable of earning a college-level liberal education it does not mean that they should. The rhetorical question is “Should all of those who have the academic ability to absorb a college-level liberal education get one?” (Murray, 2009, p. 100) Our current community colleges are comprehensive, and they act as a principal provider of academic instruction and a major provider of career and technical education (Silverberg, Warner, Fong, & Goodwin, 2004). Entrance into baccalaureate-granting institutions has gotten much more competitive in recent years. Therefore, students of a low socioeconomic status who do not have the means to be educationally competitive are taking advantage of dual enrollment programs at their high schools (Kasper, 2003). Dual enrollment programs allow high school students to take community college courses with the hope of improving their eligibility to a four-year degree granting institution. While these types of
programs work to promote higher education, it is often the case that student retention in career and technical programs is problematic (Kasper, 2003). Despite enrollment agreements and dual enrollment programs with high schools, community colleges are struggling with student retention. However, student retention is problematic for higher education in general and not exclusively for community colleges (McInnis, Hartley, Polesel, & Teese, 2000).

In the United States, career and technical education retention is problematic because most of the students who enroll only experiment with different career fields and will withdraw when they discover that the discipline does not interest them (McInnis et al., 2000). Dropout figures of a career and technical program are not necessarily negative, “There is a range of individual motives for enrolling and for withdrawing that must be seen as positive outcomes” (McInnis et al., 2000, p. 8). Therefore, students who enrolled to gain specific training and then withdraw to pursue an employment opportunity could explain the withdrawal figures.

This scenario is particularly prevalent in career and technical courses that are offered in the evening. In this case, students (mostly working adults) enroll in a particular course for the sole purpose of updating their knowledge in the subject matter or learning a specific job skill. These types of students are not interested in a degree-granting program. In general, career development courses can significantly enhance the dimensions of a student’s career development and maturity (Pascarella, Terenzini, & Feldman, 2005). However, this does not change the fact that “the majority of students who enter community college do not succeed, and this failure comes at a great cost to them and society” (Pascarella et al., 2005, p. 535).

Summary

Community colleges are on America’s front lines regarding providing higher education, and these institutions are often the go-to choice for many high school graduates and adults. In
2014, the community colleges nationwide enrolled 44 percent of students enrolled in higher education (American Association of Community Colleges, 2016). Community colleges are a place for innovation and employers understand that this innovation can be beneficial to their labor production. There is no question that the benefit of higher education is contingent on the ability of the institution to provide students with skills to facilitate entry into the labor force (Lazerson, 2010). Community colleges will collaborate with employers, especially with those companies that are associated with many of the college’s career and technical programs to ensure that the curriculum they are offering is contemporary and relevant.

Community colleges are “held accountable for preparing students to be competent citizens” (Lagemann & Lewis, 2015, p. 12). A debate about the purpose of higher education revolves around the premise that higher education benefits both the students and the society. The literature reflects this idea by indicating that community college has a “deeply structured approach to technology education” (Wyner, 2014, p. 15), but this method must be extended to the rest of the curriculum as well. The objective of the college is not to prepare workers for specific jobs, but to prepare students to succeed in an economy, where jobs will come and go, and where, new and unanticipated careers may come up. Despite the success community colleges have gained over the years, the idea remains that their career and technical degree programs are offering students a false promise.

**Career and Technical Education: A False Promise?**

Community colleges used to be a mechanism, which people could use to gain economic stability. These colleges are also the first layer of higher education for students with a low socioeconomic status. In the United States, community colleges would offer a host of academic programs, including liberal arts and humanities (Hoelscher et al., 2008). While the various
humanities and liberal art programs typically left students unemployed (Bennett & Wilezol, 2013; Côté & Allahar, 2011), they did act as a platform for continuing their education.

Rumberger and Daymont (1982) noted a fundamental institutional change in community college offerings during the late 1970’s from college-parallel liberal arts programs to terminal career and technical programs. About two-thirds of students enrolled at a community college are enrolled in a career and technical program. Despite faculty warnings (Lazerson, 2010), America’s community colleges are becoming de-facto career and technical schools.

Community colleges typically see themselves as the communities’ college, and it is essential for the successful operation of these schools to offer programs that are in high demand within the community. The question of whether community colleges have an ethical obligation to respond to employment needs of the community is a foundational issue for all the college administrators (Johnstone & Marcucci, 2010). Many community college presidents will argue – yes the community college must respond to employment needs within the community they serve because most of the operational funding comes from the community (Kelley & Pepe Lee, 2007). However, many of these presidents do not agree with the notion that community colleges are becoming de-facto career and technical schools, and they also argue that community colleges are not job placement agencies (Kuijpers et al., 2011).

Society is ambivalent about the role of community college career and technical education programs because students go to college for one or two years, and then enter the workforce with the “hiring company having no long term obligation to them” (Stokes, 2015). Critics argue that community colleges in any way cannot control educational equality, which results in a false promise (Pincus, 1980) because they cannot control the unemployment rates, and they do not enable social mobility within the society. In addition, community colleges that offer terminal
career and technical degrees hinder the transfer process that many students would otherwise take advantage of (Leigh & Gill, 2003; Pincus, 1986). Some critics add that two-year associate terminal degrees do not result in gainful employment (Hoachlander, Sikora, & Horn, 2003). Therefore, these false premises perpetrated by community colleges are problematic. Career and technical education is a safety net, and most school systems tend to maintain a clear distinction between academic and career and technical education systems. One reason for this is that the school system believes that the career and technical student will eventually be working for the academic student, which in turn creates a different relationship between community colleges and career and technical education (Ravitch, 2013; Shavit & Muller, 2000).

Distinction by school systems in terms of classifying students as academic elites and less than intelligent career and technical students hinders the ability of career and technical students to succeed, and it teaches the students very early on that a career and technical education attracts weak minded people who cannot obtain an academic education, as stated by Shavit and Muller (2000). In some cases, community college career and technical programs offer a limited curriculum in an attempt to graduate the students faster for employment purposes, “since academically weaker students usually enroll in career and technical tracks they are deprived of the beneficial effect of a more favorable milieu” (Shavit & Muller, 2000, p. 30).

It is unfortunate that any level of education could be a false promise. In fact, “postsecondary career and technical education provides economic benefits to most participants, with the minority who earn a credential reaping the greatest benefits” (Silverberg et al., 2004, p. 116). Thus, a student studying to be a dental hygienist completes his or her two-year associate’s degree at a community college can then take a certification exam. Upon successful completion of a certification exam, this student is now employable as a dental hygienist. Community
colleges offer a host of programs similar to this, and typically, students use these programs as stepping-stones to an advanced employment position. For some people, all they need is a two-year associate’s degree. However, it should be noted that less than half of students who enroll at a community college earn a credential (Silverberg et al., 2004). Education at any level is what the learner makes of it. Although, community colleges are a great stepping-stone for some, and for others, a terminal career and technical degree is all that they need.

**Summary**

Community colleges and employers are in a tenuous relationship. Community colleges offer career and technical programs, but these offerings are predicated on the idea that businesses working within that particular discipline will hire the graduates. On the other hand, employers take on the entire burden of hiring employees, and when the labor market does not warrant an employer to hire new employees, then the college graduates are left holding their career and technical education with no place to apply it. Community colleges can offer various career and technical programs, but they cannot influence or predict the nuances of the labor market. This uncertainty in the labor market leads to the excoriation of community colleges because they offer terminal degrees to students in subject areas, in which a student is not guaranteed to benefit (Lazerson, 2010; Pincus, 1986).

**The Labor Market and Career and Technical Education**

Students with a general education have higher scores on literacy tests than those students with a career and technical education. However, this does not have an effect on employment in the United States (Hanushek et al., 2011). In the United States, employment statistics are even with respect to people being employed with a general and career and technical education (Harris et al., 2001). Recent studies of cognitive development in discipline specific areas are leading
reforms in general education (Claxton & Lucas, 2012). The theory that some people learn by practice tends to be true. Herrnstein and Murray (2010) argued that it is also true that some people naturally do not have the mental capacity to obtain an academic education.

Concerning the relationship between community college and career and technical education, the labor market should have a considerable amount of influence on the curriculum (Witte & Kalleberg, 1995). The premise of a career and technical education is to enhance employability at the completion of the program. Therefore, colleges must have a working relationship with the employers of jobs that are in demand in society (Mann, 2017).

In 2008, the labor market went into a depression state (State of Working America, 2010). Because of this, the country experienced a mortgage crisis, and while this crisis dominated the media sources, two other crises were plaguing the country: unemployment and student loan debt. During the 2008 economic crisis, employees were being laid off at record high rates. Hospitals, architectural design firms, law firms, municipal schools, colleges, universities, and other employers were all handing out layoff notices. It seemed as if there was no escape. Today, our economy has rebounded, and the largest employable trade group consists of those with career and technical education (Symonds, 2013). The labor market is saturated with job offers for plumbers, electricians, builders, carpenters, and other craft trades. Suddenly, people with a current career and technical education are in demand.

**Career and Technical Education vs. On the Job Training.** Those students who participate in cooperative learning (CO-OP) programs tend to express better attitudes about both school and work than the non-co-op students (Stern, Finkelstein, Urquiola, & Cagampang, 1997). A cooperative learning program is defined as a joint program between an institution and an employer (Hertz-Lazarowitz, Kagan, Sharan, Slavin, & Webb, 2013). The specific details of
this arrangement are left to the agreement between the school and the employer. Typically, the
students select the career and technical programs that offer co-op opportunities. For example,
the students enrolled in a construction management program often intern with large construction
general contractors or construction managers. The students enrolled as architectural interns at
architectural firms and other design discipline firms. The students enrolled as nursing interns at
hospitals or medical schools.

Co-op opportunities are valuable to a career and technical educational program (Hora et
al., 2016; Wyner, 2014). As an example, a student taking electronics courses at the high school
level can then enroll at the local community college and earn a two-year degree in electronics
technology. This student is highly employable at this stage in his or her career and technical
training. However, this student has not participated in a co-op program because many
community colleges do not offer a co-op opportunity. The problem here is that this particular
student may enjoy studying electronics, but working as an electronics technician may not be
challenging enough for him or her. Top-ranked Finland and South Korean educational systems
use a project-based educational approach in as early as high school (Witte & Kalleberg, 1995).
In the United States, most community colleges offer programs which do not offer a co-op
opportunity component. In fact, unless a student enrolls at a career and technical high school,
they will not have a co-op experience. Therefore, they will not experience the labor force until
after they have graduated from their community college career and technical degree program,
which limits their exposure to the industry and diminishes their skill sets upon graduation.

Summary

Employers have always provided some level of on the job training. Colleges cannot
teach students every aspect or nuance of every job available to them within their discipline.
However, community colleges can recognize the nuances and make provisions for them through a curriculum that offers the best advantage for its students. The premise of offering career and technical education programs is to increase employability for the graduates of such programs and to provide essential foundational teaching, which will ensure that graduates are holistically trained and well prepared for the industry they are preparing to enter. The intention of career and technical education is to be foundational, and employers have the responsibility of streamlining training once they hire employees. Therefore, the intention of training students in a career and technical field or trade has always been a shared venture between community colleges and employers.

**Conclusion**

In our contemporary society, the need for career and technical education at the community college level is as great as it has ever been. This need, however, is not without the argument that the relationship between community colleges and the democracy in higher education is becoming frayed. This relationship is interpreted to mean that community colleges are offering too much job training and not enough of a broader education (Griffith & Connor, 1994). Training people for a particular job is not as important as educating the person in a holistic manner. This argument is not without merit. However, Eddinger (2014) indicated that a community college needs to teach students the technical trades in order for them to become contributing members of the society, but the student needs to be developed as a whole because most people change careers six times throughout their lives.

A rhetorical question that often appears in the literature is, does a career and technical education at the community college level develop the student holistically? It is a plausible concept that every student will not be able to support a development curriculum (Murray, 2009).
It is naturally not possible for everyone to be completely developed intellectually. Everyone has different abilities with respect to their cognitive skills and “Individual variation in cognitive skills has been shown to affect the educational process” (Ainsworth & Roscigno, 2005, p. 6). Career and technical programs offer a platform for those people who learn better by doing to contribute to society. Our communities include many different people each with a different skill level. The idea that community colleges offer an underclass education is derived from the very same snobbery that developed career and technical programs at community colleges to begin with (Claxton & Lucas, 2012; Crawford, 2011; Massey, 2013).

However, the idea that community colleges are offering an underclass education is supported by the argument that community colleges are offering too much job training and not enough broad essential education (Doyle, 2009). The fact that students can earn a two-year career and technical degree and then enter the workforce is hindering the student’s ability to transfer to a four-year institution to finish their education (Lazerson, 2010; Leigh & Gill, 2003). Community college career and technical programs diverting students from transferring to four-year institutions become the fundamental argument about the purpose of career and technical programs offered by community colleges. A few rhetorical questions that surface within this argument include, when is a student’s education completed? Do all community college graduates have to transfer to a four-year institution (Wyner, 2014)? Are community colleges contributing to the separation of America regarding inequality (Murray, 2013)?

These questions, which are associated with the fundamental purpose of a community college, lead to additional rhetorical questions about the validity of a higher education. What is the purpose of a career and technical education? What is the purpose of higher education in general? It could be argued that the purpose of a higher education is to ensure that students
graduate and become contributing members of the society (Lagemann & Lewis, 2015). Others argue that the purpose of higher education is to graduate, get a good paying job, and be able to move out of a poor socioeconomic situation. The context of the argument about the purpose of a higher education purports that a career and technical education cannot achieve this goal (Lagemann & Lewis, 2015).

More research is needed to accurately determine the significant positive or adverse effects of a career and technical education on students and society. The literature seems to indicate that community college career and technical degree programs tend to have a positive effect on students and society. Therefore, it could be deduced that community colleges without the career and technical education degree programs are providing a disservice because they will be excluding an entire population of people from an opportunity to earn a higher education. This study explores the experiences of currently enrolled students or alumni of community college career and technical degree programs.
Chapter Three

Research Methodology

A research methodology is derived from the problem being investigated and the best way for this problem to be analyzed (Lagemann & Lewis, 2015; Soares, 2010). The research design will provide the researcher with a recipe, which articulates how data should be collected, analyzed, and interpreted using methods associated with the approach (Rocco & Hatcher, 2011). The selected design governs the methodology used to conduct the study and the procedure for reporting its findings. In addition to the problem being investigated, it is the researcher’s responsibility to ensure that the selected research design is the most appropriate path for satisfying this study’s purpose and that the design is aligned with the research questions and sub questions.

To conduct this study, the researcher used the phenomenological research tradition. Phenomenology is defined as the lived experience, perceptions, perspectives, and understanding of meaning as research participants experienced a particular situation through their conscious being (Bhaskar, 2014; Creswell, 2012; Eddington, 2012; Leedy & Ormrod, 2014).

The following central question and subsequent sub-questions guided the exploration of student and/or alumni experiences and the educational effectiveness of their career and technical education program at community colleges:

Central Question

*How do currently enrolled students and alumni of community college career and technical education degree programs assess the efficacy of their educational experience?*

While this central research question allowed for foundational phenomenological data, additional questions were developed to define the focus of this study further.
Sub Questions

A. How do currently enrolled students and alumni describe their community college career and technical program experience regarding their future education?

B. How do currently enrolled students and alumni describe their community college career and technical program experience regarding their employability?

C. What factors led the students to enroll in a community college career and technical degree program?

Organization of the Chapter

Chapter Three is organized in the following manner. First, the researcher discusses the positionality and bias, followed by the research design and paradigm. Next, the researcher discusses the study’s procedure, which includes participant selection and sample strategy. These are is followed by a discussion about data collection and data analysis methods. The researcher then discusses the data storage and the presentation of findings. Finally, the researcher discusses the validity of the study and the protection of the participants.

Researcher Positionality

While attending high school, I spent much of my time in the career and technical wing of the school. My high school was a traditional academic school, which offered a limited amount of career and technical courses. I found schooling to be more interesting and enjoyable because the career and technical courses provided me with the ability to apply what I learned in my academic courses.

Herrnstein and Murray (2010) discussed the idea that not everyone has the capability to function successfully in an academic setting, which I found to be true according to my experience. My father was an electrician after leaving the Air Force, and my mother was a stay-
at-home mom, so I did not have a lot of support regarding the educational values. I was attracted to the construction industry because that is the industry my father worked in, and I presumed that it was the industry I was destined to work in.

