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STUDENT PERCEPTIONS OF SOFT SKILLS AS AN INDICATOR OF WORKPLACE  
SUCCESS

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By  
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A DISSERTATION IN PRACTICE

Submitted to the faculty of the Graduate School of Creighton University in Partial  
Fulfillment of the Requirements for the degree of Doctor of Education in  
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## Abstract

Students need a variety of skills both basic academic skills and technical knowledge in order to be successful in the workplace. Work ethic is comprised of a combination of hard skills (the technical skills needed to obtain a job) and soft skills (the personality traits and career attributes needed to keep the job and develop a career over time). This qualitative case-study dissertation in practice explores perceptions of soft skills as an indicator of workplace success for students in a two-year technical college. The researcher reviewed literature to outline the skilled labor demands in the United States, employment expectations of new entrants to the workforce, and social-emotional research in order to understand the ability for individuals to develop the skills in the two year college environment. The researcher conducted semi-structured open-ended interviews and reviewed journal submissions submitted in the PDV 105 Blueprint for Personal Success course. Findings of the study included all respondents indicating a positive perception of soft skills as an indicator of workplace success. Themes emerging from the study included respondents' desire to understand employers' expectations with regard to soft skills, the desire for support in navigating the high-stakes working environment of skilled labor positions and the need for students to demonstrate a willingness to learn and develop soft skills as they gain experience in the workforce. The study concludes with a series of conclusions and recommendations for two-year institutions to consider as they seek to develop a soft skills training program to integrate in the context of a technical college environment.

Dedication

For my father, who taught me the meaning of work ethic. For my children: Delaney, Julien and Penelope as proof that one can accomplish anything if they are willing to work hard enough. And, for my husband, Matthew for loving me past all the work.

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## CHAPTER ONE: INTRODUCTION

**Introduction and Background**

The future workforce is here—and it is woefully ill-prepared for the demands of the modern workplace (Cavanagh, Kay, Klein & Meisinger, 2006). Young people need a range of skills, including basic academic skills as well as the ability to apply technical skills and knowledge in the workplace. A collective sample of national employers has indicated that the educational system in the United States is not doing enough to prepare for a vibrant economic future for America's children and the nation as a whole (Cavanagh et al., 2006). In order for the United States to continue to compete in a global economy, the entering workforce must demonstrate excellent levels of competence in applied skills and core academic subjects. These skills are in demand for all students, regardless of their future plans, and will have an enormous effect on students' abilities to succeed in the modern workplace and community life.

Hard skills are the technical expertise and knowledge needed for a job. Soft skills are interpersonal qualities, also known as the people skills and personal attributes that one possesses. Soft skills are centrally important for human capital development and workplace success (Lippman, Ryberg, Carney, Moore & Trends, 2015). A growing body of evidence shows that these qualities rival academic and technical skills in their ability to predict employment and earnings, among other outcomes (Kautz, Heckman, Diris, ter Weel, & Borghans, 2014). While hard skills are a part of many excellent educational curricula, soft skills need further emphasis in college and university curricula so that students learn the importance of soft skills early in their academic programs before they embark on a professional career (Wellington, 2005).

Leaders in post-secondary education are beginning to realize that the challenges surrounding the skills gap in national labor trends are more complicated and nuanced than the original narrative surrounding the labor shortage suggests. While research indicates that business leaders need employees who have basic knowledge and technical expertise appropriate to their job type and industry, the research illustrates that employers place a high premium on other qualities as well (Hora, Benbow & Oleson, 2015). These other skill sets, often denigrated as soft skills, are not viewed as optional competencies but are indispensable complements to technical education. National data trends reveal that the skills most salable among employers are problem-solving, critical thinking and communication (Deloitte & The Manufacturing Institute, 2011). Further, employers are demanding that employees demonstrate an aptitude for collaboration, conflict resolution, effective oral and written communication skills, and an overall desire to continuously learn. These skills translate to an employee's ability to persevere during challenging times, to handle and adapt to change and advances in technology, and to react autonomously when called upon to engage in critical thinking and problem-solving.

Technical Colleges are the leading provider of skilled labor to America's workforce. These institutions are committed to hard skills training because their programs are designed to teach students a particular craft or skilled trade. Traditionally, they have not focused on teaching soft skills. However, increased industry demands have brought greater awareness to the importance of this facet of the educational experience (American Society for Training and Development, 2011). Employers have indicated that soft skills proficiency is an imperative addition to the hard skills of trade labor, as an employee's work ethic will be measured on the successful combination of both hard *and*



soft skills (National Network of Business and Industry Associations, 2014). Employers simply have a more limited base of human resources if employees lack these talents and behaviors. In 2017, there is a movement in technical education to develop the whole person, which means teaching both the hard skills and the soft skills.

While industry leaders have recognized the deficit in work ethic, the post-secondary education system has historically accepted little to no responsibility for teaching or developing soft skills (Center for Work Ethics Development, 2011). Educational institutions have previously relied on the notion that parents are responsible for teaching their children work ethic and by the time they reach post-secondary classrooms, they either have “it” or they do not. Similarly, educators have also readily accepted the idea that work ethic is inherent and therefore some individuals are simply born with a greater interest and innate value placed on work. These assumptions have made it increasingly acceptable for educators to label individuals with low levels of emotional intelligence and lack of soft skills as lazy or incompetent.

Public policy has influenced post-secondary education’s greater emphasis on training technical skills and is likely contributing to the dearth of soft skills. State and national representatives have responded with policy to address the skills gap; however, the response has been to focus almost exclusively on training students in the so-called hard skills, specifically in the two-year college environment. Two-year community and technical colleges, for example, focus on providing students the knowledge and ability to perform tasks like welding or computer-aided design programming aimed at preparing them to enter high-wage, high-demand jobs to contribute to the needs of the nation’s workforce. The focus is marked by an associated de-emphasis on general education and

liberal arts across the entire post-secondary spectrum, but specifically in the two-year college environment (Hora et al., 2015). Leadership as high up as President Barack Obama in his final State of the Union Address have encouraged community and technical colleges to identify “Faster pathways for students to get the ‘best skills’ possible at the cheapest cost” (Obama, 2016).

However, as society embraces the first (mostly unexamined) assumption of the skills gap, and accepts that two-year colleges should be geared toward training students in the technical skills that business leaders demand in the short term, industries are still faced with two undeniable challenges. First, employers do not seem to want employees with technical skills alone; and second, current educational policies do not reflect the true desires of industry (Hora et al., 2015).

In addition to the skills associated with trade and skilled labor such as machining, welding, sheet metal and composites fabrication, business and industry representatives call upon their employees to demonstrate adaptability, applied learning, the ability to build trust, and effective oral and written communication skills; to value continuous improvement; to engage in collaboration and be willing to contribute to team success; to harbor a customer-centered focus; to apply effective time management and work-flow; and to execute quality orientation, process execution, and safety awareness (Joshi, 2011). These skills correspond to behaviors and traits associated with soft skills.

By recognizing the elements of soft skills as specific, teachable and malleable, as a result of myriad factors including direct intervention, two-year colleges can identify the methods by which to teach soft skills (Lippman et al., 2015). It is for the above reasons that this study sought to review soft skills as a component of employment that has

emerged with growing importance as it relates to the workforce deficit in the United States. This study addressed the concern of work ethic and sought to gain insight into how to best educate and train students in the development of soft skills as a component of their workplace success.

### **Statement of the Problem**

In the years since the economic recession (2000-2010), the American economy has struggled to regain its economic pace, and more policymakers are turning to education to help meet the high demands of a skilled and educated workforce (National Conference of State Legislators, 2014). According to the Georgetown Center on Education and the Workforce, by 2020 65% of all American jobs will require some form of post-secondary degree or credential, but the current rate at which colleges and universities are awarding them will fall short by roughly 5 million (2016). Increasingly, businesses and policymakers are turning to two-year colleges to help fill these workforce gaps and educate the growing student body, predominately made up of historically underperforming student populations. Business and industry representatives indicate that soft skills are critical for workforce success.

The purpose of many work ethic studies has been to identify the importance of soft skills from the employer perspective with regard to growing and retaining a capable workforce (Lippman et al, 2015). This research trend indicates that soft skills can be studied as a component of work ethic. Surveys and assessment tools have been utilized to identify the specific soft skills that foster workforce success toward a consensus across fields. Few of these studies have then been used to study best practices for engaging students in the process of learning the expectations and developing the soft skills

associated with a strong work ethic. Educational research has for decades focused on related elements of work ethic such as motivation, resiliency, capability and confidence, whereas the focus on measurable skills associated with desired workplace behaviors has been quite limited.

There is not only significant importance in identifying the specific skills which employers proclaim as valuable for industry; pinpointing those skills and behaviors that provide for the long-term success of an employee as they relate to engagement and satisfaction in the workplace also deserves careful attention. Rarely though, are mechanisms linking soft skills to workplace success extrapolated from existing evidence. In evaluating these work ethic studies, it is important to acknowledge the abundant evidence showing that soft skills lead to better academic outcomes as well. According to OECD (2015), students with stronger soft skills will most likely advance further in school and gain more academic skills than their peers with lower levels of soft skills. Further, students with stronger soft skills use these skills to contribute substantially to workforce outcomes.

Moreover, soft skills directly contribute to an individual's success across multiple stages of workforce engagement, from looking for work and acquiring a job to excelling in the workplace and increasing one's earnings (Drexler, 2015). Yet, when the topic of soft skills is introduced in technical training programs, it is often perceived by students as irrelevant or elementary (The Center for Work Ethic Development, 2012). Thus, it is essential to establish a level of awareness and relevance with students. Too often, linear thinking, task-oriented personalities will disengage from the learning process when they perceive the topic has shifted to subjects they consider to be peripheral and/or irrelevant

to the hard skills they perceive as valuable for career readiness (Salleh, Yusoff, Harun, & Memon, 2015). Research related to the level of understanding among students preparing to enter the workforce with regard to specific expectations of employers within their chosen field is limited in nature. This highlights the significance of this study as a contribution to the literature in academia and the development of strategies to teach soft skills in the two-year technical college environment.

### **Purpose of the Study**

The purpose of this dissertation in practice case study was to explore the perceptions of soft skills as an indicator of workplace success for students at a two-year technical college.

### **Research Questions**

People need a range of skills. Successful employment requires the ability to apply hard and soft skills in a professional setting. Far too many people are inadequately prepared to be successful in the workplace. The United States will struggle to compete in the global economy if the workforce is comprised of people who lack the skills they need to obtain and keep their job. Educational institutions must do their part to ensure that students are prepared for the workforce demands of the 21<sup>st</sup> century. Two-year colleges are beginning to agree that applied skills integrated with core academic and technical subjects are essential for creating an educational system that will prepare graduates to succeed in the modern workplace and community life. These skills are in demand for all students, regardless of their future plans, and will have an enormous effect on students' ability to compete in the job market (Cavanaugh et al., 2006). The following research questions guided this qualitative study:

Research question #1: What are student perceptions of soft skills as a component of their workplace retention and advancement?

Research question #2: What are student perceptions of their ability to develop soft skills, in relation to employers' expectations, as a component of their workplace retention and advancement?

### **Aim of the Study**

The aim of this study was to create an evidence-based approach for teaching soft skills at a two-year technical college. This study sought to identify competency based outcomes related to the development of soft skills and develop conclusions and recommendations for establishing a module for teaching soft skills at the research site.

### **Methodology Overview**

The intent of this study was to explore the student perceptions of work ethic as it relates to workplace retention and advancement. Thus, the researcher selected an instrumental case study approach. The instrumental case study methodology allows the researcher to focus on an issue or concern and then select one bounded case to illustrate the issue (Creswell, 2013).

Qualitative research is a situated activity that locates the observer in the world (Creswell, 2013). The proposed qualitative research study is situated in the two-year technical college environment. Qualitative research consists of a set of interpretative, material practices that make the world visible. The researcher collected multiple forms of data, specifically observations, documents, and interviews. The data were reviewed and organized into categories or themes that cut across all the data sources (Creswell, 2013). The researcher identified a purposeful sample of participants for this study (Creswell,

2012). Participants of this study were students at a Midwest technical college, a two-year institution located in the largest metropolitan city in the state. To be considered for the study, participants were required to be enrolled full time in a technical program at the college and be registered for PDV 105 Blueprint for Personal Success in the spring 2017 semester. The PDV 105 Blueprint for Personal Success course is designed to prepare students for the workplace by educating them on the importance of establishing and maintaining their professional image. Participants ranged in age from 19-65 years of age, and there was an equal distribution of male and female.

### **Definition of Relevant Terms**

For the purpose of this study, key terms will be operationalized in a specific way. For clarity, these terms are defined as follows:

*Career Exploration:* The process of learning about one's self and the world of work by identifying and exploring potentially satisfying occupations and developing an effective strategy to realize one's goals.

*Growth Mindset:* The notion that one's intellectual ability is not a fixed number, but rather one that can be grown and increased through educational experience. The ability to convert life's setbacks into future successes (Dweck, 2006, p. 11).

*Hard Skills:* Specific, teachable abilities that can be defined and measured, such as typing, writing, math, reading and the ability to use software programs. The rules for hard skills stay the same regardless of which company, circumstances or people one works with (Han, 2016).

*Learning Community:* The environment in which students and faculty are accountable to each other in a safe and productive learning environment aimed at fostering student success (Kress & Elias, 2006).

*Learned Helplessness:* A behavior typical of a student who has endured repeated failure or otherwise adverse stimuli, which the student was unable (or perceived himself unable) to avoid. After such experiences, the student often fails to learn to escape or avoid failures in new situations where such behavior would be effective (Roueche & Mink, 1982).

*Non-Traditional Student:* Student enrolled in college who is 30 years old or older.

*Soft Skills:* Personal attributes that enable someone to interact effectively and harmoniously with other people. By definition, soft skills are hard to quantify, such as etiquette, getting along with others, listening and engaging in small talk. Soft skills include self-management skills like self-confidence or stress management, and people skills like communication and networking skills (Han, 2016).

*Two-Year College:* An educational institution allowing the open enrollment of students aged 16 and older, offering general education associate degrees and technical certifications.

*Urban:* A large, metropolitan area with a population over 250,000.

Other salient terms may emerge from the in-depth literature review and from analysis of interview transcripts. To the degree relevant, these terms will also be included in the resulting written dissertation in practice.



### **Delimitations, Limitations and Personal Biases**

Delimitations are “factors that prevent you from claiming that your findings are true for all people in all times and places” (Creswell, 2012). Delimitations of this study will stem from the reality that it is confined to a purposeful sample of two-year technical college students in a specific education environment. Participants’ attitudes toward and perceptions of the concept of work ethic and soft skills will be limited to their personal value systems and experiences. The study focused on the participants’ perceptions during their first semester at a Midwest technical college in the 2017/2018 academic year.

Within the constraints of time and geography, the study initially included a relatively small number, ten participants. Following the completion of interviews and document analysis, patterns emerged in the data and saturation was achieved. The limited scope represents a limitation of this study.

The question of researcher subjectivity is a limitation of this study. During the time of the study, the researcher in the dissertation and practice was employed at the institution (research site). The researcher brought the bias of personal experience and expertise related to work ethic and soft skills training and a familiarity with the organization and demographic of the student population. Self-acknowledgment and awareness of personal biases was mitigated through bracketing to suspend judgment about the research setting and participants throughout the research process. This practice enabled the researcher to focus on the analysis and experience as it emerged in the data.

The external validity of the dissertation in practice is also considered a limitation of the study. This study was conducted at a two-year technical college in a Midwest state

and though the study can be replicated elsewhere, the results and conclusions may not be applicable.

### **The Role of Leadership in this Study**

This study focused on the approach which drives the two-year open enrollment college to promote the employment success of its students. By exploring student perceptions of soft skills development as they relate to job retention and career advancement, the researcher sought to create an evidence-based approach to teaching and developing work ethic in the two-year technical college environment. The academic sector of the two-year technical college institution has historically demonstrated the attitude that teaching soft skills is irrelevant and peripheral to their instructional responsibilities. For that reason, the researcher drew on leadership skills theories to glean insight from students in order to identify the means to integrate soft skills education into technical programs. The study applied leadership concepts typically reserved for high levels of organizational structure and introduced them to students with the intent to demonstrate the potential success derived from putting them to use in the classroom.

There is added value in the aim to integrate innovative approaches to cultivating soft skill development in two-year technical college students. The increased emphasis on teaching soft skills through an awareness and development of work ethic will require a shift in organizational culture and will thus demand that attention and planning surround the theory of change management.

Because technical colleges have historically focused solely on hard skills training, to pledge a renewed and equal emphasis on soft skills training means initiating a change of culture and values. This study informed the researcher on the aspects of culture and

values that will in turn, propagate change at the institution. Theory of change has the power to radically enhance the capacity of social change in organizations (Burke, 2014). Change Theory grounds planning and strategy for determining what is necessary to achieve change. As the movement gains momentum (buy-in and participation), change theory is also critical to evaluation, providing a framework that allows organizations to know what to evaluate and when (Burke, 2014).

When planning organizational change, the proposed process is usually linear. Although an attempt is usually made in the implementation of change to follow sequential steps or phases, what actually occurs is anything but linear and is in fact quite messy (Burke, 2014). By engaging in the process of formal change management through the theoretical perspective and by putting frameworks and constructs into practice, the intent is to effectively stimulate engagement in the change initiative and to properly evaluate the change evolution at the institution in order to effectively contribute to the broader conversation and movement on the state and national level.

This study demonstrated the researcher's commitment to empowering students and promoting workplace success. The recommendations provided in the study represent the researcher's desire to create a sustainable model of education that values all facets of personal and professional success. The recommendations sought to recognize the students' socio-emotional needs as equal among their cognitive and psychomotor needs.

### **Significance of the Dissertation in Practice Study**

Two-year colleges have a unique responsibility to their students as well as to the community that they serve. Many students in the two-year college environment are lacking the characteristics, skills and experiences that beget success in a more traditional

college setting (Duckworth, 2013). Many of these students did not find success in a traditional academic setting. By exploring the student perceptions of work ethic as it relates to employment success, two-year colleges can implement strategies to support students as they work to understand employers' expectations and demonstrate the level of proficiency in soft skills that results in job retention and advancement. By seeking to develop an evidence-based approach to teaching soft skills, this research will not only affect students' academic progress, but also the sustainability of the community's workforce and the overall success of its citizens on a regional and national level.

### **Summary**

This dissertation in practice centered on the importance of soft skills development as it relates to job retention and advancement. Employers indicated that approximately 30% of today's job interviews focus on hard skills related to the responsibilities of the job. The remaining 70% of the job interview is spent determining if the candidate is a good "cultural fit" for the organization (Zolfagharifard, 2014). This emphasis on "fit" translates to the candidate's personal attributes that enable him to interact effectively and harmoniously with other people. This harmonious interaction contributes to the person's attitude and demonstration of work ethic.

Academic leadership, administration, faculty and representatives from business and industry have a vested interest in assuring that two-year college students are well equipped and successful in the classroom *and* as they transition to the workplace. This study explored student perceptions of soft skills development as it relates to job retention and career advancement in a purposeful sample of students at an open-enrollment two-

year technical college. The study sought to provide recommendations for creating an approach to teaching and developing soft skills in the technical programs.

## CHAPTER TWO: LITERATURE REVIEW

**Introduction**

The previous chapter laid the foundation for this study focused on student perceptions of soft skills as an indicator of workplace success. While myriad factors influence employment globally, including contextual factors such as economic and political contexts, education, and culture, this study will specifically focus on individuals' perceptions of soft skills as an indicator of workplace success, while acknowledging the existence of other influential factors, including academic and technical skills. In order to understand the relationship of contributing factors to workforce outcomes, reviewing the seminal and recent work on the topic was imperative. Furthermore, a review of the various constructs, definitions, and measures used to assess individuals and monitor progress related to the attainment of soft skills was important to help in selecting the best design for this study. The following chapter helps to explain the research-based criteria used to identify which soft skills are relevant nationally and across sectors of the workforce.

A review of literature describing the national labor shortage as well as the historical evolution of career and technical education serves to provide context for the study centering on developing soft skills in the technical college environment. Moreover, a review of literature focused on emotional intelligence in the context of education allowed for a determination of which of those skills can be improved within the developmental stages of individuals enrolled in technical training programs at various ages. Exploring the employer perspective yielded an identification of consensus in the field on a small number of fundamental skills that are more likely to result in success for

students as they transition from education to workplace. Finally, the literature review is infused with an exploration of the mission and values system embodied by two-year technical institutions as they are unique in relation to their more traditional post-secondary counterparts.

Chapter 2 builds upon the preceding definition of work ethic by reviewing the original literature associated with the value and development of soft skills. Additionally, it was necessary to research national employment trends in order to better understand the urgency associated with developing a capable workforce in the United States of America. The following literature review presents findings about soft skills development as it relates to the growing skills gap in the United States followed by a review of the literature about work ethic as it relates to the ability to develop the skills associated with workplace success.

### **The Labor Force Deficit**

#### **The Great Worker Shortage**

A recent article in Forbes magazine (2015) asserted that the great conundrum of the U.S. economy today is that record numbers of working age people are out of the labor market at the same time that businesses are desperately trying to find workers (Moore, 2015). As an example, the U.S. faces a need for nearly 3.5 million manufacturing jobs over the next decade. According to a recent study conducted by Deloitte and The Manufacturing Institute, over 2 million of those jobs will go unfilled (Deloitte, 2015).

