ABSTRACT

LEWIS-SESSOMS, MICARA. A Case Study Exploring Perspectives of Community College Experiences’ Role on Soft Skills Development of North Carolina Students Enrolled in Career and Technical Programs. (Under the direction of Dr. James E. Bartlett II).

The purpose of this case study was to explore the perspectives of North Carolina Community College System students enrolled in career and technical education (CTE) programs on the role their college experience played on their soft skills development. The central question guiding this research was the following: How do North Carolina community college students enrolled in CTE programs perceive their community college experience has prepared them to demonstrate soft skills? The 11 participants in the study were students enrolled in CTE programs at a North Carolina community college. Each participant’s program includes a work-based learning (WBL) course that requires students to engage in work experience in a career field related to their program of study. Participants were given the opportunity to demonstrate soft skills during this course.

A qualitative research design was the methodology for the case study. This study rested on the foundation of human capital theory and the premise that investments in the growth of one’s knowledge, skills and abilities (KSAs) can lead to opportunities for economic development. Through face-to-face interviews, participants discussed how their investment in a community college CTE program led them to opportunities to enhance their KSAs. Participants responded to questions regarding their overall community college experience and their WBL course. Through data analysis, five primary themes arose from the participants’ responses. The top five themes were 1) WBL, 2) preparation, 3) additional soft skills, 4) KSAs, and 5) CTE program curriculum. Each of these themes was connected to one of 62 codes from participants’ quotations about the topic of “community college soft skills preparation.” Overall, students
perceived their participation in the WBL experiential learning course played a significant role in their soft skills development. Having the opportunity to engage in an experience which provided them the opportunity to demonstrate soft skills helped students understand the priority of soft skills. While the study focused on the top three soft skills consistently referenced in literature—communication, problem solving, and teamwork—participants shared how they were able to prioritize additional soft skills.

The findings of the study contribute to the existing literature on the importance of preparing community college students to demonstrate soft skills for workplace success. The findings also endeavor to provide a perspective on the need to enhance soft skills training from the view and voice of students enrolled in a CTE program. Lastly, the findings will strive to provide further evidence supporting the need to incorporate soft skills into CTE curriculum.
A Case Study Exploring Perspectives of Community College Experiences’ Role on Soft Skills Development of North Carolina Students Enrolled in Career and Technical Programs

by
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A dissertation submitted to the Graduate Faculty of North Carolina State University in partial fulfillment of the requirements for the degree of Doctor of Education

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DEDICATION

“God answered Solomon, ‘Because this was in your heart, and you have not asked for possessions, wealth, honor, or the life of those who hate you, and have not even asked for long life, but have asked for wisdom and knowledge for yourself that you may govern my people over whom I have made you king wisdom and knowledge I have granted to you’” 2 Chronicles 1:11-12 (partial) (ESV); “Casting all your anxieties on him, because he cares for you.” 1 Peter 5:7 (ESV)

It is because of God’s care for me, I have reached this point in my life’s journey. This work is dedication to Him. Thank you for caring for me and the wisdom and knowledge You provided in every letter, word, sentence, paragraph, and page. I dedicate this to my husband, Sean and son, Sean Joshua. This journey began with two and ended with three of us. To my entire family, and especially my mother Josa for always asking, “Is there anything I can do?”

This is also dedicated to my siblings who would always check on me and my “research.” This is dedicated to those who went before me and prayed for me before I even came to be. I also dedicate this work to my all of my sister friend groups. You all helped me to maintain my spiritual, physical and mental balance, and self-care. Lastly, this is dedicated in loving memory of my father Kirk L. Raynor whom God called home to Heaven to be my Angel thirty years ago.

For your wisdom, knowledge, and guidance I am truly grateful.
BIOGRAPHY

Micara Lewis-Sessoms is a native of Goldsboro, NC. She is a strong believer in the power of education and the opportunities it affords. She lives by the principle that education is one of the few things, once earned, will stay with an individual for life.

Micara is a graduate of North Carolina Central University in Durham, NC, where she earned a Bachelor of Arts degree in elementary education and a master’s degree in counseling. She also holds an Associate in Applied Science degree in funeral service education from Fayetteville Technical Community College.

Micara has spent most of her professional career as an educator. She began her career in education as an instructional assistant in the Wayne County Public Schools System (Goldsboro, NC). She has taught middle and elementary school in the public school systems of Broward County, FL, and Durham, NC (respectively), as well as worked as a school counselor in the Durham Public Schools.

For the past 19 years, Micara has served students in several roles at Durham Technical Community College, in Durham, NC. She began her work there as an adjunct instructor in the school-age education program (formally, teacher associate program). She then transitioned into the role as program director. Micara currently serves as the college’s assistant dean of business and entrepreneurship programs and coordinator of work-based education. Most of Micara’s work at Durham Tech is centered on student learning outcomes related to career development for career and technical programs and labor market outcomes.

Micara believes serving her community is important. She lives out her belief and commitment to community and serving others as a member of First Calvary Baptist Church, Durham, NC; Delta Sigma Theta Sorority, Inc.; and FOCUS (Family, Opportunity Community
Unity and Sharing) Organization, Inc. She is a graduate of both the Leadership Durham and Chapel Hill/Carrboro Leadership programs. Micara also served as a 2019 Achieving the Dream fellow with NC State University. This provided an opportunity to connect her passion for the community college mission to the work being conducted in this agenda on a national level.

Micara is married to Mr. Sean Sessoms of Nashville, NC, and they have one son Sean Joshua “S.J.” Sessoms. She always looks forward to spending much of her time with her family.
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CHAPTER 1: INTRODUCTION

Over 100 years ago, the Carnegie Foundation for the Advancement of Teaching Skills released the results of a study conducted by Charles Riborg Mann on the most important skills needed to be successful as an engineer (National Soft Skills Association, 2017). This study overwhelmingly found factors connected to the success of engineers related to personal attributes, or soft skills. The soft skills at the top of the list were character, judgment, efficiency, and understanding of others. The technical factors of knowledge and technique were considered least important.

Since that study was conducted in 1918, possessing soft skills in the 21st Century workplace continues to remain a necessity. Employers continue to place more emphasis on the importance of employees having well-developed soft skills, rather than educational attainment and technical skills (Chiteji, 2010). Researchers have discovered the measure for life success is the ability to incorporate measures other than IQ scores on achievement tests (i.e., SAT, ACT, GRE) and grades, as these gauge cognitive ability (Heckman & Kautz, 2012). These measures fail to capture soft skills, which have become more valuable in today’s labor market.

Community colleges are the resource to provide the education and training for all skills in the career and technical education (CTE) jobs’ industry. According to Wyner (2014), community colleges must be prepared to provide training in all areas of employment that adequately align curriculum with the 21st Century career skills needed for employment. For this reason, it is critical that community colleges analyze program and course curricula to ensure learning outcomes incorporate soft skills development, in addition to technical (hard) skills required by employers (Ellis, Kisling, & Hackworth, 2014). These skills are essential for career and workplace success.
Background of the Study

To prepare students for the workforce, community colleges have focused on the importance of soft skills development to credential completion. One such system, the North Carolina Community College System (NCCCS), ensures graduates are prepared with all the skills needed to be successful in the workplace. NCCCS’s projected workforce needs are consistent with those predicted nationally. In the NCCCS’s (2018) 2018-2022 strategic plan, it is stated:

By 2020, 67% of jobs in North Carolina are projected to require postsecondary education.

Yet in 2015, only an estimated 48% of North Carolina’s prime working-age (18-64) adults had a postsecondary degree, certification, license or other credential of workplace value. (p. 2)

Therefore, NCCCS has prioritized initiatives around economic and workforce development throughout the 58 institutions across the state. This includes preparing graduates with the employability and soft skills essential for success.

The NCCCS has made investments in soft skills development through two major initiatives. One initiative was the development of the North Carolina Network for Excellence in Teaching (NC-NET) Employability Skills Toolkit. Then in 2012, the NCCCS, in partnership with NC-NET, participated in a statewide Green Super Curriculum Improvement Project (CIP). The purpose of this project was to ensure resources were available for NCCCS faculty to respond to the need for appropriate employability skills among graduates for career success (NC-NET, 2013). The committee tasked to design the toolkit identified eight employability competencies to incorporate into community college curriculum. Those eight competencies are the following:

- Interpersonal skills and teamwork
• Communications
• Integrity and professionalism
• Problem solving and decision making
• Initiative and dependability
• Information processing
• Adaptability and lifelong learning
• Entrepreneurship

Curriculum addressing each of the competencies was designed and made available to faculty who desired to incorporate them into their current curriculum. While this resource is available to faculty across the data, data on how many faculty members have utilized the modules is unknown.

Additionally, NCCCS cited interviews conducted statewide by NCWorks during *1,000 in 100*, a 2014 workforce initiative launched under the leadership of then Governor Pat McCrory. The *1,000 in 100* initiative was designed to be a tour in which local workforce development teams visited 1,000 businesses in the 100 counties across the state of North Carolina. The goal of *1,000 in 100* was to bring members of the business community and educators together to work collaboratively to understand the career development training necessary to grow and equip the workforce with skills needed for success. Reports of those interviews showed that employers emphasized the second highest challenge in hiring was lack of employability skills (Chapman, 2017). Nationally, NCCCS learned through the “research conducted by Harvard University, the Carnegie Foundation and Stanford Research Center, 85% of job success comes from practicing well-developed employability skills” (National Soft Skills Association, 2017, para. 1).
To further address this issue, NCCCS launched a second initiative to assess and address the employability skills needs at a more local level. The Employability Skills Alignment Project (ESAP) was a grant funded project (2017-2019) guided through support by the Carl D. Perkins Career and Technical Education Act of 2006, The North Carolina State Board of Community Colleges, and the Workforce and Innovation and Opportunity Act of 2014 (See Appendix A). ESAP involved employers across the state participating in a survey to gauge their most critical workforce needs. Overwhelmingly, over 50% of employers surveyed identified applicants lacking desired employability skills (Nash Community College News, 2019). The results of that survey led to the development of curriculum to support the development of these skills. This curriculum was launched in June 2019. The ESAP curriculum was designed to address the following employability or soft skill of students:

- Critical and analytical thinking
- Problem solving and decision making
- Cultural sensitivity
- Interpersonal skills
- Communication
- Reliability and dependability
- Teamwork
- Time and Resource management

NCCCS offers several work-based learning (WBL) courses. Each of these courses are designed to provide students with academic or formal experiential learning opportunities where students can gain and demonstrate workplace skills prior to credential completion. One course in
particular, WBL 110, serves the purpose of preparing students with the soft skills needed to meet the expectations of employers. The course description for WBL 110 is as follows:

This course covers basic knowledge necessary for gaining and maintaining employment. Topics include job search skills, work ethic, meeting employer expectations, workplace safety, and human relations. Upon completion, students should be able to successfully make the transition from school to work (NCCCS, 2014).