Positionality is based on the experiences and beliefs of the researcher. The position a researcher takes on a particular topic is typically directly related to his or her past interactions. Briscoe (2005) stated that “Dimensions of positionality include one’s demographic positioning within society, one’s ideological positioning, and how one discursively positions the other and oneself” (p. 32). Change agents must be cognizant that their positionality will have an implicit influence on the reach topic and process.

**Background.** My career and technical training while in high school provided an opportunity for me regarding career choices. I graduated from high school and then enrolled at the local community college because at that time the community college was my only option for exploring those career ideas. I enrolled in the colleges’ engineering transfer program, which meant that after completing two years of community college course work, I could transfer to a four-year institution to earn a bachelor’s degree in the discipline.

After community college, I decided that I enjoyed the engineering field. I enrolled in the architectural engineering program at a four-year career and technical institution and earned a Bachelor of Science Degree in Architectural-Engineering Technology. Due to my socioeconomic circumstances, I had to complete my bachelor’s degree while working full time in the construction and design industry. Working full-time and studying turned out to be tough for me and required me to sacrifice a great deal in order to complete my degree, which I was determined to do.
I was introduced to teaching the discipline at the college level, which I do currently as an instructor at a community college in the architectural and engineering department. Career and technical education has provided for me financially by providing me with employment opportunities. However, my career and technical education has provided for me in a more important form. At the time, it gave me an opportunity to experience higher education, which I would not have otherwise had. This opportunity, in turn, has given me academic and psychological confidence.

I feel that career and technical education at college level is being attacked with arguments that include job experience as being more important than an education and that vocationalism outcomes include a decline in the civic, moral, and intellectual purpose of education. Contemporarily, our society is questioning the value of a college education. Many career and technical job market opportunities do not require a college degree and, for the most part, many career and technical positions can be taught on the job, and not in the classroom. However, students will enroll in career and technical programs, especially at the community college level, in an attempt to experiment with different career options. Students at this level do not know what their career will be and often the community college can be an experiment for them. Concerning students that have established careers in the career and technical industries, in my opinion, community colleges are the best organizations to provide retraining, continuing education, certifications, and other industry-required credentials.

Career and technical education was understood to be for students who could not function in an academic society and that students enrolled in technical schools or programs would not be able to advance themselves in society. President Obama and several governors have charged our community college system with the task of enhancing and redeveloping education in the United
States (Field, 2013). In our current economic climate, career and technical positions are seemingly in abundance. I am attempting to position myself to be able to assist in the development of state of the art career and technical training and programs that will benefit society and students. Benefitting society means that adults will earn a living and will be able to pay taxes, and career and technical education can be the only way this happens for some people (Murray, 2009).

**Researcher Bias.** My positionality on this topic is driven directly from my experience as a student of career and technical programs, as a professor in practice, and as a scholar-practitioner. My bias is that my professional background is in the career and technical trades and, academically, my undergraduate work at the associate and bachelor degree level is in the career and technical field.

I earned my associate’s degree from a community college career and technical program and my bachelor’s degree from a four-year technical school after taking advantage of the community colleges career and technical transfer program. I support career and technical education at the community college because that is where I was given an opportunity, which ultimately provided for me in several ways. Without this opportunity, I can presume that I would not be as accomplished as I am today.

We live in a society where we see those at the top of the financial markets, as being successful, but school leaders and policy makers cannot measure success by how much money students make after graduation. Success to school leaders and policy makers should mean that he or she worked collaboratively to enable the graduation of as many students as possible who then contribute to society by being upstanding taxpaying citizens. This does not mean that every student who graduates from high school must enroll in a four-year degree granting institution.
However, this does mean that a career and technical education at the community college level is now more than ever a viable option for those students that are vocationally inclined. Our community colleges must be ready to accept these students with progressive curriculum, challenging project based course work and assessments, and competent instructors because sometimes a community college can change a person’s life, as it did for me.

**Research Design**

The researcher chose to use a qualitative research design to conduct this study. The decision to use a qualitative design was based on multiple factors. The researcher explored student and alumni experiences of their community college career and technical program. An exploration of a research problem indicated that a qualitative method is appropriate and the research design approach should match the research problem (Creswell, 2002). In addition, the researcher must understand how the research is going to be reported. Finally, the researcher aligned the research design with the understanding of research concepts and experience.

**Qualitative Method.** Qualitative research in a sense requires that the researcher be an instrument, which is used to interpret social interactions, and the perceptions of the participants included in these interactions (Leedy & Ormrod, 2014). Therefore, the researcher must be able to isolate bias and take an “objective approach to studying human events – interpersonal relationships, social structures, creative products, and so on” (Leedy & Ormrod, 2014, p. 139).

Qualitative research requires the researcher to focus on finding meaning and identifying how humans interpret this meaning. It does not identify cause and effect relationships. Instead, Creswell (2012) identified the following purposes for qualitative research.

**Descriptions.** A description can articulate the nature of certain situations, settings, process, relationships, systems or people. It is important for the research that participants of the
study be able to describe, within the context of their perspectives, their understanding of an event or experience.

**Interpretation.** Interpretation allows the researcher to learn about a particular phenomenon and develop new concepts or perspectives about it. Interpretations allow the researcher to discover problems within the phenomenon. Understanding how the research participants interpret their experiences is essentially the heart of qualitative research.

**Verification.** Qualitative research typically starts with assumptions, claims, theories, and generalizations, which the researcher must verify in a practical context. Often, this means verifying and validating the research as it pertains to real world applications.

**Evaluation.** Evaluations provide an assessment in which the researcher can gauge the effectiveness of policies, practices, and innovations. Often, this includes observations of procedures or practices within an ordinary and natural setting.

Qualitative research design permits the researcher to investigate questions of meaning and understand how the participants interpret that meaning and it allows the researcher to examine process and practices within the scope of the research model (Starks & Trinidad, 2007). A qualitative methodology focuses on exploring a problem rather than explaining it. Therefore, Creswell (2012) suggested that “qualitative research questions are designed to ask how or what rather than why” (p. 138). Thereby, allowing the researcher to learn from the study’s participants and to analyze the participants’ meaning of an experience or event. These experiences can then be connected to practical applications (Leedy & Ormrod, 2014; Saldaña, 2015). A significant experience is the result of a social process (Bhaskar, 1998b), which generates actual phenomena through experiences and events. Qualitative inquiry requires the
researcher to understand that experiences are not less real than events and that events are not less real than social structure (Eddington, 2012).

Qualitative methodology is the most appropriate method for proposing this study’s central and sub-questions. This research method permitted the researcher to examine the experiences of currently enrolled students or students that attended a career and technical degree program at a community college. In addition, the research method provided an opportunity for additional research, in the form of additional questions derived from data collected during the current study.

**Research Paradigm**

To conduct this research study, the researcher used the constructivist paradigm. This paradigm is in line with the study’s research questions, framework, and its qualitative methodology. Constructivism is predicated on the premise that “there is an innate human drive to make sense of the world” (Kerka, 1997, p. 2). The constructivist paradigm suggests that ontological beliefs create a person’s experience; they will create the subjective meaning of these experiences leaving each to their interpretation of this meaning (Creswell, 2012).

Subjective meaning within the context of the constructivist paradigm means that people learn from their personal experience and their interpretations of those experiences. Bernstein (2000), as cited in Wheelahan (2009), suggested that the nature of knowledge is how a society conducts its conversation about itself and what it should be like. While “fair access” (p. 9) is essential to the nature of knowledge, the complexity of society’s dynamics and its relationship with the natural and social world makes constructivism ambiguous. Collier (1994) argued that constructivism is predicated on the idea that experience is gained through living, but that not all experience is gained equally. A “critical realist” (Wheelahan, 2009, p. 3) will argue that while
the laws of physics govern everything, not everything is governed by the laws of biology, especially regarding education, “not all things are regulated by the laws of a capitalist economy” (Wheelahan, 2009, p. 3). The complex thought here is that the dynamics of our society will create different experiences and that experiences could be manipulated or manufactured.

According to Bhaskar (1998b), there are three levels of experience, (see Appendix A): real, actual, and empirical. Within these three levels, there are three domains: mechanisms, events, and experience. An example, of a mechanism in the social world, is class. Gravity is an example of a mechanism in the natural world. Bhaskar (2014) defined the domain of events as a place where real and actual events take place. Bhaskar (1998b) articulated that within this domain “outcomes cannot be predetermined, but some events can be perceived and others cannot” (p. 3). Finally, the domain of experiences is defined as empirical, which means this domain has been “generated in the real and took place in the actual” (p. 3).

A constructivist paradigm asserts that people will learn from their experiences, an instrumentalist paradigm asserts that learned concepts are only tools and that there are no provisions within constructivism to identify whether these concepts are true or false (Wheelahan, 2009). For this study, the researcher used the constructivist paradigm because it aligns with the research purpose and questions. However, there is an understanding that the objective of this study is to analyze the learned concepts as a result of the participants’ experience. The researcher understands that the applications of the learned concepts are a delimitation of this study and allows for additional research within the instrumentalism and constructivism paradigm as they relate to community college career and technical education. In addition, the researcher understands that within the constructivist paradigm, instrumentalist and constructivist share the
view that “authentic learning in the workplace” (Wheelahan, 2009, p. 9) should not be sacrificed for complexity and depth of academic curricula.

**Research Tradition**

A research tradition will often force the researcher to decide between substantive and formal theoretical questions (Bhaskar, 2014). To make this distinction, the researcher formulated the research questions in a particular format in order to align the questions with the appropriate tradition. In addition, the research tradition acted as a framework for conducting the study and for reporting and presenting the findings (Cohen, Manion, & Morrison, 2013). Phenomenology was the research tradition chosen to facilitate this study.

**Phenomenological Approach.** As the selected research methodology, the phenomenological design was appropriate for this study because this method focuses on identifying commonalities between the lived experience of the participants (Van Manen, 2015). This research study focuses on examining a concept, which was hidden within hermeneutics and phenomena. As the researcher explored these categories, associations between the phenomenological data provided by the participants were discovered. Van Manen (2015) indicated that there are many different types of phenomenology. This study used the transcendental phenomenology. According to Moustakas (1994), transcendental phenomenology focuses on the descriptions of the experiences of the participants, and it does not include the ontology of the researcher.

**Philosophical Underpinnings and Overview.** A phenomenological methodology intention is to flush out the findings of a concept. Giorgi (2012) discussed phenomenological reduction in which case the researcher must “bracket” (p. 3) their personal perspectives and theoretical ideology so that they can focus strictly on the phenomena being studied. There is a
difference between a phenomenological study and an empirical one. According to Friedeberg (2002), this difference is embedded in imaginative variation to which a study lacking imaginative variation cannot be described as phenomenological because it is an empirical study. However, Trumbull (2005) indicated that phenomenological bracketing consists of bracketing the phenomenon, and not the researcher’s ideology or experiences, and only after this is accomplished should imaginative variation be used. 

Imaginative variation is the process in which the researcher attempts to define possible meanings through imagination (Husserl, 2012). This process acted as a brainstorm and triggered different perspectives and approached the phenomenon. While it is plausible that imaginative variation could be useful, Trumbull (2005) suggested employing it only after the researcher has accomplished delimitation. The idea that a research methodology can be changed depending on whether the researcher uses his or her imagination is overwhelming. However, without imaginative variation, a phenomenological method could not exist (Friedeberg, 2002). While using the empirical method, the researcher brackets out their ideology, theory, and experiences and collects data from several participants who have experienced the phenomenon. After using empirical, and transcendental phenomenology to conduct the current study, there is no question that it is a traditional method. (Moustakas, 1994).

Bracketing out personal experience, ideology, and theory could be problematic due to the researcher’s ontology. As the researcher has experienced life, the researcher’s sense of being can be incorporated into their research unconsciously through propositions, which is ironic because a phenomenological study focuses on collecting data through conscious experiences.

This study’s purpose is to explore student experiences as they relate to the efficacy of career and technical education degree programs at community colleges through the social
process and experiences of currently enrolled students or students who have graduated from a career and technical degree program at a community college (Moerer-Urdahl & Creswell, 2004). The researcher recruited participants for this study who were able to speak directly to the phenomena under investigation. There is no expectation that the experiences of these participants will be generalized to the population at large. However, their accounts of the social process will contribute to the phenomena and structure being investigated (Bhaskar, 1998b; Creswell, 2012; Leedy & Ormrod, 2014).

**Participants and Sample**

Twelve participants were recruited for this study and will be categorized in the following manner. Six of the twelve participants for this study were students who were currently enrolled in a career and technical degree program at a community college and had acquired, at the time they were interviewed, at least 30 credit hours. The remaining six participants were alumni of a community college career and technical degree program. The alumni were divided equally into those who transferred to a four-year institution and those that have not transferred to a four-year institution. Collecting data from 12 participants has allowed the researcher to collect enough data to explore the experiences of students enrolled in or have graduated from a career and technical degree program at a community college. In addition, this data could be used to articulate the implications if career and technical education degree programs were not offered at the community colleges. The researcher chose to use purposeful criterion sampling as the method to recruit the research participants. The purposeful criterion sampling method ensured that the participants had direct experience with the phenomenon being explored and allowed the researcher to recruit participants within a narrow context. In order for the researcher to explore the lived experiences of the participants, the participants must have consciously experienced the
phenomenon being explored (Bhaskar, 2014; Creswell, 2012). The researcher accepted participants on a first-come, first-served basis (Luborsky & Rubinstein, 1995).

This study is limited to the phenomenological data obtained by participants who were enrolled in or are graduates of career and technical degree programs at a community college. Therefore, the demographics of the participants including, race, religion, gender, socioeconomic status, and academic ability are considered to be a delimitation of this study. In addition, exclusive of technical community colleges, all the technical schools, secondary school career and technical education programs, and private career preparedness institutions were excluded from this study. Students who were enrolled in a career and technical education program at a community college, but were not actively participating in the program were excluded from this study.

This study’s participants were limited to their phenomenology at their particular institution. This study was not intended to generalize all career and technical education students at all community colleges. However, this study can be used to evaluate all students attending a community college career and technical education program.

**Recruitment Access.** To recruit participants, the researcher first applied for Institutional Review Board approval at the researcher’s host university. After the study was approved, the researcher requested the approval of the participating community colleges through that institution’s Institutional Review Board or office of Institutional Research. After approval from both the institutions was granted, the researcher sent a letter of participation (See Appendix B) to students who acquired at least 30 credit hours or are alumni of various community college career and technical education programs, which articulated this study and methods and asked for participants. Students were allowed seven business days to respond to a follow-up email, which
was sent on the eighth day (See Appendix C). The researcher required the participants to complete an informed consent form (Appendix D) and return it to the researcher before any data was collected.

**Data Collection**

Qualitative research requires the researcher to interact with the research participants, and in this study’s case, this interaction came in the form of interviews. The researcher recruited 12 participants. To facilitate these interviews, the researcher developed an interview protocol (See Appendix E) which was informed by the studies’ theoretical framework and research questions. This protocol, however, was not fixed, which gave the researcher the autonomy to ask questions based on the participants’ response. Rubin and Rubin (2011) identified a non-fixed interview protocol as the responsive interviewing model. The interviews were an hour in duration. During the interviews, the researcher took notes in addition to recording the exchange (Creswell, 2012) and focused on the participants’ explanation of actual events and experiences, which was recommended by Leedy and Ormrod (2014). Thereby, guiding the researcher to avoid hypothetical questions in order to obtain the facts and actual perceptions of the participant. Once an interview was completed, the researcher transcribed the audio recording and begin the content analysis phase of the study. This phase of the study is described in detail in the analytic methods section of this chapter. The initial round of interviews produced raw data in the form of field notes and audio recordings. Due to the nature of raw data, it was necessary to ask for a follow-up interview to clarify the statements or to verify the initial information.

Data collected as a result of this study facilitated with the phenomenological research methods consisted of the experiences as told by the research participants as it relates to the research topic or question. Often, the phenomenological data is referred to as the lived
experience (Giorgi, 1997). The lived experience is a reference to the conscious experiences of 
the research participants.