In his article, Moore (2015) affirmed that while the job market remains weak overall, demand is high in certain sectors. For skilled and reliable mechanics, welders, engineers, electricians, plumbers, computer technicians and nurses, jobs are plentiful.

Moore went on to cite Bob Funk, the president of Express Systems, a company which matches almost one half million temporary workers with employers each year. Funk said, “If you have a useful skill, we can find you a job. But too many are graduating high school and college without any skills at all” (Moore, 2016, p. 4).

The skills gap is the popular phrase used to describe the perceived disparity between those who are unemployed and looking for jobs and companies with jobs looking for employees. More specifically, it is the mismatch between the needs of employers for skilled talent and the unavailability of those specific skills within the workforce.

In his 2016 article, “Measuring the ‘Gap’ in the Skills Gap,” Path (2016) noted that the skills gap adversely effects the economy in two ways. Firstly, on the employers’ side, organizations can no longer grow or remain competitive because they do not have the right skills to drive business results and support organizational strategies and goals. Secondly, on the workers’ side, potential employees become unable to access available jobs due to a lack of training or relevant experience (Path, 2016).

Two parallel studies, “The Skills Gap in US Manufacturing: 2015 and Beyond” and “Overwhelming Support: US Public Opinions on the Manufacturing Industry,” drew together perspectives from U.S. manufacturing executives and the American public that reveal American manufacturing companies will face a significant skills gap over the next decade, largely fueled by baby boomer retirement and too few young people who see the industry as a career destination.

The research in these two studies showed that 84 percent of manufacturing executives agree there is a talent shortage in U.S. manufacturing, and this gap will be



exacerbated by more than 2.7 million professionals exiting the manufacturing workforce through retirement over the next ten years (Deloitte & The Manufacturing Institute, 2015). This means that the cumulative skills gap and the positions that will not be filled due to lack of skilled workers will grow to 2 million between 2015 and 2025.

The studies (2015) went on to show that roughly 82 percent of manufacturing executives indicated a response that workforce shortages or skills deficiencies in production roles have a significant effect on their ability to meet customer demand and 78 percent indicated that the shortage affects their ability to implement new technologies and increase productivity. Manufacturing executives also responded to the survey with the indication that 60 percent of production openings are unfilled due to the talent shortage.

This shortage in the labor market is occurring despite an overwhelming 80 percent of executives who reported that they are willing to pay higher salaries than the market rates in workforce areas under the talent crisis (Deloitte & The Manufacturing Institute, 2015). The industry appears to suffer from an inability to fill the positions with adequate speed and efficiency despite offering above average compensation for work.

In a press release promoting the release of the two recently published studies, Jennifer McNelly, president of the Manufacturing Institute said, “The skills shortage pervades all stages of manufacturing from engineering to skills production” (Deloitte & The Manufacturing Institute, 2015, p. 1). Gardner Carrick, Vice President of the Manufacturing Institute added, “This challenge will only grow as the demographics of our workforce evolve with retirements, new technological advances requiring additional levels of training and certification, and our K-12 education system which continues to lack the necessary focus on Career and Technical Education” (Deloitte, 2015, p.1).

### **A Negative Public Perception**

In a separate survey of the American public, an overwhelming majority of Americans surveyed indicated a belief that manufacturing is crucial to the country's economic prosperity (90 percent), and national security (72 percent). However, less than half (49 percent) believe that the U.S. can compete globally in manufacturing (Bureau of Labor Statistics, 2016).

This study illustrated the notion that Americans see disparity in the level of action being taken by policy makers compared to the relative importance of manufacturing. If given the opportunity to add 1,000 new jobs in their community, Americans ranked the manufacturing industry as their first choice relative to all other industries. In fact, 77 percent of Americans surveyed believe a strong manufacturing base should be a national priority, 83 percent indicated the U.S. needs a more strategic approach to developing a manufacturing base, and 82 percent believe the U.S. should further invest in the manufacturing industry. Nearly two-thirds (64 percent) of the American public do not believe federal government leadership or corporate tax policies are an advantage for U.S. competitiveness relative to other countries. And over half (57 percent) feel neither U.S. trade policies nor environmental regulations are providing U.S. companies with an advantage relative to competitors in other countries. Manufacturers appear to agree, as 86 percent of executives surveyed feel government policies have a negative effect on job growth.

President and Chief Executive Officer of the National Association of Manufacturers, Jay Timmons, said "The public understands that manufacturing must be as much a part of America's future as it was in our past. Americans know that

manufacturing strengthens not just an economy, but also communities, peoples' lives and the country. It's time Washington listened to the people, and adopted a comprehensive manufacturing strategy to secure world-leading manufacturing in the United States and American Exceptionalism long into the future" (Deloitte, 2015, p.1).

Despite this apparent support for manufacturing from the American public, respondents of the survey showed a much different attitude toward manufacturing as a career path. While over half of the respondents (53 percent) indicated a belief that the manufacturing industry provides careers that are interesting and rewarding, and a similar percentage (52 percent) believe a career in the manufacturing industry provides a good income relative to other industries, only a little more than one in three parents (37 percent) would encourage their children to pursue a career in manufacturing, mainly due to lack of stability (66 percent) and their belief that manufacturing jobs are the first to be moved offshore (75 percent). As a result, manufacturing ranked fifth out of seven industries as their choice to start a career today, and it ranked last—seventh out of seven industries—as a choice for the all-important generation Y respondents, those between the ages of 19 and 33.

As the study showed, it is not a significant surprise that Americans are not selecting the manufacturing industry as their top career choice, given they tend to believe manufacturing jobs are the first to move to other countries and U.S. policy makers are not providing the leadership to help create an advantage for U.S. manufacturers relative to other countries. Overall, executives and the general public agree, manufacturing is vital to the economic success of our country at a national, regional and local level.

**Building the Talent Pipeline**

The latest data from the Bureau of Labor Statistics showed that there are 5.4 million job openings throughout the United States, up from 2.7 million openings in March of 2010. Yet many students and workers cannot find steady employment because they lack the skills necessary for success in the workplace. To build a 21<sup>st</sup> economy, we need a 21<sup>st</sup> century workforce, and that means we need 21<sup>st</sup> Century solutions.

Nearly all (94 percent) of the surveyed executives in the study from Deloitte and the Manufacturing Industry (2015) agreed that internal employee training and development programs are the most effective skilled production worker growth strategies. They also cited involvement with local schools and community colleges (72 percent), external training and certification programs (64 percent) and creation of new veteran hiring programs (49 percent).

Just as every company engineers its product lines, its supply chain and its production process, they will now need to engineer a talent pipeline. This notion is reaffirmed by Jennifer McNelly in the press release from Deloitte when she said, “Manufacturers can no longer afford to wait for an educated and trained next generation of manufacturing talent. They will need to do more to develop their talent pool, and the same old approaches no longer apply” (Deloitte, 2015, p.1). This indicates that experiential training and management programs open up their most important assets, their own employees, to new skill sets. While some manufacturers have turned to analytics to better understand their production capabilities, few are using it to help identify internal or external candidates to help fill their positions (Deloitte & The Manufacturing Institute, 2015).

The stability of the American economy faces an imminent and dire threat. The skills gap is hindering the growth and competitiveness of our companies, and shortcomings in our education and workforce development systems continue to widen the gap. The country finds itself increasingly in an unsustainable position, with a growing number of students who are struggling to manage their transition from education to employment and businesses that are desperate for new workers.

In a recent op-ed piece entitled, “U.S. Manufacturing Depends on an Educated Workforce for 21<sup>st</sup> Century,” Jay Timmons, President and CEO at the National Association of Manufacturers, posited, “If Americans want a future that produces better opportunities and raising standards of living, then we need to strengthen our global economic leadership. To do that, we will have to marshal all the human talent available to us” (2016, p.1).

### **Evolution of Career & Technical Education**

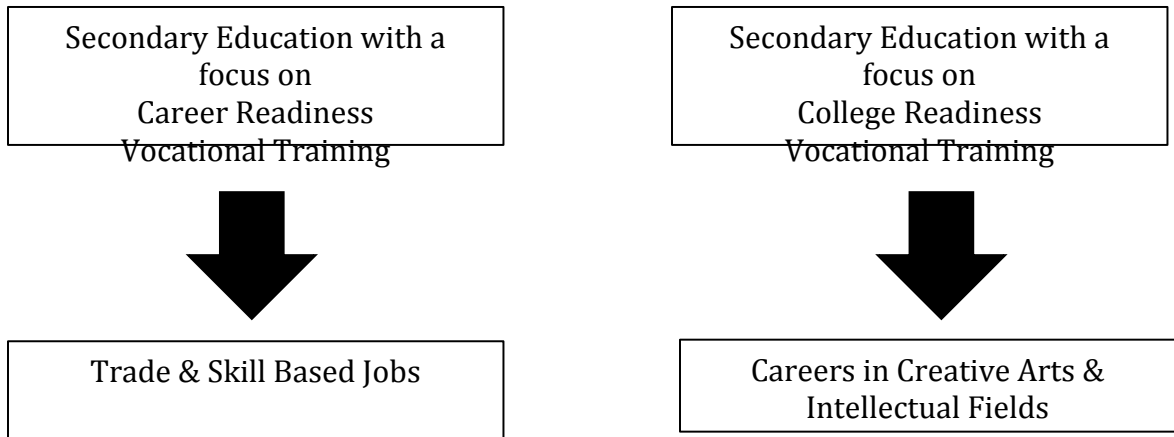
#### **The Paths to College and Career**

The importance of all students being college and career ready is one of the most important discussed issues in policy circles and secondary schools these days. However, whether or not college readiness and career readiness are one in the same is debatable. The answer has far-reaching implications for how U.S. secondary and post-secondary schools are organized and how they educate students.

Throughout most of the 20<sup>th</sup> Century, college readiness and career readiness were more or less distinct, in part because, what we now call *career readiness* was called *job training* and took the form of vocational education (Conley & McGaughy, 2012). In fact, from the 1920s on, large school districts had separate high schools for vocationally

oriented students and those going on to college (Tyack, 1974). Even in the high schools themselves, vocational students were mostly separated from college-bound students.

This model (illustrated in Figure 1), with its assumptions about the separation of career and college preparation, remained strongly rooted in high schools throughout the 20<sup>th</sup> Century.



*Figure 1.* Pathways for students from education to employment, 1920-1970

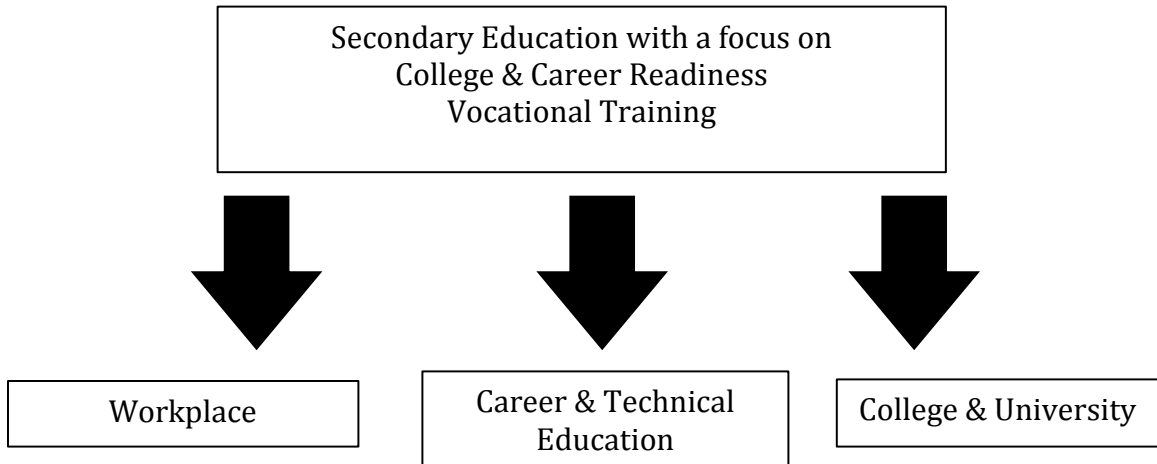
The economy, however, was not static. Entirely new categories of occupations have emerged rapidly with the shift from work related to agriculture to industrial and now to service jobs. Knowledge workers and the creative class became increasingly prevalent as a result of these shifts (Florida, 2002). Not surprisingly, the skills needed to be successful in this new economy were fundamentally different from those required by the old economy (Carnevale, 1991, 1992). Of increasing importance were foundational academic knowledge and skills; communication capabilities; technology proficiency; problem-solving strategies; and flexibility, initiative and adaptability. This dramatically shifting set of expectations signaled the obsolescence of the distinction between college and vocation as the fundamental organizer for secondary education.

During the 1990s, states adopted education standards that defined what students need to know and be able to do, but these standards were silent on what constituted college readiness and career readiness or the relationship between the two (Conley & McGaughy, 2012). Standards for Success, the first set of standards specific to college readiness, was created in 2003 under the sponsorship of the Association of American Universities (Conley, 2003). More than 400 faculty members at leading U.S. universities identified what it takes for students to be ready to succeed in entry-level courses at their institutions.

Shortly thereafter, the American Diploma Project defined college and career readiness with input from post-secondary faculty, economists and members of the business community. Achieve, the sponsor of these standards, characterized the standards as representing an “unprecedented convergence of education and employer opinions on what it means to be ready for college and careers” (Achieve, Education Trust, & Thomas B. Fordham Foundation, 2004, p. 11). Although Standards for Success and the American Diploma Project standards had considerable overlap, they were not identical (Rolfhus, Decker, Brite & Gregory, 2010).

A few years later, ACT (2006) published an influential study that claimed that college and career readiness were the same. To research this question, ACT researchers studied job requirements which they then cross-referenced against an ACT job skills assessment system. They then mapped the findings onto ACT’s college readiness standards (ACT, 2011) and concluded that the readiness requirement for both college and career were substantively comparable. As it seems, this finding was welcomed in many quarters because it seemed to solve the problem of how to educate students with a wide

range of interests and goals. At this point, a new model (illustrated in Figure 2) emerged.



*Figure 2.* Pathways for students from education to employment, present day

While they are not exactly the same, college readiness and career readiness share many important elements. The elements they share most consistently are the skills all students need to be ready for a variety of post-secondary learning environments. These include: study skills, time management skills, persistence, and ownership of learning. A series of studies conducted over six years at the Educational Policy Improvement Center in Eugene, Oregon, sought to provide insight into the overlap in skills required to be ready for college and career. Through these studies, post-secondary instructors at a wide range of two- and four-year institutions stress the importance of these skills across subject areas and programs. According to these studies, a lack of proficiency in these skills probably affects career-oriented students more adversely than it does students entering bachelor's degree programs in part because career-oriented programs tend to offer fewer supports to help students develop these skills if they lack them on entry and in part because students in such programs are more likely to be discouraged by problems early in their program (Conley & McGaughy, 2012).



The national discourse on high school reform is increasingly focused on the role of career and technical education in preparing *all* students for success in both post-secondary education and the workforce. High schools are moving away from the stand-alone vocational courses of the past, into which students with lower academic achievement or perceived potential were often channeled. Many educators are now calling for approaches that link career-technical education, rigorous coursework, and experiences that show students the relevance of education to their future, while teaching them the academic and employability skills they need to be successful in both college and career. Across the nation, schools, districts, cities, and states are launching or scaling these new programs. Yet, as indicated by the U.S. Department of Education Independent Advisory Panel of the National Assessment of Career and Technical Education (2014), many initiatives are struggling to gain traction and expand, due in part to the inadequate resources and in part to a shortage of rigorous evidence of their efficacy. Career and technical education is now repositioning itself not just as a vocational alternative to college preparation but as a pathway into post-secondary programs that links degrees and credentials to occupations.

The goal of career and college preparation for *all* students has been widely accepted, and several promising models have provided good evidence that this goal is attainable. However, these models have not yet been implemented on a large enough scale to accomplish the systematic, sustainable change that would achieve the goal. Implementing these models requires resources, planning, and commitment. The recent National Assessment of Career and Technical Education published in a report from the U.S. Department of Education (2014) and supported in a background report by Dalton,

Lauff, Henke, Alt and Li (2013) found that students who take a sequence of related career-technical classes in high school are still more likely to come from families with lower income and less educated parents; these students are less likely to take advanced math courses in high school and are less likely to enter or complete a post-secondary educational program. Disrupting this pattern, inherited from the 20th Century, is a challenge many educators and employers are now trying to meet.

As the idea of preparing students for both careers and college has become more popular, some cities and states have begun to develop systems of career-themed pathways that enroll large proportions of high school students. The 1994 School-to-Work Opportunities Act provided federal funding to build such systems, but this effort was strongly opposed in some places as unwarranted federal intrusion, and the legislation lapsed in 1999. More recent attempts to build college and career pathways on a larger scale have been initiated by states or localities (Visher & Stern, 2015).

When students feel engaged and connected to their schoolwork, it's no surprise that they tend to have better academic outcomes. However, recent studies demonstrate that career and technical education programs offer benefits that extend well beyond high school graduation. University of Connecticut researcher Shaun M. Dougherty studied 100,000 students who entered the ninth grade in Arkansas between 2008 and 2010. His report, which was published by the Thomas B. Fordham Institute, compared their academic records through high school, and then tracked them for additional year beyond graduation. Among the findings: "Students with greater exposure to Career and Technical Education are more likely to graduate from high school, enroll in a two-year college, be employed and earn higher wages" (Dougherty, 2016, p.9).

**The Technical Education Advantage**

Students who pursue technical degrees and certifications from two-year post-secondary institutions such as technical or community colleges are often looking for career pathways that offer more affordable, more efficient and more hands-on connections to occupations (American Association of Community Colleges, 2012).

When many students graduate from college with large sums of debt and then struggle to find a job in an area they spent time and money studying, career and technical education offers an enticing alternative. Graduates from high-quality technical colleges do not struggle to find jobs in their fields; rather, they are in high demand, often finding themselves recipients of guaranteed interviews and employment offers following graduation. When employers have to compete for skilled talent, there are significant benefits for technical education graduates including higher salaries, more employment opportunities to pick from and less lag time from graduation to employment (Carnevale, Ross & Hanson, 2012).

These students benefit from the circumstances of the national labor shortage. They will likely continue to benefit, as the value of highly skilled workers will only increase as the labor shortage worsens. Students are enticed by the security of jobs waiting to be filled by professionals with the right skills and training (Carnevale, 2010). They are also seemingly empowered by the notion that short-term training programs lasting as little as eight weeks and as long as four semesters offer the skills and instruction necessary to garner new expertise allowing them to launch a career earning up to \$50,000 per year (Schneider, 2013).

### Workforce Outcomes

This study recognizes multiple factors that influence individual employment nationally through contextual factors such as economic and political contexts, education, and culture; a sample of which are shown in Figure 3. This study will specifically focus on individuals' perceptions of soft skills as an indicator of workplace success, while acknowledging the existence of other influential factors, including academic and technical skills. However, before honing in on the effects of adequately and underdeveloped soft skills, it is important to acknowledge that there are a number of broader influences that contribute to an individual's employment success.

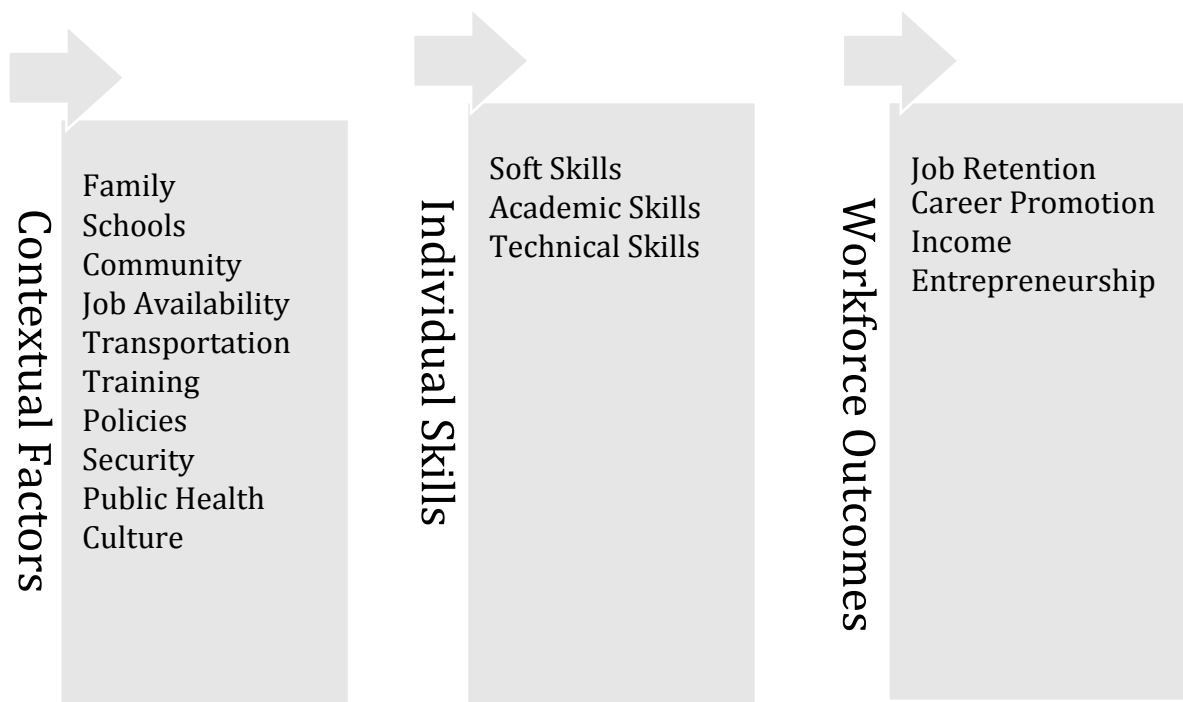


Figure 3. Factors contributing to workforce outcomes

### Soft Skills

Soft skills refer to a broad set of skills, competencies, behaviors, attitudes and personal qualities that enable people to effectively navigate their environment, work well

with others, perform well, and achieve their goals (Oxford English Dictionary, 2016).