WBL 110 can be accompanied with a lab course, WBL 110A *World of Work Lab*, which provides students with an additional opportunity to gain an understanding of soft skills. The lab description for WBL 110A is as follows:

This course provides a laboratory experience that covers the knowledge necessary for gaining and maintaining employment. Topics include job search and job interview skills, employment expectations, and employment preparation. Upon completion, students should be able to demonstrate how to successfully make the transition from postsecondary education to work (NCCCS, 2014).

The course description for WBL courses providing an experiential, hands-on work experience is as follows:

This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactory perform work-related competencies (NCCCS, 2014).

The sequencing of each hands-on WBL course denotes the number of work experience hours students earn in a semester.
One of the key WBL courses offered for experiential learning is WBL 111. Students enrolled in WBL 111 are required to earn a minimum of 160 work experience hours. The work experience students receive in WBL 111 and in all hands-on courses is related to the program of study of the credential they are pursuing. While students are given opportunities to demonstrate and gain experience in the technical skills, there is very little evidence that the WBL 111 curriculum addresses the soft skills employers desire. Instead students enrolled in the hands-on WBL courses are expected to demonstrate both technical and soft skills.

As it evaluated the need for community colleges to prepare students with the appropriate skills for the workplace, this dissertation explored perspectives of the students enrolled in CTE programs. This research involved a single exploratory case study to determine students’ perspectives about their preparation to develop soft skills during their community college experience. The phenomenon of interest was the perspectives of the students on how well they were prepared to demonstrate the employer-desired soft skills during their WBL course experiences. The aim of this study was to build upon the current research on the importance of integrating soft skills into the community college curriculum and provide insight on the connection of soft skills to student success.

Further, this study examined historical and current literature on soft skills and the importance of community colleges preparing students to demonstrate those skills in the workplace. While there are multiple soft skills identified for success, this study focused on the three most consistently referenced throughout literature: communication, teamwork, and problem-solving (Pearson, Moore, & Ray, 2017; Stewart, Wall, & Marciniec, 2016). As the researcher, I utilized pattern matching to analyze data among participants. Data collected from face-to-face interviews were compared with literature citing the importance of offering WBL
experiences to facilitate skill development and learning. The unit of analysis was the students’ perspectives on their preparation to demonstrate soft skills. Soft skills are generally defined as the essential non-technical employability skills desired by employers (Pearson et al., 2017; Stewart et al., 2016).

**Problem Statement**

The employment outlook projects there will be 55 million job openings in the U.S. by 2020 (Carneval, Smith, & Strohl 2013). Carneval, Smith, and Strohl (2013) projected that 2020 will also be the year that 65% of all jobs will require postsecondary education and training, with a total of 30% requiring some college or an associate degree combined. With the increased need for skilled workers in various CTE fields, employers will need to focus on filling these positions. However, they will have limited time to dedicate to on-the-job training of all the skills employees need for success. This calls for educational institutions to take a critical look at the role they play in educating and training the future workforce in technical skills, as well as soft skills.

The development of soft skills is becoming more critical for workplace success. Being able to interact in diverse work groups and teams, and communicate effectively, continues to grow (Dean, 2017). Employers continue to stress the need for employees to have a combination of technical preparation and soft skills (Merisotis, 2015). Employers in health care and various service organizations are seeing a positive impact on their culture and business by establishing practices around, and setting expectations for, employees having soft skills (Tulgan, 2015). Merisotis (2015) discussed how more jobs now call for employees to be cross-trained in different areas and the need for soft skills, such as communication and teamwork, is important. Soft skills contribute to a strong corporate culture for businesses and organizations (Tulgan, 2015).
Coupling soft skills development and hands-on WBL is gaining attention in other countries. For example, developing Malaysian community college students’ soft skills grew out of the discovery of employers having challenges satisfying unemployment (Ali, Rosli, Sujaid, Usodo, & Perdana, 2017). While this is the case in Malaysia, other countries, including the U.S., have found themselves experiencing worries about filling and sustaining employers’ needs (International Labor Organization, 2009). According to Ali et al. (2017), this is due to employers needing to fill jobs with employees who have technical and soft skills. Addressing the need for soft skills development at community college, Malaysian students engaged in WBL which provided students with the skills needed for the workplace (Ali et al., 2017). This model could be implemented in the U.S.

The U.S. has begun to address the value of WBL, particularly in the area of CTE. WBL has been emphasized through the Carl D. Perkins Career and Technical Education Act of 2016. Title I of the Perkins Act (2016) supports funds being used at the local level to provide students with WBL experiences (Research Triangle Institute, 2017). The Perkins Act (2016) states that institutions funded through the act will “provide students with strong experience in, and understanding of, all aspects of an industry” (p. 37). In 2018, the Perkins Act was reauthorized through the law, H.R. 2353, the Strengthening Career and Technical Education for the 21st Century Act. The reauthorized Perkins Act places even more emphasis on strengthening WBL by ensuring support is provided to the various types of WBL, such as job shadowing, internships, and apprenticeships.

The goal of WBL is to provide students with work experiences to enhance students’ career development. There is an opportunity for colleges to consider designing WBL experiences that emphasize incorporating the technical skills desired by employers, as well as
soft skills. Providing students with a curriculum in their program that enhances technical and soft skills contributes to student success in their current and future careers.

Research is plentiful on the need for employees to have well-developed soft skills from the perspective of employers. There is also a wealth of research on the work of colleges to prepare students for the workforce through experiential learning experiences. However, there is very little research on coupling college students’ soft skills development with WBL. According to Deming (2017), there is little evidence studying the results of programs designed to develop soft skills in students. Research exists that supports the fact that soft skills are deemed valuable by employers, as well as their connection to workplace success; however, there are gaps in the research on how students perceive their community college experience prepared them to demonstrate soft skills.

This study provides an analysis of the role of soft skills in the workforce based on current literature, with a focus on students’ perspectives on their preparation in demonstrating soft skills while enrolled in WBL courses in the NCCCS. This research aims to enlighten community colleges on making continuous improvements to the CTE and WBL curriculum. Information from this study will be used to inform which elements of soft skills preparation are essential to student success and provide strategies for preparation for the world of work.

**Purpose of the Study**

The purpose of this qualitative case study was to examine students’ perspectives about the role their community college experience played in the development of their soft skills. In this study, soft skills were generally defined as the essential non-technical professional skills desired by employers for workplace success (Pearson et al., 2017; Stewart et al., 2016). The population for this study was students enrolled in CTE programs at four different community
colleges in North Carolina. Each student was enrolled in WBL courses through the duration of the study.

Participants were in their last semester, or next to last semester, of their program of study. Each shared their knowledge of soft skills. They were also asked to share how they feel they were prepared to demonstrate soft skills during their college experience. Hearing about the soft skills development of students from the voices of actual students provides a critical perspective from individuals who are directly impacted by the teaching and learning of these skills.

According to Harris and King (2015) the perspective on the skills gap has been researched from the eyes of employers for some time. Whether or not students fully understand the importance of soft skills is lacking (Harris & King, 2015). Data collected during this study was designed to inform future work of community colleges to address the need to engage in best practices for integrating soft skills into the CTE and WBL curriculum.

Research Question

The question which guided this research was the following: How do North Carolina community college students enrolled in CTE programs perceive their community college experience has prepared them to demonstrate soft skills? Student preparation was measured by analyzing the data collected from interviewing the study participants.

Interview Questions

Information was collected through the use of semi-structured interviews. The interview questions were designed to gather information regarding participant’s perspectives on the role their community college experience had on their soft skills development. The interview questions captured information from the participants to gather themes around their community college experience and soft skills development. During interviews, participants were asked to
identify their CTE program of study and the reasons they selected that particular program. Students were asked questions which allowed them to share their past and current work experience, and what skills were/are needed to be successful in those experiences. Additionally, participants were asked if they knew what soft skills were and, if so, what was their experience demonstrating those soft skills.

Given the participants were nearing the end of their community college experience in their program of study, they engaged in experiences contributing to their soft skills development. Additional questions allowed participants to share information about the type of WBL learning experience they engaged in and if they were able to demonstrate soft skills during that time. They were asked to share feedback they received from their WBL supervisors on soft skills, and if/how that feedback was helpful to them. Questions about their CTE curriculum and soft skills were also asked, to include asking participants to share content they felt could be added to the program’s curriculum which could enhance a future student’s skills. Participants were asked to share how they will be able to apply anything they acquired during the sum of their community college experience to the workplace upon graduation. Lastly, participants were asked to share how they felt their overall community college experience prepared them to demonstrate soft skills.

Theoretical Framework

The research of this dissertation was guided through the paradigm of social constructivism. Social constructivism provides a frame in which participants share their experiences to understand the culture where they live and work (Creswell & Poth, 2018). Social constructivism allows participants to shape their understanding of their behavior based on their experiences. Research guided by this paradigm relies on the participants’ view of the situation
(Creswell & Poth, 2018). The research of this dissertation allowed participants to discuss how their community college experiences prepared them to demonstrate soft skills. Participants were able to connect the ability to transfer soft skills gained during their community college experience to on-the-job success in the workplace, as they participated in WBL.

Human capital theory provided the theoretical framework for this study. Human capital is the sum of an individual’s skills, knowledge, and experiences which contribute to their overall value to the workplace (Dictionary.com, n.d.). Dessler (2017) noted that human capital is described as the knowledge, education, training, skills, and expertise individuals have and continue to gain. With those factors working together, a person’s human capital allows them to contribute positively to the overall success of the work organization.

Rooted from 1950s work in economic growth and development, human capital theory has sought to make the connection between an individual’s knowledge, skills, and abilities (KSAs) to their success in the workplace (Chang & Chen, 2011). Knowledge is obtained in the form of education, while skills and abilities are obtained in investments in training. Chang and Chen’s (2011) research acknowledged that as human capital increases so does an individual’s job performance. Increased job performance can ultimately lead to economic growth. Economists and economic policy makers recognized the value of investing in human capital, as it relates to growth between 1950 and 1960 (Holden & Biddle, 2017).

Human capital theory continues to expand from the work of its founding researchers. Researchers Theodore Schultz, Gary Becker, and Jacob Mincer are noted as early researchers in human capital theory (Holden & Biddle, 2017). While each brought with them a similar belief of the need for more investments in human capital, there were differences in their final conclusions regarding human capital. According to Holden and Biddle (2017), Schultz’s work in human
capital focused on the importance of more educational policy and federal allocation of resources as a strategy to build human capital for economic growth while Becker’s work focused on a more general theory of investing in human capital for the benefit of a specific sector. Finally, Mincer’s research focused on the personal distribution of income “as a result of deliberate investments in human capital” (Biddle & Holden, 2017, p. 545).

As students enter the doors of community colleges, it is expected they will receive the education and training needed. Community colleges also support students in obtaining skills, knowledge, training, and expertise and, therefore, purposefully contribute to human capital. A student’s completion of their academic credential is a signal to a prospective employer they have, at a minimum, the technical skills needed for a job (Connelly, Certo, Ireland, & Reutzel, 2011). The addition of soft skills into the curriculum could contribute to their human capital (Ngang, 2012).