The research data collection focuses on researching in a systematic and verifiable way, 
which allows the study to be replicated by other researchers. Phenomenological researchers tend 
to demonstrate their scientific rigor and trustworthiness by offering examples and quotations 
from the data as evidence of points are made to articulate the phenomenon (Trumbull, 2005). 
Examples and quotations make the evidentiary base of any analytical claims transparent 
(Halling, 2002). The data collected during this study has been reported in terms of direct 
quotations offered by the research participants. These quotations work to aid in the investigation 
of the research question and to validate the statement of the problem. The collected data is 
presented in Chapter Four.

**Content Analysis**

According to Leedy and Ormrod (2014), content analysis is an examination of a specific 
body of material for the “purpose of identifying patterns, themes, or biases” (p. 148). In this 
phase of exploration, the researcher used transcribed data to build a biography of the participants 
and learned what their community college career and technical degree program means to them. 
The content analysis is typically not used as a stand-alone research method (Elo et al., 2014; 
Leedy & Ormrod, 2014). However, when coupling content analysis with a research 
methodology, the combination permitted the researcher to extract data that was used in the 
preceding phases of the investigation of the problem.

In this phase of the study, the researcher engaged in the process known as coding (Smith, 
2004). The researcher identified statements related to the topic and grouped these statements and 
words into meaning as well as articulated the various ways in which the participants experienced
the event. To analyze the research data, the researcher engaged in a process known as “interpretive analysis and decontextualization and recontextualization” (Starks & Trinidad, 2007, p. 1375). During this process, the researcher separated data from its original content, and assigned this data a code. This coding process was included in the organization of details and categorization of the data, which permitted the researcher to search for meaning within the data (Elo et al., 2014; Leedy & Ormrod, 2014). These were followed by recontextualization. Here, the researcher examined the codes for patterns and similarities and reduced the data into themes and relationships (Creswell, 2002; Elo et al., 2014; Leedy & Ormrod, 2014; Starks & Trinidad, 2007). The researcher synthesized and generalized the data, and created an overall portrait of the data identifying the phenomenological aspects embedded within the data. Finally, the researcher created a description of the event as the participants experienced it (Creswell, 2002; Groenewald, 2004; Leedy & Ormrod, 2014; Saldaña, 2015). The researcher then, organized and presented the results of the study. The presentation of the research data is discussed later in this chapter.

Phenomenological data requires the researcher to articulate detail and accuracy. Therefore, as Smith (2004) indicated that the researcher should present an evidence trail that will be open for auditing to demonstrate the validity of the data and quotations obtained from the participants and organized as per the theme.

**Presentation of Findings.** This research study is presented using a thematic review, and it contains multiple layers of data, which has been carefully analyzed and reported. The researcher has presented the findings in a way that conveys a level of scientific relevance and captures the complexity of the lived world as the participants have described it (Van Manen, 2015). The phenomenological concepts expressed is evident in writing. However, the researcher
does not present the data in the artistic form in an effort to report clear and authentic phenomenological data (Applebaum, 2012).

The researcher presented the findings to include a rationale for studying the case, detailed description of the facts of the case, a detailed description of the data, a discussion of themes, and a connection to the central research question (Elo et al., 2014; Leedy & Ormrod, 2014; Van Manen, 2015). This study presents phenomenological data in terms of describing the experiences of the participants. This included the bracketing of the researchers’ experiences, identifying significant statements, identifying meaning, and using a textural description of experience describing what the participants in the study experienced and how they perceive the alleged phenomenon. Finally, the researcher presented a composite of descriptions of the participants; which incorporated the textural descriptions and a structural description of the event.

**Data Storage**

All data collected throughout this study has been stored according to its media type. Documents and notes are being stored in a locked cabinet, and the researcher is the only person with the key. Audio recordings and all electronic documents are being stored in an electronic file on a password-protected computer, which has been backed up with a password-protected external storage device (Creswell, 2012). The researcher has completed the audio transcription process, and the recordings have been permanently deleted from the file storage system.

**Trustworthiness**

Trustworthiness was essential to providing validity to this study. The researcher engaged in a number of strategies to validate the research contained in this study. The researcher used triangulation as the main method for ensuring research validation and trustworthiness.
Creswell (2012) stated with regard to the triangulation process, “This process involves corroborating evidence from different sources to shed light on a theme or perspective. When qualitative researchers locate evidence to document a code or theme in various sources of data, they are triangulating information and providing validity to their findings” (p. 251).

Triangulation includes peer-review, and the researcher ensured that the research procedure including the peer-review process was conducted in a manner that supports the intended validity of this study. From the beginning, the researcher clarified bias. In the case of this study, the researcher discussed past events, experiences, and interpretation related to this study. In addition, the researcher used member checking. The member-checking process is based on the researcher ensuring that all the transcribed data is accurate. To accomplish this process, the participants had an opportunity to examine their transcribed data and to alert the researcher of any inconstancies or misstatements.

The content analysis of the data was subjective because the researcher was responsible for the data analysis. Therefore, credibility is predicated on the coherence of the argument and the presented evidence from the interviews to support the argument and the alignment with the central research question.

**Protection of Human Subjects**

The inherent nature of qualitative research required the researcher to contemplate and plan for any ethical obligations that may surface during the design and implementation of the study (Creswell, 2002). In order to prepare for this, the current study included the following human protection parameters.
**Institutional Review Board.** An instructional review board reviewed this study with the main purpose of protecting the participants from any harm the study may directly or implicitly inflict on them (Creswell, 2002).

**Confidentiality.** All the participants were made aware of the confidentiality provisions designed for this study. These provisions include assigning a pseudonym to mask their identity during the data collection process and in any published material. The researcher ensured that the participants were aware of how the researcher intended to use the data they provided (Roberts, 2010). Confidentiality for this study also included ensuring that all the recognizable information that may link a response to a specific participant be removed from the report of findings. After being awarded approval from the Institutional Review Board, each participant was required to read and sign the informed consent form articulating the purpose of this research and the ethical obligations of the researcher (Creswell, 2012; Miles, Huberman, & Saldana, 2013).

**Informed Consent.** In order to ensure the validity of this study, it is important to ensure that all the participants are participating voluntarily. Therefore, all the participants were informed of the risks prior to their approval to participate. Prior to any participation in this study, each participant was asked to read and sign an informed consent statement (Roberts, 2010).

The researcher provided an informed consent statement which conveyed the nature and goals of this study along with a description of the extent of the participants’ involvement in this study. The statement indicated that participation is voluntary and that a participant can terminate their participation at any time. The researcher ensured that this included potential risks and benefits of this study as well as a guarantee of confidentiality. This statement also conveyed the researchers’ ethical obligations to the participants.
Recording Data. Audio recording is essential for accurately reporting of data. However, the recording of interviews creates a significant ethical issue. Therefore, the researcher requested permission from this study’s participants to audio record their interviews (Creswell, 2002; Leedy & Ormrod, 2014; Roberts, 2010). In addition, the participants were told how the recordings will be used and how they will be stored. Further, the researcher informed the participants about how the recordings will be destroyed after they have been transcribed.

For this research study, the researcher collected general information using the methods outlined earlier in this chapter from the participants in order to describe the data. The researcher discusses this data in terms of participant profiles in the following section of this chapter.

Participant profiles

The current study uses data, which was collected from 12 research participants. These participants are organized into categories according to their status within their program. Six of the 12 participants were students currently enrolled in a community college career and technical program with at least 30 credit hours at the time they were interviewed. The remaining six participants are alumni members of these programs and are further organized into the following subsets. Three of the six alumni members graduated with their associate degrees and joined the labor market. The remaining three alumni members transferred to a four-year institution of higher learning.

The following participant profiles serve to provide general information about the participants of this study. Their profile includes information about their role in this study and basic demographic data. These profiles will provide validation as to how well these participants contributed to the phenomenon being investigated through the details of their phenomenological story.
Participant One – Dan. Dan (personal communication, January 27, 2017) is a graduate of a community college career and technical degree program, and upon graduation, he decided to join the labor market in an industry associated with his degree. Dan indicated that his goal was to earn a two-year degree in order to find a job of his choosing, “[my goal is] to build a reputation with a company where you can [be promoted] within the company.” Dan is currently gainfully employed, which he credits his community college career and technical degree for while insisting that the only reason to enroll in higher education is to get a job after graduation. Dan indicated that the “principle” purpose of earning a degree was to build a career. However, he did indicate that a community college career and technical degree could be used as a building block for transferring to a four-year institution.

Motivation was a large factor in Dan’s decision to enroll in a two-year career and technical program. He indicated that his parents influenced his decision to enroll, “They showed me opportunities that people I knew who had a degree, what it enabled them to do. It was like, go to school, get a decent job. Even if you don't, then you still got the school to fall back on, maybe down the road.”

Participant Two - Michael. Michael (personal communication, January 18, 2017) graduated from a community college career and technical degree program with an associate’s degree and certification in a discipline associated with the construction and design industry. Upon graduation, he decided to join the labor market working in a field, which transcends the skills he learned in his degree program.

Michael is the second person in his family to earn a higher education degree. His mother earned an associate’s degree and is a few credits away from earning a bachelor’s degree. Michael indicated that his experience while enrolled in a community college career and technical
degree program had been positive in general. He indicated that he valued the social component of the process “I really enjoyed working with my peers. I learned a lot from them.”

Michael went on to say that his completion of a college degree provided him with a sense of accomplishment and empowerment. He indicated that without earning a degree, he would not have the same level of confidence he has now when it comes to applying and interviewing for jobs and while at work, he said he feels more secure and confident in his role and productivity. Michael is currently employed and would like to earn a bachelor’s degree, but does not have the means currently.

**Participant Three – Ben.** Ben (personal communication, January 31, 2017) is a graduate of a community college career and technical degree program with an associate’s degree. Upon graduation, he decided to transfer to a four-year institution of higher learning to earn a bachelor’s degree in a closely related field. Ben enrolled in a community college career and technical program when he discovered that his high school grades were going to prevent him from attending a four-year institution directly from high school. His decision to enroll was influenced by his parents and their lifestyle. Ben’s father was a contractor for several years, and Ben did not want to do that type of work. Therefore, he saw a community college career and technical degree as the only way to better himself. Ben indicated that by observing his parents’ lifestyle, he knew he needed to earn a better position in society, “[I] knew that I needed to better myself in order to have a better life.”

During his program, Ben motivated himself with the idea that once he graduated with a career and technical degree, he would be able to continue his education at a four-year institution. He indicated that his long-term career goal is to work as a field supervisor on large projects, “after I obtain my bachelor’s degree, [I would like to] work full-time either somewhere in the
construction field or somewhere in the engineering field.” Ben indicated that a bachelor’s degree would allow him to grow with a company and move higher up on the management scale and he noted that this goal would not be achievable with only an associate’s degree.

Participant Four - Gabriella. Gabriella (personal communication, January 20, 2017) graduated from a community college career and technical program. She is the first member of her family to graduate from college. Her dad attended college for two years in Mexico but did not finish his education and her mother did not graduate from high school. During our interview, Gabriella indicated that although her parents did not earn a higher education they still believed in the value of a college education. Gabriella and her family migrated to the United States from Mexico. While her parents had to work to support the family their message to Gabriella was that a college education would provide for a better lifestyle.

After graduating from community college with her associate’s degree, Gabriella transferred to a four-year institution and is studying interior design. She indicated that her community college career and technical education was a great benefit for her and her family “[this degree means] a lot to me and my family because it’s something. I hold something.” She goes on to say that “many Hispanic families, their kids, don’t go to college.”

Participant Five – Emily. Emily (personal communication, January 25, 2017) graduated from a community college career and technical degree program. Her father holds a bachelor’s degree, and her mother holds an associate’s degree. Emily indicated that her desire to enroll in higher education was not completely influenced by her parents, “my parents never pushed me in a certain direction. They always wanted their children to go to college, but they respected our decision [including] what we wanted in life.”
Emily’s decision to enroll in a community college career and technical program was influenced in general by the labor market. The factors that led Emily to enroll included the number of jobs available in her chosen field of study, personal interest, and a drive to better her position in society. Furthermore, she indicated that for her the driving factors leading her to enroll included her interest and the economy; “[factors that led me to enroll] I guess just my personal interests and the economy, knowing that’s where things were going. There were going to be jobs in the technical field.” Emily graduated with an associate’s degree in a career and technical discipline and is currently gainfully employed.

**Participant Six – Brian.** Brian (personal communication, January 31, 2017) graduated from a community college career and technical degree program. However, this program was not his first choice. After high school graduation Brian intended to enroll in a four-year bachelor’s program, but he indicated that his high school grades prevented him from enrolling in a bachelor’s program directly from high school, “When I applied for a four-year school, my grades coming out of high school were not that acceptable, were not that good. It was easier for me just to transfer or to apply to a two-year school, a community college, due to my grades in high school. I was not the best student in high school at the time.”

Brian used his community college career and technical education to explore a skill set he did not realize he had: “when I got into my two-year degree at the community college I realized this is where I need to be, my grades completely changed.” After graduating with a career and technical degree, Brian decided to use his skills to start his own consulting business.

**Participant Seven – Jillian.** After graduating from a vocational high school, Jillian (personal communication, February 13, 2017) decided to work, and she got married and had children. During this time, she enrolled in a four-year bachelor’s degree program at a university.
Jillian quickly found out that she could not be a mother, wife, and college student at the same time and had to withdraw from her program. While her immediate family members are fairly well educated, Jillian was career focused and did not feel that college was for her.

Jillian took various jobs in the construction trades, and while she enjoyed her work, she wanted to be sure that she was setting an example for her children. So, she enrolled in a community college career and technical program. Jillian decided on a career and technical degree because she remained career focused; “I always knew that was the direction I wanted to go, so technical with college, it’s more job ready. So, that is just practical for me.”

**Participant Eight – Jonathan.** Jonathan (personal communication, February 13, 2017) enrolled in a community college career and technical program but had to withdraw due to a few family issues. Several years later he returned to his program focused on earning his degree. Jonathan indicated that earning a college degree has been a lifetime goal of his and that his motivation for following through with it is the idea that a college degree can change his position in society; “[I do not want to] have to spend the rest of my life digging a ditch or working [a remedial job].”

Jonathan decided to enroll in a community college career and technical program after he decided to change careers. After high school, he did not have the means to go to college so he had to work a “survival job” at the time. He indicated that he wanted to be role model for his children and grandchildren. After graduation, Jonathan will join the labor market with the hope of earning a bachelor’s degree at some point.

**Participant Nine – Jennifer.** Jennifer (personal communication, February 14, 2017) has a variety of higher education experience. She started at a four-year institution enrolled in a business program and decided that she did not like it. Jennifer felt that her four-year program
was not teaching her anything: “I did not like that it was just lectures.” After withdrawing from the university and deciding that she did not want to go back to her old job, Jennifer enrolled in a community college career and technical program. She was intrigued by the hands-on nature of the program and felt that a career and technical program is a better fit for her than a four-year academic program.

Jennifer comes from a family with various levels of higher education. While being raised by a father with a master’s degree and a mother with a bachelor’s degree, education was promoted as knowledge and knowledge equates to opportunity and success. The chief factor contributing to Jennifer’s decision to enroll in a community college career and technical program was that she never wants to stop learning.

Participant Ten – David. David (personal communication, February 20, 2017) is currently enrolled in a career and technical program at a community college. David migrated to the United States with his family when he was eight years old. His family values education and his father is continuously telling him that knowledge is more important than money. David will graduate from his career and technical program soon and plans to transfer to a four-year institution to earn a bachelor’s degree.

While David’s family’s educational background plays a huge role in his view of higher education, his family’s financial status did not allow him to apply to a four-year institution. Therefore, he took his father’s advice and started at a community college. David said that his enrollment in a career and technical program was driven by his desire in high school to “work with his hands” which he indicated means that he did not want to work at a desk doing “mental work” and in general he is looking for a stable career.
**Participant Eleven – Eric.** After graduating from high school, Eric (personal communication, February 21, 2017) applied for enrollment into a bachelor program at a four-year university. However, due to his grades in high school, the university rejected his application leaving him with the community college option. Earning a higher education was not optional for Eric. His family formed a huge factor in his decision to enroll at a community college. Eric enrolled in a career and technical program at a community college because this program was closely aligned with his interest.

Admittedly, Eric wanted to quit school after his first semester for various reasons, but his motivation to continue came from his experience at his “dead end job,” and he was determined not to have to return to this job. His determination to not to return to his job coupled with the pressure from his family reminding him that higher education will improve his lifestyle providing him with better career options and the possibility of advancement in terms of academics or as a career professional.