These skills are broadly applicable and complement other skills such as technical, vocational and academic skills (Lippman, et al., 2015). Soft skills are centrally important for human capital development and workforce success (Robles, 2012). A growing evidence base shows that these skills rival academic or technical skills in their ability to predict employment and earnings, among other outcomes (Kautz et al., 2014).

As the workplace has modernized globally, the demand has never been greater for candidates who possess strong competency in soft skills (Balcar, 2014; Carnevale, 2013; Eger & Grossmann, 2004; International Labour Organization, 2008). This is due to a number of factors such as increased reliance on technology, which results in more non-routine tasks and team-oriented environments, as well as an increased need for labor in service industries over agriculture and manufacturing, especially in developing countries (Dickens, 2007). At the same time, many employers around the world report that a lack of soft skills is a contributing factor in talent shortages (Manpower Group, 2013). There is a call for workforce preparation to focus on skills of the future rather than skills that were needed in the past.

One of the challenges in consolidating the research associated with soft skills is integrating the knowledge from the academic disciplines of psychology (including the developmental, education, occupational, personality, and positive psychology sub-fields), sociology, and economics, as well as the fields of positive professional development and organizational and workforce development. Each field and stakeholder has its own goals and terminology both domestically and internationally. In fact, the increased focus on these skills is reflected in the multitude of terms associated with this field including 21<sup>st</sup>

Century Skills, life skills, essential skills, behavioral skills, non-cognitive skills, workplace or work readiness competencies, social emotional learning (SEL), transferable skills, employability skills, and character skills or strengths. The terms are not interchangeable; they point to different aspects of these skills, and to different outcomes with which they are associated (Lippman, et al., 2015). Nevertheless, despite differences in terminology, once terms with similar meaning are grouped together, a substantial consensus emerges around which types of skills are considered most useful. While the term *soft skills* has long been used and understood by employers, until recently there was a lack of consensus among employers on terminology and definitions for each specific skill, as well as their relative priority.

### **Defining Soft Skills and Hard Skills**

Although described in different terms, many of the definitions of soft and hard skills in the literature describe similar concepts. For example, Dixon et al. (2010) viewed soft skills as “a combination of interpersonal and social skills. Hard skills, conversely, include technical or administrative competence” (p. 35). For Newell (2002), soft skills (e.g. self-awareness, self-regulation, motivation, empathy and social skills), are manifestations of emotional intelligence, and hard skills (e.g. logic analytical thinking, rigor, strategic, long-term vision) are indicators of cognitive intelligence. Similarly, Muzio and Fisher (2009) related hard skills to innate intelligence and soft skills to behaviors, motivation and other aspects of human interaction (p. 26).

The term *soft skills* has existed a long time in both business and educational settings, in corporate meetings, and in curriculum development (Evenson, 1999). When people think about their skills, they usually reflect on practices that they have perfected,

such as keyboarding with speed and accuracy or wiring the electronics in an automotive system (Robles, 2012). When individuals use the term *hard skills*, they typically are referring to the definition of skills as defined by Parsons (2008): the ability, coming from one's own knowledge, practice, and aptitude, to do something well; competent excellence in performance; and a craft, trade, or job requiring manual dexterity or specific training in which a person has competence and experience.

Robles (2012) explained that hard skills are those achievements that are included on a résumé, such as education, work experience, knowledge and level of expertise. He referenced examples of hard skills including job skills like typing, writing, math, reading, and the ability to use software programs.

Soft skills are not defined as *skills* in the traditional sense. Rather, they refer to character traits that enhance a person's interactions, job performance, and career prospects (Parsons, 2008). Robles (2012) noted the greatest feature of soft skills is that the application of these skills is not limited to one's profession. Soft skills are continually developed through practical application during one's approach toward everyday life and the workplace (Arkansas Department of Education, 2007; Magazine, 2003). Unlike hard skills, which are about a person's skill set and ability to perform a certain type of task or activity, soft skills are interpersonal and broadly applicable (Parsons, 2008).

### **Soft Skills are more than “People” Skills**

Robles (2012) focused research on exploring and evaluating interpersonal communication in the workplace. Through this work, he identified literature supporting

the notion that soft skills are made up of the combination of interpersonal (people) skills and personal (career) attributes, as shown in (Figure 4).

Soft Skills = Interpersonal (People) Skills + Personal (Career) Attributes
--

*Figure 4.* Components of soft skills.

People skills (also referred to in the literature as interpersonal skills) are a component of soft skills (Cafasso, 1996; Klaus, 2010). People skills are the attributes that characterize a person's relationships with others (Robles, 2012). Some researchers noted that these skills are the most important skills at all levels of the job (Sheikh, 2009; Smith, 2007). Many authors equated interpersonal skills with soft skills (James & James, 2004; Perreault, 2004; Neiragden, 2000; Perreault, 2004). Personal attributes might include one's personality, likeability, time management, prowess, and organizational skills (Parsons, 2008).

Career attributes can include communication, teamwork, leadership, and customer service (James & James, 2004). People skills are the foundation of good customer service, and customer service skills are critical to professional success in almost any job (Evenson, 1999; Zehr, 1998). People skills promote a positive attitude. Effective communication, respectful interaction, and the ability to remain composed in difficult situations (Evenson, 1999). The combination of interpersonal (people) skills and personal (career) attributes make up the operational definition of soft skills (Robles, 2012).

### **Employer Expectations**

Employers want resourceful employees with soft skills at all levels ("Employer's Value Communication", 2004; John, 2009) with interpersonal qualities (Rodas, 2007)



who can collaborate, motivate, and empathize with their colleagues (Klaus, 2010). Soft skills contribute to employability and are transferable in many jobs. Cleary, Flynn, and Thomasson (2006) defined general employability as follows:

- Basic/fundamental skills: technical skills, knowledge of task, hands-on ability
- Conceptual/thinking skills: planning, collecting and organizing information, problem-solving
- Business skills: innovation and enterprise
- Community skills: civic and citizenship knowledge
- People related skills: interpersonal qualities, such as communication and teamwork
- Personal skills: attributes such as being responsible, resourceful, and self-confident

Employers often differ in their definitions of commonly named soft skills, such as leadership; even among this group there is a need for common terms and definitions.

While employers frequently report that soft skills are scarce among prospective employees, current assessments of these capabilities are not always comparable across studies or companies. As a result, estimates of the extent of the problem at the local or national level are hindered. It is clear that employers are less willing or able to offer training on soft skills compared to technical skills, despite wanting employees who possess both sets of skills.

Young people need to apply a range of skills, both technical and soft, in the workplace. A survey of human resource professionals conducted in 2006 by the Conference Board, Corporate Voices for Working Families, the Partnership for 21<sup>st</sup>

Century Skills and the Society for Human Resource Management sought to define the skills necessary for success in the workplace for the 21<sup>st</sup> Century. They also sought to discover whether new entrants to the workforce, graduates of high school and two-year and four-year colleges have those skills. The survey results indicated that far too many young people are inadequately prepared to be successful in the workplace (Lotto & Barrington, 2006).

The four participating organizations jointly surveyed over 400 employers across the United States. These employers articulated the skill set that new entrants, recently hired graduates from high school, two-year colleges or technical schools and four-year colleges need to be successful. Among the most frequently cited and highest prioritized skills included in the responses:

- Professionalism / Work Ethic
- Oral and Written Communication
- Teamwork / Collaboration
- Critical Thinking / Problem Solving

In fact, the findings indicated that applied skills in these areas, on all levels of employment from production to management, outrank basic knowledge skills such as reading comprehension and mathematics. In other words, while the “3 R’s” (reading, writing, arithmetic) are still fundamental to any new workforce entrant’s ability to do the job, employers emphasize that applied skills like teamwork, collaboration, and critical thinking are “very important” to success at work (Lotto & Barrington, 2006). Figure 5 outlines a description of skills associated with basic knowledge skills and applied skills

as prioritized by employers responding to the survey, with applied skills consistently showing significant value over basic knowledge skills.

Basic Knowledge / Skills	Applied Skills
English Language (spoken)	Critical Thinking / Problem Solving
Reading Comprehension (in English)	Oral Communication
Writing in English (grammar, spelling, etc.)	Written Communication
Mathematics	Teamwork / Collaboration
Science	Diversity
Government / Economics	Information Technology Application
Humanities / Arts	Leadership
Foreign Languages	Creativity / Innovation
History / Geography	Lifelong Learning / Self- Direction
	Professionalism / Work Ethic
	Ethics / Social Responsibility

*Figure 5.* Prioritization of skills according to employers

### **A Dearth of Soft Skills**

In the next five years, college graduates will continue to increase in numbers among new hires. More than one-quarter of employer respondents (27.7 percent) project that over the next five years their companies will reduce hiring of new entrants with only a high school diploma while 49.5 percent (nearly half) project increased hiring of two-year college / technical school graduates (Lotto & Barrington, 2006). The results of this study leave little doubt that improvements are needed in the readiness of new workforce

entrants. Employer respondents indicated that high school graduates are deficient in areas relating to basic knowledge skills as well as those associated with the applied skills deemed equally important. However, respondents indicated that graduates from two- and four-year colleges are better prepared than high school graduates for the entry level jobs they fill, yet still deficient in written communication and leadership skills (Lotto & Barrington, 2006, p. 47).

The U.S. Department of Labor has identified a group of skills that are imperative for individuals to acquire in order to successfully maintain a job. They are: communication, networking, enthusiasm, teamwork, critical thinking, and professionalism (United States Department of Labor, 2012). The reality is that most members of the incoming workforce are deficient in those skills. The Conference Board, in conjunction with SHRM (Society for Human Resource Management) found that 75 percent of employers said the incoming workforce was deficient in these skills (Lotto & Barrington, 2006). Dr. James Heckman, a Nobel laureate, even notes in his 2006 report that, “These skills are more critical to job success than a college degree” (Heckman, 2006).

A recent survey of regional manufacturers in the Midwestern United States suggests one of the top reasons employers cannot fill positions is because too many candidates lack, “motivation, attitude and interpersonal abilities” (Dunn, 2015, p. 22). The Employer One survey identified a shortfall in soft skills more often than a lack of technical skills among the top reasons why they were having a hard time filling jobs. According to Gemma Mendez-Smith, the executive director of the Labor Market planning board who is cited in the study, “Employers continue to say the same thing—

employee work ethic and soft skills are critical to business yet job applicants are not meeting employer expectations” (Dunn, 2015, p. 22).

Technology has had a profound effect on skills that employers want from graduates (Mitchell, Skinner, & White, 2010). The shift from an industrial economy to an information society and an office economy means that many jobs now place an emphasis on integrity, communication and flexibility (Zehr, 1998). Historically, technical skills, also known as hard skills, were the only skills necessary for career employment; but the 2017 workplace is showing that technical skills are not enough to keep individuals’ employed when organizations are right-sizing and cutting positions (James & James, 2004).

### **Involuntary Turnover**

The Employer One survey also indicated that while “not enough applicants” was cited as the number one reason for not filling open positions, employers consistently cited retaining employees through the first ninety days of employment as a significant challenge. The top reasons for termination prior to the completion of ninety days included: not using cellphones appropriately, not arriving on time to work, and leaving early without express permission. Dunn (2015) also cited other reasons for termination including not speaking to supervisors respectfully and not engaging with co-workers in a respectful manner.

Despite lethargic economic recovery in certain sectors, involuntary turn-over continues to challenge employers throughout the United States. According to the Department of Labor, in September 2016, more than 1.7 million Americans were separated from their jobs. These separations, the result of termination or being fired, are

referred to as involuntary turnover. It is estimated that over 20 million jobs will result in involuntary turnover in 2017 alone (Bureau of Labor Statistics, 2016).

In a white paper entitled, “Whose Job is it Anyway? Strategies for Increasing Job Retention,” the Center for Work Ethic Development (2012) asserted that poor employee retention is costly for American business and reflects a misappropriation of time, effort, and financial resources that are invested in preparing individuals for professional success. Studies estimate the cost of turnover to be anywhere from 33 percent of an annual salary to upward of 250 percent for managers (Center for Work Ethic Development, 2012). Further, because involuntary turnover is typically unplanned, the costs of lost productivity and replacement can be even higher (Kantor, 2016).

While employee privacy concerns and regulations limit the amount of scientific data on the exact nature of employee discharges, anecdotal research points to the most common reason employees are terminated as an inability to demonstrate basic workplace behaviors (Center for Work Ethic Development, 2012). Employers admit to opting to fire people for having a “bad attitude.” Further investigation illustrated that the real issue was not only an employee’s internal attitude, but also the external behaviors that comprise and express a “bad attitude.” These external behaviors prove problematic when they result in poor customer service, low employee morale, and employee theft. These behaviors effect the bottom line and often lead to the ultimate termination of employees who demonstrate them (Clark, 2012).

According to a study conducted by Leadership IQ and published by Mark Murphy (2015), 46% of newly-hired employees will fail within 18 months, while only 19% will achieve unequivocal success. But contrary to popular belief, technical skills are not the

primary reason why new hires fail; instead, poor interpersonal skills dominate the list, flaws which many of their managers admit were overlooked during the job interview process.

While hard skill development remains one of the top priorities of education, workforce and corporate training, little is being done to develop behaviors that will lead to long-term employment. In their 2011 State of the Industry Report, the American Society of Training and Development (ASTD) indicated that less than 4.1 percent of all corporate training dollars are marked for training in this core area. Moreover, while educators and workforce development professionals concentrate on career preparation, their primary focus continued to be teaching someone how to get a job rather than how to keep one (Eberts, 2010).

### **Developing Soft Skills for Job Retention**

The term “soft skills” is defined based on its usage. When Parsons (2008) defined soft skills as the personal attributes that enhance an individual’s interactions, job performance and career prospects, he differentiates the skills themselves from “hard skills” which, as he indicated, are largely about a person’s skills set and ability to perform a certain type of task or activity. As Parsons (2008) demonstrated through his working definition, soft skills are interpersonal and broadly applicable. Soft skills are often described by using terms associated with personality traits, such as optimism, common sense, responsibility, a sense of humor, and integrity. Soft skills also consist of abilities that can be practiced (but require the individual to genuinely *like* other people), such as empathy, teamwork, leadership, communication, good manners, negotiation, sociability, and the ability to teach someone a new skill. It is said that hard skills (technical skills)

will often get you a job interview, but you need soft skills to get (and keep) the job (Park, 2012).

Among the many things modern parents are told is the notion that it is important to instill in their children a strong work ethic. There are plenty of ideas for how to do this. Some insist that work ethic is learned by being required to do chores and contribute to the household, and later on by taking on summer jobs. Others say that making an effort to talk with children about the value of work and the value of money instills work ethic. Some families may call on a reward system. Others yet may focus on modeling the expectations and practices around a solid work ethic. Many children, in this way will learn from their own parents' hard work, ambition and commitment. No one way is necessarily "better" than the next and efficacy often depends on the nature of the child (Drexler, 2014).

However, instilling work ethic in children is not an easy task. In fact, in busy households, it may be easier to just take out the trash and feed the dog oneself rather than supervise a child's execution of those tasks when it may be necessary to offer several reminders and even engage in conflict to get the job done. This concept is discussed in the 2012 *New Yorker* piece "Spoiled Rotten," which presented American kids as the most indulged set of young people in the history of the world (Kolbert, 2012).

However, as Peggy Drexler (2014) asserted in her article "Can Work Ethic Be Learned?" there is reason to believe that work ethic can be taught and learned among older adults. This concept demonstrates the probability that trends in workforce development and retention could be positively affected with the implementation of training in the area of soft skills that bolsters an individual's work ethic.



In her article “Soft Skills: Preparing Kids for Life After School,” Jaime Greene (2017) indicated that whether they learn it from their parents or from another source, people develop soft skills through socialization, learning the values, attitudes, and actions through interactions with others. Greene further asserted that socialization and relationship-building are a critical part of individuals’ lives. This article concluded that by adding this important element to instructional plans and classroom expectations, educators help prepare students for success after graduation.

### **How do you Teach Personality? Call it a Skill.**

One of the main challenges in examining soft skills lies with the definition itself. This is likely because many of the qualities attributed to this category are ineffable and difficult to measure (Cobb, Meixelsperger, & Seitz, 2015). A working paper series from the National Bureau of Economic Research defined soft skills as “personality traits, goals, motivations, and preferences that are valued in the labor market, in school and many other domains” (Heckman & Kautz, 2012, p. 56). Soft skills remain hard to define and even harder to assess.

A number of different strategies have been identified towards developing soft skills. These skills are referred to in the literature as, employability skills, soft skills, and professionalism (Cranmer, 2006; Yorke & Knight, 2006). The range of strategies span from those which adopt a fully integrated model where students may not be aware that they are developing soft skills, e.g. Cassidy (2006). Those which adopt a parallel model of skill development, e.g. Ross, Staples and Udall (2011). Those which provide separate skill development courses that are made available to students, e.g. Baker and Henson (2010). In general, work-based learning experiences, typically delivered through

internships or apprenticeships, are widely considered to offer a good mechanism to build employability skills (Hanna, Curran, Ayre & Nicholl, 2011; Yorke, 2006). In contrast, it is acknowledged (Cranmer, 2006) that other approaches which “tack on” soft skills development courses may not be particularly effective.

### **Overcoming Learned Helplessness**

In their article “Overcoming Learned Helplessness in Community College Students,” researchers, John Roueche and Oscar Mink (1982) asserted that many nontraditional students who enter the community college’s open door bring with them a history of failing to control the outcomes of their lives, both in and out of the classroom, believing that other people or influences, such as teachers, poverty, or “the system,” control what happens to them. Roueche and Mink (1982) conducted several studies which resulted in the conclusion that these nontraditional students adopt the attitude of “Why try?” which critically influences their academic experiences. They advised that if these students are to achieve success, community college instructors must help them challenge and overcome the sense of helplessness which impedes their academic experiences and encumbers their progress. To accomplish the goal of helping students reach a level of self-determination, instructors may employ a variety of techniques and methods.

Roueche and Mink (1982) suggested that students must perceive that they can control experiences if they are to develop self-esteem, feel competent, and protect themselves against depression. Anytime those who manage instruction can convince students that their efforts are not in vain, that they can achieve, then the students’ learned helplessness is counteracted. Though not necessarily recent, Roueche and Mink posited a

number of relevant suggestions for confronting the symptoms and attitudes of helplessness in community college students which correspond to the process of effectively developing soft skills in more recent literature. Among the most relevant of these suggestions is the realization that to reverse classroom helplessness, it is necessary for students to experience some failure and to develop a way to cope with it (Roueche and Mink, 1982). This realization is present in more recent literature, as well. In her 2014 article “Fostering Perseverance: Inspiring Students to be Doers of Hard Things,” Wendy Bray emphasized the importance of inspiring learners to embrace challenge, by saying, “Students are more likely to persevere in the face of challenge when they view struggle as a necessary and valued part of learning rather than a sign of personal failure” (p. 5). Further, the research presented by Roueche and Mink (1982) suggested that instructors can also help students gain new views of situations in which they feel controlled by others. For example, one student presented in the article viewed his boss as an almighty controller. The instructor pointed out that the student’s “obedient” behavior was actually an active and successful attempt to control the boss, not meek submission. Finally, Roueche and Mink demonstrate support of a theory presented even earlier in the literature asserting that instructors can help students develop behavior plans of action that allow them to try new options and gain control of situations in which they feel helpless (Roueche & Mink, 1982; Dua, 1970).

### **The Importance of Mentoring**

Improving student success among two-year college students has become an increasingly important issue for administrators, educators, and policy makers at the federal state and local levels (Bailey, Jenkins, & Leinbach, 2007). Students attending

two-year colleges often face different obstacles than students who attend four-year institutions. These open admission institutions have traditionally accepted all students regardless of high school grades or the intensity of the curriculum previously taken at their graduating high schools. As a result, many students enter two-year colleges with lower levels of academic preparation and achievement in high school (Bailey & Alfonso, 2005). Moreover, many two-year college students do not live on campus, have limited opportunity to actively engage in social activities, attend college part-time, work off-campus, and/or have limited opportunities to form significant support systems—all factors previously shown to effect student grades, retention and graduation rates (Cohen, Brawer, 2003).

Research points to mentoring as a means of promoting student success both during the period of enrollment and post-graduation by way of job retention and career advancement (e.g. Campbell & Campbell, 1997; Kahveci, Southerland, & Gilmer, 2006; Sorrentino, 2007). Mentoring experiences have empirically shown to exist in a variety of forms including informal relationships that naturally evolve as well as relationships that exist within the context of a formal mentoring program (Luna & Cullen, 1995). Similarly, the duration of both informal and formal relationships has been shown to vary lasting anywhere from a single meeting (Phillips-Jones, 1982) to over a decade (Levinson, Carrow Klein, Levinson, & McKee, 1978). Moreover, when considering what mentoring is and how college students experience it, it is important to consider that mentoring, whether formal or informal, may not be limited to a single relationship between a student and a faculty member. Rather, the core functions of mentoring have been empirically shown to often be provided by a combination of persons in an

individual's life, including faculty, staff, senior students, peers, friends, family members, professional colleagues and/or religious leaders (Kram & Isabella, 1985; Zalaquett & Lopez, 2006).