Technical skills are just one area in which students should be prepared for the workplace. How are community colleges able to assess if students have been provided with the soft skills needed as a part of their human capital? The research of this dissertation sought to gain the perspectives of students on how their overall community college experience provided them with the soft skills needed to be successful in the workplace and contribute to their human capital.

Nature of Study

Qualitative research was most appropriate for this study. Creswell and Poth (2018) described qualitative research as an approach that focuses on a problem and creates a question that the analysis of that question will provide insight and suggestions to solving. In qualitative research, data is gathered through a variety of methods, such as interviews, observation of behavior, or analysis of written documents and videos (Levasseur, 2011). With these methods,
the researcher is the primary instrument (Creswell & Poth, 2018). Qualitative research involves research methods that answer questions of how and why (Levasseur, 2011). Data is derived from participants who self-report their perspectives on an issue (Creswell & Poth, 2018). In this study, I served as the researcher, and therefore, the primary instrument. Participants self-reported information regarding their community college experiences.

In qualitative research, the case study approach is utilized when there is an interest in exploring an issue in a particular system or within a specific population (Levasseur, 2011). One can utilize a variety of methods to collect data in a case study (Wilson, 2011). Case study allows the researcher to gather in-depth information about an issue (Crowe et al., 2011) and they can be used to evaluate the complexities of a case, such as changes that occur and the effect context has on the case (Hollweck, 2016).

A case study approach was used in this study. According to Yin (2018), case studies can involve collecting data from different sources, such as documentation, archival records, interviews, direct observations, participant-observation, and physical artifacts. This approach was most appropriate in this study as it allowed me to collect data that answered the research question of how. This study explored how students perceive they have been prepared to demonstrate soft skills. Case studies involve selecting participants in a bounded system. These participants were asked to share their experiences. For this study, participants were students enrolled in WBL courses in the NCCCS. They shared their experiences through face-to-face, semi-structured interviews. Additionally, each participant was enrolled in a different CTE program at a community college in the NCCCS.
Scope

The participants from the study were chosen in an effort to explore shared experiences on the perspectives of the role of the community college experience on developing students’ soft skills. All participants were students enrolled in a four different community colleges in North Carolina and identified into CTE programs. This population was selected because their program of study lists WBL courses as either required or an elective, which allows them to demonstrate both technical and soft skills. Each participant was actively engaged in an experiential learning work experience with an employer in the career field related to the student’s program of study.

Participants were able to provide current feedback on their experiences applying soft skills to the WBL workplace. Also, each participant was enrolled in a different CTE program. Selecting participants from different CTE programs provided perspectives on varying aspects of the community college experience. Since CTE programs are designed to lead to employment, graduates must be prepared with technical and soft skills. Choosing CTE students as participants produced findings which provided CTE faculty program-level perspectives on the role of soft skills in WBL.

Limitations

Limitations of a study are factors that arise beyond the researcher’s control. According to Simon and Goes (2013), these factors often drive how in-depth the researcher can delve into the study. One limitation in the study was students being able to commit their time to serve as participants due to additional school and life commitments. Another limitation was the challenge in soliciting students to participate in the study. To gather sufficient data, it was necessary to involve more than one community college. Lastly, there was the limitation of some students not
having a clear understanding of the topic. This allowed me an opportunity to ask participants additional questions about the topic in order to ensure they developed a clear understanding.

**Delimitations**

Delimitations are bounded or restricted elements of the study decided upon by the researcher. Delimitations are identified prior to the study and narrow the scope (Simon & Goes, 2013). One delimitation of this study was the study sample. Participants of this study were purposefully chosen as students enrolled in a community college in North Carolina. This bounds the study to the same community college system and being enrolled in specific courses. A second delimitation was that all participants were enrolled in the WBL course at the time of the study. A third delimitation was that participants represented different CTE programs. There was a total of nine different CTE programs represented in the study, which provided participants an opportunity to provide different perspectives of their soft skills development based on the type of work experience of each.

**Significance**

For colleges to ensure they provide curriculum relevant to the skills employers need in the workplace, they must continue to build relationships with employers. While colleges have long partnered with employers to identify the technical skills required, there continues to be a call for employees to have an even broader set of employability skills than in the past. In addition to the technical skills needed to be successful, employers expect employees to be equipped with a set of 21st Century career competencies, or soft skills, to effectively do their jobs (Carneval et al., 2013). This study shed light on the perspectives of students engaged in WBL regarding their preparation in demonstrating soft skills. The stakeholders in this research were community college students, employers, and faculty who teach and coordinate WBL work
experiences. The findings of the study will be utilized to provide suggestions on incorporating soft skills into CTE curriculum.

Definitions of Key Terms

The following terms and acronyms and their definitions were discovered and used throughout this study:

Career and technical education (CTE): Formally known as vocational education, CTE is educational preparation and training for careers, leadership development, and future education (Gordon, 2014).

Human capital: Human capital comprises of the investments in education and training to allow an individual to enhance their knowledge, skills and abilities to make positive contribution to the workforce and economy (Becker, 1993).

Knowledge, skills, and abilities (KSAs): Knowledge is the development of understanding a specific subject matter. Skills are competencies which prompt one to utilize knowledge. Abilities are the attributes developed by an individual over time through training (Merisotis, 2015).

Soft skills: Soft skills are the non-technical skills of employees that contribute to workplace and industry success (Stewart et al., 2016).

Work-based learning (WBL): WBL is a term that describes a variety of structured learning experiences that extend outside of the classroom and allow students to integrate what is taught to help strengthen employment (Garnett, 2016). These experiences provide students with the opportunity to apply theory and skills from the classroom to the workplace. This dissertation explored the WBL experiences of students enrolled in WBL courses in the NCCCS.
Assumptions

As the researcher, my connection to the study is influenced by my professional work. As a coordinator for work-based education at a community college in North Carolina, I am tasked with connecting students in CTE programs to opportunities for gaining work experience. Currently, I serve as an instructor for WBL 110: World of Work and WBL 111: Work-Based Learning I. In WBL 110, students are taught academic skills needed to gain and maintain employment. WBL 111 is a course that provides students with experiential learning related to the program for which they are pursuing a degree or diploma. Through this work, I engage with employers to develop an understanding of the skills most essential for professional success. This information is then shared with CTE program directors to make continuous improvement in curriculum development and teaching strategies.

While employers provide feedback on students’ technical skills and soft skills, very little information is collected from students. Past studies on soft skills have focused more attention on the idea that college graduates lack soft skills from the employers’ perspective than the students. Since the institution where I am employed teaches courses to prepare students to be successful in the workplace, it is critical to ensure they are equipped with all the skills needed. This study was a result of my interest in evaluating the perspectives of students who participate in WBL experiences on the role soft skills play on those experiences. I am a faculty member with an interest in studying gaps in WBL students’ soft skills and using data collected from students to foster student success during work experiences and transition into the workforce.

My professional connection to WBL created the opportunity for assumptions in the study. The first assumption was that all participants knew what soft skills were and understood the importance of having these skills. The second assumption was that employers who supervise
students during their WBL experiences provided opportunities for students to develop or strengthen soft skills. A third assumption was that participants provided accurate information regarding their experience during the interview. Lastly, a fourth assumption was that I would be able to locate students enrolled in different CTE programs who would be able to serve as participants in the study.

**Chapter Summary**

This chapter outlines the details of a completed qualitative case study exploring the perspectives of community college students enrolled in CTE programs on the role their community college experience played on their development of soft skills. The purpose of this case study was to explore how students view their community college experience as important to their development of soft skills. A sample of students from the NCCCS who are pursuing a CTE credential and enrolled in WBL courses were recruited to serve as participants. Each participant was pursuing a different CTE program credential. Furthermore, this chapter discussed detailed information about the scope, delimitations, and limitations of the study, as well as the assumptions of myself as the researcher. This study has the potential to inform future action research on the connection of various elements of the community college experience, such as curriculum, teaching strategies, and WBL experience and soft skills preparation in community colleges.

Chapter 2 provides the study’s literature review. This information has been gathered to provide the researcher with a foundation of literature on the topic of soft skills development and its importance to the workplace. The literature also discusses research conducted on WBL. This includes defining WBL, identifying various types of WBL and determining its connection to
student success. Additionally, further literature supporting the theoretical framework of this qualitative study and the history of CTE are discussed in Chapter Two.
CHAPTER 2: LITERATURE REVIEW

The purpose of this chapter is to present literature on topics related to the focus of this study. The literature review begins with an introduction to the primary topic of soft skills and themes uncovered while conducting research. Literature on WBL themes are then shared. The chapter concludes with a review of literature on the theoretical framework used in this study, human capital theory.

The purpose of this qualitative study was to examine students’ perspectives on the role of their community college experiences on the development of soft skills. This was in an effort to ensure these experiences provide students with the soft skills employers have identified that graduates lack (Wyner, 2014). Through reviewing the literature, I determined there was a gap in soft skills development from the perspective of students. In soft skills development, the gaps between the non-technical skills, or soft skills expected by employers, and those displayed by college graduates continues to widen (Stewart et al., 2016). Additionally, the literature review provides an analysis to support college students engaging in WBL prior to credential completion. My goal was to couple the soft skills and WBL to document their connection in providing students with opportunities to demonstrate skills needed for success in the workplace. This analysis of literature provides a foundation that supports the development of both soft skills and technical skills in college curriculum. It also discusses theoretical perspectives and reviews historical research.

In reviewing the literature on soft skills, the history of soft skills, along with three consistent themes on the subject, was discovered. The first theme was an established definition for soft skills. Literature supports a clear definition of what soft skills are and identifies specific soft skills desired for workplace success, along with research perspectives on the topic.
Secondly, there was an existence of a healthy body of literature around the gap of soft skills preparation for college graduates from the perspective of employers. Lastly, there was literature around the theme of teaching soft skills.

Further, my review of the literature around the topic of WBL revealed three main themes. The first theme is the literature defining WBL. WBL researchers have conducted studies of the history of WBL, which have led to consistency in defining the term. More work is being conducted to continually align the definition with workforce expectations. Secondly, there was a strong body of research classifying WBL as experiential learning. Experts in the field deem WBL to be a form of EL through its learning strategies. Lastly, research conducted supports linking soft skills development training to WBL programs and the essential skills employers have identified to be taught in that training. Each of the three areas of the literature review present sound research in WBL, which is useful in providing support for the necessity of WBL experiences in the community college curriculum.