**Participant Twelve – Amy.** Upon high school graduation, Amy was not sure what she wanted to study in college. Enrolling in higher education was not optional for her, so she enrolled in a community college career and technical program. Amy was not a great high school student. She was not sure that she would be successful at the college level. Subconsciously, she felt that a career and technical education would be easier for her because of the practical application of the subject matter.

Amy is interested in transferring to a four-year institution to earn a bachelor’s degree upon graduating with her associate’s degree. However, Amy has expressed concern about her academic ability. Her poor academic performance while in high school was a driving factor for her decision to enroll at a community college, and she indicated that she is not doing very well in
her current program either. Amy admits that her community college career and technical program was not as easy as she thought it would be and that she will be able to use her education to join the labor market upon graduation. While working in the field, she indicated that she will retake several curses at the community college level, and then apply to a four-year institution for a bachelor’s degree.

The participants in this study represent a broad range of career and technical degree programs across multiple community colleges. The researcher defined the career and technical concept in Chapter Two as it relates to the literature. For the purposes of this study, the researcher has identified the programs each participant represented, which is illustrated via Table 1.

Table 1
List of the Participants Career and Technical Degree Programs

<table>
<thead>
<tr>
<th>Mechanical Engineering</th>
<th>Culinary Arts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Architectural Engineering</td>
<td>Landscape Design</td>
</tr>
<tr>
<td>Interior Design</td>
<td>Automotive Science</td>
</tr>
<tr>
<td>Dentistry</td>
<td>Nursing</td>
</tr>
<tr>
<td>Heating, Ventilation and Air Conditioning</td>
<td>Early Childhood Education</td>
</tr>
</tbody>
</table>
Conclusion

This study explores the experiences of students and alumni of community college career and technical degree programs. The phenomenological research methodology was used to determine if there is a central phenomenon embedded within the experience of students enrolled in community college career and technology degree programs. The standard phenomenological and qualitative research methods have been used to conduct this study, which includes interviewing participants, coding data, theme analysis, and a report of the findings. The researcher has removed any ontological experiences from the research process. This removal of ontological experiences is to ensure that the collected data is strictly that of the participants lived experience with the objective of discovering a central phenomenon. Overall, the alignment between the research questions and the methodology is appropriate for this study so that others can examine and understand the experiences of this study’s participants.
Chapter Four

Report of the Research Findings

As stated in Chapter One, this study explores the experiences of students who are enrolled in or are an alumnus of community college career and technical degree programs. The data that is presented here, thereby, examines the efficacy of these programs. Following a qualitative research design and mode of inquiry, the researcher conducted one-on-one interviews with the participants of this study. These interviews offered valuable data and insight into career and technical degree programs offered at the community colleges. The interviews shed light upon the experiences of each participant.

The following central question and subsequent sub-questions guided the exploration of students’ and alumni’s experiences as well as the educational effectiveness of the career and technical education program they undertook at their respective community colleges:

Central Question

*How do the currently enrolled students and alumni of community college career and technical education degree programs assess the efficacy of their educational experience?*

While this central research question allowed for the procurement of foundational phenomenological data, additional questions were developed to define the focus of the study further.

Sub Questions

A. How do the currently enrolled students and alumni describe their community college career and technical program experience in the context of their future education?

B. How do the currently enrolled students and alumni describe their community college career and technical program experience in terms of their employability?
C. Which factors led the students to enroll in a community college career and technical degree program?

Organization of the Chapter

Chapter Four presents the major themes and sub-themes that came forth as a result of the analysis of the data. In addition, the researcher has defined the emergent outlying themes and sub-themes. Following this thematic review of the data, which includes how the participants experienced their career and technical degree program, the researcher recontextualizes the data and presents a composite of the event through the participant’s perspective.

Review of the Data Collected and Presentation of the Findings

Through decontextualization, the researcher identified factors for enrollment as a principle theme in the context of exploring currently enrolled students and alumni experience, in community college career and technical degree programs as well as a number of sub-themes associated with it. Socioeconomics, rejection from a meritorious university, employability, and family’s educational background are the predominant sub-themes. The value of education is the next principle theme. This theme is associated with the ability to achieve a better life quality, the ability to provide for one’s family, and the gaining of self-confidence. Following the value of education, the role played by the faculty is the next principle theme. This theme includes the sub-themes of lack of interest displayed by the faculty and the lack of experience of the faculty in the trade being taught, all of which leads to an inconsistency in the delivery of knowledge and skills. The social aspects of higher education comprise the next principle theme. This theme is associated with the concept of communication, socialization with peers, and anxiety. The students’ plans after graduation form the next principle theme. The sub-themes associated with this theme include transferring to a four-year institution and joining the labor force. The final
principle theme is program improvements. This theme is not associated with any sub-themes.

Table 2 shows the themes and sub-themes discussed above in a grid.

Table 2

Summary of Themes and Sub-themes

<table>
<thead>
<tr>
<th>Theme</th>
<th>Sub-theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factors for Enrollment</td>
<td>Socioeconomics</td>
</tr>
<tr>
<td></td>
<td>Rejection from University</td>
</tr>
<tr>
<td></td>
<td>Employability</td>
</tr>
<tr>
<td></td>
<td>Family Education Background</td>
</tr>
<tr>
<td>Value of Education</td>
<td>Access to a Better Life</td>
</tr>
<tr>
<td></td>
<td>Ability to Provide for Family</td>
</tr>
<tr>
<td></td>
<td>Gaining Self-Confidence</td>
</tr>
<tr>
<td>Efficiency of the Faculty</td>
<td>Lack of Interest</td>
</tr>
<tr>
<td></td>
<td>Lack of Experience in the Assigned Field</td>
</tr>
<tr>
<td></td>
<td>Inconsistency</td>
</tr>
<tr>
<td>Social Aspects</td>
<td>Communication</td>
</tr>
<tr>
<td></td>
<td>Socialization with Peers</td>
</tr>
<tr>
<td></td>
<td>Anxiety</td>
</tr>
<tr>
<td>Plan Upon Graduation</td>
<td>Transferring</td>
</tr>
<tr>
<td></td>
<td>Seek Employment</td>
</tr>
<tr>
<td>Program Improvements</td>
<td></td>
</tr>
</tbody>
</table>
Finally, the researcher comments on a number of outlying concepts that emerge from the data collected from this study. The outlying themes include concepts such as the participants’ social determinants and the idea that career and technical education acts as a safety net for those who are skeptical about the benefit gained from pursuing higher education. Table 3 shows the outlying themes.

Table 3
Outlying Themes

<table>
<thead>
<tr>
<th>Theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Determinants</td>
</tr>
<tr>
<td>Higher Education Skeptics</td>
</tr>
</tbody>
</table>

**Factors for Enrollment.** The data suggests that there are various factors that lead to enrollment in a community college career and technical degree program. The factors discovered in this study include enrollment due to financial constraints or poor academic performance while in high school. In other instances, the participants reported access to a pathway to change careers or advance in their current career field as a factor behind their enrollment into their respective career and technical degree program.

A recurring concept within this category is the idea of family pressure. Several participants reported that they were pressured by their family to complete a higher education degree. David informed that upon graduation from high school, enrolling for higher education was not a feasible option for him. David’s parents had migrated to the United States when he was still young, in the hopes of finding a better future for their children. From a young age, David knew that education was going to be a key factor for being successful. David informed
that he comes from a family that is rooted in the values of education, “[I] come from a family that values education more than anything, [even] more than money. It’s [Education] something that we just value a lot in our family.”

On the other hand, several participants reported feeling pressured to complete a higher education degree in order to be able to provide for their family. Eric informed that he enrolled in his career and technical program because he did not want to return to a “dead-end job,” and that he wanted better employment opportunities that would enable him to provide for his family. The idea that higher education will offer those who graduate with a better opportunity is a common idea expressed throughout the sample population for this study. Dan enrolled in his career and technical program because he did not want to work in a manual-labor position, like his dad. Therefore, he enrolled into a community college career and technical program to ensure that he would be able to achieve a better way of life.

In contrast, the idea that community college career and technical programs undertake the sole responsibility of preparing students to join the labor force tends to be false. Some participants report that simply completing the degree was rewarding enough and that the knowledge they gained would be enough of a stepping-stone to continue working in the labor market or enroll in a four-year institution to earn a bachelor’s degree. Ben reported that while his parents played a large role in his decision to enroll in a higher education program, upon graduation, he was proud that he was able to complete a degree program. Ben stated, “it’s something I worked hard for.” Some participants such as Jenifer equated happiness with education, “I think some higher education is beneficial to everyone” and “People should never stop learning.” While these outlined factors are among the most predominant in this category, other factors include being rejected from the four-year institutions due to poor grades while in
high school. Several participants reported turning to the community college when their application at the college or university of their choice was turned down, while some reported that the community college career and technical experiential programs seem to have worked out better for them.

Career changing was also a factor that informed their decision of enrolling into a community college career and technical program. Jonathan specified that his occupational injury forced him to change careers. Therefore, he took advantage of a long-time interest of his and enrolled into a career and technical program, “There’s really not a money figure you can put on it, with respect to the cost of learning a new skill.”

There are following four sub-themes associated with the factors leading to enrollment in a community college: socioeconomics, rejection by the university of choice, employability, and family educational background. The research discusses these sub-themes in the following section.

**Socioeconomics.** Various participants reported that they enrolled in a community college career and technical program because they did not have the financial means or support to enroll at a university. Eric said that he was interested in transferring into a bachelor’s program upon graduation from his career and technical program, but he would like his employer to offer tuition reimbursement. Eric said that he had been experiencing difficulties affording the tuition fee for his community college career and technical degree. Jonathan stated that he had to enroll in a career and technical program in order to have financial stability and to be able to afford the cost of his college program later in life. He added that he would like to earn a bachelor’s degree; however, transferring into a bachelor’s program was not affordable.
David’s situation is similar but nuanced. David reported that while his parent’s value education and view education as the only means to attain a financially stable lifestyle and career, they are unable to support a university education financially. David was advised to start at the community college level because the credits are more affordable and that upon the completion of his associate degree, he could transfer to a four-year institute to pursue a bachelor’s degree.

The researcher asked the participants about how they perceived their social determinants to have influenced their decision to enroll into a community college career and technical program. The data revealed that this topic was not a theme or a sub-theme. However, it is worth reporting that in some cases, the participants did mention that they grew up in a poor socioeconomic atmosphere or that they had migrated to the United States to evade poor living and working conditions. The data obtained from this study does not find a substantial connection between the participants’ social determinants and their decision to enroll into a community college career and technical program.

**Rejection from the University.** Community colleges have always been a safety net for students with poor academic performance, and their continuous enrollment process makes them the obvious option when a student is rejected from a four-year institution. The participants suggested that, initially, a community college career and technical program was not their first choice. In general, many of the participants suggested that their grades upon high school graduation prevented them from enrolling into a bachelor’s degree program. Brian explained that enrolling in a community college was not how he had imagined higher education would be while in high school. However, due to a lack of knowledge of the college enrollment process, or because of being ill-advised in high school, he was not aware that grades were an important deciding factor for enrollment at the university level, “when I applied [to a] four-year school, my
grades coming out of high school were not that acceptable, were not that good. It was easier for me just to transfer or apply to a two-year school, a community college due to my grades in high school.” Ben reported a similar scenario with his attempt at enrolling into a bachelor’s degree program, “[community college] wasn’t my first choice. My first choice was to go straight to a four-year school, but I didn’t get in because my grades were a little low in high school.”

In some cases, the participants started their education at a university but later found that their chosen major did not align with their interest, following which, they decided to withdraw from the university and enroll in a community college career and technical program in an effort to explore more career options in their field of interest or to explore career options in general. Jennifer reported that she withdrew from her bachelor’s degree program and enrolled in a community college career and technical program because the career and technical program was more practical for her. The idea that career and technical education is a more practical education option is a sentiment that came up among many of the participants.

**Employability.** Many of the participants indicated that they recognized that lack of employability meant that they needed to increase their knowledge base, which prompted them to enroll in a higher education program. Some participants indicated that they had been observing the hiring trends in specific industries, and that is how they selected a career and technical discipline for studying. Emily specified that she became interested in her chosen field of study because she needed a job. Hence, she studied the ongoing hiring trends and decided to enroll in a discipline with promising employability prospects.

Some of the participants had a more calculated and focused view of why they had enrolled in a community college career and technical program. These participants cited the reason that programs such as those were what they had been exposed to while growing up. Ben
stated that his dad was working in a career and technical trade to which he was exposed to while in high school. Likewise, Brian said that he was exposed to his chosen discipline while growing up and that he knew what he wanted to study in college upon high school graduation due to this exposure. It seems that many of the participants enrolled in their respective community college career and technical program on the premise that they would find employment upon graduation. Therefore, it seems as if the driving purpose behind their enrollment was to gain the skills necessary to broaden their employability means.

**Family Educational Background.** The topic of family involvement and how the participants deal with the same influenced how the participants perceived their programs. There are two extremes embedded within this sub-theme. One extreme is that the members of the family might be from an educational background that is limited; and in some cases, a few, if not all, the family members have not had any formal high school education to speak of. In this case, the family seemed to have pressured the participant in favor of completing a college degree. In general, this pressure is predicated on the idea that the family members want their children to earn a lifestyle that is better than what they have managed to earn. Gabriella noted that her decision to enroll in a degree program was imposed upon her by her parents. She explained that her parents motivated her to enroll, “My dad went to college in another country for two years, but did not graduate and my mom never graduated from high school.” Gabriella went on to say that because her parents’ education is limited, they could understand the value of education and motivated her to pursue a degree. Brian seems to have experienced the similar parental pressure from his parents, as was evident from his words:

My dad didn’t graduate from college, but he did have partial college and my mom just went to high school, and that was it. [My motivation for enrolling] was that we were told
we had to go to college, that was the biggest reason, and my dad was working out the money for us to go to college.

There is no doubt that parents typically wield some level of influence upon their children’s decision to enroll in a higher education program. However, Dan explained that his parents wanted to show him that opportunities are only available to people who have earned a degree. Dan said that his dad did not finish his high school education and that his mother completed a two-year degree about ten years after graduating from high school. Dan explained, “My dad didn’t finish high school. My mom, she had an opportunity for a scholarship at a university, but she didn’t do that. She ended up with two years of early childhood education after she graduated, maybe like ten years after she graduated. [My] parents influenced me [to earn my degree].”

For a number of the participants, it appears that their parents’ influence on them was derived from their lack of education, which provided the motivation for their children to complete a degree program. However, it is interesting to note that many of the participants experienced the opposite in terms of their parents’ educational level. Those participants whose parents had earned a degree reported that their parents were not influential in that they did not intervene in their children’s decision-making process. Many participants in this category suggested that earning a college degree was simply expected of them, and this expectation was reinforced while growing up. When the participants were asked about what their motivation was to complete a degree, their response was a resounding, “to better myself” or “to better my position in society” or “to be financially sound.” These sentiments, presumably, are the result of the participants independently observing the lifestyle of their educated parents. Ben reported that his mother earned a two-year degree in business, and his father earned a bachelor’s degree and is
now an engineer. Ben recalled his motivation for enrolling in a career and technical degree program:

[My motivation for earning a degree was that] I wanted to better myself. I wanted a job that was not easier, but easier on my body. Not having to do physical work – more like mental work in an office. I [saw] my dad do construction for a while, and I [saw] how hard that was. When he moved into engineering I [saw] how that was and that looked like a better option than working outside all-day, every day.

Ben’s parents did not tell him that he must go to college. His decision was based on his observation of his parents’ lifestyle. Ben recalled, “It was me observing. I knew that I needed to better myself to have a better life.”

The idea that various participants decided to enroll into a community college career and technical degree program based on implicit family pressure and individual observation emerged from the data unexpectedly. The researcher noted that those participants who were motivated by their parents’ lack of education and those participants who were motivated by their parents’ education provided the participants with a common viewpoint – education and knowledge were empowering.

**Value of Education.** The value of education was noted more commonly among the alumni participants of this study. However, it came second in terms of prevalence for the currently enrolled participants. In general, the participants referred to the value of education from the point of view of personal gain from higher education. Some participants indicated that the value of their educational experience was that it would make them “job-ready.” In addition to being job-ready, some participants mentioned the idea that community colleges offer better
value than a four-year institution. A career and technical degree offered a hands-on learning experience to the participants, which they valued over traditional academic learning.