In his article "The Development of Soft Skills as an Aid to Job Retention and Advancement," Park (2012) asserted that a key component of adequately developing soft skills is conveying the notion of continual "becoming." His conclusions suggested that students, educators and professionals at all levels must recognize that individuals are all still becoming someone, that we are not destined to stop becoming. Walsh (2010) indicated that providing feedback is a vital aspect of supporting a student in practice. Mentors are responsible and accountable for supervising students in learning situations and providing them with constructive feedback on their achievements. In order to promote "becoming," it is essential that students have the opportunity to receive constructive feedback from mentors (NMC, 2008). This aids them in identifying future learning needs and actions (Duffy, 2013).

### **Growth Mindset as a Component to Soft Skills Development**

Research has increasingly shown that there is more to student success than cognitive ability (Yeager, Paunesku, Walton, & Dweck, 2013). The 21<sup>st</sup> Century classroom is often structured around the notion that the more intelligent the student, the more successful the student will be in achieving academic excellence. Schools at all levels focus on test scores to identify academic progress, though these scores are later shown to be an unlikely predictor of success in life. However, researchers are beginning to suggest a phenomenon that classroom teachers have long been aware of: the idea that

doing well in school and in life depends on much more than students' ability to learn quickly and easily (Duckworth, 2013).

The characteristics of 21<sup>st</sup> Century college students at open-door, two-year institutions are demonstrative of the powerful nature of perseverance in education. Very often, the most successful students are not the ones with the highest IQ. Conversely, some of the brightest students often struggle to make passing grades. Duckworth (2013) suggested that of a variety of individuals in many challenging situations, one characteristic emerges as the common characteristic of successful individuals: grit.

In their work on determining a student's likelihood of giving up or embracing an obstacle, researchers Dweck and Yeager (2012) posited that because challenges are ubiquitous, resilience is essential for success in school and in life. Where previous studies have fallen short of providing long term solutions for bolstering academic achievement and diminishing peer exclusion and victimization, Dweck and Yeager's (2012) work sought to show that in order to accomplish the goal of growing resilience and fostering grit, attention must also be paid to the psychology underlying responses to academic and social challenges.

The research in the area of psychology and brain development worked to demonstrate the differences between what Dweck (2006) labeled a fixed mindset versus a growth mindset. The fixed mindset refers to an attitude that students display with the assumption that they are only as intelligent and capable as they are; if they are not inherently *good* at a skill (reading, writing, speaking, listening), it is impossible to eventually become better. Conversely, a growth mindset predisposes the idea that

Duckworth (2007) also presented, that skills and traits can be developed through intentional practice and work to achieve a desired, improved outcome.

Intervention experiments have shown that changes in perceptions of intelligence can affect academic behavior over time (Dweck and Yeager, 2012). Various studies have been conducted in order to demonstrate possible methods for changing students' theories on intelligence. These range from studying the effects of providing students with theoretical information on how the brain develops and how humans learn to studying students as they engage in activities designed to demonstrate their own acquisition of knowledge over time.

Perhaps one of the most important results of these studies is the concept that effort is not the only factor that affects academic performance. Students also need to develop skills so they know how to use their brains in a smarter way. Dweck and Yeager (2012) produced studies that show the benefits of teaching students what science says about the brain growing (people growing their intelligence) at a faster rate when they learn something new and less when they practice something they already know (Dweck and Yeager, 2012).

### **A Call to Action for Educators**

Parks (2012) asserted that educators and employers alike are beginning to realize that it is no longer enough to train students how to do a job without teaching them how to get and keep a job. "No longer are technical skills the only skills that are important for an individual's success on the job" (Parks, 2012, p.7). Increasingly, human resource professionals and researchers are recognizing the essential nature of general

employability skills, and specifically, soft skills and their relationship to job retention and advancement (U.S. Department of Labor, 2014).

In general, employers need employees to be able to function in the workplace, be confident communicators, good team players, critical thinkers, problem solvers, and to be adaptive and adaptable to new challenges and workplace changes (Harvey, Locke, & Morey, 2002). A graduate's technical know-how is already a default factor that enables them to be employed. However, non-technical skills, or soft skills are equally important for graduates to be able to *use* their technical skills more effectively (Nasir, Ali, Noordin, & Noordin, 2011). Soft skills have often been seen as less important in many technical disciplines (Salleh, Yusoff, Harun, & Memon, 2015). However, in the fast-paced global marketplace, soft skills are valued more highly than ever before (Shafie & Nayan, 2010; Shannon, 2012).

In their recent study "Gauging Industry Perspectives on Soft Skills: Importance vs Satisfaction," Salleh et.al (2015) affirmed the importance of soft skills and the level of satisfaction for employers. The findings of their study indicated that there is no question that graduates would benefit from having good soft skills such as communication skills, teamwork and time management, leadership and problem-solving skills. All these skills require them to be able to effectively communicate, interact, present and lead projects, which is the nature of many technical career pathways.

Although Salleh et.al indicated that it was rather too idealistic to expect colleges to be able to produce graduates with all soft skills valued by employers, efforts need to be made toward providing the right learning experiences to the students: "It is important for education to find ways of developing and strengthening soft skills among their graduates.



This will ensure that graduates will be highly equipped with the relevant soft skills to meet industry demands” (Salleh, Yusoff, Harun, & Memon, 2015, p. 1016).

### **Literature Review Summary**

As outlined in Chapter 2, there is growing deficit in the United States labor force that presents serious implications for the nation’s ability to compete in a global marketplace. This chapter provided an overview of the seminal and recent work on the topic of soft skills as an indicator of workplace success. The researcher provided a review of the various approaches, definitions and measures used to assess the required skill sets and to monitor progress related the attainment of soft skills.

The chapter included a review of the literature describing the national labor shortage as well as the historical evolution of career and technical education in order to provide context for this study, which focused on the perception of soft skills in the technical education environment. This review of literature also offered an examination of employer perspectives on the importance of soft skills as an indicator of workplace success. This yielded an identification of consensus in the field on a small number of fundamental skills that are more likely to result in success for students as they transition from education to workplace.

Literature associated with the development of emotional intelligence was examined and reviewed in order to allow for a determination of which of those skills can be improved within the developmental stages of individuals enrolled in technical training programs. Chapter Two concluded with a preponderance of evidence in the literature which suggests that educators has a responsibility to prepare their students with soft skills so they can better meet employer’s expectations in the workplace.

## CHAPTER THREE: METHODOLOGY

### **Introduction**

The following section outlines the approach utilized in the research process in order to best explore student perceptions of soft skills as an indicator of workplace success. The subsequent information outlines the research design, describes the interview protocol, provides an overview of participant selection, summarizes the sampling procedure and includes a synopsis of the method of data analysis. By addressing these points, this chapter illustrates how this study sought to answer specific research questions relevant to student perceptions of soft skills as an indicator of job retention and career advancement to add value to work ethic and soft skills literature.

The purpose of this dissertation in practice case study was to explore the perceptions of soft skills as an indicator of workplace success for students at a two-year technical college. This qualitative study employed the case study methodology of research. The case study approach is familiar to social scientists because of its popularity in psychology, medicine, law and political science. Case study research has a long distinguished history across many disciplines (Yin, 2012). The intent of this study was to explore student perceptions of soft skills as the concept relates to workplace retention and advancement. Thus, the researcher selected an instrumental case study approach. The instrumental case study methodology allows the researcher to focus on an issue or concern and then select one bounded case to illustrate the issue (Yin, 2012; Creswell, 2013).

Qualitative research is a situated activity that locates the observer in the world (Creswell, 2013). This qualitative research study is situated in the two-year technical

college environment. The specific institution, a Midwest technical college, served as the “case.” Thus, the amalgamation of the participants’ perceptions and other data defined the case study. There is limited evidence suggesting best practices for integrating soft skills training in the post-secondary environment, although numerous institutions are developing innovative techniques for addressing the soft skills gap in their program graduates (Warland, Applegate, Schnur & Jones, 2015). In order to contribute to the body of literature in a meaningful way and equip the field to better serve national workforce development needs, this study builds on the literature with regard to business and industry needs and post-secondary education’s limitations by seeking to identify common themes in student perceptions of soft skills training as an indicator of workplace success.

### **Research Questions**

The following research questions guided this qualitative study:

Research question #1: What are student perceptions of soft skills as a component of their workplace retention and advancement?

Research question #2: What are student perceptions of their ability to develop soft skills, in relation to employers’ expectations, as a component of their workplace retention and advancement?

### **Research Design**

The study employed the qualitative research method. The term qualitative research is used to refer both to techniques (of data collection or data analysis) and to a wider framework for conducting research, or paradigm. Qualitative research is a situated activity that locates the observer in the world. Qualitative research consists of a set of

interpretive, materials practices that make the world visible (Creswell, 2013). Qualitative researchers study things in their natural setting, attempting to make sense of, or interpret, phenomena in terms of the meanings people bring to them (Denzin & Lincoln, 2011).

The study followed the traditional process for qualitative research (Creswell, 2013). The researcher used an emerging qualitative approach to inquiry by collecting data in a natural setting sensitive to the people and places under study and employing data analysis that is both inductive and deductive and establishes patterns or themes. This process allowed the researcher to focus on learning the meaning that the participants gave to the concept of soft skills, not the meaning that she brought to the study from her own research and knowledge of the literature (Creswell, 2013). The intent was to access participant meanings in order to further suggest multiple perspectives on the topic of what constitutes workplace success.

The selection of a qualitative study was appropriate due to the nature and circumstance of the problem. Qualitative research is best utilized when a problem or issue needs to be explored (Creswell, 2013). The need to integrate soft skills training was evident from the perspective of business and industry leaders, as well as that of the post-secondary institutions. Further exploration was needed in order to develop best practices for doing so. There was a need to study the group or population defined by the students themselves in order to identify variables that cannot be easily measured, and hear unexplored perspectives. Creswell (2013) further indicated that using qualitative research is appropriate when a complex, detailed understanding of the issue is necessary.

By engaging in qualitative research, the researcher sought to empower individuals to share their stories and hear their voices (Creswell, 2013). The aim of the study was

achieved, by creating an approach to integrating soft skills training into technical education programs that takes into account the value-systems of *all* stakeholders, including those of the student or eventual employee.

This qualitative study employed the case study methodology of research. The case study approach is familiar to social scientists because of its popularity in psychology, medicine, law and political science. Case study research has a long distinguished history across many disciplines (Creswell, 2013). Because the intent of this study was to explore the student perceptions of soft skills development as it relates to workplace retention and advancement, the researcher selected an instrumental case study approach. The instrumental case study methodology allowed me to focus on an issue or concern and then select one bounded case to illustrate the issue (Creswell, 2013). In this study, Midwest Technical College will serve as the sole case, with the unification of the participants and their perceptions and other data defining the case study.

Case study is one of the most frequently used qualitative research methodologies (Yazan, 2015). Yin (2002) defined case as a “contemporary phenomenon within its real life context, especially when the boundaries between a phenomenon and context are not clear and the researcher has little control over the phenomenon and the context” (p. 13). This is a particularly relevant definition to consider with regard to the phenomenon of work ethic. The research site, a Midwest technical college, was selected as the case for the relevance with respect to the larger problem being explored. Merriam (1998) described a case as a single entity, a unit around which there are boundaries. By fencing in the institution and considering perceptions related to the problem, the researcher was able to study the phenomenon of work ethic in a manner that stresses its unique and

distinct attributes (i.e., hard skills and soft skills) as they manifest in the two-year college environment.

### **Participants/Data Sources and Recruitment**

Ideally, the entire population would be used to gather information related to the study (Roberts, 2010). However, this is not feasible as the group of interest is too large and is scattered across the United States. The researcher identified and recruited a sample that was similar to the population under study. The researcher identified a purposeful sample of participants for this study. The purposeful sample allowed the researcher to identify different perspectives on the problem of work ethic and student perceptions on the value and development of soft skills as a means to demonstrate work ethic. Stake (1995) asserted that purposeful sampling is particularly appropriate for use when engaging in the instrumental case study approach. Further, Yin (2009) stated that when using purposeful sampling, the case itself can be single or collective, multi-sited or within-site, and focused on a case or on an issue.

Participants of this study were students at a Midwest technical college, a two-year institution that awards Associates level degrees and Technical Certificates. The participants were enrolled full-time in a technical program at the college and were required to be registered for PDV 105 Blueprint for Personal Success in the Spring 2017 semester. The PDV 105 Blueprint for Personal Success course is designed to prepare students for the workplace by educating them on the importance of establishing and maintaining their professional image. Participants ranged in age from 19-60 years of age.

The researcher recruited students from the case site. Written permission was obtained from the President of the college indicating agreement to conduct research with

a purposeful sample of students. The researcher sent an email introduction to the faculty assigned to three PDV 105 Blueprint for Personal Success courses in order to explain the study. A follow-up phone call was made a few days later in order to further clarify the study and address any questions and concerns the faculty members may have had. The faculty members were not invited to participate in the study; however, their informed awareness was included in the recruitment process as a courtesy and as a means to gain access to students.

The researcher employed a purposeful sampling strategy. Electronic invitations to participate in the study were sent via individual course mail messages in the Blackboard Learning Management System to the students enrolled in the course. Emails were sent individually to each student to prohibit responses going to all students in the sample. The faculty members had no knowledge of who ultimately participated in the study and this declaration was made clear to potential participants. Students were directed to an electronic Survey Monkey information requisition page after viewing an overview of the intent of the study and acknowledging the ethical guidelines and considerations. The researcher received 24 responses which indicated interest in participating from the sample pool of 202 students enrolled in PDV 105 Blueprint for Personal Success in the Spring 2017 semester. From this group of willing participants, the researcher identified 15 participants from a variety of ages and representative degree granting programs in the area of Aviation and Manufacturing. Despite it not being a true reflection of the workforce demographics, equal representation of males and females was desirable and achieved.

Selected participants who responded affirmatively to an interview request were contacted to schedule an interview to discuss their perceptions of soft skills as an indicator of workplace success. Interviews were scheduled until saturation was achieved and until the criteria of equal participation was met. Each interview lasted between 25 and 60 minutes. The researcher conducted 10 interviews before saturation was adequately achieved.

### **Data Collection Tools**

The researcher utilized naturalistic data gathering techniques. Naturalistic researchers explore complex situations and problems using a variety of techniques, including participant observation, documentary and conventional analysis, and interviews (Rubin & Rubin, 2011). As is often the case, this research project combined multiple research techniques in a single project. These research techniques included participant documentary analysis, and interviewing; each technique served as a unique data collection tool.

The primary tool of research for this qualitative case study project was in-depth interviewing. By engaging in qualitative interviews, the researcher looked for rich and detailed information (Rubin & Rubin, 2011). The interview questions were designed to allow the researcher to explore examples, experiences and narratives associated with students' perceptions of soft skills as an indicator of workplace success. The researcher asked five, open-ended questions with the intent of eliciting a unique and detailed response from the interviewee. The researcher used the semi-structured interview process allowing the option to elaborate and raise follow-up questions throughout the course of the interview. The interview questions were not fixed; rather, the researcher



employed the freedom to engage in insights and experiences as they emerged in the interview (Rubin & Rubin, 2011). The interview protocol was comprised of five main questions. Table 1 includes the questions and rationale for each item.

Table 1. *Interview questions and rationale*

Question #	Content	Rationale
1	<p><i>Question:</i> Tell me about your decision to pursue a technical education...</p> <p><i>Possible follow ups:</i></p> <ul style="list-style-type: none"> <li>• What is your program of study?</li> <li>• What are you hoping to learn while you are here?</li> </ul>	<ul style="list-style-type: none"> <li>• Provides the opportunity for students to explain the draw to a two-year technical college environment</li> <li>• Provides the opportunity for participants to explain in detail what they hope to obtain while enrolled at the college</li> </ul>
2	<p><i>Question:</i> Tell me about what kind of career you want to pursue...</p> <p><i>Possible follow ups:</i></p> <ul style="list-style-type: none"> <li>• What are the biggest challenges associated with getting a job in that field?</li> <li>• How is your program of study preparing you to get a job in that field?</li> </ul>	<ul style="list-style-type: none"> <li>• Provides the participant the opportunity conveys their interest in a specific career field.</li> <li>• Provides the opportunity for the participant to explain the perceived challenges associated with gaining employment.</li> <li>• Provides the opportunity for the participant to discuss how they perceive they are being prepared for the work world.</li> </ul>
3	<p><i>Question:</i> In your opinion, what is the most important skill or trait that an employer in (chosen field) expects employees to demonstrate?</p> <p><i>Possible follow ups:</i> How has your program helped you to develop that skill or trait?</p>	<ul style="list-style-type: none"> <li>• Provides the opportunity for the participant to convey the perceived values of the chosen field.</li> <li>• Provides the opportunity for the participant to convey the perceived educational experiences</li> </ul>
4	<p><i>Question:</i> Tell me, what makes a person in (chosen field) successful?</p>	<ul style="list-style-type: none"> <li>• Provides the opportunity for the participant to convey the perceived definition of success.</li> </ul>

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5	<p><i>Possible follow ups:</i></p> <ul style="list-style-type: none"> <li>• How will you demonstrate success in your profession?</li> <li>• What forms of advancement are available to you in (chosen field)?</li> <li>• How does one prepare to advance in (chosen field)?</li> <li>• Why are people fired or terminated in (chosen field)?</li> </ul> <p><i>Question:</i> Is there anything about preparing for your future work you would like to tell me that I have not yet asked?</p>	<ul style="list-style-type: none"> <li>• Provides the opportunity for the participant the opportunity to explain their awareness of important skills necessary to advance / succeed.</li> <li>• Provides the opportunity for the participant to explain the perceived causal reasons for lack of success in the workplace.</li> <li>• Provides the opportunity for the participant to add any additional perspectives they perceive as relevant to the interview experience.</li> </ul>
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The researcher was committed to engaging in respectable qualitative research practices that yielded reproducible and dependable results. Denzin and Lincoln (2000) suggested that credibility, transferability, dependability and conformability establish fidelity in qualitative research. The researcher employed qualitative validation strategies to ensure integrity and credibility of the findings. The researcher sought to establish transferability through a research design and interview protocol that elicits answers deep and rich in description. Though the study could be replicated at another institution, it is probable that differing circumstances and environments are likely to yield unique results. Dependability, the strength of the findings, and conformability, the lucidity of the data to outcomes, were achieved using an audit trail (Cook, 2015). The researcher was committed to reexamining the qualitative data multiple times in order to confirm that coding of emergent themes was applicable in all instances.

The researcher was aware of the concern for personal bias. Patton (2001) indicated the need for researcher sensitivity to bias and error, as the potential of researcher influence during an interview is a significant challenge to overcome. Many of these factors, including the participants' perceptions of the interviewer's characteristics (e.g. sex, race, perceived social status, etc.) are specific considerations to acknowledge and difficult to overcome (Creswell, 1998). The Creighton University Interdisciplinary Leadership Program prepared the researcher to be mindful that interviewers project personal attitudes and anticipate responses, both of which corrupt data (Cook, 2015). The researcher used a separate worksheet to record reflexive summaries of participant responses during interviews to bracket information received. Further, the researcher employed Member Check. The researcher provided each participant access to a transcript of his/her interview via e-mail within one week of the completed interview.

The researcher maintained a detailed schedule of interviews with a research journal that included the bracketed summaries and reflections composed throughout the interview process. Braun and Clark (2013) suggested that keeping a research journal is absolutely vital to the development of good qualitative research. The researcher used the research journal to regularly report and reflect on the progress and process of the research. This resource included the following types of information: reflection on the process and practice of recruitment and data collection, field notes for observations and interviews, analytic insights that occur during data collection, and the emotional aspects of the research (Braun & Clark, 2013). The manifestation of this information was shared with the researcher's Dissertation in Practice Chair and Committee for Peer Review in order to systematically validate the research process.

The researcher utilized a secondary tool for data collection in the study by way of documentary analysis. Documentary analysis involves examining documents—including newspapers, speeches, budgets, transcripts of meetings, personal and public letters, internet posts, blog posts, novels, diaries and just about anything that appears in written form as well as pictures and visual recordings (Rubin & Rubin, 2011). The researcher examined the participants' journal assignments from PDV 105 Blueprint for Personal Success. The journal assignments were semi-professional, informal writing assignments that engage the student in reflecting and reacting to the instructional material presented in each learning module. The PDV 105 Blueprint for Personal Success course offered the following directive to accompany the journaling activity: *Journaling can be one of the best ways to document and increase your learning. In this course, you will create weekly journal entries to document your understanding of the concepts presented in the course and your thoughts as you work to apply those concepts in your own work and life* (PDV 105, 2016). Journal prompts offered the opportunity for students to consider the themes and concepts presented in the course and to relate that new information to their plans for future career development. This activity was also valuable in order for the researcher to consider the perceptions of students with regard to their attitudes and beliefs surrounding the concept of work ethic via soft skills development in the course. Further, this strategy allowed the researcher to establish triangulation in the research method. The broad concepts and specific journal prompts for analysis are presented in Table 2.