**Theoretical Framework**

Human capital theory’s roots stem from the work of three main founding researchers beginning in the 1950s, Theodore Schultz, Gary Becker, and Jacob Mincer (Holden & Biddle, 2017). Through their work, it was determined that investments in KSAs contribute to the development of human capital (Holden & Biddle, 2017). According to Merisotis (2015), human capital requirements are increasing. However, the education and labor institutions created to grow human capital are inconsistent with the needs of the 21st Century workforce (Merisotis, 2015). The increasing need for growing human capital supports educational institutions aligning curriculum to the KSAs necessary for the workforce.
Foundations in Human Capital

Schultz, Becker, and Mincer are noted as early researchers in human capital theory. Mincer’s research emphasized how investments in human capital affect personal income distribution (Holden & Biddle, 2017). Becker’s research documented how firms often provide training on skills related to specific sectors which may not be transferable to another company (Mihn-herold, 2010). While both Schultz and Becker’s research focused on investments in human capital for economic growth, Schultz’s work moved into the connection of education policy and human capital. Schultz’s interest in human capital was to develop an understanding of the rate of return on education based on the investments of one’s human capital (Holden & Biddle, 2017). The growth in the nation’s output is connected to the human capital (Schultz, 1961). According to Schultz (1961), investments in human capital which yield returns over long periods of time include education, training, and migration. In his work, Schultz (1961) described five major categories of activities which improve human capital:

1. Health facilities and services, broadly conceived to include all expenditures that affect the life expectancy, strength and stamina, and the vigor and vitality of a people;
2. On-the-job training, including old-style apprenticeship organized by firms;
3. Formally organized education at the elementary, secondary, and higher levels;
4. Study programs for adults that are not organized by firms, including extension programs notably in agriculture;
5. Migration of individuals and families to adjust to changing job opportunities (p. 9).

Schultz’s (1961) call to connect education policy to human capital investments, coupled with the estimates of the return in economic growth created arguments in government to increase funding in education under U.S. Presidents John F. Kennedy and Lyndon B. Johnson (Holden & Biddle,
2017). While today’s society is evolving, the call for connecting education policy and human capital remains (Merisotis, 2015).

Becker’s analysis of human capital began with a focus on gaining knowledge and skills for a specific firm (Stern, Rahn, & Chung, 1998). Further research led Becker to additional theoretical findings of how increasing one’s knowledge and skills through on-the-job training and education led to increased human capital and higher wages (Becker, 1993). As it relates to on-the-job training, Becker (1993) offered two ideals which firms can undertake to invest in human capital: general and specific training.

The concept of general training provides an individual with an enhancement of skills that can be transferable to any firm related to that industry. According to Becker (1993), this training is an asset to the organization because the person who is trained pays for the cost of training themselves and what they gain can raise the productivity of the firm during their time working there. At times, the cost paid by employees in general training consists of a reduction in wages during the training, which is returned in the form of higher wages once they complete the training (Stern et al., 1998). This training is known as “learn and go” (Stern et al., 1998, p. 473). Specific training involves the firm making financial investments to increase the workers’ skills on products directly related to that firm creating an obvious level of productivity for that firm (Becker, 1993). According to Stern et al. (1998), the trainee and the firm reap the cost and the benefit of specific “learn and stay” type of training (p. 473).

The connection of human capital and education also finds its way into the research of Becker (Holden & Biddle, 2017). While Becker (1993) asserted that education is important to increasing human capital, there is no clear line supporting schools being the sole source of that education. Mastering particular types of knowledge yields positive results in the financial
investment of going to school when completed simultaneously with practical application (Becker, 1993). Becker (1993) stated, “The development of certain skills requires both specialization and experience and can be had partly from firms and partly from schools” (p. 51). This supports firms and schools complementing their efforts through WBL experiences as a way to invest in human capital.

**Human Capital and Workplace Skills**

The connection of human capital to economics and education focuses on how investments in one’s KSAs contributes to their success in the workplace (Chang & Chen, 2011). As one invests in the development of these three areas, they are able to perform better in their work (Merisotis, 2015). The return on the investment in human capital manifests itself in different ways for employers and employees. These returns on investment can include higher wages, quality production, and even overall improved health of employees (Berntson, Sverke, & Marklund, 2006). Developing competence and job tenure are also ways to invest in human capital and perceived employability (Berntson et al., 2006). The emphasis on the overall cost of labor is just as important as the return on investment in ensuring employees have the knowledge and skills needed for the job (Mihn-herold, 2010).

Research in human capital focuses on the need for both knowledge and skills in the current knowledge-based economy and for future workers (Mihn-herold, 2010). A focus on the need to grow human capital is key in understanding the importance of students acquiring the skills needed for workplace success (Merisotis, 2015). It is critical for current and future workers to have both the knowledge and skills to increase their human capital (Mihn-herold, 2010). This is especially true in the current workforce where proficient soft skills’ contribution
to human capital can lead to economic mobility (Wilterdink, 2018). Providing students with technical and soft skills as a part of their education contributes to their human capital.

**Soft Skills**

The topic of soft skills began to become of interest in the early 1100s when it was believed these skills were attached to individuals’ values and training in religions (Kingsbury, 2015). Kingsbury (2015) documented that people learned how they should behave, deal with challenges, and be successful from what they gathered from religious leaders. Research from the Carnegie Foundation and Stanford Research Center noted that 85% of success in the workplace derives from individuals having a developed set of soft skills (National Soft Skills Association, 2017). In 1918, a study conducted by Charles Riborg Mann on the most important skills one should have in order to be a successful engineer yielded results that most of the critical issues centered around personal and human relations (National Soft Skills Association, 2017).

Although that particular study supporting soft skills development goes back over 100 years ago, employers in today’s labor market are echoing the same sentiment. The world of work continues to become more diverse and the need for global interaction is increasing (Dean, 2017). Employees must be prepared to have appropriate communication and team building skills, along with adjusting to varying ages, genders, and ethnicities in the workplace (Dean, 2017). Soft skills have increasingly become a part of the essential skills in which college graduates need and what employers want (Stephens, 2013). Students should understand how vital competence in soft skills is, as these skills are critical for success in the workplace (Pearson et al., 2017). While students often recognize the importance of possessing soft or employability skills, it is important that students not consider themselves overly prepared with these skills.
(Harris & King, 2015). Colleges must work to incorporate soft skills into the curriculum to support student success and allow them a platform to demonstrate those skills.

**Defining Soft Skills**

While there is agreement to ensure graduates have well-developed non-technical skills, non as soft skills, there is debate on calling these skills soft. According to Britt, (2016), there is a call to use alternate terminology to define these skills which are challenging to achieve. Terms such as essential skills, emotional intelligence quotient (EQ) and people skills have been suggested by human resources professionals (Britt 2016). Regardless the nomenclature, the definitions remain consistent.

A focus on developing students’ soft skills through learning has become increasingly vital as employers seek to hire the most qualified candidates for the job. In order to focus on soft skills development, the definition of soft skills must be established. Fan, Wei, and Zhang (2005) defined soft skills as non-cognitive skills required to be successful in an occupation. Specifically, coordination, persuasion, negotiation, communication, establishment, and maintenance of interpersonal relationships are descriptors of soft skills (Fan et al., 2005). Stewart et al. (2016) defined soft skills as “the non-technical competencies associated with one’s personality, attitude, and ability to interact effectively with others” (i.e., to be optimally employable; p. 276). Results of the study found the following soft skills to be the most preferred: communication, interpersonal relationships, professionalism, teamwork, problem-solving/critical thinking, ethical behavior, flexibility, leadership, and diversity awareness/sensitivity (Stewart et al., 2016).

Communication is a critical skill for employees to possess. In particular, the three forms of communication—interpersonal, written, and verbal (Dean, 2017)—are the most integral part
of effective communication. Research on creating a clear definition of the soft skills desired of employers appeals for community colleges to conduct thorough research with employers in their service area (Ellis et al., 2014). Anthony and Garner (2016) defined soft skills as “non-technical skills such as listening, communication, teamwork, time management, self-management, empathy, integrity, flexibility, emotional intelligence, and related social skills” (p. 360). Soft skills are noted to include the variety of social skills that identify them distinctively from hard skills or technical skills.

In 1991, the U.S. Department of Labor’s Secretary’s Commission on Achieving Necessary Skills (SCANS) conducted a 12-month study on the essential skills needed by employers (U.S. Department of Labor, 1991). According to the research, SCANS maintained its relevance by identifying specific hard skills and soft skills competencies for optimal employee performance that are needed (Ellis et al., 2014). The report resulted in the establishment of a new set of suggested workplace competencies for high school graduates to become effective workers. These competencies are listed in the broad terms of resources, interpersonal skills, information, systems, and technology.

**Emotional Intelligence and Soft Skills**

Emotional intelligence (EI) is often coupled with soft skills as a means of explaining particular behaviors. EI’s historical foundation is based on the research of Salovey and Mayer of the 1990s (Cherry, 2018). Salovey and Mayer’s research in EI is based on the earlier 1920s work of Edward Thorndike (Cherry, 2018). Thorndike’s work was a part of a body of research that began the idea of different types of intelligence (Mayer & Salovey, 1993). Thorndike began researching basic intelligence, pairing it with human action to discover social intelligence (Cherry, 2018; Mayer & Salovey 1993). According to Mayer and Salovey (1993), Thorndike’s
definition of EI stands as “the ability to perceive one's own and others' internal states, motives, and behaviors, and to act toward them optimally on the basis of that information” (p. 435). EI is considered to be a subset of social intelligence, or the ability for people to get along with each other (Cherry, 2018).

Salovey and Mayer (1995) defined EI as the “ability to monitor one's own and others' feelings and emotions, to discriminate among them and to use this information to guide one's thinking and actions” (p. 189). This definition is based on the perspective that emotions play a role in the decisions people make (Mayer, Roberts, & Barsade, 2008). EI involves having the ability to accurately reason about one’s emotions and using those emotions to enhance thought and actions (Mayer et al., 2008). Additionally, EI is about the ability to manage the influence emotions have on relationships with others (Walton, 2012).

According to Cherry (2018), recent EI research has gained attention through the work of Daniel Goleman. Goleman’s 1995 book, Emotional Intelligence: Why It Can Matter More Than IQ, sparked a wave of research interest in EI. Researchers connecting EI to the workplace began with Goleman’s research in utilizing EI as a measure that determines an individual’s success in the workplace, rather than an IQ score (Cherry, 2018). The focus of Goleman’s research was on the role EI plays in one’s work performance and ability to lead (Goleman, 1995; 2005). According to Goleman (1995; 2005), while IQ is still essential to academic achievement, EI is more prevalent in demonstrating skills that are “soft,” like emotion, self-regulation, and empathy. Goleman (1998) asserted that EI works in synergy with cognitive intelligence skills.

Goleman’s (1998) research on the connection of EI to the workplace identified emotional competence as a driving force to success. An emotional competency is defined as “a learned capability based on emotional intelligence that results in outstanding performance at work.”
There were initially five areas of EI identified by Goleman (1998) which contribute to success: 1) self-awareness, 2) self-regulation/management, 3) motivation, 4) empathy, and 5) social skills. These areas of EI influence the action of emotional competencies. For example, an individual can display trustworthiness if they have high placement in the area of self-regulation/management. Since this study, Goleman republished work in EI and revised the initial five areas into four. The four areas are as follows: 1) self-awareness, 2) self-management, 3) social awareness, and 4) managing relationships (Goleman, 2005).