Emily said that earning her career and technical degree was valuable to her because her accomplishment has provided her with opportunities to improve her position in the society: “[earning my career and technical degree] is very valuable. It gave me a life that I couldn’t have had without it.” Emily said that ever since she graduated from her program, she feels more accomplished and her earning a gainful employment is a direct result of earning her degree. She feels a sense of accomplishment, and that is what she values most about her having enrolled in a career and technical program.

Of course, in many cases, the value of education is directly linked to the factors that contributed to the enrollment. A few participants reported that higher education is valuable to their parents, and that was the reason behind their enrollment. It is interesting to note that the value of education was a principal theme among the alumni. This can be reasoned by acknowledging the fact that once students have graduated from a degree program and have experienced the benefits of their academic efforts, they appear to be more appreciative of the experience.

There are three subthemes, which are associated with how the participants perceived the value of education. These subthemes are: access to a better life, the gained ability to provide for their family, and the gaining of self-confidence. The researcher discusses these subthemes in the next section.

**Access to a better life.** The sub-theme, access to a better life, is closely associated with the earlier mentioned sub-theme of employability. However, the researcher noted that although the participants considered a better life to be predicated on employability, the two concepts can
be discussed individually. The data seems to indicate that the participants are aware that education has the potential to provide them with a better lifestyle than what they were currently experiencing; however, the researcher also noted that a better life essentially refers to gaining employment that the participant will enjoy and can advance in. Finding enjoyable employment is implicit in the data; however, Jonathan clearly mentioned that he found it necessary to work in a “survival job” for several years before enrolling in a community college career and technical program in an attempt to find employment that would be more in line with his lifelong interest. Jennifer expressed the same sentiment when she articulated that she thinks knowledge is empowering, and that the more she knows equates to how successful she can be, and ultimately, how happy she will be.

Many of the participants were unsure of what they wanted to do in terms of a career, and many of them enrolled in the program that they believed was best aligned with their career interests. Therefore, the employability variable is moot because upon graduation, the participants are employable, but whether or not their education will provide a better life for them remains unknown.

*The Ability to Provide for the Family.* Surprisingly, the ability to provide for one’s family is a prominent sub-theme, which emerged from the larger theme, that of the value of education. Many participants indicated that they valued the ability to be able to give back to their family once they are gainfully employed. David seconded this concept boldly. He stated that his parents migrated to the United States in order to attempt to provide their children with better living conditions, and so, he feels that being able to give back to his parents is an obligation of his.
Eric reiterated the value of the ability to provide for one’s family. Eric mentioned that he left his job in order to take college courses so that he could provide for his family in a better way. Eric, of course, is equating education with upward mobility and is hopeful that earning a career and technical degree will equate to being able to provide better for his family financially.

**Gaining of Self-Confidence.** A few of the participants informed that they looked at earning a career and technical degree as a way to boost their self-confidence. Jillian said that she valued the self-confidence that she has gained from her enrollment in a degree program. The participants indicated that self-confidence related to the empowerment their education has provided them when it came to giving interviews for employment positions or advancing further in their current position. Additionally, it also provided them with human capital and overall self-confidence as they navigate through life.

While many of the participants reported that they gained self-confidence through their program in various ways, this sub-theme was discovered unexpectedly, and the participants discussed this topic candidly. It also appeared that the participants were surprised that their career and technical program was boosting their self-confidence.

**Efficiency of the Faculty.** Career and technical faculty members are an integral part of a career and technical program. Each faculty member brings a level of expertise and experience of their discipline to the college. However, many of the participants expressed concern over the efficiency of their faculty members in terms of the level of their expertise and their ability to teach. The participants pointed out that many of the faculty members were in their last year of employment before retirement and that when a new set of faculty members took over their program, the instruction provided and the curriculum developed was greatly improved. However, that was not the case for all the represented programs; and in some cases, the
participants felt that their time and money was being wasted and that their concerns were going unaddressed by the organization.

This study’s participants seemed to have developed animosity toward the faculty within their respective programs. While some participants appeared to have more animosity toward their faculty than others, the general understanding among the participants held that their respective faculty members seemed to them to be disengaged with the students and with the course’s content. Michael said that in his program, the faculty was inconsistent which led to a great deal of animosity between the students and the faculty members. Michael said that he felt that a faculty member could influence a student’s success ability through engaging the students enrolled in their course. Ben said that the faculty in his program was absent a majority of the time, and that their inconsistent attendance interfered with his learning experience. Dan mentioned that he had enrolled in a career and technical program with the expectation that he would get to learn from a hands-on curriculum; however, he regrettably found that the faculty in his department seemed to think that reading and answering questions was a better way of learning for the career and technical students.

The abstruse behavior exhibited by the faculty in many of the programs, which the participants were a part of left the participants wondering if they had indeed made the right decision to enroll in a community college, and many of them began to question whether a career and technical program was even worth the expense. Jonathan suggested that he felt unprepared to enter the workforce because of the lethargic attitude of his instructors.

The researcher noted that there are three subthemes associated with the principal theme of the role played by faculty. These subthemes include display of disinterest by the faculty, the
faculty members’ apparent inexperience in the trade they were meant to be facilitating, and their inconsistency. The researcher discusses these subthemes in the next section.

*Lack of Interest.* The participants stated that they felt that many of their faculty members were not interested in facilitating the curriculum or the course material. Such experience led to the participants feeling disconnected with the major of their choice, which instilled in them distrust in their field as well as in career and technical education in general. While the faculty implications on community college career and technical degree programs is beyond the scope of this study, and it appears that the participants might have experienced a transition period in terms of the faculty being transitioned out of the department while new faculty is transitioned into the department. Johnathan recalls his experience with the faculty in his program:

I enrolled at a time that the [my] department was not on very stable ground. I went through three different professors with each of them having their own take, and there was inconsistencies on this, different approaches. It just seemed like none of them wanted to talk to each other to get on the same page. My last four years have been hell.

Jennifer mentions how there is just one instructor that she feels comfortable with, and if it was not for him, she would have withdrawn from the program. Jennifer recalls, “I just believe that really if it wasn’t for [one of my instructors] and him taking that time and being patient and just making it pleasant, I don’t think that I would be as comfortable as I am [in my program].”

Gabriella drew a similar scenario. She mentions that it was not until her second year of program that she felt as if she was really learning. The faculty within her program was replaced between her first and second year. Gabriella recalls:

Well, from my experience from these two years; first year here wasn’t as I hoped it would be because of the professors that we had. They didn’t really teach us as much as I
wanted to and when I got into my second year, I started learning more stuff. More vocabulary, more training, more about the software that we use; so basically, our first year wasn’t what we expected. It wasn’t until the second year where [we] actually started learning more stuff.

*Lack of Experience in the Assigned Field.* The idea that the faculty would not be experienced in the trade they are meant to be teaching came about as a surprise to the researcher and the participants. Many of the participants were concerned that due to their faculty members’ apparent lack of expertise in their assigned field, their (the participants) abilities and skill level was compromised. In general, the majority of the participants were concerned about the lack of up-to-date instruction within their program, and a few participants became increasingly concerned that they might have made the wrong decision in opting for a community college career and technical degree. Johnathan recalls an experience he had in one of his program courses:

[My instructor] gave us the book. He said, “Everything that you need to know about [the software] is in that book, and if you can’t find it in the book, find it on a YouTube video. If you can’t find it on a YouTube video, then ask me, and maybe I’ll, have the answer for you.” Then when he took over [an] advanced software course he had never seen or used the software before in his life, but he wanted to teach it, so I lost out on a lot of that [information]. That bothered me. I was paying to take this class, and I’m getting taught by somebody who had not even taken the beginner course.

*Inconsistency.* The faculty is typically the nucleus of any degree program, but in some cases, the faculty was absent more often from the campus than being present. The participants reported that frequently, they would arrive on the campus to find that their professor had
cancelled class without sending them any prior notification. In other instances, the participants would arrive to the scheduled class and their professors would be absent. Many of the participants expressed feeling anxiety over the attendance habits of their faculty members, and this inconsistent behavior exhibited by their faculty led to a feeling of ambivalence toward community colleges career and technical education in general. Jillian pointed out that her instructors seemed to be inconsistent in terms of their level of knowledge and teaching style. She recalls that:

I think it’s very necessary to have a person that is in the field but that has an education background for communication and to really push you, but in a way, there’s a fine line of pushing in the field and pushing as an educator, and I think you need a person to push you as an educator. That’s only taught if you have an education background.

Johnathan explained that he also felt that the faculty members at his college were inconsistent, and that the students became the faculty’s secondary focus. Johnathan informed that:

[t]he inconsistency of not being with the curriculum, the way that the people at that time that was teaching it, was approaching it, and their little internal battles that they were having with each other. I didn’t feel as if they were putting the students first.

**Social Aspects of a Career and Technical Degree.** The participants reported that the ability to socialize with their peers was an important benefit to them. Socialization in an educational setting was a prevalent concept according to many of the participants. The ability to socialize and communicate are embedded in human nature, and it is inherent in college degree programs. Many of the participants reported that their participation in their respective degree programs has given them a sense of social confidence, which, in turn, has encouraged them to communicate better in terms of interacting with their peers and with the program faculty. David
reported that he feels that his program has forced him to become more social, which is in contrast to his socialization habits from when he was in high school, “I think college, in general, brought me out a bit more into this social life. And I’ve been kind of quiet in high school; I’ve been just laid back, but I still get my work done and all that. But in college I feel like I’m coming out. ”

Socializing and human interaction, in general, is an aspect of learning that is inherently present in college-level degree programs. However, those people who are not able to enroll in a four-year degree program rely on community colleges to fill this void. A part of those students who enroll in a community college program rely upon the community college career and technical programs to provide them with one of the basic human necessities – social interaction and communication.

In addition to the above outlined themes, the researcher noted several subthemes emerging from the data sample. These subthemes include communication, socialization with peers, and social anxiety. The researcher discusses these subthemes in the following section.

Communication. It is interesting to note that some of the participants used the term “social” while others used the term “communication,” and it appears that the word communicate does not necessarily equate to a participant being any more or less social within their respective programs. It seems that participants would use the term “communicate” when they are referring to the holistic nature of their degree program to indicate that they are enabled to be productive in the industry, through benefits such as the ability to communicate with others. The term “social” appears to be used by the participants to reflect a more casual and less formal atmosphere. The other side of the spectrum dictates how the program prepared the participants to communicate rather than to socialize. Ben reported that his program greatly increased his social development with respect to being able to communicate with the professionals in his industry. He indicated
that his vocabulary development coupled with the public speaking course he took provided him with the confidence he needed to be able to communicate effectively in the industry. Eric echoed this sentiment by mentioning that, in part, the holistic nature of his program drove him toward improving his communication skills.

**Socialization with Peers.** Michael indicated that he benefitted most from the relationships that he formed with his peers and the faculty. Michael recalls his experience in terms of his socialization with this peers and faculty:

I actually learned a lot from [the other students], and especially once some of them started actually placing into jobs and could bring their experiences from their jobs to their class. Like when I would talk with Ben, Dan, and Jen, they would come in and tell me how things are going at work, and show me what I can expect from an employer in the field, and that sort of thing. I think that was one of the things that were really, that I really liked, and I liked some of the teachers and everything. [The faculty] relationship back and forth, I think that was really good.

Michael goes on to say that he learned a lot from his peers, and that he enjoyed working with them, “working with the other classmates, I mean, I picked up on that and learned a lot from [them]. I really enjoyed working with my peers.” Jennifer stated that she enjoyed the entire atmosphere. She said that she enjoyed working with her peers and interacting with the faculty, but she said that she really enjoyed engaging with those students who seemed isolated and withdrawn from their classmates, “with me being older, sometimes, I think younger students can feel like they don’t know anybody when they come in - that they are alone. I really kind of hone into those students who I don’t think are social butterflies.”
On the other hand, some participants reported that the social aspect of their experience was more rewarding than a relationship with any single individual. Gabriella discussed her perspective on being a part of a community, and said:

I was able to socialize more and just be able to talk more in general. Meeting people and having to socialize, being in class with them. Just the atmosphere because I could say that I actually did have classmates that enjoyed what they did. They actually came to class and enjoyed each other and just being around them. Camaraderie, I guess, with peers. Just [enjoyed] being part of the community here.

Socializing with their peers seemed to be an important activity for many of the participants. However, that was not the case for all of them. In some cases, the participants expressed anxiety over just coming to class.

**Anxiety.** Anxiety is a topic that many of the participants alluded to in terms of coming to class with other students. The researcher noted that many of the participants may not have had an opportunity to be social prior to enrolling in a higher education degree program. This anxiety, as reported by the participants, is predicated on the structure of higher education in general. Students with a common interest from various backgrounds and with different abilities convening in class together was problematic for many of the participants. Eric stated that he was anxious because he felt that the other students would be more advanced and better educated than he was. He was concerned that the other students would be able to learn concepts and procedures faster and more adequately than he would. Amy expressed similar concerns because of her high school academic record. Amy reported that she was not a good student in high school and was concerned that the other students in her career and technical program would be able to identify her academic shortcoming.
**Plans Upon Graduation.** Participants reported that they enrolled in a community college career and technical program with the goal of either transferring into a bachelor’s degree program or securing employment upon graduation. Those participants who reported that their goal was to seek employment seemed unsure of their future. The cause of this ambivalence is unknown, but the existing literature on the subject matter suggests that when students are experiencing problems with their faculty members or are learning to satisfy someone else, then their outlook in terms of graduating and joining the labor market tends to be compromised. However, those participants who said that their goal was to transfer appeared to be more confident and determined that they would reach their eventual academic and career goal.

**Transferring.** In addition to the goal of graduating from a career and technical program and joining the labor market, several participants reported that their goal is to transfer into a bachelor’s degree program. Three out of the six currently enrolled participants expressed interest in transferring, while three out of the six alumni members had already transferred. Gabriella stated that her career and technical education has given her an advantage over her counterparts at the university level. While the faculty in her career and technical program did not promote transferring, Gabriella indicated that her program did prepare her to transfer. Of course, transferring to a bachelor’s program from a community college career and technical program comes with a unique set of drawbacks in terms of the number of credits that can be transferred among other nuances. Gabriella stated that the bachelor’s degree program would provide her with more in-depth course work and experience, which is naturally not attainable in a two-year program. Earning a bachelor’s degree, for Gabriella, is about getting a good job and being able to advance at work.
The more education – the better, was the sentiment echoed by several other participants who were interested in transferring. Ben stated that he enrolled in a community college career and technical program with the intention of transferring upon graduation, “[transferring] was my vision at the beginning of this program [because] I knew I wanted my four-year [degree].” He also went on to say that a bachelor’s degree would provide him with better standing and opportunities for advanced placement in companies, and that earning a bachelor’s degree would allow him to escape menial work or manual labor-intensive jobs. He said that his career and technical program prepared him “technically” in terms of transferable skills, but his program did not prepare him academically to transfer. Ben indicated that his program was not challenging enough for him academically, and that the lack of a challenging curriculum contributed to his anxiety over his academic preparation for future endeavors.

Completing a career and technical degree seemed to foster a sense of confidence in the participants, but many participants still wanted the added confidence that they felt would be gained when they completed a bachelor’s degree. Jillian mentioned that transferring to a four-year institution and completing a bachelor’s degree would, allow her to feel better about herself, and it would elevate her to a position wherein she would be able to choose a career path instead of having to take up a “survival” job. While the idea that education can “boost” self-confidence is not a new concept, it is not the only reason motivating students to transfer. Other reasons include the uncertainty of finding employment post community college and the idea of transferring becoming more plausible if an employer would agree to provide tuition reimbursement.

David adamantly stated that education is more important than money. However, when asked about his decision to transfer, he stated,
It probably depends on how much I get paid as well. Like if I was getting paid an average amount, a $30,000 a year whatever. It would basically depend on the amount financially that I receive, the amount of wage that I receive. This statement seems to indicate that David will move onto a bachelor’s program only if his career and technical degree does not yield adequate employment. However, David insisted that education was not only about earning money,

No. It is not just about money. Not about financial. Like I said, my dad has taught us let us know before going and getting an education that have value. The education is and the person is basically nothing if you don’t have knowledge or education. So I truly, without him saying anything, I believe that by myself. So I think it’s not just about how much you get paid or if you have a good job or not. It’s more of how much value. How much you value the education itself.