Table 2. *Journal prompts*

<b>Concept</b>	<b>Journal Prompt</b>
Module One: Goal Setting	What concepts really stuck with you from this module? How is your thinking about the topics presented this week changing as a result of what you learned? What additional questions do you have as you seek to apply these concepts and strategies to your own life?
Module Two: Entry Level Leadership	As we reflect on the learning for this week, take some time to consider the following. In your journal entry, please address the following: <ul style="list-style-type: none"> <li>• What opportunities are present in your life that you can “step up and lead?”</li> <li>• Do you plan to strive for a leadership position in your career goals?</li> <li>• Now that you have considered that leadership involves actions and behaviors at every level of life and work, what ideas and concepts from this module do you think will help you develop yourself professionally?</li> </ul>
Module Three: Professional Communication	Please address the following: <ul style="list-style-type: none"> <li>• What are some important words, phrases, or ideas that should be included in a definition of communication?</li> <li>• What are some ways in which ineffective communication skills could hold you back from achieving your career goals?</li> <li>• How do you think having strong communication skills can help you in your career?</li> </ul>
Module Four: Diversity in the Workplace	Please address the following: <ul style="list-style-type: none"> <li>• Is it “OK” to fail in the workplace?</li> <li>• What is “success” in work and life?</li> <li>• In your opinion, is money the most important thing? Or do you seek to love the work you do and the people you do it with?</li> </ul>

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 Module Five: Career Planning

As you reflect on your work and learning this week, create a journal entry that addresses the following:

Recall your Values Assessment from Module Two.

- How do your primary and secondary values connect with the career that you have chosen to pursue?
- How are you communicating your values and strengths in your cover letter and resume?
- Have you thought about how you will convey your strengths and values in a job interview? If so, how? If not, have you identified some resources to help you prepare for job interviews?

## Module Six: Lifestyle Design

As you reflect on your learning this week, compose a journal entry that addresses the following:

- Are you designing your life or letting someone else design it for you?
- How will your ability to set boundaries affect your work – life balance?
- What strategies are you using to make big decisions in your life?
- Are you using your strengths? If so, how? If not, how are you going to adapt to making better decisions by using your strengths?

## Module Seven: Disruption in Industry

When change or disruption comes and affects your financial future, how do you plan for that? What can you do to take charge of all aspects of your life so that when disruption occurs you are prepared?

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Documents are most useful when combined with in-depth interviews that allow the researcher to discuss with their creators what they contain and how they were prepared (Rubin & Rubin, 2011). By including the documentary analysis as a secondary form of data collection, the researcher sought to acquire the context and perspective

conveyed in the secondary messages, such as moral values and cultural beliefs that emerge in the written documents.

### **Data Collection Procedures**

This research project combines two naturalistic research techniques in a single project. These research techniques include interviewing and documentary analysis. Each technique served as a unique data collection tool.

Participants who responded affirmatively to an interview request were contacted to schedule an interview to discuss their perceptions of soft skills as an indicator of workplace success. Interviews were scheduled until saturation with each interview lasting no longer than 60 minutes. The researcher conducted 10 interviews until saturation was achieved.

The interview proceedings were recorded using a digital recording device. The process began with a verbal review of the implications for the study and the ethical considerations. Participants were presented with an informed consent document on the outset of the interview. The researcher offered the participant a beverage (such as coffee or tea) and engaged in expressions of gratitude for the willingness of the student to participate in the study. Then, the researcher commenced with the semi-structured interview protocol. The recordings were subsequently transcribed verbatim using the Rev.com transcription service. All written and recorded information were downloaded to the researcher's computer in a password protected environment known only to the researcher and erased upon completion of the study. Downloaded information was kept in a secure location in the researcher's home with access available only to the researcher.

The documentary collection involved obtaining participant approval and permission to access the digital copies of participants' journal entries via the Blackboard Learning Management System. The digital copies of journals were transferred into new digital files and all identifying information was removed. The researcher used numerical coding to track documented responses and interview responses attributable to the specific individual participant. No identifying information accompanied the data at any time.

### **Ethical Considerations**

The ethical considerations for this study were typical issues connected with conducting research in an academic environment with adult learners. The researcher did not work with an at-risk population or sample and therefore limited ethical considerations to issues of permissions, privacy, anonymity, consent and overall ethical research practices. The researcher obtained approval from the organization's executive leadership team led by the President of the College. The research site required no additional review. Further, the researcher sought permission through an exempt review from the Creighton University Institutional Review Board which was approved January 2017 (IRB Package #1020487-1). Braun and Clark (2013) suggested that ethical standards include the principle of competence, awareness of professional ethics, standards of ethical decision making, and limits of competence all of which relate to being an ethical researcher. The researcher employed a standard of protection for the participants of the study including minimizing risks associated with participating in the study, a commitment to inform participants of the minimal risks associated with participating and informing participants of their continual right to withdraw from the study at any time. Further, the researcher preserved the anonymity of the research participants by using a numerical coding system



to remove personal identifying information from data. Finally, the researcher was dedicated to the requirements for ethical practice including obtaining informed consent for the participant observation, journal review, and interview; avoiding deception; maintaining confidentiality and privacy; ensuring participants' right to withdraw (without explanation or negative effect), not subjecting participants to (unnecessary) risks; and being honest and accurate in reporting research results (Braun & Clark, 2013).

### **Data Analysis**

Analyzing text and multiple other forms of data presents a challenging task for qualitative researchers (Creswell, 2012). Deciding how to represent the data in tables, matrices and narrative forms adds to the challenge. Interviews were conducted by me. The interview sessions were recorded using a Zoom H2 recorder, downloaded onto an HP tablet, and transcribed by Rev Transcription Company. Written results were analyzed and coded by hand using Madison's (2005) Data Analysis Strategies.

The researcher organized the data and engaged in an initial read-through of the database. Next, the researcher began establishing an initial list of codes and organizing themes, representing the data and forming representations in order to form an interpretation of the data. Creswell (2012) referred to Madison (2005) with an interpretative framework taken from critical ethnography. This framework includes four main steps to analyzing the data set in qualitative research. Table 3 explains these steps.

Table 3. *Madison (2005) Data Analysis Strategies*

<b>Analytical Strategy</b>	<b>Madison (2005)</b>
Identifying Codes	Do abstract coding or concrete coding
Reducing codes to themes	Identify salient themes or patterns
Creating a point of view	For scenes, audience, readers
Displaying the data	Create a graph or picture of the framework

The process of coding involves aggregating the text or visual data into small categories of information, seeking evidence for the code from different databases being used in a study and then assigning a label to the code (Creswell, 2012). The researcher examined the data to determine the valuable and relevant elements that emerged as important to the study. Then, the researcher developed a condensed list of tentative codes (lean coding) that matched text segments, regardless of the length of the database. These codes were subsequently expanded and reduced throughout the coding process. The data analysis continued with theming that allowed the researcher to identify general categories. This step involved abstracting out beyond the codes and themes to the larger meaning of the data. If and when applicable, the researcher sought to link interpretations of the data to the larger research literature developed by others for context and reference.

The researcher recognized personal biases with regard to educational background and overall familiarity with this topic and resolved to address those biases through the use of field journaling to note the emergence of attitudes or barriers indicative of bias. The researcher also depended on committee oversight to guard against bias. In order to mitigate the effects of these biases, the researcher committed to a series of quality measures including by the participants, bracketing and maintaining a journal of the research process, including data collection, and analysis. Triangulation was established when the data converged from at least three sources of data collection.

### **Summary**

This chapter presented an overview of the research methodology for gathering, analyzing and interpreting the data in order to examine the student perceptions of soft skills as indicator of workplace success (job retention and advancement). The researcher

conducted a qualitative case study research project that relied on the collection and analysis of various forms of qualitative data including documentary analysis and in-depth interviews. This chapter outlined the research design, an explanation and rationale of the selected data collection tools, a declaration of the plans for participant selection, a definition of the sampling procedure and synopsis of the anticipated data analysis. Further, the researcher addressed concerns and considerations relative to the ethical implications and limitations of the study. By addressing these points, this chapter helped to build the framework for how this study sought to answer the specific research questions to add value to the work ethic and soft skills literature in the field of technical education.

## CHAPTER FOUR: FINDINGS

**Introduction**

As noted in Chapter One, two-year technical colleges have begun to evolve from offering a singularly focused educational experience centered on teaching hard skills. This shift promotes a more holistic educational experience that includes preparation in both hard and soft skill sets. This evolution is a welcome response driven by the expressed concerns of employers who indicate that entry level employees lack the soft skills necessary to be successful in the workplace. Lotto and Barrington (2006) highlighted the deficiencies in soft skills as perceived by employers with regard to employees entering the workforce with a two-year degree indicating that,

When asked to assess new workforce entrants, employers report that many of the new entrants lack skills essential to job success, ... with specific deficiencies in applied skills associated with critical thinking, problem solving, oral communication, written communication, teamwork / collaboration, diversity, information technology application, leadership, creativity / innovation, life-long learning / self-direction, professionalism / work ethic, and ethics / social responsibility. (Lotto and Barrington, 2006, p. 1)

The literature reviewed in Chapter Two demonstrates the consensus across fields of employment which indicates that soft skills are a necessary component of workforce success from the employer perspective. Further, there is a growing body of research that indicates that soft skills can be taught and developed in students. According to Dweck (2012), students can be taught the science underlying people's potential to change their academically and socially relevant characteristics, and they can be shown how to apply these insights into their own lives. Educational institutions, including two-year technical

colleges, are using this research to base their approach at incorporating soft skills development into their technical degree programs.

The previous chapters specified the background and need for this study, reviewed literature and detailed methodology. In addition to the purpose and aim of this study, Chapter Four will present findings from the data collected. Data presented in these sections include in-depth interviews and journal assignment submissions from PDV 105 Blueprint for Personal Success. Findings will be presented on the discoveries from the research collected. To obtain an understanding of students' perceptions of soft skills as an indicator of workplace success and soft skill(s) behaviors, triangulation was employed. Data studied were considered in response to two research questions:

Research question #1: What are student perceptions of soft skills as a component of their workplace retention and advancement?

Research question #2: What are student perceptions of their ability to develop soft skills, in relation to employers' expectations, as a component of their workplace retention and advancement?

### **Purpose of the Study**

The purpose of this dissertation in practice case study was to explore the perceptions of soft skills as an indicator of workplace success for students at a two-year technical college.

### **Aim of the Study**

The aim of this study was to create an evidence-based approach for teaching soft skills at a two-year technical college. This study sought to identify competency based

outcomes related to the development of soft skills and develop conclusions and recommendations for establishing a module for teaching soft skills at the research site.

### Summary of Interview Questions

The primary tool for data collection for this study was in-depth interviewing. The interview questions were designed to allow the researcher to explore examples, experiences and narratives associated with students' perceptions of soft skills as an indicator of workplace success. The researcher asked five, open-ended questions intent on eliciting a unique and detailed response from the participant. The interviews were semi-structured, allowing the option for follow-up questions throughout the course of the interview.

Table 4. *Interview questions and rationale*

Question #	Content	Rationale
1	<p><i>Question:</i> Tell me about your decision to pursue a technical education...</p> <p><i>Possible follow ups:</i></p> <ul style="list-style-type: none"> <li>• What is your program of study?</li> <li>• What are you hoping to learn while you are here?</li> </ul>	<ul style="list-style-type: none"> <li>• Provides the opportunity for students to explain the draw to a two-year technical college environment</li> <li>• Provides the opportunity for participants to explain in detail what they hope to obtain while enrolled at the college</li> </ul>
2	<p><i>Question:</i> Tell me about what kind of career you want to pursue...</p> <p><i>Possible follow ups:</i></p> <ul style="list-style-type: none"> <li>• What are the biggest challenges associated with getting a job in that field?</li> <li>• How is your program of study preparing you to</li> </ul>	<ul style="list-style-type: none"> <li>• Provides the participant the opportunity conveys their interest in a specific career field.</li> <li>• Provides the opportunity for the participant to explain the perceived challenges associated with gaining employment.</li> <li>• Provides the opportunity for the participant to discuss how they perceive they are being prepared for the work world.</li> </ul>

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3	<p>get a job in that field?</p> <p><i>Question:</i> In your opinion, what is the most important skill or trait that an employer in (chosen field) expects employees to demonstrate?</p> <p><i>Possible follow ups:</i> How has your program helped you to develop that skill or trait?</p>	<ul style="list-style-type: none"> <li>• Provides the opportunity for the participant to convey the perceived values of the chosen field.</li> <li>• Provides the opportunity for the participant to convey the perceived educational experiences</li> </ul>
4	<p><i>Question:</i> Tell me, what makes a person in (chosen field) successful?</p> <p><i>Possible follow ups:</i></p> <ul style="list-style-type: none"> <li>• How will you demonstrate success in your profession?</li> <li>• What forms of advancement are available to you in (chosen field)?</li> <li>• How does one prepare to advance in (chosen field)?</li> <li>• Why are people fired or terminated in (chosen field)?</li> </ul>	<ul style="list-style-type: none"> <li>• Provides the opportunity for the participant to convey the perceived definition of success.</li> <li>• Provides the opportunity for the participant the opportunity to explain their awareness of important skills necessary to advance / succeed.</li> <li>• Provides the opportunity for the participant to explain the perceived causal reasons for lack of success in the workplace.</li> </ul>
5	<p><i>Question:</i> Is there anything about preparing for your future work you would like to tell me that I have not yet asked?</p>	<ul style="list-style-type: none"> <li>• Provides the opportunity for the participant to add any additional perspectives they perceive as relevant to the interview experience.</li> </ul>

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### Summary of Course Assignments

This study also included the collection and analysis of course documents from students' submissions in PDV 105 Blueprint for Personal Success. The researcher examined the students' journal assignments from the course. The journal assignments were semi-professional, informal writing assignments that engage the student in

reflecting and reacting to the instructional material presented in each learning module.

Journal prompts offered the opportunity for students to consider the themes and concepts presented in the course and relate them to their personal interpretations and future plans.

Table 5. *Journal prompts*

<b>Concept</b>	<b>Journal Prompt</b>
Module One: Goal Setting	<p>What concepts really stuck with you from this module? How your thinking about the topics is presented this week changing as a result of what you learned? What additional questions do you have as you seek to apply these concepts and strategies to your own life?</p>
Module Two: Entry Level Leadership	<p>As we reflect on the learning for this week, take some time to consider the following. In your journal entry, please address the following:</p> <ul style="list-style-type: none"> <li>• What opportunities are present in your life that you can “step up and lead?”</li> <li>• Do you plan to strive for a leadership position in your career goals?</li> <li>• Now that you have considered that leadership involves actions and behaviors at every level of life and work, what ideas and concepts from this module do you think will help you develop yourself professionally?</li> </ul>
Module Three: Professional Communication	<p>Please address the following:</p> <ul style="list-style-type: none"> <li>• What are some important words, phrases, or ideas that should be included in a definition of communication?</li> <li>• What are some ways in which ineffective communication skills could hold you back from achieving your career goals?</li> <li>• How do you think having strong communication skills can help you in your career?</li> </ul>
Module Four: Diversity in the Workplace	<p>Please address the following:</p> <ul style="list-style-type: none"> <li>• Is it “OK” to fail in the workplace?</li> <li>• What is “success” in work and life?</li> </ul>



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 Module Five: Career Planning

- In your opinion, is money the most important thing? Or do you seek to love the work you do and the people you do it with?

As you reflect on your work and learning this week, create a journal entry that addresses the following:

Recall your Values Assessment from Module Two.

- How do your primary and secondary values connect with the career that you have chosen to pursue?
- How are you communicating your values and strengths in your cover letter and resume?
- Have you thought about how you will convey your strengths and values in a job interview? If so, how? If not, have you identified some resources to help you prepare for job interviews?

## Module Six: Lifestyle Design

As you reflect on your learning this week, compose a journal entry that addresses the following:

- Are you designing your life or letting someone else design it for you?
- How will your ability to set boundaries affect your work – life balance?
- What strategies are you using to make big decisions in your life?
- Are you using your strengths? If so, how? If not, how are you going to adapt to making better decisions by using your strengths?

## Module Seven: Disruption in Industry

When change or disruption comes and affects your financial future, how do you plan for that? What can you do to take charge of all aspects of your life so that when disruption occurs you are prepared?

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### Summary of Data Organization and Analysis Procedures

The researcher engaged in a process to organize and analyze the data. The process was explained in detail in Chapter Three and began with an initial review of the

interview transcripts and journal submissions as a whole. The researcher then made notes about the first impressions derived from the data. Subsequently, the researcher engaged in a thorough review of each transcript, reading line by line and began labeling relevant words, phrases, sentences or entire sections of the interviews. An identical review process was utilized for the journal submissions. The researcher marked the word or phrase as relevant if it was repeated frequently, came as a surprise, was explicitly stated as important by the participant, or struck a resemblance to a concept presented in the literature review. The researcher identified many codes derived from the labels noted as relevant. Categories were created by combining the codes into similar groups. A copy of the master coding list associated with this study is included in Appendix B.

The categories were then extrapolated and condensed throughout the analysis process and eventually compacted to derive three main themes that emerged through this study. The researcher offers the findings of this study by explaining the categories and describing the connections between them via a thematic presentation.

### **Demographic Information for Qualitative Responses**

Five of ten interviews were male and five were female. Participants ranged in age from 19 to 60 years of age. Respondents 1, 2, 7 and 10 were enrolled in academic programs related to Advanced Manufacturing including Machining Technology and Composite Fabrication and Repair. Respondents 4, 5, 6, 8 and 9 were enrolled in academic programs related to Aviation Technology including Aero- structures Assembly and Aviation Maintenance Technician. Table 3 represents this and additional demographic information received through the interviews.

Table 5. *Summary of Salient Demographic Information for Qualitative Responses*

Summary of Salient Demographic Information										
Name	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10
Gender	M	M	F	M	M	F	M	F	F	F
Age	19-	31-	25-	25-	45-	31-	19-	45-	45-	19-
Range	25	45	31	31	60	45	25	60	60	25
Academic Focus	MFG	MFG	MFG	AVT	AVT	AVT	MFG	AVT	AVT	MFG

### **Presentation of Findings**

In presenting the findings of this research, this chapter reviews how the study was conducted and reflects on its processes and variables. This instrumental case study was based on a series of interviews and assignment submissions conducted and analyzed with 10 student representatives from a two-year technical college. Respondents included students pursuing technical degrees in aviation and manufacturing programs in areas of sheet metal fabrication, machining technology, composites repair and fabrication, and aviation maintenance technology. By engaging in qualitative research, the researcher sought to empower individuals to share their stories and hear their voices.

The research site was situated in an urban, Midwest city with an approximate population of 400,000 people. At the time of the study, the research site, a two-year technical college, serves approximately 5,000 degree and non-degree seeking students in academic areas ranging from general education to technical degree paths. Degrees offered at the college range from short-term training certifications to full-blown

Associate Degrees in areas of applied science and technology. In addition to program of study, the pool of respondents also varied in that the participants included both male and female students ranging in age from 19-60 years of age.

Following the interviews and submission of assignments, data were organized, coded and subsequently, themed, as was noted in Chapter Three using Madison's four main steps for analyzing the data set in a qualitative research study, as cited in Creswell (2012). The researcher reviewed all data three times, taking notes on salient information to develop a preliminary list of labels and patterns as they emerged. This abstract coding was completed by highlighting important information and modifying a preliminary master coding list of response categories. Several fundamental themes emerged. Triangulation was achieved across the study when these themes emerged at least three times across interviews and journal submissions. Finally, the researcher returned to the literature in this area to determine how respondents' responses compared to the employer and educational perspectives of soft skills as an indicator of workplace success.

All 10 respondents demonstrated a positive awareness and overall indication that soft skills play a critical part in one's employment retention and advancement. The following categories were identified from the interviews conducted during this instrumental case study. The categories discovered through the responses, listed in order of relevance to the research questions, included the following: (a) respondents' perceptions of the need to demonstrate high-order thinking skills; (b) respondents' perceptions of the need to develop and demonstrate social skills; (c) respondents' perceptions of the need to develop and demonstrate effective communication skills including both oral and written; (d) respondents' perceptions of the need to demonstrate

self-control in the workplace with regard to career and technical training, career advancement and conflict resolution in the workplace; (e) respondents' perceptions of the need to embody a positive self-concept with regard to one's personal and professional persona.

Respondents perceived soft skills a critical component of their workplace retention and advancement. When asked about the decision to pursue a technical education, one respondent indicated, "I wanted to stop working all kinds of low-end jobs. I knew that if I just took the time to invest in myself and learn a skilled trade, I would be worth more to the employer and I could begin to develop some stability for my family by earning higher wages" (Respondent 5, interview communication, February 23, 2017). The participants' responses related easily with the description of behaviors and traits described by employers as they have indicated the desired characteristics of potential employees. Lippman et al. (2015) indicated that there are five critical skills most likely to increase workplace success across all outcomes and which employers are expecting employees to have: higher-order thinking skills (including problem-solving, critical thinking and decision making); social skills; communication skills (including oral and written communication); self-control; and positive self-concept. Responses often overlapped when addressing one or more behavior or trait, but related to one or more of the remaining characteristics, and in turn, related to the research questions. Figure 6 illustrates this relationship between respondents' responses and the results presented by Lippman et al. (2015).