In the workplace, areas of EI and the emotional competencies that complement each, display themselves as soft skills (Thomas, Beyer, & Sealey, 2018). Soft skills are the actions of emotional competencies that help employers identify the top performer on the job (Goleman, 1998). Goleman (1998) observed that employers found soft skills or emotional competencies to be twice as valuable as IQ or expertise. Employers having an awareness of EI can enable improvement among a team at work and identify leaders on the team (Paul, 2017). The value of an individual's emotional competencies increases with job position (Goleman, 1998). Employers favor workers who have a variety of strengths in each of the areas of EI. These emotional competencies, or soft skills, contribute to career advancement and workplace success (Wheeler, 2016).

**Signaling and Soft Skills**

Rooted in the work of Michael Spence, the signaling is based on properly communicating information between two parties (Connelly et al., 2011). Spence (1973) focused on the effect of information asymmetry on proper communication in the job market. Information asymmetry is defined as what happens when one party in a situation has more information than the other party (Business Dictionary Online, n.d.). In information asymmetry, information is unequally
distributed. This affects how decisions are made in a variety of areas from households to businesses (Connelly et al., 2011). Information asymmetry can be created when particular information is considered private for one party (Connelly et al., 2011). Therefore, all information may not be shared, and individuals make decisions based solely on the information they have.

In hiring, it is critical that job candidates provide prospective employers with the proper information to make the best hiring decision possible. A wide gap of information asymmetry between the job applicant and the prospective employer lessens an employers’ ability to choose the right candidate for the job (Connelly et al., 2011). According to Spence (1973), the hiring process is kin to the lottery, and employers make decisions based upon the information they have about potential employees beforehand. Information provided by the potential employees are signals (Spence, 1973). One widely used signal of an employee is higher education (Connelly et al., 2011). When potential candidates make the investment to attain higher education, they transmit the signal that they are able to fulfill the job requirements (Connelly et al., 2011).

Much of what is discovered about an employee’s skills is often noticed after the employee is on the job (Spence, 1973; 2002). Employers have learned that it takes time to observe employees’ abilities after hiring in order to assess the quality of their work (Spence, 1973). Once hired, employers discover more skills employees possess or areas where they need development. This is because an employer is unable to observe all employees can do prior to hiring (Spence 1973).

Employers have discovered the signal of higher education may not always equate to an employee’s skill set for the job (Stewart et al., 2016). While graduates believe their college degree signals they have all the skills employers seek, employers have discovered this is not
always the case (Stewart et al., 2016). This can be attributed to a mismatch in signaling (Stewart et al., 2016). Based on the signaling theory, failure in signaling has made it challenging to understand what soft skills students and employees possess, as well as what employers expect (Stewart et al., 2016). Students can have the soft skills adequate to be successful on the job but may either lack the ability to properly signal to employers they have those skills, or employers may fail to signal those skills are essential for the job (Stewart et al., 2016). This miscommunication creates unclear expectations between employers and employees. This also has the potential of creating challenges in employers understanding the areas of soft skills professional development employees need. Preparing students to be able to understand signals in communication will contribute to their human capital. Community college graduates must be able to properly communicate to employers they have the soft skills appropriate for the job.

**Gaps in Soft Skills Preparation**

In the workforce, employers seek flexibility, critical thinking, problem-solving, teamwork, and other soft skills. Through changes in the labor market, employers have observed a gap between college graduates and the soft skills essential for employment (AbuJbara & Worley, 2018). Changes in the labor market are focused on an increase in the need for service sectors and a decrease in manufacturing (Weedon & Tett, 2013). The United Kingdom government observed a soft skills gap in current workers and provided monetary resources to encourage employers to make an investment in developing these skills while on the job (Weedon & Tett, 2013).

In addition to changes in the labor market—movement to more service type work and less manufacturing in the workforce—there are also changes in the talent, which may attribute to the gap in soft skills observation. According to Tulgan (2015), the workforce has embraced
young talent and the fresh ideas and technical skills they bring. In doing so, there is an observation by managers of the gap in the soft skills needed to be successful. This seems to widen from generation to generation (Tulgan, 2015). Tulgan (2015) observed that while younger employees think they have soft skills, employers observe they do not. Furthermore, employers which Tulgan (2015) interviewed expressed how they should not be held responsible to ensure these workers have soft skills.

The soft skills gap is also wide in different ethnic groups. Fan et al.’s (2005) research on the soft skills gap between Black and White people should be considered. There is a soft skill (non-cognitive) gap between Black and White people caused by family background, which may contribute to lower self-esteem and “less participation in mainstream social activities in the periods of personal development” (Fan et al., 2005, p. 4). This gap ultimately creates wage earning gaps between the two groups (Fan et al., 2005).

A study conducted by Hart Research Associates (2015), on behalf of the Association of American College and Universities, yielded results confirming that employers believed that colleges should consider improving curriculum in an effort to close the skills gap. Employers participating in the survey perceived college graduates as not as prepared as they should be in areas such as skills in real-world settings, oral and written communication, and critical thinking. These are identified as soft skills. According to Hart Research Associates’ (2015) survey, fewer than three in 10 employers perceived that graduates were prepared in those soft skills areas.

Ellis et al. (2014) revealed a gap in the soft skills employers seek and the ones identified and taught in the office technology (OT) curriculum in community colleges. The purpose of the OT professional development courses in the NCCCS and the South Carolina Technical College System is to teach soft skills and include relevant soft skills teaching for entry-level employees.
The curriculum in those courses is continuously evaluated to ensure the content is congruent with employers’ needs. As a result, community colleges can take measures to examine program and course curriculum across the board to ensure objectives align with soft skills, as well as any additional technical (hard) skills required by employers (Ellis et al., 2014).

**Teaching Soft Skills**

At times, colleges leave developing soft skills to career centers, if they are taught at all (Winstead, Adams, & Sillah, 2009). To facilitate students’ development of technical skills specific to their particular field, and those they believe are important for overall success, like soft skills, employers emphasized that colleges should make improvements to their curriculum (Hart Research Associates, 2015). Soft skills curriculum for college classrooms does exist. Examples of soft skills curriculum are found in North Carolina and South Carolina. The NCCCS, in partnership with NC-NET, designed the Employability Skills Toolkit in response to the need for appropriate employability skills among its graduates (NC-NET, 2013). Results on the use of this curriculum have yet to be analyzed. Winstead et al. (2009) reported the Leadership and Professional Development program implemented at South Carolina State University’s business program—designed to address soft skills—had a positive impact on students’ business skills and preparation for the workplace.

While imbedding soft skills into the curriculum is necessary, there are challenges. One challenge is the faculty’s consideration of the broad focus of the specialties in liberal arts education (Eyler, 2009). Each curriculum program or discipline area calls for students to have different skills. Narrowing the focus on a particular set of skills is challenging for faculty who teach in liberal arts, as there is already an overwhelming amount of learning outcomes in each discipline.
Another challenge of including soft skills in the college curriculum is the notion that this addition to courses may reduce the content (Anthony, 2014). Making room for soft skills in the classroom could come at a price of omitting required course objectives. Content, which is discipline-specific, is often the focus of college courses. More so, employers are concerned with content that leads to success in their production and that students can transfer to other jobs (Anthony, 2014). Therefore, despite these challenges, an evaluation of both academic and CTE college curriculum should take place to include skills employers need in the workplace (Harris & King, 2015).

**Work-Based Learning**

The establishment of the 1994 School-to-Work Opportunities Act began to address the need to close the readiness and work skills gap in secondary education (Bragg & Griggs, 1997). WBL allows students to apply their knowledge from the classroom to the workplace (Stern et al., 1998). The concept of WBL draws upon the field of experiential learning, allowing students to partner with employers to extend the learning experience (Garnett, 2016). The pedagogy of WBL and its place in higher education has been a debate in education worldwide (Nottingham, 2017). What is consistent in the debate is that WBL provides students with the opportunity to demonstrate both technical and soft skills. As the focus centers on the continual building of the workforce, high schools, colleges, and universities are providing students with relevant education and professional development opportunities that holistically prepare them for work, and WBL experiences are increasingly part of that preparation.

**Defining WBL**

Defining WBL has been the interest and work of researchers and policy makers since the 1990s (Stern et al., 1998). Raelin (2011) defined WBL as work that occurs in the workplace
with the purpose of equipping students with the skills, knowledge, and attitudes to be successful in their community and work. This definition suggests that individuals other than the student and instructor are involved in the educational process. WBL allows students to engage in real work, which is coupled with learning taking place in the classroom (Raelin, 2011). Other research defines WBL as “all and any learning that is situated in the workplace or arises directly out of workplace concerns” (Lester & Costley, 2010, p. 562). A commonality in the research in defining WBL is the necessity for the practice to occur outside of the classroom. According to Johnston (2001), moving the educational experience to a setting different from the traditional classroom should be noted as an important element to learning. In defining WBL, Kim (2011) noted that while the learning takes place at a work location, it also includes a focus on the actual work skills. The structure of WBL experiences is also a focus in defining it. Bragg, Hamm, and Trinkle (1995) defined WBL as:

Instructional programs that deliberately use the workplace as a site for student learning. WBL programs are formal, structured, and strategically organized by instructional staff, employers and sometimes other groups to link learning in the workplace to students’ college-based learning experiences. WBL programs have formal instructional plans that directly relate students’ WBL activities to their career goals. (p. iii) While terminology may vary, research in this study supported the overall commonality of defining WBL as learning occurring outside of the classroom with the objective of preparing students for the workforce.

To further define WBL, literature classifies it into different modes of experiences, including interviews, half-day job shadowing, mentoring, and internships. These classifications are significant because research demonstrates these experiences have led to employer success in
filling job positions (Bellman, Burgstahler, & Ladner, 2014). Johnston’s (2001) research
considers WBL to be experiences, like cooperative education, apprenticeships, structured WBL,
school-to-work programs, education to career programs, youth apprenticeships, and clinical and
internship opportunities. Researchers also classify service-learning, paid work experience,
unpaid internships, and school-based enterprise as forms of WBL (Kim, 2011). Often, business
and industry will drive WBL for their employees based on a specific need or issue in the
organization. Those businesses work to create “in-company” courses that serve as “vehicles for
subject-specific learning,” which serve as forms of WBL (Lester & Costley, 2010, p. 563).
Lester and Costley (2010) discussed how these opportunities are meaningful and how employees
are moved to action to become engaged when there is support from the employer.

Literature is consistent in the classification of the forms of WBL. Raelin’s (2011) work
to involve WBL in governmental policy provides examples of these experiences as cooperative
education, internships, and clinical experiences. Each of these experiences not only enrich
students’ learning by providing work experience, but they also provide an opportunity for student
reflection (Raelin, 2011). Internships and co-ops are modes of WBL that contribute to student
persistence from high school to college (Ryken, 2004). Adding to the research, Bragg and
Griggs (1997) focused on school-to-work arrangements and the role community colleges play.
Their research classified registered adult apprenticeships as a modality of WBL.