While David felt that his career and technical program prepared him to transfer, he seemed unsure about his decision to transfer. Of course, every student who wishes to transfer has financial concerns, but some students decide that working a few years after obtaining their career and technical degree is a better option for them. Eric expressed feelings of uncertainty over his future after he graduates from his community college career and technical program, but he offered an ideal scenario with regard to transferring, “I’m really not sure if I will actually just get a job and continue to work hoping that they (the employer) will pay me to go back to school or just go back to school from here. ”

It is without question that many community college students are apprehensive about transferring due to the financial implications. Jonathan said that he would like to transfer, but simply lacked the means to do so. Michael echoed Jonathan’s views in terms of insufficient means to earn a
bachelor’s degree. In fact, Michael had to wait several years before he could earn his career and technical degree in order to afford the cost,

I feel a lot like I did before I went to get my associate’s. I wanted to get a degree, but just didn’t see the means necessary. I didn’t have the time and the money. I could either have the money, or the time, but having both gets complicated because you leave work, you don’t have the money anymore. You work, and you don’t have the time, so there’s that balance. I feel the same way. If I had no need for sleep, then I would probably want to continue on to get a bachelor’s, but I don’t know. I couldn’t leave work to do that. I’ve already quit for two years and then having my wife foot all the bills and put me through school. I didn’t really have the means necessary to do it. I don’t feel without sacrificing too much.

Seeking Employment. The participants were asked if they felt that their career and technical program prepared them for the labor market or for a transfer to a four-year institution to complete a bachelor’s degree. The responses to this question were varied. In general, those participants who planned on entering the labor market upon graduation were satisfied with how their program had prepared them. Michael stated that his career and technical program prepared him well for the job market and he had a “boost of confidence” by finishing his degree.

Many of the participants agreed with Michael, and indicated that their successful completion of a degree program gave them a sense of achievement, which provided them with the confidence to enter the workforce. However, Jonathan also mentioned that he did not feel prepared to enter the workforce, and added that he could point to the direct reasons for it. Jonathan explained that about halfway through his program, several of the faculty members retired, and that a change in the faculty benefited him. He felt that the faculty did not do an
adequate job of preparing the students for contemporary employment. The researcher noted that “faculty” is a sub-theme that has emerged from the data, and was explored earlier in this chapter.

**Program Improvements.** Many of the participants in this study offered their thoughts on how the institution could improve their programs. In some cases, the participants reported having suffered owing to an outdated curriculum. The participants reported that they were expecting a more complex and rigorous curriculum at the time of enrollment; “[the courses need to be] more labor intensive. It was too easy. As far as core classes, English, whatever your core classes, they’re just standard, but everything is also too easy.”

In addition to the criticism targeted at the insufficient rigor of their program, some participants indicated that their career and technical program lacked the hands-on experiential learning opportunities. Hands-on practical learning is a hallmark parameter between career and technical training and traditional academic schooling. Many participants reported that their course schedule was not flexible. An inflexible schedule forced the participants to find flexible employment, childcare, and other necessities to be scheduled around their course work rather than the college allowing the participants to schedule courses around their personal schedules.

The participants also offered a general feedback in terms of the courses being offered to them and the value of those courses. Several participants reported that at least a handful of their courses did not provide the type of learning experience that they were expecting. The reason behind this perspective varies from one participant to another. However, in general, they considered their experience as unproductive, in part because the faculty lacked interest, according to the participants (faculty is a theme, which was discussed earlier in this chapter), or because there were no advanced math or science subjects being offered. Some participants were
able to find similarities between their college level career and technical education and their high school curriculum.

The participants reported that they were disappointed to learn that many of the more difficult courses had been removed from their programs. Various participants suggested that a higher level of math and science subjects should be introduced in their programs. In other instances, some of the participants indicated that they would like to see the humanities courses removed from their career and technical program because they did not see the value in taking the humanities courses. Gabriella said that her humanities courses, which her college required her to take, did not relate to her interests, and that she did not see the value in taking those types of courses. Dan said that the humanities subjects are not needed and that he holds no value in these courses,

I took a, whatever class was required, and I didn't learn anything. I took psychology and another class. You learn things that you don’t really need to learn. Behavior skills and people, so yeah. Just go out in the real world and meet somebody and draw your own conclusion. Humanities, psychology, whatever it is, that’s not needed.

On the other hand, some participants indicated that they enjoyed taking their humanities courses, and that they found the content of the courses to be interesting and fun to learn.

In addition to the participants’ comments about curriculum improvements, a few participants said that they thought that their program was not challenging enough for them, and that they found their course material to be easy and boring. This sentiment was refuted by Jillian and Amy, who indicated that their career and technical program pushed them to their limits and forced them to expand their knowledge horizons,
This program made me want to go further on, it didn’t make me want to just stop and go work. It actually made me, "oh my goodness, I can actually think that way. Okay I need to do more." Mentally this program has really pushed my brain in a way I had no idea my brain could work.

Amy echoed Jillian’s sentiment, “It pushed me in a way I didn’t really know that my mind could work.” In addition to these themes and subthemes, the researcher noted two outlying concepts, which are described as social determinants and education skeptics.

**Social Determinants.** Two participants suggested that the social determinants, in part, prompted them to enroll in a community college career and technical degree program. The participants reported that they were feeling stuck in terms of their position in society, and that they were not happy with their menial labor market jobs. To them, education seemed to be the best way to gain upward mobility and to attain better living and working conditions. Jennifer said that, indirectly, her social determinants created an awareness of how people can be suppressed, and that education could offer an escape from remaining in an oppressive relationship,

I know parents [who] did not focus on anything but themselves, so they didn’t push their children to want more because they didn’t want more for themselves. Sometimes that’s just a snowball. It’s a rolling effect. That’s probably why I do want to work with more underprivileged and people who don’t have the role models.

Likewise, Eric perceived his social determinants as a hindrance on his path to a better future. Eric said that he wanted to grow and expand his mind. He indicated that he lives in an area that he described as populated by people who classify as being part of the lower-middle class, and that his community seemed to be complacent about their position in the society. The citizens in
that neighborhood seemed to be narrow-minded and rejected change. Eric said that he did not want to be stuck with that mentality, “just knowing that in that area they’re small thinking. This is how… they won’t like if something present to them, they not want to change. It’s like this is what we are accustomed to there is nothing else to do.” Eric continued by saying that he did not want to become complacent about his living environment, and that he has had some experience with being stuck in society in his former employment, “that's what happened with me with [my employment position]. I just got stuck and my one-year turned into four years. That’s not what I had planned.”

Higher Education Skeptics. One participant appeared to be apprehensive about the personal or societal benefits to be gained from higher education. Dan reported that the only reason he enrolled in a community college career and technical degree program was because, “that piece of paper says something to employers. That’s all that really matters in the end.” Dan appeared to be skeptical of the benefits of earning a higher education, and said that he did gain some job-oriented knowledge while attending his courses, but overall, he felt that he had not gained much out of his program. Dan said that he did not want to be forced into a manual-labor job like his dad, so he decided to explore an education path, but he said that his past academic history guided him to a career and technical program, “I wasn't really smart in school so I went with [a career and technical track].”

Conclusion

The data obtained from this study forwards that the community colleges need to do a better job at maintaining an up-to-date curriculum abreast with the developments in the current time and hire faculty members who are capable of facilitating education and learning. The data tends to indicate that many of the participants are not happy with the level of teaching offered
within their programs, and that only after faculty changes were made did the level of teaching and learning increase.

It is interesting to note that the alumni participants articulated upon the value of their education, and then specified the factors leading to their enrollment. The participants who were currently enrolled in career and technical programs specified the factors leading to their enrollment, followed by what they presumed was the value of their education. It is important to note that in case of the currently enrolled students, their perception of the value of their education is directly associated with the factors for their enrollment. For example, when a participant reported that a factor for enrollment was family pressure, this same participant also reported that the value of their education was that they would be able to get a good job to help their family. While the association between family pressure and value of education is not a valid association for every participant, it does appear to be prevalent among many of the participants.

In general, the data tends to indicate that the participants’ family educational background appears to significantly influence the participants decision to enroll in a community college career and technical program or in a higher education program in general. The data reveals that the participants from families with limited education valued higher education and supported their child’s efforts to study at college level. Similarly, those participants whose families are college-educated also valued a college education and supported their child’s decision to study at college level. While this study did not focus on family and education values, the data appears to be consistent with regard to the idea that a college degree will provide for better employment opportunities, and that a community college career and technical degree can act as a stepping-stone to a bachelor’s degree. Several participants reported that they intend to transfer upon
completion of their degree program, and several alumni reported that they did transfer upon completion of their degree program.

A significant finding in this study is that the majority of the participants have a positive outlook toward their education and society. This reflection noted by several of the participants considers the upward-mobility efforts of students who without community college career and technical programs would not have had an opportunity to change their position in society. Many of the participants reported experiencing some level of struggle with academics, and they turned to the community college and career and technical programs for hope through which many of them eventually learned that they were indeed capable of earning a higher education.

The participants seemed to have experienced their community college career and technical programs positively, although, many participants offered suggestions in terms of how the institution could improve its career and technical curricula. While there were several factors described as contributing to negative aspects of their program, the participants overwhelmingly reported that they were happy with their community college career and technical experience.

Chapter Four presented the data obtained from the current study. Chapter Five summarizes and discusses the findings in relation to the framework and the literature. The researcher then discuss the implications of the study and offer recommendations for further research.
Chapter Five

Discussion

Career and technical education is a topic that has been researched many times in the past for various reasons. Critics of career and technical education say that students who graduate from these programs are not being holistically educated and are being under-developed. Critics insist that community college career and technical programs are worth suspending from the colleges program offerings. In contrast to the critics’ perception of community college career and technical education, the research data tends to overwhelmingly indicate that career and technical education is beneficial to American society. However, research about student experiences of their career and technical education is difficult to find. This study provided data that offered an exploration of the experiences of community college career and technical students and alumni.

Community colleges must use a contemporary career and technical education model to deliver an education to students who will be entering a constantly evolving labor market. The graduates of contemporary community college career and technical programs must be able to adapt their education to several career fields and disciplines.

The purpose of this research study is to explore the experiences of currently enrolled students and alumni of community college career and technical degree programs. The following central question and sub-questions guided the exploration of student and alumni experiences and the educational effectiveness of their career and technical education program at community colleges:
Central Question

How do currently enrolled students and alumni of community college career and technical education degree programs assess the efficacy of their educational experience?

While this central research question will allow for foundational phenomenological data, additional questions have been developed to put further focus on this study.

Sub Questions

A. How do currently enrolled students and alumni describe their community college career and technical program experience regarding their future education?

B. How do currently enrolled students and alumni describe their community college career and technical program experience regarding their employability?

C. What factors led students to enroll in a community college career and technical degree program?

Organization of the Chapter

Chapter Five offers a discussion of the current study’s findings, and is organized in the following manner. The researcher summarizes the major themes, subthemes, and outlying themes, which emerged from the study. Then, the researcher discusses the research findings as they relate to the research questions, literature, problem of practice, and the theoretical framework. Finally, the researcher offers a statement about the implications and recommendations this study offered for future research and practice.

Summary of the Major Findings

Table 4 offers a summary of the major themes and subthemes. Followed by Table 5, which provides an overview of the outlying themes.
Table 4

Summary of Themes and Sub-themes

<table>
<thead>
<tr>
<th>Theme</th>
<th>Sub-theme</th>
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<tbody>
<tr>
<td><strong>Factors for Enrollment</strong></td>
<td>Socioeconomics</td>
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<td>Rejection from University</td>
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<td>Employability</td>
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<td>Family Education Background</td>
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<td><strong>Value of Education</strong></td>
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<td>Ability to Provide for the Family</td>
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<td>Gaining Self-Confidence</td>
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<td><strong>Efficiency of the Faculty</strong></td>
<td>Lack of Interest</td>
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<td>Lack of Experience in the Assigned Field</td>
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<td>Inconsistency</td>
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<td><strong>Social Aspects</strong></td>
<td>Communication</td>
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<td>Socialization with Peers</td>
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<td>Anxiety</td>
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<td><strong>Plan Upon Graduation</strong></td>
<td>Transferring</td>
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<td>Seeking Employment</td>
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<td><strong>Program Improvements</strong></td>
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Table 5

Outlying Themes

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<th>Theme</th>
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<tr>
<td>Social Determinants</td>
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<td>Higher Education Skeptics</td>
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**Discussion**

Data from this study reflects the conscious experience of the research participants and revealed that community colleges cannot act as though there is a single purpose assigned to higher education. The data tends to show that community colleges seem to be complacent in their career and technical curricula delivery and development. The findings of this study seem to indicate that there is a relationship between the factors, which contributed to the participants enrolling in a career and technical program, and the level of which they value their education. In addition, there seems to be a relationship between the factors contributing to the enrollment in a career and technical program and the educational background of the participants’ family. The participants seemed to make a connection between the positive program improvements as being a positive influence on their life after graduation. Surprisingly, the concept of social interaction is a significant theme, which emerged from the data. The four subthemes associated with social interaction also emerged from the data are presented. A subtheme helps to provide context to the principal theme it is associated with, and clarifies how the participants interact with the principal theme. In this section of Chapter Five, the researcher discusses the research findings as they relate to the literature and the theoretical framework.
Research Findings and the Literature

The positive experiences expressed by the participants coupled with their positive outlook on their future is known as democratization (Leigh & Gill, 2003; Rosenbaum et al., 2007). The expectation that a community college, much less a career and technical program at a community college, is second to a university education, was not a common concept among the participants. The argument that a community college career and technical degree program will hinder a student’s wish to transfer to a four-year institution to earn a bachelor’s degree is known as the diversion effect (Leigh & Gill, 2003). The literature indicates that a community college career and technical degree program course selection is didactic and ambiguous, and community colleges do a poor job with helping students navigate their selected curriculum, ultimately leaving the students to fend for themselves. The students lacking the social know-how in a community college setting will fall behind because the college is not structured in a way that supports the students (Deil-Amen & Rosenbaum, 2003). The observation by Deil-Amen and Rosenbaum that students who lack social know-how skills will fail in terms of navigating their selected curriculum, and as a result of this failure they will fall behind their peers is part of the argument of those that believe that community college programming, especially career and technical degree programs, lead to the diversion effect. The data obtained during the current study indicated that the analysis of students falling behind simply because they lack the social know-how to navigate their curriculum tends to be true. The diversion effect applies when students enroll in a community college and decide to join the workforce upon graduation or withdraw from the college once they have obtained the skills required for employment, which according to the diversion effect stunts their educational attainment (Leigh & Gill, 2003). The
participants of this study reported that the faculty did not coach them on the transfer process and requirements. In many cases, the faculty presumed that the participants enrolled in a community college because they intended to work upon graduation in lieu of transferring to a four-year institution to complete a bachelor’s degree. The claimed that the faculty did not encourage or coach students about their transfer options contributes to the diversion effect (Deil-Amen & Rosenbaum, 2003; Leigh & Gill, 2003; Rosenbaum et al., 2007). At the same time, the data obtained from this study discredits the claim that community college career and technical students are strictly interested in joining the labor force upon graduation (Graff & Birkenstein, 2008; Katz & Rose, 2013). In the following section, the researcher discusses how the literature supports or does not support the themes and subthemes of this study.

**Factors Leading to Enrollment.** Our contemporary economic structure does not provide much movement regarding career exploration. Students enroll in a specific higher education program because of their possible exposure to the components of the program at some point during their life. A mechanism for exposure to college majors and ultimately career options is often a specific lifestyle, which can be dependent on socioeconomic status, exposure, gained interest, and past educational experience (Hoachlander et al., 2003). However, not every student can benefit from the concept of exposure and positive socioeconomic status, and these are the students that could take advantage of a more flexible economic structure, which would allow for more career exploration.

Given the tight economic structure, many students turn to a community college to fit earning an education into their schedule in an attempt to avoid the typical higher education structure of fitting their personal schedule into a prescribed course schedule. This factor alone contributes to the majority of enrollment in community college programs. The data collected
from this study seems to reaffirm the idea that many people will enroll in a community college career and technical program simply because they can manage the program as part of their daily schedule.