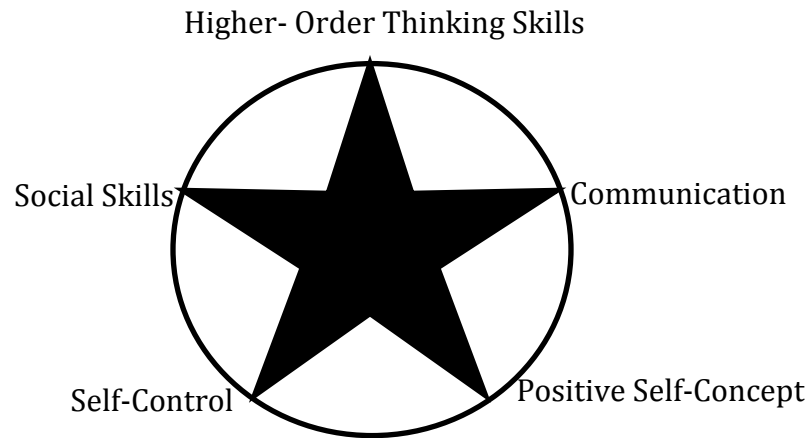


Figure 6. *Key soft skills for workforce success.*

The respondents' understanding of soft skills and their implications on the overall trajectory and success of their career development was supported by their personal values system and evident in the experiences and viewpoints they shared. When asked about the most important skill or trait that employers' in their field were looking for in a job candidate, one respondent stressed the importance of being personally invested at work, "It's important to invest in the mission of the company. If you want a company to take an interest in you as a person, you have to show interest in the company" (Respondent 4, interview communication, February 23, 2017). Acknowledging behaviors and traits related to skills defined by the researcher as soft skills provided insights into the profundity of personal values and intensity of the understanding that it is necessary to integrate soft skills into their professional environments. The following are illustrations from the data:

#### **Category A: Higher-Order Thinking Skills**

Respondents referenced higher-order thinking skills consisting of problem-solving, critical thinking and decision making. Respondents demonstrated understanding that employers will be requiring them to identify an issue and take in information from

multiple sources to evaluate options in order to reach a reasonable conclusion. There was evidence of these characteristics in all ten of the respondents' interviews and/or writing. Respondents demonstrated that high-order thinking is very much sought by employers and is critical for all workforce outcomes.

One respondent stressed the obvious need to make himself an asset to the company by being able to solve-problems and make decisions:

In past [job] interviews, I expressed to supervisors a strong desire to solve problems their teams were facing and I illustrated I would prove to be a valuable asset to their team. In the interview stage, supervisors want to see hunger in the people they interview and not by typical interviewing structure—they have to see that you are smart and that you are worth something. (Respondent 4, interview communication, February 23, 2017)

Another respondent speaking about the importance of leading from the shop floor when problems in production arise stated:

I have [had] many opportunities to step up and lead at work. My senior crew member, or lead often breaks us up into two or more groups. Each group needs a leader. Depending on who is in my group and how comfortable with the job we are doing, I will often step up and lead—especially if the job requires problem solving or trouble shooting a problem. (Respondent 7, interview communication, February 27, 2017)

These excerpts identify the notable perception that higher-order thinking skills (including problem-solving, critical thinking and decision making skills) are desired characteristics for entry level employees in aviation and manufacturing career paths.

They also highlight the respondents' desire to develop these skills as well as the capacity to clearly articulate these skills during the job interview process. The shift from hard skills to soft skills as being the most desired skill or trait by employers was evident in the perceptions that respondents expressed in their assignment submissions and interviews. The distinctive hard skills associated with each participants' degree path was evident but did not affect the categories or subsequent themes of this study.

### **Category B: Social Skills**

The majority of respondents expressed that social skills help people get along well with others and that getting along with colleagues and supervisors is essential to workplace success. When asked in a follow-up question about some ways that social skills can help or hold one back in their career, one respondent said, "I always try to show respect to everyone I work with no matter who they are and what they do. At the end of the day, I want to show my supervisors that I am good with people because I think that also shows them that I am focused and good at my work" (Respondent 6, interview communication, February 27, 2017). Respondents articulated social skills in examples such as having the ability to show respect for others, using context-appropriate behavior, and resolving conflict. Respondents communicated an understanding that social skills are universally important. To this point, one respondent indicated, "It's [social skills] not important just at work but in life. People just respond better to others when we are nice and respectful rather than demanding or rude" (Respondent 8, interview communication, February 27, 2017).



Responses in general, offered connections to social skills being the determining factor for successful workforce outcomes (employment, performance, income / wages).

When asked how he will demonstrate success in his profession, once respondent said:

I am starting to realize how big of a difference I can make in someone's life or just that day at work. If you do not step up to help people and do the right thing or lead, then you will be in the same spot you [were] in before you did it. In other words, you have nothing to lose just things to learn. (Respondent 7, interview communication, February 27, 2017)

Several responses offered suggestions that having social skills did not necessarily mean that respondents expected to be popular at work or that popularity was necessarily the key to success. To this point, one respondent indicated:

It's ok not to be friends with everyone at work, but you have to recognize that you need to get along or at least be respectful of everyone. Making someone angry at work may be one mistake that you can fix or maybe not and you never know how that it is going to affect you long term. When you make people angry or disappoint them repeatedly, you develop a reputation as a bad person or an unproductive worker even if you are not. This can affect your pay or even whether or not you get to keep your job. (Respondent 10, interview communication, February 27, 2017)

The emphasis in the responses associated with social skills was clearly placed on the importance of maintaining a professional rapport with the people one associates with at work. Responses offered in the interviews and journal submissions consistently reiterated the notion that one's professional reputation was formed, in part, by the way

one treats and interacts with colleagues and supervisors. Respondents tended to refer to their co-workers informally, but this fact did not take away from the inclination that reverence and respect for those whom one worked next to is an imperative to achieve success over the long-term. Further, numerous examples of social skills being tied to workforce outcomes such as promotion and compensation were cited across the study indicating that supervisor perception of social skills was perceived by respondents as crucial to workplace retention and advancement.

### **Category C: Communication Skills**

A consistently present category that emerged in the interviews and journal submissions was the importance of having strong communication skills in order to be successful in the workplace. When asked what are some importance words, phrases, or ideas that should be included in a definition of communication, respondents acknowledged referred to the specific types of communication used in the workplace including: oral, written, non-verbal, and listening skills. Specifically, one respondent said:

I [have] had a lot of experience in a lot of different jobs over the years.

Communication, whether it be on a personal, professional, or scholastic basis comes easy for me. I know how to get my point across to anyone in any situation: written, or orally. Either way is fine with me anymore. I think a person has to be a good communicator in today's jobs. (Respondent 5, interview communication, February 23, 2017)

Respondents demonstrated an understanding that strong general communication skills contribute to the development of other skills, like social skills. When asked, how

she thought having strong communication skills can help her in her career, one respondent replied, “Communication is one of the main ways we demonstrate respect for others. One thing that is really important to supervisors is eye-contact. If you cannot look someone in the eye on the job site, they will begin to think that you are hiding something or that you are disrespectful” (Respondent 2, interview communication, February 23, 2017).

Another respondent shared that communication is essential to effectively communicate one’s goals and needs in the workplace:

Some ways ineffective communication skills can get in the way of my career goals is not speaking up, not being brave on what I say, and not being totally focused. If I were to have strong communication skills, it would help me be ahead and get to somewhere farther. (Respondent 10, interview communication, February 27, 2017)

Another response to this question demonstrated a perception that communication is often the most critical component to developing a positive reputation in the workplace and positively contributing to a strong company culture:

I have become better at communicating my needs to my supervisor. If I need to take time off, I present him with the information and feel confident that I am respectful and respected. I used to hate asking for time off because I thought I would be labeled as “lazy”. (Respondent 6, journal entry, spring 2017)

Respondents offered examples that demonstrated how poor communication very often contributes to negative interactions and residual conflict in the workplace. The importance of teaching effective oral and written communication skills was highlighted in

several respondents' indications that situations of conflict in the workplace often present the most challenging opportunities to communicate effectively and maintain respect towards co-workers and supervisors. An example of this was highlighted in one respondent's response related to avoiding conflict on the job:

I would say an important phrase in a [difficult] conversation would be, "Tell me more about it" or "I do not know." (Respondent 10, interview communication, February 27, 2017)

These responses highlighted the respondents' perceived importance of developing and demonstrating effective communication skills in the workplace. Respondents recognized the significance of oral and written communication as it related to workplace success, specifically with regard to demonstrating acceptance and respect towards their supervisors and co-workers. Similarly, respondents gave examples of incidents when poor communication exacerbated conflict in the workplace citing issues of avoidance, blame-shifting, intolerance and disrespect as symptoms of poor communication.

#### **Category D: Self-Control**

Consistent with employers' articulated expectations, respondents conveyed an awareness of self-control as it refers to one's ability to delay gratification, control impulses, direct and focus attention, manage emotions, and regulate behaviors. When asked to reflect on their Values Assessment results in a journal assignment, respondents cited a number of long-term goals (including financial stability, completed education and degrees, and long-term employment) as indicators of workplace success. When asked, how their primary and secondary values connect with their career aspirations, one respondent said:

The first thing I want to do is provide for myself and my child, so that means that I have to work. But, I would rather work at a job that I like and one that has growth opportunities for the future—I see potential to have that in Manufacturing once I learn the skills. (Respondent 3, journal entry, Spring 2017)

One respondent's comment on the importance of self-control in the workplace indicated a perception that self-control is a skill that can be developed:

I am 36 and if I could turn back the hands of time for all the time[s] I did not listen or when I thought I knew it all I would [be right] where I should be [already, instead of still being in school, still trying to make my way] but I do not have any regrets for I chose this path. [But] when I was younger I thought I knew it all and would not allow anyone to tell me anything. I would not allow myself to trust anyone but I finally came to a crossroads in my life and I wanted to know what is my purpose. So for the first time in my life, I trusted to follow and from there God laid it out for me by following him I can finally take the lead. I understand that it takes long hard work to recover from mistakes in the past but the future is bright. (Respondent 2, interview communication, February 23, 2017)

Another important facet of self-control is the notion that the manufacturing workplace presents many opportunities every day to cut corners or take short cuts. Several respondents illustrated the importance of doing the right thing when no one is watching, as being an element of self-control and quality assurance. An example of this is highlighted in one respondent's reply when asked in a follow up question, how he would communicate self-control as a strength in a job interview:

The opportunities to teach my daughter right and wrong [is a like] the opportunity to get to work on airplanes and to fix things. To me, these are the best goals I can have. The job I get I want to take it as high as I can go from year one to CEO regardless the time it takes to get there. My big idea is to find ways of moving safer and faster and saving the company money and the way to do that is to lead by example and do the right thing every time. (Respondent 7, interview communication, February 27, 2017)

When reflecting on the importance of self-control in the workplace, respondents repeatedly emphasized behaviors associated with integrity, honesty, and dependability. Respondents cited the many personal and professional demands that they carry daily and noted that self-control meant focusing on the long-term and delaying their gratification for a time when hard work would pay off in the way of financial stability, job security, professional respect and expertise and a sense of belonging within the organization where they work.

#### **Category E: Positive Self-Concept**

The interview protocol led respondents to reflect on their career preparation and lifestyle design elements. When asked how does one prepare to advance in their chosen career field, respondents indicated a perception that having a positive self-concept contributes to workplace retention and advancement. One respondent indicated, “I think you have to believe that you deserve to be successful. That you are worthy of getting what you want out of life” (Respondent 9, interview communication, February 27, 2017). Responses associated with positive self-concept included examples like the need to demonstrate self-confidence, self-efficacy, self-awareness and strong personal beliefs, as

well as self-esteem and a sense of well-being and pride. To this point, several respondents mentioned having a sense of pride and accomplishment when they finished a project at work.

Respondents demonstrated an awareness that having a positive self-concept is another intrapersonal skill that is important for workplace success, noting repeatedly that workplace success manifests as a component of their personal pride and dignity. This was highlighted in one respondent's comment:

For some reason, just being able to achieve the goal that I have set in place for myself of getting a high-skilled job would be a huge milestone that I'll overcome in my lifetime. Because I'll be graduating in spring of 2017 my goal is fast approaching and I just hope I'm ready for what life has in store for my future. I do have some pretty big obstacles that stand between me and my goal. But I'm a fighter and will not let anything stand in my way of my goal. (Respondent 6, interview communication, February 27, 2017).

Another respondent demonstrated the importance of demonstrating gratitude as a component of positive self-concept, particularly with regard to overcoming hardships:

As I get up in the morning, I start my day off with a smile. I kiss my wife I tell her the most heartfelt words I have ever heard, "I love you." From there the motivation is overwhelming I let nothing get in my way as I fall to my knees and give thanks and praises to God for another beautiful day from that point I'm prepared for whatever God has laid out before me and believe it or not, the challenges are never too great. (Respondent 2, interview communication, February 23, 2017)

When asked if there was anything more about preparing for your future work you would like to tell me that I have not already asked, one respondent indicated an overwhelming sense of pride for the ability to complete their technical training and showed strong intention to pursue their employment goals:

I have had this goal since I was a kid, but never could reach it now-- at last it's finally in view. With my wife and kid next to me, I will stick to my goal of getting my A&P license and starting at [company] as a valuable asset to the company. I will continue to learn more going to class to be one step closer to my goal and making my dream a reality. The big goal is to help people fly to new places meet new people and give my daughter a father she can be proud of.

(Respondent 7, interview communication, February 27, 2017)

Though each participant spoke from a unique place of experience and individualized career goals, it was consistently evident in the responses that having a positive self-concept was perceived to be a critical component of workplace success. This notion is consistent with employers' expectations that employees demonstrate attitudes and behaviors relevant to a positive self-concept, specifically, in the areas of gratitude, self-confidence, self-esteem and self-awareness.

### **Analysis and Synthesis of Findings**

A final analysis of the data collected throughout this research study reveals a set of recurring themes that emerged from the categories and were supported by the literature presented in Chapter Two. To summarize, students come to the decision to enroll in at a technical college in order to pursue high-wage, high-demand jobs that offer financial stability, the development of technical skills and offer secure employment opportunities.



Students who enroll in technical programs in the areas of aviation and manufacturing often do so out of an innate interest in hands on work that includes designing, constructing and repairing things as well as understanding how things work.

Careers in aviation and manufacturing have historically inspired images of dirty shop floors, loud working environments and rough labor demands. However, the modern aviation and manufacturing environment is far from this historical perception. In 2017, advanced manufacturing jobs are high-skilled, high-wage and high-demand. These employment opportunities require employees with certifications and experience to perform technical skills and function in a clean, amicable and professional working environment.

While two-year technical institutions have previously focused solely on training and certification in hard skills it is apparent through this study that employers and students alike expect institutions to prepare graduates who are career ready. This means preparing students with the hard skills necessary to get the job *and* the soft skills necessary to keep their job and advance in their position.

Respondents demonstrated a positive perception of soft skills as an indicator of workplace success and of their ability to develop these skills in relation to employers' expectations. This study reveals that in order to promote a successful transition from technical training to the workplace, students must: (a) demonstrate an understanding of employers' expectations for *both* hard and soft skills; (b) demonstrate the ability to acclimate to the high-stakes working environment present in skilled trades professions; (c) demonstrate a willingness to continually learn and adapt on the job.

**Theme One: Understanding Employer Expectations**

Both the responses offered in the interviews and the journal submissions offered a synergy between what employers articulated as the most important skills necessary for employment success and what respondents expressed as equally important behaviors and traits to demonstrate in the workplace. The interview responses showed that students are aware of employer expectations but not always certain that they can or will meet those expectations in areas related to soft skills. As Dweck (2012) pointed out, performing technically is just one of the challenges people face on a daily basis. People are also highly concerned about their social competence, in particular whether or not they are liked, respected and whether or not they belong (Dweck, 2012). When asked, what do you think employers' in your field are looking for in a new employee, one respondent answered:

Oh, I know what they want. They want you to show up on time and do your job without making mistakes. Mistakes cost the company money. (Respondent 5, interview communication, February 23, 2017)

Another respondent articulated the importance of showing up to work on time and in a consistent and dependable manner:

I think showing up on time is big thing. All my instructors stress the importance of being on time and following directions. Employers are not forgiving of people who show up late or make mistakes – or being wasteful. I think that's a problem too. (Respondent 3, interview communication, February 23, 2017)

Some responses connoted a perception that employers to prioritize corporate needs over those of the individual employee:

Employers expect people to come to work no matter what. They want people to be dependable and do they job they were trained to do. They are paying good money for work to be done. (Respondent 9, interview communication, February 27, 2017)

### **Theme Two: Navigating the High Stakes Environment**

For individuals who have little if any professional working experience, transitioning from the unskilled labor market to that of the skilled trade professions can be challenging. Respondents communicated feelings of concern in navigating the need to demonstrate soft skills in the workplace. It was evident that respondents understood the importance of demonstrating these skills, but interviewees offered responses that consistently demonstrated a reluctance to admit that they were inexperienced or unskilled in this facet of the workplace:

I will usually be very shy at work in a new job. I watch people. I find someone I can trust and then I try to learn as much as I can without asking for help from anyone until I know who I can trust. (Respondent 8, interview communication, February 27, 2017)

Another response illustrated a pressure to demonstrate perfection despite a lack of experience:

I think it's hard because they know they hired someone right out of school, but we know that what they want is a five-year employee. So—there's a lot of pressure to be fast and good at what you do and also to make friends and be well liked from the very beginning. (Respondent 6, interview communication, February 27, 2017)

Yet another respondent shared an experience that demonstrated the importance of communication and self-control:

For me, I do not do politics and I do not like to play games. There is a lot of politics at work—that's the reason I am unemployed now. I confronted my boss at my last job and well, it did not end well. I have already learned the importance of communication through that experience and also learned to not let my ego get me in trouble. At the end of the day, I need a paycheck and I do want to have a job. (Respondent 7, interview communication, February 27, 2017)

Two specific examples of the high-stakes environment emerged during the interviews:

**Example One: Making Mistakes**

Many respondents indicated that making mistakes in the workplace was highly likely given their inexperience and human factors. However, they repeatedly expressed the importance of recovering from those mistakes in order to learn from them and demonstrate to supervisors that they were worthy of keeping their job or advancing into a new role. When asked about her articulated fear of making a mistake at work, one respondent said:

I am young, and when I get out of school this will be my first real job. But, I also have a child and I have to be responsible for making good decision for my son. I am afraid that I will get fired just because I did not know I was supposed to do something a certain way. I know that when I make a mistake I will have to tell someone right away otherwise it could get worse and I could get fired.

(Respondent 10, interview communication, February 27, 2017)

In a comment related to the importance of recovering from mistakes on the job, another respondent said:

There are lots of ways to make mistakes in the workplace. The most common is that people get lazy. That's when accidents or inefficiencies happen. That's also when employers are more likely to take action to dismiss you. Sometimes you make a less intense mistake, like you upset someone on accident or did not understand what you were supposed to do and that caused more work for someone. When that is the case, it can be bad but you can overcome it if you handle it the right away. What I have seen though, is that it's really hard for people to swallow their pride and admit that they were wrong. People usually make excuses or blame others for their own mistakes. (Respondent 4, interview communication, February 23, 2017)

In a comment that linked back to more specific skills, as discussed in the previous section, one respondent shared:

I have had lots of jobs and I make mistakes all the time, but I am careful. I think when [supervisors] see that you are trying to do the right thing – because you communicate with them and with your co-workers that can go a long way.

(Respondent 6, interview communication, February 27, 2017)

### **Example Two: Developing a Reputation**

Seven out of the ten respondents indicated an awareness of the pattern of behavior that results in a positive or negative perception of them as a contributing member of the workforce. Responses indicated that one's reputation for being dependable, honest and motivated were particularly important. This was specifically highlighted in one

respondent's reply to further explain the connection between dependability and workplace success:

I work pizza delivery right now and I hate dealing with high school kids. They will just not show up for no reason which causes problems for everyone else who did show up to work. I am looking forward to working in an environment where people are more dependable because [supervisors] will not tolerate repeated absences and people who cause problems for production. (Respondent 2, interview communication, February 23, 2017)

Another similar response demonstrated the connection between the established reputation and the respondent's self-concept:

It's important to me that I am respected and thought of as a person who you can count on to do a good job. I have a son and my goal is to raise him to be the best man he can be – that comes from modeling the behavior of a person who is dependable and cares about others. At work, you do not always know everyone who is effected by your actions, which means you have to be serious and consistent in order to have the respect that you deserve. (Respondent 9, interview communication, February 27, 2017)

Lastly, all of the respondents offered some connection between professional reputation as perceived by supervisors and ultimate job retention and advancement. One particular response indicated the transparency in character that is established after working with someone on the job floor:

It's not hard to figure out who is lazy and who cuts corners. They think people do not know but [we] do. It's no different for the boss or the lead on the floor. You

cannot fake your way through being a good worker. Real motivation and real dedication to your job is in the work you put out not the words or the politics.

(Respondent 3, interview communication, February 23, 2017)

### **Theme Three: A Willingness to Learn**

All ten respondents demonstrated a profound willingness to learn whatever skills it takes to be successful in the workplace. Participants indicated a perception that there are hidden rules governing what is acceptable and what is not acceptable behavior in the workplace. The interviews supported the expectation that their academic program teach them *all* the skills necessary to be successful in the workplace. When asked about her experience in the PDV 105 course, one respondent commented:

When I first started this course [PDV 105 Blueprint for Personal Success], I thought that I already knew what it takes to be successful at work. I raised five children. I am grown. I am a hard worker and I have endured a lot of tragedy in my life, but I do not give up. Even English is my second language and school is really hard for me. But, I am glad that this school cares about being successful at work. It has been helpful for me to understand communication and social skills in the workplace especially when it is solving problems or conflict because that is scary for me.