Researchers have identified qualities of exemplary WBL programs. Johnston (2001)
concluded that the major contributing factors to the effectiveness of WBL are solid dedication
from the institution’s senior administration, tight connections with local business and industry,
and innovative pedagogy. Lester and Costley’s (2010) findings were congruent in terms of the
pedagogical components of an exemplary WBL program. WBL experiences should have a
strong pedagogical component designed around four areas: 1) a learning agreement; 2) consideration of prior learning; 3) “use of live, methodologically-sound projects;” and 4) assessment (Lester & Costley, 2010, p. 564). Lester and Costley (2010) also suggested WBL programs guided by a tutor or academic consultant, who, even with varying roles, facilitate the learning.

Bellman et al. (2014) provided research on the essentials of building successful WBL programs through a variety of activities for students and employers. The University of Washington’s Disabilities Opportunities Internetworking and Technology (DO-IT) program offers a variety of activities for promoting WBL opportunities to students and employers. The DO-IT program involves employers in the process of creating opportunities with a “low level of commitment” (Bellman et al., 2014, p. 400) as this serves as an effective strategy for WBL development and employer recruitment. These activities include marketing with testimonial flyers, job shadowing, career panels of professionals with disabilities, and student workshops and academies. Such activities are designed to recruit employers to serve as hosts to WBL students and ensure students are prepared to engage in the learning experience (Bellman et al., 2014).

Kim’s (2011) findings identified successful WBL programs as being rooted in a continuous curriculum improvement process and a constant monitoring of student services, such as financial support, mentoring, engaging and frequent worksite visits, and intentional student worksite placement. According to Raelin (2011), successful WBL experiences should also provide opportunities for reflection, monitoring, and assessment of students’ participation and supervision. Raelin’s (2011) work revealed that support from policymakers and the third sectors of the community are vital for WBL programs. In Ryken’s (2004) research, her school-to-career program model found key components of the WBL experience to be connection and mentorship.
in an effort to facilitate students’ academic and career goals. Furthermore, successful WBL experiences include a shared responsibility among community colleges, employers, government agencies, and labor unions, where they exist (Bragg & Griggs, 2011).

Research findings focus on the value and role of WBL. In Bellman et al.’s (2014) research on the role WBL experiences played in assisting students’ transition into careers, it was found that WBL proved valuable in helping individuals determine if they needed to make career changes, providing development on the skills needed in the workplace, motivating students to continue their academics, and building knowledge employers need in order to make accommodations for employees with disabilities. Building on the definition of WBL as work initiated by employers to help improve work skills of their current employees, Lester and Costley (2010) deemed its value in growing the adult college population and interest in continuing their education at a college or university. This also develops professional and personal growth, as well as guides employers on how to deal with workplace issues (Lester & Costley, 2010). Employees who gain an increase in professionalism can become motivated to perform well on the job, which can affect positive change throughout an organization.

Essentially, WBL is valuable in motivating students to continue their pursuit of academic and career development. Ryken’s (2004) research on school-to-career programs discovered that blending WBL into the program structure enhances the instructional experience. Two hundred and fifty-six high school students in a school-to-work program in the area of biotechnology participated in an internship experience. As a result, 90% of those students continued their pursuit of postsecondary education. Furthermore, Ryken (2004) found this demonstrated that internship experiences in high school promote college admission and graduation, as they link college and work. Additionally, “students who had paid co-op jobs while attending community
college were more likely to earn the college biotechnology certificate” (Ryken, 2004, p. 42). In Denmark and Germany, the existing skills gap between school and work is reduced when employers provide apprenticeships and WBL opportunities to students. When business and government share the costs, this contributes to the value of WBL (Bragg & Griggs, 1997).

While WBL is a successful instructional modality, it is not without its share of criticism. Johnston’s (2001) historical research showed how critics of WBL expressed that new school-to-work programs “are undermining new higher academic standards” (p. 73). There is also criticism regarding the liability risks employers face and the fact that training WBL students requires an adequate number of available mentors, which can be time-consuming (Johnston, 2001).

Kim’s (2011) research found that while employers work with colleges to provide WBL opportunities to students, employers are challenged with low retention rates of students after graduation. Lester and Costley (2010) determined that WBL “does not follow established academic practice” (p. 569), there are issues with the tutor’s or WBL coordinator’s role and making the transition from being a teacher to facilitator and resource, and there is a lack of academic rigor, which risk the quality of the programs. Lastly, criticism of WBL in Raelin’s (2011) research focused on the structure of WBL and school-based learning. It is essential for the two to occur concurrently, so students can apply course principles and objectives as they engage in WBL (Raelin, 2011).

The Role of WBL in Experiential Learning

The expansion of WBL experiences into the college curriculum has made it essential to further explore the body of knowledge on the subject. One area researchers have focused their attention is WBL’s place in experiential learning (EL) and the relationship between the two, as
it relates to definition and classification. To begin understanding the relationship between WBL and EL, researchers’ definition of EL is key. Austin and Rust (2015) provided a detailed review of the historical definition of EL. Their work spans more than 42 years and includes research from Dewey to the Association of Experiential Learning. The definition of EL crafted through the research of Eyler (2009) uses language similar to those in the definitions of WBL. Eyler (2009) defined EL as learning that takes place in settings beyond the classroom and moves students into their community, while forming a bridge between the classroom and the world. Caulfield and Woods (2013) defined EL as learning that contributes to students’ awareness of social issues in their community, in turn, producing socially responsible behavior in students as they connect to their community outside of the classroom.

Stavenga de Jong, Wierstra, and Hermanussen’s (2006) research identified WBL as being EL in the way knowledge is acquired experientially by students learning by doing and described the process as “surrender to experience” (p. 167). According to Raelin (2011), it is the “effective use of experience as an integral part of education in order to empower learners and promote the common good” (p. 10). Exemplary EL must encompass clear learning objectives, allow training in skills where students can see those skills in their coursework, and ensure placement is logistical and monitored closely by faculty (Eyler, 2009).

Classifications and forms of EL vary across the research; yet, they are similar to those used to describe WBL. Austin and Rust’s (2015) research classified internships and cooperative education as common forms of EL. This is consistent with Eyler’s (2009) descriptions of the forms of EL and her position that these types of field experiences help in building practitioner skills. Eyler’s (2009) work acknowledged that a deeper understanding of the subject matter is produced through EL. It also creates the “capacity for critical thinking and application of
knowledge in complex or ambiguous situations” (Eyler, 2009, p. 26) and engages learning in the workplace, allowing the opportunity for lifelong learning to be fostered. While WBL and EL are different, they often overlap (Lester & Costley, 2010). WBL aligns with the theoretical framework of EL and the focused work of Dewey, pragmatism, and his discussions of relating learning to life experiences (Lester & Costley, 2010). Finally, Stavenga de Jong et al. (2006) related WBL to EL by describing it as acquiring knowledge experientially through learning by doing, guided learning, and reflective learning.

**WBL and CTE**

According to Miller (1984), there is debate on having vocational or CTE education operating by a clear philosophy. Issues such as the hierarchy and value of CTE have allowed it to exist apart from a philosophical or theoretical foundation. Providing CTE with a philosophy shapes its purpose and operating principles. Additionally, creating a philosophy in which to guide principles, leads to policy development and support for CTE (Miller, 1984). With the first WBL programs being birth by CTE through apprenticeship programs, historical efforts to move CTE to the forefront of preparation for work was established. Today, many efforts to review additional WBL programs in CTE continue.

CTE began as what was known as vocational education. Vocational education served the purpose of providing educational opportunities for all. According to Gordon (2014), vocational education served those who were unable to receive an education in the public system during the 20th century. Since the purpose of vocational education was to train all, there was early push to incorporate this training into liberal arts education. Thought leaders and historians such as Booker T. Washington, W.E.B. Du Bois, David Snedden, Charles Prosser, and philosopher John Dewey, provided varying perspectives on vocational education. While each viewed vocational
education in a different lens, each viewed this type of education as necessary to the success of the U.S.

WBL has a long history with CTE. The first forms of WBL connected to vocational education were apprenticeships. Early apprenticeships date back to the early sixteenth century, and involved voluntary forms modeled after Europe, or involuntary forms, requiring taking care of children who were orphaned and poor (Gordon, 2014). CTE has always allowed opportunities to engage in workplace learning.

While CTE has been useful in providing training for the jobs of the future, Gordon (2014) noted there are recent trends in CTE that impact opportunities for this arena to grow. CTE practitioners and stakeholders are called to commit to providing challenging, relevant, and more academic-focused curriculum. To do so, it is necessary to change the image and perception some still have about CTE. According to Hull, (2003) there are some who perceive CTE programs as places where students who are challenged academically can be placed in order to succeed. However, CTE has the potential to not only meet the global workforce needs, but also incorporate higher academic standards into the curriculum.

To fill in the skills gap across the country, the message that a four-year college degree is the path to success must shift (Matter, 2018). CTE plays a role in filling in the skills gap. The Carl D. Perkins Career and Technical Education Act of 2006 defined CTE as being education which teaches technical problem-solving, employability, higher-order thinking, and industry and occupational specific skills (Threeton, 2007). In 2018, the Perkins Act was reauthorized through the law, H.R. 2353, the Strengthening Career and Technical Education for the 21st Century Act. The reauthorized Perkins Act places even more emphasis on strengthening WBL by ensuring
support is provided to the various types of WBL, such as job shadowing, internships, and apprenticeships (Research Triangle Institute, 2017).

Incorporating WBL into CTE programs exposes students to work in a specific industry. The wide range of activities classified as WBL (i.e., job shadowing, service-learning, internships, and apprenticeships) “provide CTE students with valuable experience in the world of work” (Brown, 2003, p. 2). Rosen, Visher & Beal (2018) noted the growth in evidence that CTE can improve economic growth when more students earn career specific postsecondary education leading to better paying jobs. Coupling WBL and CTE creates more opportunities for students to receive a well-rounded education by exposing them to the up close and personal experiences in their chosen career field.

Chapter Summary

With employers favoring employees who have soft skills, incorporating these skills into the college curriculum would be beneficial (Anthony, 2014). Kim’s research (2011) identified an objective of WBL as preparing students for a future career. For this reason, qualitative study examined students’ perspectives on their level of preparedness to demonstrate soft skills during their WBL work experiences.

Through an extensive search of scholarly research, I observed a gap in the literature regarding students’ perspectives on their preparedness to demonstrate soft skills in the workplace. The research of this dissertation contributes to filling that gap. I also observed the connection of the role of human capital theory to skill development and WBL. This study explored the gap in soft skills development. Research findings of students’ perceptions of their preparedness in soft skills development will inform future work of faculty on integrating soft
skills into college curriculum. Students’ ability to define and identify relevant soft skills for their prospective career fields are reported in the results of the study.