There are a host of other factors contributing to the reason people enroll in a community college program, but there tends to be a specific reason for enrolling in a community college career and technical degree program. The data appears to implicitly indicate that those students enrolling in a career and technical degree program are either easily bored or skeptical of the benefits of higher education. Therefore, the factors driving these students to enrollment could be that they are looking for a more meaningful educational experience (Claxton, 2015) or that they have a distrust towards education and they view career and technical education as an economic safety net (Goings & Margaret, 2013).

The value of Education. The value of education is a concept that every participant had discussed. The paradigm embedded here is that the participants ultimately understand the potential benefit of higher education, but their perspective of the value of their education is predicated on what their education has done for them. In many cases, the theme of the value of education is based on the premise that the participants thought that they would be able to find gainful employment upon graduation. The data indicated that it is unlikely that students will enroll in a community college career and technical degree program simply for the sake of earning an education for the greater good of society. While all the participants said that they value their education, the researcher noted that the three alumni members who earned their credential and joined the labor market were gainfully employed in a field related to their degree at the time the researcher interviewed them. The other three alumni members transferred to a four-year institution.
While discussing the value of education, it is important to note that the alumni members discussed how they perceived the value of their education more prominently than any other concept. The value of education is a major theme of this study regarding the alumni members. The factors, which led them to enroll in a career and technical program, was the next major theme. The currently enrolled participants discussed the factors leading to their enrollment as a major theme, with their perception of the value of their education as the next major theme of the study.

Given the data obtained from this study, the researcher concluded that the students perceived the value of their education from what their education has provided for them. It is of course, easy to speculate that if alumni members were not gainfully employed at the time the researcher interviewed them, their perspective on the way they value their education could have been much different. Therefore, even though the graduates of community college career and technical programs value the benefits of their education more than the education itself, it remains necessary to defend education as a public good. Naturally, when people earn an education, the benefit is shared throughout society, “When citizens are educated, some of the advantages accrue to us all and not just those who have received the education” (Taylor, 2015, p. 57).

**Faculty.** Community college career and technical programs rely on the experience of their faculty members within their respected trade. Often, this means that teaching ability and style are not a driving factor in the hiring or retention of career and technical faculty members (Deil-Amen & Rosenbaum, 2003). In general, to be employed to teach a trade at a community college, a person needs at least an associate’s degree and a predetermined number of years of experience in the trade. Of course, this is not the case for all teaching positions in career and technical programs. In some cases, there is a requirement that the faculty members should hold
appropriate certifications or licenses. These requirements often mean that the professionals hired to train students in a specific discipline are likely to use the knowledge transition model to teach students, rather than learning the facilitation model. Bailey, Jaggars, and Jenkins (2015) indicated that “faculty who adhere to the knowledge transmission model tend to focus on facts rather than concepts, cover a large amount of material in class, and emphasize lectures, readings, and other use of media to impart information” (p. 85).

The participants in this study indicated that their faculty members were more interested in bookwork, reading, and responding to questions than they were with the traditional hands-on method of experiential learning. The participants did not agree with the knowledge transmission model of teaching, and many of them expressed their frustration with the lack of learning facilitation within their program.

While the participants expressed concern over the teaching methods used in their career and technical programs, they indicated that there appeared to be structural inconsistencies as well. Many of the participants stated that they felt that their faculty members were under-trained and not fit for teaching their assigned discipline. There was also concern among the participants that the faculty and through the faculty, the organization had much deeper structural problems.

The data collected during this study revealed that community colleges need to do a better job with organizing, managing, and facilitating structural change within the organization. The structural changes or discontent should not negatively influence the experiences of the students enrolled in the college programs. However, the current data revealed that the participants experienced significant negativity, which seems to have been influenced by the structural incompetence within the organization.
Social Aspects. Being social is an inherent part of human nature, but the mechanism to interact socially is not offered naturally. This study revealed that the students enjoyed the opportunity to interact socially with their peers and faculty members. The alumni participants stated that since graduating from their programs, they feel that they miss the social aspect of being enrolled in a college degree program. The sense of community was also raised by a participant, although the researcher noted that this concept is an outlier, the feeling of community is plausible for those students looking for a mechanism to interact socially or an organization to simply be a part of (Kubala, 2000).

Year after year, students will enroll in community college courses, and many of those students will major in a career and technical program. While their expectation is that they will learn a skill and, upon graduation, they will gain employment, they do not realize that the social aspect of coming to class and interacting with their peers is an important part of earning a college degree.

In addition to the students’ perception that the social aspects of their degree program are essential to their learning ability (Deil-Amen & Rosenbaum, 2003), the researcher noted that the participants used the term “social” to discuss the interaction between student to student and student to faculty. The participants used the term “communicate” to discuss student to employer interaction. The researcher noted that this use of vocabulary by the participants could mean that career and technical students, overall, tend to gain an appreciation for their education and are able to differentiate between the less formal atmosphere of academic study and the more formal atmosphere of employment.

Plan Upon Graduation. In broad terms, some of the students enrolled in these programs are exploring their career options, but the data presented in this study revealed that many of the
participants had an objective or a goal at the time when they enrolled. The participants’ objective usually included one of the two possible outcomes upon graduation - transfer to a four-year institution or join the labor force.

**Transferring to a Four-Year Institution.** The ability to transfer to a four-year institution is one of the many roles community colleges foster as they educate their students. However, community college career and technical programs appear to need to do better in preparing and advising students about transfer requirements and the transfer structure in general. It is known that “community college students often have a low-level of academic motivation” (Bailey et al., 2015, p. 94), and that students who enroll in community college use their education upon graduation as a mechanism to better their academic standing and to transfer to a four-year institution to complete a bachelor’s degree. Unfortunately, “the majority of students who enter community college do not succeed, and this failure comes at great cost to them and society” (Osterman, 2011, p. 130).

The data collected for this study includes three alumni members who transferred to a four-year institution to earn a bachelor’s degree upon graduation from their community college career and technical degree program. The alumni participants reported that they intended to transfer upon enrollment to their career and technical program and that transferring was their goal upon entering the college.

Many of the currently enrolled participants indicated their interest in transferring upon graduation, but expressed concern over their financial and academic ability to do so. While a long-standing hallmark of community colleges is to graduate students who will then transfer to a four-year bachelor’s degree program, this is not their only obligation. According to the data
collected for this study, some students will use the community college to help them gain employment or for retraining. These students often enroll in career and technical programs.

**Joining the Labor Market.** Many of the participants reported that they would like to transfer upon graduation, but that idea was simply unrealistic for them. Other participants reported that they did not enroll in a career and technical program with the goal of transferring – their goal was to earn an education, which will provide them with the skills needed to find gainful employment.

Given the wide range of expectations of community college career and technical students, the community college cannot dictate a single path for its students nor can it be a prescriber for defining the purpose of higher education. Community colleges do many things well, such as preparing students to join the labor force or transferring to a four-year institution, “many students see community college as a step toward a four-year degree and we should also support this objective” (Osterman, 2011, p. 157).

With community colleges enrolling students with a broad range of skills and backgrounds, the decision to allow students to advise themselves throughout the course of their program is problematic, “the advising process should provide an opportunity for staff to help students understand their strengths and weaknesses, develop academic and associated career goals, and learn about what majors might correspond to those characteristics” (Bailey, Jenkins, Belfield, & Kopko, 2016, p. 87). The participants in this study were experiencing a level of ambivalence regarding the pathway to success, and they expressed their concern that their ambivalence was due to the lack of student advising.

The literature appears to support the efforts of community college career and technical degree programs in their ability to foster the democratization process. There is no question that a
community college career and technical education is attractive to the American lower-class society, which many of the participants of this study contributed to. Community colleges offer inexpensive courses, generous offerings, and the campus is often located nearby. In addition, according to Leigh and Gill (2003), the community colleges democratize access to higher education by offering career and technical programming in addition to traditional academic courses and by fostering a rolling admission policy. However, the participants of this current study stated that their traditional academic courses were not challenging and they likened them to the secondary school level courses. The participants’ experience of this phenomenon credits the critics’ (Fichtenbaum, 2015; Lazerson, 2010; Ravitch, 2013) theory of community college career and technical programs as being a diversion and aiding in the decline of the moral and intellectual meaning of higher education.

This study revealed that several of the participants enrolled at a community college because they were rejected by or withdrew from a four-year institution. Murray (2009) asked the following rhetorical question, “should all of those who have the academic ability to absorb a college-level liberal education get one?” (p. 86) Murray goes on to say that “a large proportion of people who are theoretically able to absorb a liberal education have no interest in doing so” (p. 86). The reason to justify and the methods used by the participants of this study to select their program of choice are outside the scope of this study. However, it is important to note that Murray’s thesis indicated that those participants that were enrolled at a four-year institution and then withdrew could fit into this category, therefore supporting the claim that not all those who are capable of absorbing a college level liberal education want to do so. Leigh and Gill (2003) reported in their study that “the students with high levels of desire to be educated typically enroll in transfer as opposed to terminal programs” (p. 27).
Through a wide lens, the researcher noted that the participants valued their career and technical education. Many of the participants reported that their education had propelled them to a better position in the society. A position that they would not have been able to achieve otherwise. Although the participants reported favorably in terms of their career and technical program in general, several of the participants indicated that they did not value their general education courses. The lack of appreciation or value of general education courses exhibited by the participants could be the result of many factors. It was clear that the participants in this study did not see a relationship between their general education courses and their technical core courses (Bailey et al., 2016). Community college career and technical programs would benefit from the “deeply structured” (Wyner, 2014, p. 15) approach to technical degree curricula, which could better serve the goal of degree completion. However, this study revealed that achieving a deeply structured approach to degree completion is based on the ambition and values of the students enrolled in the program. A program could be deeply structured and well prepared, but if students do not value a holistic education, then the effectiveness of career and technical education will continue to be questioned.

**Research Findings and Theoretical Framework**

Path dependency theory is predicated on the idea that students will succeed in completing a degree if they can be supplied with a “well-defined pathway” (Bailey et al., 2016, p. 89). Path dependency theory serves a binary purpose. First, the theory offers the institution a framework within which to create policy, curriculum, and procedure, and it redefines the professoriate. Second, the theory supports the students by providing them with a structure, in which they can be successful at completing their degree program.
The participants in this study indicated that their community college career and technical path to success was ambiguous at best. The participants defined success according to their goals, which were closely aligned with their factors for enrollment, essentially asking the rhetorical question, what do I get out of this? If the path to completion was clear, then the students would have an answer to this question. However, the alumni participants reported that they did not receive an answer to this question until their position in society changed as a result of their education. The currently enrolled students appeared to be gaining a response, but were still searching. The data collected during this study seems to support the claim that a well-structured path to completion will better serve the students.

This study revealed that the community college career and technical programs must embrace the “new vocationalism” (Hora et al., 2016, p. 9) and theory to practice integration (Stokes, 2015) concepts. Path dependency theory cannot be implemented without both concepts being utilized. The experience of the participants in this study is evidence that with the lack of the new vocationalism and theory to practice integration, the effectiveness of community college career and technical programs will remain questionable in the eyes of employers and society in general.

**Recommendation for Future Research and Practice**

The researcher understands that the experience described by the participants of this study cannot be generalized across all community colleges. However, community colleges can benefit from the data presented. Embedded in the data are concepts suitable for additional research. The researcher will discuss these concepts concerning how they apply to the industry of practice and how they can influence future research.
**Recommendation for Future Research.** This study has revealed some concepts to consider for future research. The participants indicated that family pressure and values greatly contributed to their enrollment in a community college career and technical degree program. Further research regarding this concept could include an in-depth review of the association between family values and career and technical education. Future research could also include an investigation into why people choose to enroll in a career and technical degree program and the factors which contribute in influencing their decision. It is generally known that students who have been exposed to certain disciplines will gravitate to the discipline in which they are most comfortable (Shavit & Muller, 2000; Soares, 2010; Yorke, 2006). Therefore, additional research should include the branches of secondary education to investigate the type of person who would enroll in vocational-technical high schools, and of those who graduate from one, who would enroll in a community college career and technical program and whether they would enroll in the same discipline or a different one.

This study also revealed that additional research could be conducted in the area of community college career and technical program transfer rate. Data collected during the current study suggested that the alumni participants who transferred to a four-year institution to earn a bachelor’s degree had considerable amount of trouble doing so. Complications with the transfer process were evident in the lack of community college career and technical faculty advisement and ambiguous and outdated curriculum. Additional research in this area could include a review of career and technical program transfer procedures and the process for which community colleges are facilitating such procedures.

In addition to the above recommendations for additional research, the concept of social determinants, as it relates to community college career and technical degree program enrollment
could also be an area of additional investigation. There is no question that career and technical programs appeal to a certain population of students. The question is: to what extent do social determinants dictate which higher education program a student will enroll in? There is no doubt that students in poor socioeconomic areas earn low-test scores, “children whose parents are poor and have low educational attainment tend to have lower test scores” (Ravitch, 2013, p. 36). It is important to know whether community college career and technical programs are helping students with a poor socioeconomic status by graduating students who can find gainful employment and the ability to change to a more financially comfortable living arrangement. It is also important to know whether community college career and technical degree programs, instead of helping boost the socioeconomic status of graduates, are contributing to the separation of classes in American society (Murray, 2013).

**Recommendation for Practice.** The data presented in this study could be significant to community college administrations nationwide as they facilitate career and technical education programs along with their budgets, organization, and policy. College administrators will be able to use the findings presented in this study to make their decision-making procedures better as they relate to career and technical degree programs.

College administrators could use the findings of this study to streamline the decision-making process and provide generalized recommendations for the effective governance of career and technical degree programs. The responsibility to educate students while preparing them for work is shared by the institutions of higher education and employers, “I view the combination of academic study and work preparation as a both/and rather than an either/or proposition” (Stokes, 2015, p. 4). This study supports the both/and paradigm and offers practitioners evidence to
suggest that community colleges should embrace the new vocationalism and theory to practice integration in an attempt to support the paradigm.

This study suggests that the participants valued the practical-based curriculum that a career and technical program offers, but expressed disappointment in terms of the lack of practical-based training they received in their courses. Institutions will need to change their culture to support progressive career and technical curriculums (Panero & Talbert, 2013). One way to achieve culture change is to move away from a “focus on curriculum delivery and teaching practice” and move towards a “focus on student learning and access to instructional content” (Panero & Talbert, 2013, p. 39).

There is no question that there is value to earning a university degree and that work productivity and economic gain is better with each level of schooling acquired (Gallagher, 2016). However, the community college career and technical degree programs are often stigmatized in that they appeal to the lower class and less ambitious students. The stigma is often implicitly facilitated by the organization. Manning (2012) wrote that the organization is only as good as its members want it to be, “all organizational members play a role in shaping culture and the construction of meaning from individual and collective experience” (p. 91). This statement is directly related to how community colleges facilitate their career and technical programming, deduce policy, create course schedules, organize departments, and hire faculty within their career and technical structure.

Community colleges must be able to provide quality career and technical degree programs to those students who wish to obtain the credential. The organization cannot adequately provide this service to its students if it offers validity to the stigma. Therefore, the researcher noted that the data collected for this study seems to indicate that the participants were
longing for a more challenging curriculum and engaged experiential experience, which may indicate that their community college facilitated their career and technical programs in such a way as to provide validation to the stigma.

To avoid offering validation to the perpetual stigma of career and technical education, the researcher recommends that community colleges employ the new vocationalism in conjunction with theory to practice integration. Faculty within the career and technical program structure must move from the knowledge transmission teaching method to the learning facilitation-teaching method, thereby including a more rigorous curriculum and competency based learning and assessment.

**Competency-Based Learning and Assessment.** Community colleges in the future will need to embrace competency-based training to provide holistic career and technical education degree programs. Students sitting in a classroom listening to a professor lecture for 60 minutes no longer serves its purpose (Hora et al., 2016). Competency-based learning provides students with the opportunity to engage in their studies physically. Practical engagement is “significant because it opens up the opportunity for individuals to earn credentials based on what they know or can do, rather than spend unnecessary time in an academic setting” (Gallagher, 2016, p. 159).

Competency-based learning and assessment should be inherent in career and technical training, but there is no mechanism for the mandatory use of competency-based learning and assessment. The participants in this study unanimously said that they, although it was limited, enjoyed the hands-on experiential learning offered in their career and technical degree program. While the opponents (Fichtenbaum, 2015; Lazerson, 2010; Ravitch, 2013) of career and technical programs demonize these programs and excoriate students who graduate with career and technical terminal degrees seem to agree with the idea that those people who work with their
hands are less intelligent than those who work with their minds, Claxton (2015) and Crawford (2016) indicated that this thought tends to be false. Intellectual work does not automatically equal intelligence. One of the top educational myths in contemporary education is that “Practical learning is cognitively less demanding than intellectual learning” (Claxton & Lucas, 2012, p. 19).