(Respondent 8, journal entry, Spring 2017)

Another respondent shared the feeling that the course offered added confidence and a better understanding of what employers are looking for in their job candidates:

This class has given me a lot more confidence. I have gone to a lot of job interviews and felt really desperate and insecure. Now, I feel like I will be

interviewing them at the same time they are interviewing me. I will be asking questions about what exactly they expect and then I will be prepared to answer how I will meet their expectations. If I do not know something, I am going to ask them how they will teach me and make sure they know I am willing to learn. (Respondent 3, interview communication, February 23, 2017)

Similarly, when asked to expand on a comment related to the importance of teaching soft skills in order to promote a smooth transition from technical training to workplace, one student said:

Oh you [have to] teach the young kids. Cause you see, they do not know, cause some of their parents did not teach them and others they just do not care yet because that's how some young people are. That's how I was. But, I like being in the class with them because maybe they can learn from my mistakes if I share them. It is hard to relate though because some of them do not want to be here and for me, this is a mission from God. This is my way to change my life.

(Respondent 5, interview communication, February 27, 2017)

Respondents demonstrated an overall willingness and desire to learn the specific skills and behaviors that would contribute to their success in the workplace. The researcher perceived an interest in developing soft skills and a belief that one's skills could be enhanced if specific strategies could be taught in the context of their technical education.



### Summary

The need to increase the capability of America's workforce is imperative. There is a focus on national level of government to promote employment opportunities in the industrial sector in order to address the labor deficit and skills gap which is predicted to intensify in the next decade. Chapter four outlined the results of this study which focused on exploring student perceptions of soft skills as an indicator of workplace success. Following an instrumental case study design in a qualitative study data were collected and analyzed. The researcher conducted ten semi-structured interviews and reviewed and analyzed journal submissions for submitted in the PDV 105 Blueprint for Personal Success course.

Results suggest that students have a positive perception of soft skills as an indicator of workplace success. Soft skill traits were evident as respondents shared examples of personal values and experiences that indicated their awareness of employer expectations and the need to develop soft skills for the purpose of job retention and advancement. Further, respondents expressed the desire and capability to develop soft skills in order to meet employer expectations and promote workplace retention and advancement. The study resulted in the emergence of five broad categories and three main themes relevant to students' perceptions of soft skills as an indicator of workplace success.

## CHAPTER FIVE: CONCLUSIONS &amp; RECOMMENDATIONS

**Introduction**

This study explored student perceptions of soft skills as an indicator of workplace success. A review of related research relevant to the labor deficit in the United States, employer expectations of workforce candidates and one's ability to develop soft skills in relation to those expectations led the researcher to identify value in exploring student perceptions of the necessity to develop and demonstrate soft skills as a component of their job retention and advancement opportunities. Data collected through a review of course assignments and an interview protocol led the researcher to further identify the value of integrating soft skill(s) development into technical education curriculum in a two-year technical college institution. Because soft skills play an intricate role in determining the ultimate success of an employee's workforce outcomes (i.e. job-retention, career promotion, income and entrepreneurship), this researcher recommends that the technical institution (and others like it) make further efforts to integrate soft skills development into their technical education curricula.

The final chapter of this dissertation in practice study offers conclusions and recommendations for integrating soft skills in the context of a technical education. This solution directly addresses the technical college's desire to fully prepare students to meet workforce outcomes by equipping them with both the hard and soft skills they need to be successful in the workplace. This study concludes with practical advice for addressing the challenge of integrating soft skills training into technical education programs by providing technical college leaders with recommendations for how to best design and implement a program to meet the evolving demands of industry representatives. The

recommended solution provided in this chapter includes an outline of student learning outcomes that reflects both the expectations of industry employers and meet the needs of technical education students as perceived by the researcher as a result of this study.

In this chapter, the researcher will synthesize data taken from interviews and journal submissions to offer a series of conclusions and suggested methods for the implementation of an approach to implement soft skills training in the context of a technical education.

### **Purpose of the Study**

The purpose of this dissertation in practice case study was to explore the perceptions of soft skills as an indicator of workplace success for students at a two-year technical college.

### **Aim of the Study**

The aim of this study was to create an evidence-based approach for teaching soft skills at a two-year technical college. This study sought to identify competency based outcomes related to the development of soft skills and develop conclusions and recommendations for establishing a module for teaching soft skills at the research site.

### **Proposed Solution**

A growing evidence base shows that these skills rival academic or technical skills in their ability to predict employment and earnings among other outcomes (Kautz et al., 2014). The purpose of this study was to explore whether or not students in technical programs recognized the evolving soft skill needs of business and industry in technical career pathways. In their responses, participants not only identified many of the exact skills and traits desired by employers (evidenced by the literature). Due to the uniformity

of the responses, the researcher was able to provide recommendations for the design, development, implementation and assessment for such a program to facilitate the growth and development of soft skills in two-year technical college students. The proposed solution, generated from this study is the recommendation to implement soft skills training as a viable means of contributing to the quality and quantity of workforce needs.

### **Employer Engagement**

The researcher recommends engaging with local and regional employers to determine service-area workforce expectations with regard to soft skills. There are many benefits to engaging employers in the development efforts when designing a soft skills training program. First, employers can provide concrete expectations on which to base the learning outcomes relevant to developing the desired skills and behaviors. Second, employers are usually interested in engaging with technical colleges in order to create a talent pipeline to fill their employment needs, for this reason, the opportunity to engage in the design of the soft skills training program may offer new opportunities for employers to engage in and offer support to the technical programs at the institution. Finally, employer engagement can promote buy-in and commitment for the students who will be enrolled in the training program, particularly if they are aware that their future employer participated in developing the training they are participating in.

The researcher recommends working directly with employers to form a unique advisory team to oversee the development and evaluation of the soft skills program. This advisory board would focus on articulating the needs of business and industry and translating those needs into student learning outcomes and determining the best ways to assess students' proficiency for those outcomes.

Technical colleges contribute to workforce needs by offering short and long-term training options in areas of applied technical skills needed to equip the skilled trade labor workforce. Technical programs range in duration from 6 weeks to earn a certificate of completion to 2 years to earn a full associate's degree. The level of certification in skilled trades careers varies, however, employers have made it clear that they expect their employees to demonstrate proficiency in soft skills when they are hired to work. For this reason, the researcher recommends that the approach to integrate soft skills in the technical college environment be comprehensive yet flexible to allow for integration in both short and long-term programs.

### **Learning Modules**

The soft skills training program should be comprehensive yet flexible. This could be achieved by creating learning modules that could be implemented with flexibility depending on the duration and context of the technical training program. A suggested illustration of these learning modules is provided in Figure 7 below.

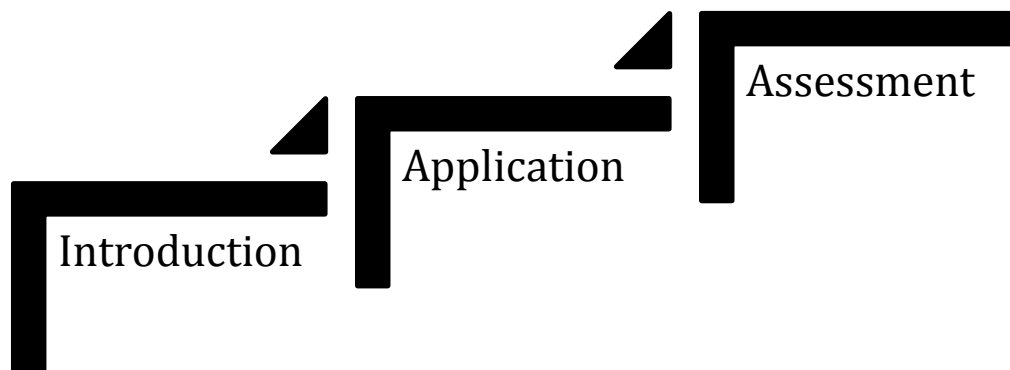


Figure 7. *Soft skills learning modules.*

Each component of the soft skills training program could be integrated into the context of the technical education program as a stand-alone component such as a for-

credit course, or could be integrated directly into the technical education course as an embedded learning module. The researcher suggests a blend of both of these options be utilized in order to meet the various scheduling needs of technical programs. For example, the introductory component could be a stand-alone, for-credit course that is required at the beginning of all technical programs. This course would focus on providing context for soft skills training and allow students to create career goals that would ultimately promote their investment in developing the skills necessary to be successful in the workplace. Further, the researcher suggests that the application module be integrated directly into technical courses as an embedded learning module. This could be thought of as a workshop or special seminar offered directly in the context of the technical program courses. This approach allows for students to apply the concepts related to soft skills development directly into the context of their technical learning environment and thus, increases their understanding of the way these skills and behaviors manifest in the realistic work environment. This approach would allow for simulation not unlike a “clinical experience” for skilled trades. The assessment component of the soft skills program could be delivered as a stand-alone course such as a capstone or embedded as a seminar or workshop depending on the specific needs of the program. Modularizing the components of soft skills training allows for flexible implementation in technical programs that require both short and long-term program configurations.

### **Student Learning Outcomes**

The content of a soft skills training program should be based on the expectations that employers have outlined for successful employees. The researcher reviewed those expectations in Chapter Two of this study and recommends that those expectations be

formalized into learning outcomes that can be operationalized to develop skills in technical education students. An outline of the proposed student learning outcomes is provided below.

**1. The student will demonstrate an understanding and ability to set personal and professional goals.**

- 1.1. Demonstrate the ability to set SMART goals in their personal and professional life
- 1.2. Demonstrate an understanding of procrastination as a deterrent from reaching their goals
- 1.3. Identify specific strategies for avoiding procrastination and demonstrating an active pursuit of their goals

**2. The student will identify and demonstrate the personal characteristics associated with entry and middle level leadership.**

- 2.1. Cultivate a sense of self-awareness by identifying a leadership style
- 2.2. Identify their personal values and recognizing the effects of their value system
- 2.3. Recognize the characteristics of strong leaders
- 2.4. Recognize the characteristics of toxic leaders and followers
- 2.5. Identify opportunities to develop entry and middle level leadership

**3. The student will identify and demonstrate the skills and behaviors associated with professional oral and written communication.**

- 3.1. Develop listening skills and identify listening blocks
- 3.2. Demonstrate an understanding of the writing process in a digital age and how

to compose an effective message

3.3. Discover how the communication process works and different parts of the professional communication model

3.4. Identify which forms of communication work best for different types of messages

3.5. Identify the common barriers to good communication

**4. The student will demonstrate an awareness of cultural diversity in the workplace and identify strategies to engage in teamwork and successful collaboration.**

4.1. Identify how trust, cohesiveness, support, and ethics affect group climate

4.2. Recognize, accept, and respect people's differences; develop a willingness to cooperate with others

4.3. Recognize the benefits of encouraging teamwork and cooperation, being perceived as a leader

4.4. Develop the ability to implement different strategies for dealing with conflict

4.5. Recognize the value of the many different professional roles people play

**5. The student will identify proactive strategies to develop and manage a professional career.**

5.1. Create a comprehensive career plan

5.2. Identify their career readiness quotient and identify strategies to improve it

5.3. Establish a career management action plan

5.4. Create a dynamic cover letter, targeted resume, and follow up thank you note

5.5. Identify resources for workforce education and development



**6. The student will engage in lifestyle design activities.**

6.1. Recognize your strengths and talents and connect them to your personal and professional goals

6.2. Identify elements related to employment (financial concerns, family obligations, dreams for the future) that effect your decision making and future planning

6.3. Create a framework that recognizes the challenges and triumphs associated with a positive work, life balance

6.4. Discuss strategies for making major life decisions such as going back to school or changing careers

6.5. Develop interest and skills that promote and encourage health and wellness for daily living.

**7. The student will define the concept of Disruption in Industry and develop an internal locus of control.**

7.1. Discuss the concept of disruption in industry

7.2. Locate industry resources from a variety of sources and areas of interest

7.3. Demonstrate the ability to locate information and consider facts when making decisions

7.4. Recognize the potential effects of disruption in industry in association with personal skill sets and emerging technologies

**8. The student will identify the benefits of reflection in the workforce education and development process.**

- 8.1. Recognize examples of growth and understanding in their own work
- 8.2. Demonstrate an active dedication to demonstrating behaviors associated with positive personal and professional development
- 8.3. Reflect on personal and professional goals

The outline above is intended as a recommendation for technical college leaders who are seeking to implement soft skills training in order to develop skills and behaviors that reflect the expectations of employers in industry. The skills and behaviors listed above offer specific manifestations of behaviors associated with the five categories that emerged in this study: higher-order thinking skills, communication skills, self-control, positive self-concept and social skills. The student learning outcomes are offered as part of the proposed solution in this study and if followed, allow technical colleges a substantive list of skills and behaviors to train and evaluate their students' progress in developing these skills.

These skills can be developed by offering students a variety of learning opportunities including role-playing, reading assignments, written assignments, group exercises, case-study exercises, and reflective activities. It is recommended that a wide variety of learning exercises be utilized in order to promote an understanding of skills and behaviors associated with workplace success. Students will require multiple opportunities to practice and learn from these experiences. They will also appreciate the opportunity to apply several different strategies to demonstrate proficiency in each skill area. Whenever possible, the learning exercises should tie directly back to the employers' expectations for soft skills in the skilled trade. Doing so will contribute relevance to the lesson and promote the students' commitment to the learning outcomes.

### Assessing Students' Skills

Assessing students' progress in developing soft skills can be a challenge. While a number of the skills associated with workplace behaviors, such as showing up on time and dressing in the required uniform, are objective; many skills such as resolving conflict effectively and demonstrating social skills are more subjective in nature. The researcher recommends developing a standard of performance to illustrate the assessment protocol to students. This standard should allow for the assessment of skills that are both objective and subjective in nature. An example of a standard of assessment is provided in Figure 8 below.

Standard of Assessment: Soft Skills Development			
<b>Standard Not Met</b>	<b>Approaching</b>	<b>Met Standard</b>	<b>Exceed Standard</b>
Student did not demonstrate the skills and/or behaviors at a level of proficiency that indicated an understanding of the expectations required in the workplace.	<p><b>Standard</b></p> <p>Student demonstrated the skills and/or behaviors at a deficient level of proficiency, but did demonstrate a basic level of understanding for the expectations required in the workplace.</p>	Student demonstrated the skills and/or behaviors at a sufficient level of proficiency that meets the expectations required in the workplace.	Student demonstrated the skills and / or behaviors at an exceptional level of proficiency that exceeds the expectations required in the workplace.

Figure 8. *Standard of assessment: Soft skills development.*

The researcher recommends that the assessment of soft skills development take place on a consistent basis in order to provide the student with on-going feedback on their development and to allow for documentation of improvement throughout the training. This assessment should be conducted similar to the practice with any other course work,

in that as students complete an exercise or assignment, they should be provided feedback on their level of proficiency. Likewise, the nature of the skills and behaviors lend easily to the opportunity for self-reflection and self-assessment which ultimately contribute to the internalization of these skills and behaviors and further ensure that students are equipped to perform these skills and behaviors once they transition from training to workplace. Reflection can take place both formally and informally by offering students the opportunity to engage in self-assessment exercises and offering opportunities for students to process their strengths and opportunities for improvement as a learning exercise.

### **Support for the Solution**

As the labor deficit increases, technical education institutions should continue to educate technical students on the expectations awaiting them as future members of the workforce. It is imperative that entry level employees understand basic employer expectations in the workplace, specifically as they related to attendance, dependability, accuracy and efficiency.

There is a shift in the qualifications for those seeking employment in industry trades across the United States. Skills attainment that was once possible through on-the-job training and apprenticeship experiences now requires post-secondary training and certifications. Further evolution in the technology and demands associated with these jobs have led to the increased level of technical skills associated with employment in these positions. These increased training and skilled labor requirements coupled with other economic factors have contributed to a growing labor shortage in skilled labor sectors nationally. In order to continue to compete in a global economy, it is necessary to

identify ways to increase the quality and quantity of The U.S. labor workforce. This urgency has placed technical careers at the forefront for individuals seeking employment opportunities in high-wage, high-demand jobs. When asked about his decision to pursue a technical education, one respondent commented:

My decision to pursue a technical education was influenced by the job market. I knew that I wanted to make a change and that I was tired of working a dead-end job. There was a scholarship for this program to become a machinist, then I learned that I would have a guaranteed job-interview with a company paying \$15 per hour as soon as I completed 4 months of training. When I considered my present situation was going nowhere, there really was not much else to think about. (Respondent 2, interview communication, February 23, 2017)

This comment also acknowledged the responsibility that technical education institutions have to prepare their graduates to meet the expectations of business and industry in their chosen field. It is common for local and regional business and industry entities to partner with local two-year colleges to create a pipeline for their talent acquisition needs. In doing so, there will often be scholarship opportunities and in particularly innovative organizations, these partnerships go so far as to offer guaranteed interviews such as was the case for the respondent cited above. With this in mind, the institution must protect its reputation as a valuable contributor to the qualified hiring pool and must also respect the contribution that the company has made to the student as a benefactor of the scholarship to pursue training. As the Office of Career, Technical and Adult Education (a subdivision of the U.S. Department of Education) asserted, “Publicly funded Technical Colleges are responsible for assisting all students as they acquire

challenging academic and technical skills that prepare them for high-wage, high-skill and high-demand occupations in the 21<sup>st</sup> Century global economy” (OCTAE, 2017, p.4).

The intentional integration of soft skills into technical education programs is one way to meet the objective outlined by OCTAE (2017) to prepare students to develop the skills they need to be successful in today’s workforce. The interviews conducted for this study identified the following rationale and steps for design, development, implementation and assessment of a program aimed at teaching soft skills in the technical education environment. First, this study aligns with previous research that identifies the need to increase the quality and quantity of workers in the labor workforce. The study sought to explore student perceptions of skills previously identified in the research, by employers across fields to determine a consensus between what employers were looking for and how students perceived them to be attainable and relevant for the obtainment of entry-level employment in their chosen field. Finally, the study revealed that, to most assuredly promote their likelihood of workplace success (retention and advancement), students must (a) understand employers’ expectations; (b) effectively navigate the high-stakes working environment in advanced manufacturing fields and; (c) demonstrate the willingness and capacity to continue to learn and grow on the job.

Soft skills integration is a new and somewhat daunting component of technical education. As noted earlier in the study, there are several reasons why educational institutions have historically denied ownership of the responsibility to teach these skills in the context of their technical programs. However, as Dweck (2012) noted, it is becoming more and more evident that the same characteristics that promote strong students also promote strong employees (Dweck, 2012). Therefore, for a number of reasons including

efforts to increase retention rates and deliver on workforce development outcomes technical colleges across the nation are beginning to consider how they would effectively integrate soft skills training at their institutions. As they do so, it is imperative that they draw close connections between their decision to intentionally approach soft skills training in answer to the demands of the business and industry sectors they serve.

As institutions design, develop, integrate and assess their approach to teaching soft skills in the context of technical education, it is necessary to identify ways to measure the effectiveness of these efforts in assisting graduates as they navigate the high stakes environment characteristic of employment in skilled labor careers. These career paths often include stressful working environments that stress high-production outcomes with a low margin of error for wasted time and material. Companies employing individuals in these fields often operate on multiple shifts, allowing for round-the-clock production. The environment includes the likelihood of working around heavy machinery that requires acute attention to safety and an awareness for process and protocol with every action taken. While technical institutions make every effort to create a learning environment that resembles the climate of a real production line, the reality is often not fully experienced until a graduate steps foot on the floor of their first job out of school. So, too, are the circumstances surrounding the scenario based teachings of soft skill training. With that in mind, one of the challenges associated with the recommendation to create an approach at teaching soft skills is associated with creating the right balance between a safe place for a student to learn and practice the skills in the realistic context with the implied pressures of a real workplace. Throughout the study, participants consistently identified the need to develop the skills necessary to promote

success in the workplace, however, many respondents indicated a concern for not being able to demonstrate those skills in the moment when the real situation presented itself.

To this point, one respondent commented:

I know what to say now. When we are talking about saying or doing the right thing, but I am sure it gets harder in the real world when you have a supervisor telling you to hurry up and do it faster and you have the pressure of the people around you competing for being the best at a specific task. (Respondent 6, interview communication, February 27, 2017)

This comment highlights the fact that institutions must also recognize the inevitability that students will make mistakes in their training and go on to make mistakes in the workplace. The interviews emphasized the importance of teaching students to effectively recover from making mistakes and to teach them applicable steps to engage in behaviors and demonstrate attitudes that contribute to their ability to develop a positive reputation with co-workers and supervisors.

Despite the reservation that they could perform the necessary skills in the moment, participants showed a consistent perception that the willingness to learn through experiences in the workplace was critical to their ultimate job retention and career advancement. Each participant cited benefits to teaching students soft skills in the context of their technical education. Respondents also emphatically stressed that they knew they would have to demonstrate a number of these skills (specifically, effective communication, social skills, and self-control) in order to retain their position and advance in their careers. They also expressed that they expected to continue to learn



about effectively demonstrating these skills and behaviors as they acclimated to the culture at their place of employment post transition from education or training.