In Chapter 3, I will discuss the methodology for this qualitative study. The chapter contains a discussion on the research design and rationale for the selection of this methodology. Furthermore, any ethical considerations which arose are shared.
CHAPTER 3: METHODOLOGY

Chapter 3 provides the framework of the research methodology of this study. A qualitative case study method was used. Participants shared information through face-to-face interviews about how their experience as a North Carolina community college student in a CTE program prepared them to demonstrate soft skills. Nine different CTE programs were represented in the study. This chapter addresses the research design and rationale for the case study design. Additionally, there is a discussion on the sampling, participants, data collection, analysis, measures, and guides. Lastly, this chapter provides information regarding issues of trustworthiness, validity, reliability, and ethical considerations.

Introduction

Simon and Goes (2013) stated qualitative research should be conducted utilizing a naturalistic approach. The purpose of case study research is to understand phenomena in the particular context where the problem is set. This study’s purpose was to understand the perspective of community college students enrolled in CTE programs on how their college experience has prepared them to have soft skills. Since community colleges provide training and education for individuals to enter careers, it is imperative students are prepared with both technical and soft skills desired by employers. With research being plentiful on soft skills preparation from the perspectives of employers, Harris and King (2015) brought light to the issue from the perspective of students—a perspective that is limited in research. Similarly, this study explored students’ perspectives on their soft skills preparation with a focus on three key factors in their community college experience. Those three key factors were WBL, CTE curriculum program, and overall community college experience.
Research Design and Rationale

Qualitative research is a process of inquiry that explores a human or social issue or problem through a specific methodological approach to the study (Creswell & Poth, 2018). This type of research involves the development of an understanding of the issue or problem through the analysis of data collection, such as words and perspectives of participants. Qualitative research studies are conducted in natural settings. The environment is unmanipulated and considered to be as is throughout the duration of the study (Given, 2008). Qualitative research involves answering questions using methods like ethnography, case study, grounded theory, phenomenology, and action research (Levasseur, 2011). Additionally, qualitative research is often used to improve current practices around a particular topic or subject (Pir, 2013). The number of participants and the methodology led me to select a qualitative research design for this study. Creswell and Poth (2018) offered the suggestion of studying a few sites or individuals, along with collecting details that are extensive about each site or individual. There were 11 participants in this study. The participants represented nine CTE programs and four different community colleges in North Carolina. This number provided me with information to develop themes and reach the point of data saturation.

The case study method provides a deep exploration and understanding of an issue or problem (Creswell & Poth, 2018). This method provides the researcher with data descriptive of the topic, based on real-life situations of the participants (Simon & Goes, 2013). The data can be used for one of three purposes of research: exploratory, descriptive, or explanatory (Yin, 1994). Research questions that are explored without the control of behavioral events and focus on contemporary events can be incorporated in the case study method (Yin, 1994).
This study was conducted utilizing a single-case study research method. The case was CTE students in the NCCCS. The case study method was selected based on the research question: How do North Carolina community college students enrolled in CTE programs perceive their community college experience has prepared them to demonstrate soft skills? Students taking courses designated with the WBL prefix were selected for participation in the study.

According to Tulgan (2015), there is a need to prepare students to demonstrate soft skills for career success. It is critical for students to understand their competency in performing soft skills in an effort not to rate their skill level too high (Harris & King, 2015). Gathering students’ perceptions on their own soft skills preparation is a start. However, research on community college students’ perceptions on being prepared to demonstrate soft skills is limited. This study focused on the perceptions of students.

A case study can be used when the researcher is focusing on a single case that represents a critical case to test a theory (Yin, 1994). This type of study allows the researcher to explore a contemporary phenomenon within the real-life context (Yin, 1994). Such was the case in this study, as I examined the topic of soft skills preparation through the lens of human capital theory, which supports the increase of skills contributing to an increase in an individual’s human capital and ability to make positive contributions to the workforce and economic development (Holden & Biddle, 2017). This study followed the suggestion of case study research by exploring the perspectives of community college students in CTE programs who were enrolled in WBL courses, as they were able to provide recent real-time data on the topic.
Research Question

Case study research involves exploring research questions seeking to answer “how” or why” (Yin, 1994). The central question which guided this research was as follows: How do North Carolina community college students enrolled in CTE programs perceive their community college experience has prepared them to demonstrate soft skills? Students’ perspectives on their preparation was measured by my data analysis of responses obtained from the study participant interviews.

Sampling

Selecting people or places to study, establishing a rapport, and gaining access to participants are important steps in qualitative research (Creswell & Poth, 2018). Purposeful sampling by the researcher should be considered to determine the individuals or sites used for data collection to best inform the researcher regarding the research question (Creswell & Poth, 2018). Purposeful sampling was used to determine the sample for this study. Creswell and Poth (2018) observed that maximum variation sampling should be used if some criteria for the sample has been selected in advance. Such was the case with this study.

The sample selected for this study was from a population of North Carolina community college students attending four different colleges. Eleven students enrolled in nine different CTE programs served as participants for the study. Each of the programs selected at the different colleges offered WBL courses for degree completion. Four of the participants selected were enrolled in both academic and experiential WBL courses concurrently during the study. The remaining seven students were enrolled in only WBL 111. Table 1 list the participants by college and CTE program area of study.
Table 1

*Participants by College or CTE Program*

<table>
<thead>
<tr>
<th>Pseudonym</th>
<th>College</th>
<th>Prior work experience</th>
<th>CTE Program Area of Study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Henry</td>
<td>College #1</td>
<td>Yes</td>
<td>Computer Science</td>
</tr>
<tr>
<td>Elizabeth</td>
<td>College #2</td>
<td>Yes</td>
<td>Public Services</td>
</tr>
<tr>
<td>Lisa</td>
<td>College #4</td>
<td>No</td>
<td>Computer Science</td>
</tr>
<tr>
<td>Melissa</td>
<td>College #1</td>
<td>Yes</td>
<td>Health Science</td>
</tr>
<tr>
<td>Michelle</td>
<td>College #1</td>
<td>Yes</td>
<td>Business</td>
</tr>
<tr>
<td>Shirley</td>
<td>College #3</td>
<td>Yes</td>
<td>Health Science</td>
</tr>
<tr>
<td>Tammy</td>
<td>College #3</td>
<td>Yes</td>
<td>Public Services</td>
</tr>
<tr>
<td>Thomas</td>
<td>College #3</td>
<td>Yes</td>
<td>Public Safety</td>
</tr>
<tr>
<td>Tonya</td>
<td>College #4</td>
<td>No</td>
<td>Business</td>
</tr>
<tr>
<td>Vanessa</td>
<td>College #1</td>
<td>Yes</td>
<td>Computer Science</td>
</tr>
<tr>
<td>William</td>
<td>College #4</td>
<td>Yes</td>
<td>Business</td>
</tr>
</tbody>
</table>

*Note:* These are the areas of study which describe the program. The actual program is not listed to protect the identity of the college.

CTE programs were chosen for this study as these academic programs train students in curriculum leading to careers. Recent trends in CTE call for college curriculum which challenges, engages in academics, and is relevant to the 21st century (Gordon, 2014). Selecting participants in different CTE programs allowed me to analyze students’ perspectives on both technical and soft skills preparation across curriculums designed to lead to different careers. It also provided data on additional experiences outside of the CTE curriculum that students felt prepared them to demonstrate soft skills and be prepared for their future careers.
Site Profile

Yin (2018) defined case study as a research method which “investigates a contemporary phenomenon (the ‘case’) in depth and within its real-world context” (p. 15). The present issue of workforce preparation presented an opportunity to research this topic within the setting of the case selected for this study. There were four colleges from the NCCCS selected as sites for this study. The NCCCS is comprised of 58 colleges which provide education and training to address state, national, and global workforce needs. Each college also provides course work to prepare individuals to transfer to public and private, four-year colleges and universities. Funding for the establishment of community colleges was adopted by North Carolina’s General Assembly in 1957. Twelve of the first North Carolina community colleges were designated as junior colleges. Five of those colleges focused on arts and sciences and seven on vocational/CTE (NCCCS, n.d.a).

Since its inception, each of the NCCCS’s 58 community colleges provide postsecondary curriculum and continuing education to individuals in one of the 100 counties across the state. NCCCS offers traditional face-to-face, clinical, hybrid, and fully online courses. The average overall curriculum full-time equivalent (FTE) in the NCCCS is 183,928 (NCCCS, n.d.a). An average of 46% of the overall curriculum FTE for NCCCS is CTE. With nearly one-half of the system’s FTE being comprised of CTE, it is imperative to make deep commitments to ensure students are trained in all skills to prepare them for the workforce.

As evident from its title, “North Carolina Community Colleges: Putting Education to Work,” the NCCCS 2018-2022 strategic plan has focused its efforts on responding to the need to equip individuals for the workforce. Workforce preparation is critical as two-thirds of the jobs in North Carolina will require education beyond high school by 2020 (NCCCS, 2018). In its
strategic plan, NCCCS focuses on four themes of improvement: 1) student interest and access, 2) clear and supported pathways for student progress, 3) economic workforce impact, and 4) system effectiveness (NCCCS, 2018).

While each of these themes link to strengthening the workforce, the focus on the economic workforce impact directly addresses preparing students to be copiously ready for the workforce. The goal of this theme is to “Ensure the educational pipeline prepares a workforce possessing the interest, KSAs to meet the needs of employers, now and into the future (NCCCS, 2018, p. 8). Thorough consideration of ensuring graduates have the KSAs needed for the workforce includes providing technical and soft skills training. Selecting four colleges within the NCCCS as sites for this research provided an opportunity to gather data from those deeply impacted by the plan of NCCCS—the students.

Data on students’ perspectives on the role their community college experience played on their soft skills development was collected at the institutional level. Forty-eight WBL coordinators, faculty, and administrators representing 33 of the 58 community colleges in North Carolina were contacted via email to identify colleges offering both academic and experiential WBL courses. I received responses from 13 of the 48 individuals I reached out to identifying their colleges as offering either one or both courses. I shared information regarding the study with those 13. Of the 13, WBL coordinators from the four selected as sites responded with an interest in participating in the study. One of the four colleges requires CTE students to take both an academic and experiential WBL course. The remaining three colleges require students to take only an experiential WBL course as a part of the CTE program. Selecting students who were enrolled in the experiential WBL course allowed me to collect the data necessary to address the
topic, as the participants were engaged in a scenario where they are expected to demonstrate soft skills.

The colleges were identified in the study as College #1, College #2, College #3, and College #4. The four colleges were located within 22-151 miles from the NCCCS office. Each college offers a variety of CTE degrees, diplomas, and certificates. The colleges were classified as either small or medium based upon total enrollment. Table 2 provides a profile of the four colleges in this study.