Therefore, competency-based learning and assessment is an important concept concerning how career and technical curriculum should be facilitated, and competency-based assessment is the appropriate form of assessing students who are learning via a competency based curriculum. In addition, asking the students to demonstrate skills rather than sit through an hour-long lecture followed by a summative assessment provides the students with additional value. There are two competencies derived from the competency-based learning concept. These competencies are “expert thinking” and “complex communication” (Hora et al., 2016, p. 94).

According to Hora et al. (2016), expert thinking is defined as the “cognitive ability to develop knowledge and use it to identify patterns and solve new kinds of problems,” and complex communication is defined as “the social skill to work diverse colleagues, exchange and understand large amounts of complicated information, and cultivate trust and understanding” (p. 94). The researcher noted that the data collected as part of this study seems to have shown that these three competencies, (knowledge, social aspects, and communication) are principal themes and necessary aptitudes for academic and workplace advancement, according to this study’s participants.
Conclusion

The significance of this study is that it will add to the national debate about the effectiveness of an academic education versus the effectiveness of a career and technical education and the importance of community colleges offering both. The inherent complications of theory to practice integration coupled with the impurities of community college structure and policy has caused society to question the validity of community college career and technical degree programs. Community colleges must operate with a business model simultaneously with an education model. Often these models conflict, and it is the students who suffer the effects. The central research question that guided this study is: How do currently enrolled students and alumni of community college career and technical degree programs assess the efficacy of their educational experience? This qualitative research study was designed to study the lived experiences of community college career and technical students and alumni concerning their conscious experience of their community college career and technical degree program.

Community colleges are on America’s front lines, and they are confronted with what seems to be an impossible task – to educate anyone looking to earn an education. There is no question that many students enrolling in community college programs struggle with college-level learning (Bailey et al., 2015). Students arrive at the enrollment office with poor metacognitive skills. Two-year colleges enroll students who are less academically prepared and are generally from disadvantaged backgrounds (Kelly, 2016). However, community colleges have the resources to help these students succeed including offering remedial course work. Also, successful paths through community college career and technical programs are often structured well, and these programs are often connected to jobs (Bailey et al., 2016).
While the discussion surrounding community college career and technical programs continues to include innuendo and the idea of a failed educational system, the data presented in this study suggested that this claim tends to be false. There is no question that community college career and technical programs need to do a better job of advising students regarding employment opportunities and for transferring into a bachelor’s degree program. Bailey et al. (2015) certified this data stating that “students expressed confusion and frustration over transfer requirements and the transfer process and said that being in a program with a well-defined pathway would improve their chances of completing an associate degree or transferring” (p. 155).

Given the concepts of the new vocationalism and theory to practice integration as guiding methods to implement the path dependency theory, community college faculty members need to redefine the professoriate and collaborate with industry professionals to develop a contemporary curriculum. The idea that a community college would be complacent in that they do not update their programs, they do not offer professional development for faculty members, and they do not integrate their academic community with the practical trade communities, is detrimental to the institution, the students, and the community. The days of vocational education are over, and community colleges must adopt the new vocationalism and theory to practice integration initiatives through the perspective of path dependency theory.

Our community colleges are on the front lines regarding higher education. They must be prepared with updated curriculum and a vision for the future. This includes new vocationalism, theory to practice integration, and the path dependency paradigm and excludes old cliché, outdated curricula, stereotypes, and summative assessment methods, which do not match the industry demand. Policy makers argue that “supporting vocationally oriented training programs
is the best solution to the nation’s workforce challenges” (Hora et al., 2016, p. 43). The institutions should develop a strategic plan through the lens of path dependency theory and examine their mission and vision statements to ensure that they correctly convey a contemporary mission, vision, goals, and objectives.
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Appendix A

Figure 1: The domains of the real, actual & empirical (Bhaskar, 1998a)

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<th>Domain of Real</th>
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Appendix B

Recruitment Email
Northeastern University - College of Professional Studies
Doctor of Education Program

Subject Line:

Dear Students,

My name is Thomas Gauthier. I am a student in the Doctor of Education program at Northeastern University, am currently conducting a study for my doctoral thesis, and am seeking research participants.

I am researching the need for vocational degree programs at community college. My objective is to collect information about student experiences within their vocational education programs, which will strengthen the support for maintaining existing vocational programs and/or developing and funding additional vocational programs.

For this study, I am recruiting participants who meet the following criteria:

- Currently enrolled in a community college vocational education degree program with at least 30 credits.
- Graduates of community college vocational degree programs that have transferred to four-year institutions or are working in the labor market.

If you decide to participate in this study, you will have two interactions with me. The first interaction is an in-person meeting that will last approximately 45 – 90 minutes. I will ask you to select a pseudonym to protect your identity, you will be presented with a consent form, and you can ask me questions about the study. This meeting will be an in-depth interview about your experience as a community college vocational education student or alumni. It will be audio recorded and transcribed into writing. I have attached the questions that I will ask you so you can review them in advance. Finally, you may choose to meet in person or send me an email for the second interaction. I will provide you with the transcript of our in-depth interview and a summary of my interpretation of your account. You will have the opportunity to share additional information and clarify points of confusion or inaccuracy. In total, these interactions are expected to take about two or three hours of your time.

Please email me at Gauthier.th@husky.neu.edu if you wish to participate and let me know if you have a particular place where you would like to meet. Keep in mind that we will need a quiet place suitable for audio recording our conversation.

Thank you for your interest in participating in this study. Please email me at Gauthier.th@husky.neu.edu if you have any questions.

Regards, Thomas Gauthier
Appendix C

Recruitment Email (Follow Up Message)
Northeastern University College of Professional Studies
Doctor of Education Program

Subject Line:

Dear Students,

One week ago, you received an email about a research study that I am doing for my doctoral thesis.

This is a reminder to email me at Gauthier.th@husky.neu.edu if you are interested in participating.

Thank you again for considering participation in the study.

Regards,

Thomas Gauthier

*Note: This is a follow-up email that will be sent to students who do not respond within seven days of the initial email. For the follow-up email, the initial email will be forwarded to students so they can easily view the information included and respond appropriately.
Appendix D

Informed Consent Form
Northeastern University College of Professional Studies
Doctor of Education Program

<table>
<thead>
<tr>
<th>Northeastern University, Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of Investigator(s):</td>
</tr>
<tr>
<td>Principal Researcher: Dr. Ron Brown, Northeastern U.</td>
</tr>
<tr>
<td>Student Researcher: Thomas Gauthier, Northeastern U.</td>
</tr>
<tr>
<td>Title of Project: Exploring Student Experiences: Examination of Community College Career and Technical Programs</td>
</tr>
</tbody>
</table>

Informed Consent to Participate in a Research Study

We are inviting you to take part in a research study. This form will tell you about the study, but the researcher will explain it to you first. You may ask this person any questions that you have. When you are ready to make a decision, you may tell the researcher if you want to participate or not. You do not have to participate if you do not want to. If you decide to participate, the researcher will ask you to sign this statement and will give you a copy to keep.

Why am I being asked to take part in this research study?

We are asking you to participate in this study because you are either currently enrolled in a community college career and technical program with at least 30 credit hours or you are a graduate of such a program.

Why is this research study being done?

The purpose of this study is to explore the importance of vocational education degree programs at community colleges.

What will I be asked to do?

If you decide to take part in this study, we will ask you to respond to research question developed to gauge your experience with your career and technical education.

Where will this take place and how much of my time will it take?

This study will involve three points of contact with the researcher, two in person and one either in person or via email. The first point of contact will be an initial meeting with the researcher (approximately 30 minutes). The second point of contact will be an in-depth interview with the researcher (approximately 45–90 minutes). The third point of contact will be a follow-up conversation with the researcher. You can elect to hold this meeting in person (approximately 30 minutes), or you can respond to the researcher via email (time varies). The interviews will be audio recorded for transcription and analysis purposes. You will choose the location of the interviews.

Will there be any risk or discomfort to me?

The primary risk associated with this study is the discomfort you may feel discussing your experience with your vocational degree program. The researcher will respect your boundaries during the interviews and allow you to skip any questions that you do not wish to answer. The researcher will provide you with resources for seeking additional guidance relative to your situation if needed.
Will I benefit by being in this research?

There will be no direct benefit to you for taking part in this study. However, the researcher hopes that the information gathered through this study will provide valuable insight into the experiences of students of vocational education degree programs at community colleges and contribute to the national debate about the value and importance of these programs nation wide.

Who will see the information about me?

Your part in this study will be confidential. Only the researchers will see the information about you. If you decide to participate, you will select a pseudonym that will be used throughout the study to protect your identity. Any reports, presentations, or discussions associated with this study (i.e., doctoral thesis, journal articles, conference presentations) will utilize this pseudonym and will not include any personal information linked directly to you. Information about your age, gender, race, and field of study will be included to help others understand and interpret the research findings. Our interviews will be audio recorded and transcribed into writing. The researcher will code the written transcript to identify patterns and themes within your interview and across interviews with other participants. All physical documents or files related to this study will be stored in a locked file cabinet. All electronic files will be stored in a password protected online file storage program and on an external data storage device. Only the researcher will have access to these storage mechanisms. All data will be retained for seven years and then destroyed.

If I do not want to take part in the study, what choices do I have?

Section is omitted

What will happen if I suffer any harm from this research?

No special arrangements will be made for compensation or for payment for treatment solely because of my participation in this research.

Can I stop my participation in this study?

Your participation in this study is completely voluntary. You may decide not to participate, and may withdraw at any time. You are not obligated to answer all questions that are asked of you during interviews. You may indicate your desire to skip a question by stating, “pass.”

Who can I contact if I have questions or problems?

If you have any questions about this study, please feel free to contact Dr. Ron Brown (ron.brown1@neu.edu) the Principal Investigator.

Who can I contact about my rights as a participant?

If you have any questions about your rights in this research, you may contact Nan C. Regina, Director, Human Subject Research Protection, 490 Renaissance Park, Northeastern University, Boston, MA 02115. Tel: 617. 373. 4588, Email: n.regina@neu.edu. You may call anonymously if you wish.

Will I be paid for my participation?

There is no incentive for participating in this study.

Will it cost me anything to participate?

You will be responsible for the cost of traveling to the interview site. However, you will be able to select an interview site that is convenient and comfortable for you.
Is there anything else I need to know?
Nothing noted here

I agree to take part in this research.

Signature of person [parent] agreeing to take part ________________ Date ________________

Printed name of person above

Signature of person who explained the study to the participant above and obtained consent ________________ Date ________________

Printed name of person above

Depending upon the nature of your research, you may also be required to provide information about one or more of the following if it is applicable:
1. A statement that the particular treatment or procedure may involve risks to the subject (or to the embryo or fetus, if the subject is or may become pregnant) which are currently unforeseeable.
2. Anticipated circumstances under which the subject’s participation may be terminated by the investigator without regard to the subject’s consent.
3. Any additional costs to the subject that may result from participation in the research.
4. The consequences of a subject’s decision to withdraw from the research and procedures for orderly termination of participation by the subject.
5. A statement that significant new finding(s) developed during the course of the research which may be related to the subject’s willingness to continue participation will be provided to the subject.
6. The approximate number of subjects involved in the study.
Appendix E

Interview Guide
Northeastern University College of Professional Studies
Doctor of Education Program

Date:
Location:
Interviewer:
Interviewee:

Instruction for the interviewer:
My name is Thomas Gauthier, candidate for the Doctor of Higher Education Administration Degree at Northeastern University. My doctoral research is focused on the need and importance of offering career and technical education degree programs at community colleges. My objective today is to ask you a few questions aimed at understanding your experience with career and technical degree programs at your community college and some of the reasons why you enrolled in this particular program.

Please understand that your name will not be used in my study or in my notes. Therefore, you will be asked to select a pseudonym that I can use to identify you in the study. Also, I will be taking notes and will be audio recording this interview, so please feel free to talk naturally and openly without worrying about me keeping up with you. If you are not comfortable with a particular question, please respond, “pass” and I will move on to the next question.

Part One – Ice Breaker and General Questions

Ice Breaker

1. What is the participant’s academic status?

Prompts.

a. Are you a second-year student, or a graduate?

b. What is/was your major area of study?

c. Are/were you a daytime or an evening student?
d. Are you attending “community college” on a full-time basis or part-time?

2. What is the participant’s family educational background?

   **Prompts.**

   a. Did your parent or guardian earn a college degree?
   b. What is your motivation for earning a degree?

**General Questions**

3. What factors lead participants to enroll in a career and technical education degree program?

   **Prompts.**

   a. What motivates you to study at the college level?
   b. Was a career and technical program your first choice?
   c. What is your long-term goal in terms of a career?

4. What do participants suggest is the value of their education?

   **Prompts.**

   a. What does earning a career and technical degree mean to you?
   b. How has earning a career and technical degree changed your life?

5. What perceptions do the participants offer in regard to the holistic nature of their career and technical education program?

   **Prompts.**

   a. Has your career and technical program offered you more than career and technical training?
   b. Did you gain any non-career and technical skills from your program?
c. Did your career and technical program provide you with an opportunity to explore your own ontology?

6. How do participants suggest improving their career and technical education program?

Prompts.

a. Should courses be added or removed?

b. Was the course schedule flexible?

7. What are the positive aspects of the participant’s career and technical education program?

Prompts.

a. What did you enjoy about the program?

b. How would you promote the program to someone thinking about enrolling?

8. What are the negative aspects of the participant’s career and technical education program?

Prompts.

a. What aspects of the program did you dislike?

b. How would you explain your criticisms of the program?

9. How do participants understand how their social-determinants influenced their educational choice?

Prompts.

a. Did you enroll in a career and technical program because of specific aspects of your life?

b. How has your career and technical education program influenced your social-determinants?

10. How do participants identify with their career and technical education program?
Prompts.

a. How do participants suggest their career and technical program changed their outlook towards education?
b. What does the term identity mean to you?
c. Do your career and technical education define you?

Part Two – Currently Enrolled

Regarding Future Education.

11. What are the intentions of participants in terms of transferring to a four-year degree program?

Prompts.

a. After you finish your program here, are you planning to transfer into a career and technical program or an academic program?
b. What was your thought process in determining your decision to transfer?
c. Why are you transferring as opposed to working after you earn your Associate of Applied Science Degree (AAS) degree?

Regarding Employability.

12. How do participants feel about how their career and technical education degree program is preparing them for employment?

Prompts.

a. What are your employment goals?
b. Do you feel that a career and technical program is helping you achieve those goals?

13. What aspects of employment do participants articulate as being important in regard to their career and technical education program?

Prompts.
a. What skills are you learning in your program that will transfer to employment?

b. Are you learning about hard and soft skills?

**Part Three – Alumni (Working)**

14. What careers are participants currently working in?

**Prompts.**

a. Is your career related to your degree?

b. What type of role do you serve in your current position? (Labor, managerial, administration)

15. How do participants feel about how their career and technical degree program prepared them for employment?

**Prompts.**

a. How has your career and technical education prepared you for your current job?

b. What aspects of your career and technical education are you using at work?

c. What skills are you using on the job, which you did not receive in your program?

16. How do participants view the efficacy of their career and technical education program?

**Prompts.**

a. Do you feel that your career and technical education is valuable or could you have done without it?

b. How does it feel to be a college graduate contributing to society?

**Part Four – Alumni (Transferred)**

17. How do participants view the efficacy of their career and technical education program?

**Prompts**

a. Do you feel that your program prepared you for a transfer?
b. What did the four-year program give you that you did not get at the AAS level?

c. Is your four-year program related to your AAS degree?

18. How do the participants feel about how their career and technical education program prepared them to transfer to a four-year degree program?

Prompts.

a. What do you think the four-year program will give you that you did not get in the Associate Degree program?

b. Does the college and the faculty promote transferring?

c. What are some of the obstacles in the way of transferring?

Thank you again for taking the time to meet with me and discuss this issue. If I find that I need to ask you any follow-up questions, I may email or call you for clarification. In addition, if you feel that you want to add or clarify any information you provided today, you are free to call or email me.

Thanks again,

Thomas Gauthier