Two-year technical institutions must continue to identify effective ways to teach and develop soft skills in order to meet industry expectations. The labor deficit in the United States imposes an urgency to increase the skilled labor pool in order to compete in a global economy. One way to positively affect the labor deficit is to increase the quality and capability of the workforce that is coming in. This effort would allow the quality and duration of employment per capita to increase and perhaps ease the demand for “number of souls” needed to support America’s growing workforce needs.

### **Stakeholders**

There are internal and external stakeholders related to the proposed solution to implement a soft skills training program in a technical college environment. These stakeholders can both positively and negatively affect the implementation of the training program and therefore, must be considered with a comprehensive needs assessment executed in order to properly address the priorities and opportunities to serve and benefit from stakeholder involvement in the project as a whole.

The most relevant external stakeholders involved in the development of a soft skills training program are state and local workforce and economic development agencies including the department of education as well as technical program accrediting bodies. These organizations can provide support or create barriers to the project and should be evaluated to determine what strengths and challenges exist. Additionally, the local employer community including representatives from business and industry are relevant external stakeholders. As mentioned previously, the employers should be communicated

with early on in the design and development process in order to reach the maximum benefit of the influence and engagement in the process. The external stakeholders will likely prove to be highly valuable in the viability of the training program.

There are a number of internal stakeholders to consider during the design, development, implementation and assessment of the soft skills training program. Internal stakeholders include the Board of Trustees, the President, Leadership Council, faculty members, staff members, and students enrolled in the training program. It is essential that the project manager assess the needs of each internal stakeholder in order to ensure that their needs are addressed in the training program. Additionally, each internal stakeholder can offer specific resources and support that can enhance the project. There are also potential barriers associated with the internal stakeholders, for that reason, it is essential that communication is executed and maintained consistently.

### **Factors for Consideration**

There are a number of factors related to the design and development of a soft skills training program in the technical education environment. Factors for consideration include: policies, potential barriers and obstacles, financial factors, and change theory. The researcher recommends considering each of these factors carefully when crafting the specific components of the soft skills training program.

**Influencing Policies.** There is the potential for policies at the state and local level that could both hinder and enhance the project as a whole. There are a number of policies related to the alignment and accreditation of technical programs that could be interpreted as hindrances specifically when curriculum and program outcomes are prescribed with little flexibility for the addition of external learning outcomes. These

policies should not be viewed as a terminal factor for the desire to integrate soft skills. Instead, the researcher recommends the institution work directly with representatives from business and industry to identify the specific needs in that program field and then to work directly with state agencies to articulate a review of the program that allows for the integration of soft skills where employers indicate it is needed. This employer-driven approach is more effective than attempting to repeal a state mandated alignment without the support of business and industry.

There are also policies at the state and local level that can enhance the project to integrate soft skills in the technical education environment. These policies include state subsidies for businesses who allow their employees to engage in industry advocacy committees for workforce development. This is one way for technical colleges to engage representatives from business and industry to support the design and development of the training. Additionally, state departments of education also engage employers in workforce development opportunities that could work to enhance the development and maintenance of the training program, specifically in the context of funding. The researcher recommends that institutions investigate the state and local policies related to workforce and economic development in order to identify opportunities for enhancement as well as awareness of hindrances that exist.

Additionally, each technical college has its own set of policies and regulations. Typically, these policies and regulations are overseen by a Board of Trustees who work to ensure that the institution as a whole maintains accreditation and abides by their self-administered by-laws. The researcher recommends that each institution consider their unique organizational structure to determine what, if any, permissions and/or support

from the Board of Trustees need to be obtained in order to proceed with the implementation of a soft skills training program. The Board of Trustees and state governing agencies will continue to be stakeholders to consider during development, implementation and on-going maintenance of the soft skills training program.

**Potential Barriers.** With any new or renewed focus on a specific aspect of an educational experience such as the soft skills training program proposed as a solution in this study, there is the opportunity for potential barriers to emerge. First and foremost, the institution must have the support of the President and Leadership Council in order to properly implement a soft skills training program. In addition to that factor, the researcher recommends that institutions consider the following three barriers which could emerge during development, implementation and maintenance of the program: flow of communication between stakeholders, start-up and maintenance costs associated with program development and sustainability, and collecting and analyzing metrics associated with the evaluation of the program.

Each of those three potential barriers must be considered in order to properly plan, implement and assess a soft skills training program in the technical education environment. If the soft skills training program is to be implemented across the technical program offerings at the institution, it is critical that the President and Leadership Council are aware and supportive of the initiative. This engagement can create opportunities for the project manager to engage with business and industry on behalf of the college, benefit from state and local policies and communicate with the college community (internal and external stakeholders) openly.

Communication can create barriers in any professional situation and implementing a soft skills training program at a technical college is no different. The researcher recommends engaging stakeholders in regular communication throughout the design, development, implementation and evaluation of the project. Doing so will ensure that stakeholders both internal and external to the organization are kept apprised and engaged in the work that is being done to meet the needs of business and industry in a new way. Failure to keep the lines of communication open will often result in barriers that prevent adequate implementation and evaluation.

Most two-year technical colleges operated through state funding are doing so with limited resources. For that reason, finances could become a barrier to the solution proposed in this study which is to implement a soft skills training program. The researcher recommends that budget proposals be developed for the training program and that constant review and supervision of those budgets be executed. Doing so will ensure that when funds are allocated that they are responsibly and effectively spent in support of the project.

Finally, the researcher recommends that institutions develop, collect and report metrics associated with the evaluation of the soft skills training program. Metrics can be used to make decisions about the effectiveness of the program and allow the project manager and leadership executives at the institution to base decisions about the training program on data-driven assumptions. By considering the potential barriers that could emerge with the decision to implement a soft skills training program, institutions can better plan, prepare, implement and assess the initiative.

**Financial / Budget Issues.** Initially, it may appear that the financial / budget issues related to designing and developing a soft skills training program would be minimal. Indeed, there are minimal costs associated with delegating the necessary resources towards personnel time and effort to initiate the design, development, implementation and assessment of the soft skills training program. Additional financial considerations include purchasing curriculum and taking the necessary steps to ensure the proper coordination and data tracking of metrics associated with the successful implementation of this solution.

If further consideration is offered, there is an opportunity to consider ways that this solution could positively affect the financial situation of the organization. This could potentially occur, as the institution uses their implementation of the soft skills program to network with business and industry in a new way. Specifically, business and industry representatives tend to have talent acquisition budgets that are often outsourced to recruiting firms who seek qualified job candidates. This solution offers the opportunity for business and industry to connect directly with technical colleges to source their talent and also work with students during their training process which could have unintended benefits such as the opportunity for students to develop professional relationships with industry representatives and an overall brand loyalty towards specific companies who engage with their training providers to develop their professional skills and likewise, show an interest in developing the whole person. This consideration opens the opportunity for technical colleges to benefit in financial ways such as industry contributions to scholarship funds, expert participation for guest lectures, donations of

technical equipment and numerous other gift-in-kind transactions as a result of increased industry engagement.

**Change Theory.** Burke (2014) asserted that organizations are created and developed with the expectations that they will serve a given purpose consistently and will exist at length in this service. Technical Colleges were created out of an economic need that emerged in the late 1970s to offer career pathways for students who were not intent upon attending a traditional four-year college or university. This change occurred after the restructuring of Career and Technical Education that was referenced in Chapter Two. Burke (2014) also noted that organizations do not live separately from their external environment, and that this environment has an effect on the organization. It is important to note that the programs offered at technical colleges are heavily influenced by the economic demand in their service-area. These institutions often offer training programs consistent with the on-going or developing employment needs in their local and regional areas. Consequently, it is also important to note that as these employment demands shift, so too must the scope, focus and delivery of the technical programs. These changes must be made in a timely response to industry demands in order for technical programs to stay relevant and to effectively service their mission / role in the community.

By considering the stakeholders and factors related to developing and implementing a soft skills training program, the institution can more fully develop a plan to design, implement and assess the training program within the context of their technical education environment. Further, assessing the needs and potential contributions from internal and external stakeholders and considering the potential barriers associated with those stakeholders can assist the institution as they consider the best ways to identify and

allocate resources to support the training program. Finally, it is necessary to consider the factors related to designing and implementing the proposed solution of a soft skills training program. These factors include policies, financial issues, potential barriers and change theory all of which can affect the effectiveness of the implementation of the training program.

### **Implementation of the Proposed Solution**

The initial steps for implementing a soft skills development training program can be as simple as assigning the task and allocating the necessary resources to begin the development process. Subsequent steps include assigning roles and responsibilities specific to the project and taking the necessary steps to analyze the emerging needs and goals for the program within the institution. The researcher recommends that institutions begin the process of implementing the soft skills training program by assigning a project manager to identify the scope and sequence of the development project and creating an implementation timeline.

These initial development steps should also include an analysis of the resources available to the project and will likely lead to a prioritization of needs and outcomes associated with the project. It is also advisable to design the metrics of evaluation for the program as part of the initial design and planning of the project, doing so will better ensure that the project delivers on the outcomes desired. There are a number of considerations to make when implementing a soft skills training program including the stakeholders, factors, the leader's role, how to effectively build support for the initiative, how to properly evaluate the program and how to construct a timeline for the project.



### **Factors and Stakeholders Related to the Implementation of Soft Skills**

#### **Training.**

There are several factors and stakeholders to consider during the implementation phase of the soft skills training program. These factors include needs assessment, communication method and metrics for evaluation. The project manager should work with their leadership to determine what the specific goals of the program are and what specific portion (all or some) of the student population they will plan to serve. These considerations will assist in determining what resources will need to be allocated for in the project development and implementation phases. Further, the project manager should determine what method and schedule of communication will be used to keep stakeholders (both internal and external) informed of the progress and effectiveness of the project. Finally, the project manager should utilize the required resources and manage involvement from the relevant stakeholders in order to determine the most appropriate metrics for evaluating the effectiveness of the training program at pre-established intervals known as benchmarks.

The internal and external stakeholders relevant to the implementation of the soft skills training program are consistent with those listed as relevant for the design and development of the program. They include external stakeholders from state and local entities and representatives from business and industry as well as internal stakeholders such as the Executive Leadership council, faculty, staff and students. The researcher recommends that the stakeholders, both internal and external, are communicated with consistently throughout the implementation phase in order to determine their needs and potential contributions to the project.

**Leader's Role in Implementing Proposed Solution.** The successful implementation of a soft skills training program will depend on leaders' internal and external to the technical college. These leaders will offer support and guidance throughout the design, development, implementation and evaluation phases of the project. Leaders should first identify the issue of workforce development as a problem and evaluate whether or not soft skills training meets the specific needs to their local and regional workforce development needs. Once the solution is acceptable as viable and relevant to the problem further implementation can commence.

The leader should then evaluate the time and resources available to implement the soft skills training program. One option would be to assign the project manager, as previously suggested, and then request a project proposal from the project manager in order to determine what amount of time and resources are needed to complete the project. This preliminary scope and sequence of the project can be used to make decisions on the other factors (communication, finances, and timeline) related to the implementation of the training program.

Once the initial proposal has been approved, it is necessary for the executive leadership at the technical college to commit the resources and support necessary to continue the development and implementation of the soft skills training program. This would include allowing adequate time to educate the implementation team and offer opportunities for that team to research the context of the problem to determine for themselves why this solution is necessary.

Leaders in business and industry should also engage in the development and implementation process in order to determine how they stand to benefit from the

implementation of soft skills training. An example of this type of engagement is the suggestion provided previously, that of an industry advisory committee, that operates to educate and inform the development team on the specific needs and evaluation metrics of business and industry. This also offers the opportunity to explore ways for business and industry to allocate support b way of resources including financial support, mentorship, and development expertise to more closely align the implementation with the specific needs of the workforce in the institution's specific service area.

**Building Support for Soft Skills Training.** The researcher recommends building support for the implementation of a soft skills training program. One of the most effective ways of doing so is to educate the stakeholders on the context of the issue related to the labor deficit and offer data that supports the development of soft skills as a viable attempt increase the abilities of the workforce. Leaders can build support for a soft skills training program by offering the program as a way to positively affect the labor shortage and focusing in on a way to demonstrate the technical college's value in contributing to the talent pool in these high-demand careers. Leaders can use change theory to formalize their efforts in shaping a new culture in the technical education environment that creates equal priority for hard and soft skills in the educational experience.

There are a number of positive implications for the organization as a result of implementing soft skills training. These implications can be shared as they are experienced in order to build support for the program. First and foremost, demonstrating a commitment to the overall employment success of students offer the institution an opportunity to demonstrate a renewed commitment to the mission of serving the students'

enrolled. Further, the same is true for offering a renewed commitment to serving the employment needs in the local and regional area by responding to employer demands in a new way. These implications could and should be shared to stakeholders as successes and challenges emerge in the implementation process.

**Evaluation and Timeline for Implementation and Assessment.** The researcher recommends establishing specific evaluation criteria and a timeline for implementation and assessment of the soft skills training program. These two components are a critical part of the effective implementation and sustainability of the program. It has previously been suggested that the evaluation criteria be established early on in the development process. Doing so will ensure that the criteria can be met through specific efforts outlined in the design, development, implementation and assessment of the soft skills training program. Further, when establishing the evaluation criteria, the project manager should assign responsible parties to specific outcomes and metrics allowing the opportunity to assign accountability throughout the various phases of the project.

The timeline for implementing a soft skills training program is dependent on the specific needs and academic calendar of the institution. A suggested timeline for design, development, and implementation is provided below. This timeline could be modified to fit the specific needs of the organization.

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Timeline for Implementation of Soft Skills Training		
Assign Project Manager	<ul style="list-style-type: none"> <li>• Conduct Needs Assessment</li> <li>• Create Project Proposal</li> <li>• Identify Resources</li> <li>• Identify Evaluation Criteria</li> <li>• Establish Timeline</li> </ul>	30 days

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Phase One: Design	<ul style="list-style-type: none"> <li>• Identify learning modules</li> <li>• Draft learning outcomes</li> <li>• Identify learning experiences</li> <li>• Identify assessment standard</li> <li>• Assign Roles and Responsibilities</li> <li>• Communicate with stakeholders</li> </ul>	6 months – 1 year
Phase Two: Development	<ul style="list-style-type: none"> <li>• Develop Introduction</li> <li>• Develop Application</li> <li>• Develop Assessment</li> <li>• Vet with Stakeholders</li> </ul>	3-6 months
Phase Three: Implementation	<ul style="list-style-type: none"> <li>• Identify Pilot Group</li> <li>• Deploy Learning Modules</li> <li>• Collect Metrics</li> <li>• Communicate with Stakeholders</li> </ul>	3 months- 1 year
Phase Four: Evaluation and Report	<ul style="list-style-type: none"> <li>• Analyze metrics</li> <li>• Report to Stakeholders</li> </ul>	30 days

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Figure 9. *Timeline for implementation of soft skills training program.*

### **Implications**

The proposed solution, that of implementing a soft skills training program in the technical education environment, promotes a number of implications for consideration.

There are practical implications, implications for future research and implications for leadership theory and practice.

**Practical Implications**

This qualitative study offered the greatest benefit to two-year technical colleges who are interested in responding to the demands of business and industry in order to better meet the needs of employers' hiring their graduates. Technical colleges play a role in the communities they serve by supplying a workforce in areas of skilled trades and technical expertise. The employment positions filled by individuals trained in the technical college setting are critical to the economic success of the communities the individual institutions serve and to the national economy as a whole. For that reason, it is necessary for institutions to constantly evaluate their effectiveness to meet workforce needs and improve their service when deficiencies arise.

There are significant challenges that technical colleges face in meeting demands to graduate students faster and with increased proficiency of skills. This can be a difficult balance to strike when business and industry are pressured to retain and develop a qualified workforce. Not surprisingly, they are turning to technical colleges for support. While the development and implementation of a soft skills training program does not address all of the challenges surrounding today's workforce deficit, it does offer a viable solution to the need to improve the abilities of the existing workforce when quantity improvements seem to already be diminished. There are also benefits to business and industry who stand to capitalize on those added capabilities of their workforce in two main ways. The first is to retain their workforce for a longer time, thus reducing the costs for hiring and training new employees. The second is to develop talent to promote from within, thus creating a middle-level talent pipeline that cannot be achieved otherwise and offers additional fiscal benefit.

**Implications for Future Research**

The need to engage in a more intentional approach to teaching soft skills in the context of a technical education is a relatively new and emerging trend in post-secondary education and workforce development. Possibilities include a study of outcomes and interventions related to soft skills development in technical programs; a study which examines long-term job retention and advancement as a result of soft skills training. This could include interviewing students before and after completing the soft skills training course and would also involve evaluating a control group of students to determine if the intervention was the determining factor. A study of the effectiveness of learning outcomes would benefit the literature in this area by offering an added understanding of ways to effectively teach the subjective skill sets. Further, a review of the assessment procedures used to evaluate the effectiveness of the training in both the short and long-term setting. Additionally, technical colleges might benefit from future research focused on the factors related to their student population to determine how students from different backgrounds respond to and internalize professional behaviors and skills related to employability. As institutions that offer education to diverse populations, it would be beneficial to see how different demographics could be more effectively taught in the areas of soft skills. An example would be the challenging of developing soft skills in students with post-traumatic stress disorder as a result of living in poverty or experiencing other adverse circumstances.

**Implications for Leadership Theory and Practice**

Research in this area offers the opportunity to identify leadership theory and practice that relates to developing practices that cultivate soft skills in employees and

students. This could be particularly valuable as the workforce continues to age and turn-over between generations that are so vastly different in personality than one another. Specific leadership styles such as transformational and transactional leadership each have characteristics that relate to motivating individuals in ways that could be connected to soft skills development specifically in the areas of high-order thinking and social skills. Leadership theory as a whole promotes the idea of reflective practices and self-control that also mirror desired practices of strong soft skill development. It is possible that soft skill development as a whole is simply an attempt to bring access to leadership traits to the entry-level workforce. These implications include practical and theoretical implications relevant to the proposed solution.

### **Summary of the Study**

This Dissertation in Practice explored student perceptions of soft skills as an indicator of workplace success. The literature review and instrumental case study highlighted the importance of developing soft skills in order to meet employer expectations and promote workplace success through job retention and career advancement. The research found that students perceive soft skills to play a critical role in their ability to obtain, retain and advance in their career in the fields of aviation and manufacturing, a career path that historically focused on the exclusive requirement of technical (hard) skill proficiency. This Dissertation in Practice offers the development of a soft skills training program integrated into the context of technical training programs as a proposed solution to positively affect the labor deficit that technical colleges are being called to address. The proposed solution identifies key and practical elements to ensure that implementation of the soft skills training program is successful.



This proposal provides a practical solution to an emergent issue that many technical colleges face today—how to better meet workforce needs and offer increased employment opportunities for their students. The soft skills training program can be implemented with ease, and when executed as suggested throughout this study, can have a positive effect on the needs of technical college's to serve in their communal role. This study also provides a foundation for future development and research that could inform a best practice model for soft skills training in the context of a technical education. It is a valuable resource for technical colleges that have not yet implemented a soft skills training program but wish to do so. This research contributes to the current literature and provides both a strong foundation and an opportunity for future study of the integrated approach to soft skill development as it relates to workplace success.

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*Appendix A***Bill of Rights for Research Participants**

As a participant in a research study, you have the right:

1. To have enough time to decide whether or not to be in the research study, and to make that decision without any pressure from the people who are conducting the research.
2. To refuse to be in the study at all, or to stop participating at any time after you begin the study.
3. To be told what the study is trying to find out, what will happen to you, and what you will be asked to do if you are in the study.
4. To be told about the reasonably foreseeable risks of being in the study.
5. To be told about the possible benefits of being in the study.
6. To be told whether there are any costs associated with being in the study and whether you will be compensated for participating in the study.
7. To be told who will have access to information collected about you and how your confidentiality will be protected.
8. To be told whom to contact with questions about the research, about research-related injury, and about your rights as a research subject.
9. If the study involves treatment or therapy:
  - a. To be told about the other non-research treatment choices you have.
  - b. To be told where treatment is available should you have a research-related injury, and who will pay for research-related treatment.

*Appendix B***Master Coding List**

<b>Label</b>	<b>Description</b>
Technical Skill	Hard skills
Soft Skill	Soft skill / employability skill
Personality	Innate part of who they are
Self-esteem	
Career Change	
Job Search	
Job Satisfaction	
Work / Life Balance	
Success	Feeling of fulfillment / achieved goal
Scarcity	Not having enough of something
Time Management	
Dependability	
Attitude	
Acceptance	
Tolerance	
Affirmation	
Tough Questions	Addresses a tough question
Financial Stability	
Financial Resources	
Time Commitment	
ID info	
Communication Issue	
Written Communication	
Oral Communication	
Non-Verbal Communication	
Being a good listener	
Supervisors	
Family support	
Family expectations	
Providing for family	
Job security	
Advancement Opportunities	
Promotions	
Bad experiences	
Workplace Termination	
Workplace Reprimand	
Wanting to do more (Potential?)	
Self-Efficacy	Thinking they can do something or can dev.
Self-Respect	

Respect for Others	
Great Quotes	Quotes that should be noted
God	Mention of God or God's plan
Sense of belonging	
Corporate Culture	
Entrepreneurship	
Achievements	
Goal Setting	
Long-Term Goals	
Problem Solving	
Critical Thinking	
Decision Making	
Leading	
Setting an Example	
Mentorship	
Development	Referring to getting better over time
Learning Experience	Learning a lesson from something that happened
Evolving Technology	Diffusion of innovation