Table 2

<table>
<thead>
<tr>
<th>College Identification</th>
<th>Classification</th>
<th>Percentage of CTE by FTE</th>
<th>WBL Course Offering</th>
</tr>
</thead>
<tbody>
<tr>
<td>College #1</td>
<td>Medium</td>
<td>38%</td>
<td>Academic and Experiential</td>
</tr>
<tr>
<td>College #2</td>
<td>Small</td>
<td>51%</td>
<td>Experiential</td>
</tr>
<tr>
<td>College #3</td>
<td>Medium</td>
<td>50%</td>
<td>Experiential</td>
</tr>
<tr>
<td>College #4</td>
<td>Small</td>
<td>51%</td>
<td>Academic and Experiential</td>
</tr>
</tbody>
</table>

*Note: The classification of colleges is based on the average of overall curriculum FTE, from 2014–2015 through 2018–2019. As determined by the researcher the classifications are small (>3500 FTE) and medium (3501-9,000 FTE).*

Method of Participant Access

Johl and Renganathan (2009) stated that inability to gain access to participants when conducting research can be a pitfall. The process of gaining access can take years and involves the researcher establishing a reputation of integrity and consistency. Obtaining approval from educational institutions' review boards in a key step in gaining access to students and any records pertaining to human subjects (Creswell & Poth, 2018). I began the process of gaining access by
obtaining permission from North Carolina State University’s (NC State) Institutional Review Board (IRB) to conduct research. Once permission to conduct research was granted, I sought to gain access to the participants directly from each college.

Creswell and Poth (2018) also suggested that gaining access could include seeking people who can assist in making arrangements with facilitating the data and site. College faculty and coordinators of WBL courses provided me with each college’s external research study process. The approved NC State IRB application was presented to each college WBL coordinator. Once the process was followed by each college and permission was received, each WBL coordinator agreed to serve as college champions to assist me with soliciting participants.

Initial contact with the potential participants was made by each college champion. College champions contacted students either via email or face to face to solicit their participation in the study. Recipients of the email completed an initial survey via Qualtrics to establish their interest and to determine if they were eligible for the study (Appendix B). Once participants who completed the survey identified themselves as being interested in participation and eligible, they received information via email. In the email, I included information introducing myself, the purpose of the study, the level of commitment expected from the participants, and the right to consent form (see Appendix C). Participants solicited face to face by the college champion received this information once I met them face to face.

To participate in the study, participants were expected to meet the eligibility requirements. Participant eligibility for the study was based on the following criteria: 1) enrollment in a CTE program offering WBL courses; 2) current student enrolled in WBL during the time of the study; and 3) enrolled in their last semester, or next to last semester, before completing their degree. After it was determined the participants were eligible and consent was
provided, face-to-face interviews were scheduled with each participant. Interviews were held at a time and location that was convenient and met the level of comfort for each participant. Each participant was compensated for their time with a $25 Amazon gift card.

**Role of Researcher**

In qualitative research, the researcher’s role is to be the bricoleur and research instrument (Lincoln & Denzin, 2018). As the researcher, I am connected to the topic of the study through my professional work. During the study, I served as a WBL faculty member for a community college in North Carolina and have served in this role for 12 years. This has allowed me to work with approximately 150 students and over 25 employers connecting community colleges and employers to students for hands-on work experiences, and employers to talented potential employees. This connection supports my experience with the research topic through teaching students taking academic and experiential WBL courses and collaborating with employers supervising WBL 111 work experiences.

**Data Collection**

For this study, data was primarily collected through participant face-to-face interviews. Eleven interviews were scheduled for 30-60 minutes each and took place in a setting comfortable and beneficial for the participant. The average time for the interviews was 35 minutes. Nine of the 11 interviews took place on the college campuses, while two were conducted at local coffee shops convenient for the participants. Conducting face-to-face interviews allowed me to gather rich and real time data about students’ perspectives on soft skills preparation.

The interviews took place as participants were nearing the completion of their WBL experience. Conducting the interviews during that time allowed the participants an opportunity to provide their perspective after they had gained a wealth of hands-on experience related to their
CTE program. Also, participants provided their perspective students who had completed most of the required coursework in the CTE program and been enrolled at the college for at least three semesters.

Yin (2018) described case study interviews as conversations which are guided versus being queries of structure. Creswell and Poth (2018) emphasized consideration of who to interview and what questions should be asked. Both the “who” and “what” hinge on the purpose for the study and the central research question being explored. This study was designed to explore the perspectives of North Carolina community college students enrolled in CTE programs at one institution on their preparation to demonstrate soft skills. Since this topic focused on personal student perspectives on community college CTE program preparation, only students enrolled into CTE programs were interviewed.

In order to strengthen case study research, it is recommended to approach a study using multiple sources of evidence (Yin, 2018). While face-to-face interviews were the primary source of data, I also gathered data from additional sources as a way to discover students’ soft skills preparation. I analyzed the course syllabus from the academic WBL course and the curriculum offered in the NC-NET Employability Skills Toolkit (see Appendix D). Of the four community colleges represented in the study, one offers the WBL 110: World of Work course as a co-requisite to the WBL 111: Work-Based Learning I course. The NC-NET Employability Skills Toolkit offers curriculum and practical assignments on soft skills. Each of these provides students with an opportunity to enhance their soft skills. Triangulation of these data sources provided a more in-depth study of community college students’ experiences.
Interview Questions

Primary data was collected using semi-structured interviews. The interviews were conducted toward the end of the WBL experiences. Participants were asked a variety of questions focused on gathering data to support the research question. Participants were asked to identify their CTE program of study and the reasons they selected that particular program. Participants were also asked questions which allowed them to share their past and current work experience, and what skills were/are needed to be successful in those experiences. Additionally, participants were asked if they knew what soft skills were and, if so, what was their experience demonstrating those soft skills.

To ensure sufficient data was collected, additional questions were asked to address participants’ experiences as they were completing their WBL courses. Given the participants were nearing the end of their community college experience in their particular program of study, they may have engaged in experiences contributing to their soft skills development. Participants were asked to share information about the type of WBL learning experience they engaged in and if they were able to demonstrate soft skills during that time. There were questions where they were asked to share feedback they received from their WBL supervisors on soft skills, and if and how that feedback was helpful to them. Questions about their CTE curriculum and soft skills were also asked, which included asking participants to share content they felt could be added to the program’s curriculum which could enhance a future student’s skills. Participants were also asked to share how they felt their overall community college experience prepared them to demonstrate soft skills. Lastly, participants were asked to share how they would be able to apply anything they acquired through the sum of their community college experience to the workplace upon graduation.
During qualitative research, there are times when interviewers encounter a participant who is shy or inarticulate, providing data which could be viewed as inadequate (Creswell & Poth, 2018). Additionally, there may be times when participants provide an abbreviated answer, prompting the important interview step of follow-up (Kennedy, 2006). When this was experienced during this study, I worked to engage the participants to provide as much information as possible by asking probing questions as a method of obtaining adequate and useful data. The interview guide was used to organize the interview and allowed me to take notes as part of the documentation process (see Appendix E).

Each interview was audio recorded solely for the purpose of conducting an in-depth analysis of the data. The interviews were recorded on a secure recording device used only to collect data at the time of the proposed study. As the research instrument, only I had access to the audio recordings during the study.

The data collected from the interviews was analyzed from the transcriptions of each audio recorded interview. The audio recordings from the interviews were downloaded to my password-protected computer for transcription from the audio recorder. Each interview was uploaded and transcribed using software from REV. REV is a certified and confidential transcription service. Once the interviews were transcribed, I re-listened carefully to the recorded information. Listening carefully is a desired skill in case study research (Yin, 2018).

During the data analysis, I focused on observing common themes from the responses of the participants, course outcomes of WBL 110, and curriculum from the NC-Net Employability Skills Toolkit. Listening and observing data for themes connected to elements of the participants’ community college experience and soft skills development was key. Common
themes were used to determine how the results were related to the research question of the study and their connections to the theoretical framework, human capital theory.

**Measures and Guides**

As the researcher, I was the instrument of the proposed study. With a close connection to WBL and the topic, it was imperative to consider the role of any potential biases while conducting the study. It was also key to note that my experience in the field provides credibility to act as the subject matter expert. As the research instrument, I worked to build validity and reliability throughout the study.

Creswell and Poth (2018) discussed the relevance of the dynamics between the interviewer and interviewee. The interviewer must be aware of the possibility of equipment issues and potential issues in questioning, to include, but not be limited to, participants saying little or displaying emotional outbursts. To handle any issues encountered with equipment, I had an additional audio recorder available as a backup. There were no issues with questioning with the participants. Each was informed of their right to withdraw from the interview at any time.

**Trustworthiness, Validity, Reliability**

Qualitative research calls for researchers to establish that information is accurate, dependable, and credible (Simon & Goes, 2013). Triangulation of data is a process used to establish the credibility of qualitative research (Creswell & Poth, 2018). Triangulation provides dependability on data collected and confirmation of the findings. One way dependability of this research was established throughout the study was through triangulation of different sources of data. By listening to each recorded interview and reading the transcripts twice I was able to gain an understanding of participants perspectives on their soft skills preparation. Reviewing the WBL110 course syllabus and NC-NET curriculum established credibility in the participants’
interview responses and strengthened validity and reliability in the findings. This was done by observing consistent themes related to participants’ responses. In data triangulation, understanding “how” data is compared is just as important to qualitative research as “what” will be triangulated (Varpio, Ajjawi, Monrouxe, O’Brien, & Rees, 2017).

Member checking serves as a method of establishing validity and reliability in qualitative research. To confirm the accuracy of interviews, participants should be provided with transcripts to review (Carlson, 2010). According to Birt, Scott, Cavers, Campbell, and Walter (2016), the roots of member checking lie in the work of Lincoln and Guba during a time when qualitative research fought for its place in the world of research rigor along with positivist studies. I utilized member checking in this study as an additional process to support the findings. Within 24–48 hours of each interview, transcripts were sent to secure email addresses provided by each participant. In the email, participants were asked to review the transcript for accuracy and to confirm that their responses represented their perspective on the topic of community college soft skills preparation. Participants were asked to provide their confirmation within 72 hours of receiving the transcripts. I also shared with them that no response served as confirmation that the information was accurate and reflected their perspective on the topic. Ten of the 11 participants responded confirming the accuracy of the transcripts. This provided an additional level of trustworthiness to the data collection and study findings.

**Data Analysis Procedures**

Qualitative data analysis allows the researcher to engage in a circular process of managing data, discovering emergent ideas, theming, interpreting, and representing the data (Creswell & Poth, 2018). I engaged in the data analysis process as such, by beginning with reviewing the primary source of data in this study, face-to-face interviews. Data collected from
the face-to-face interviews was triangulated from two additional sources: course syllabus review of the academic WBL course offered at College #1 and a review of the curriculum from the NC-NET Employability Skills Tool Kit.

The first step in analyzing the data involved reviewing transcripts from the interviews. In my initial read of the transcripts, I observed consistent ideas which emerged, as it related to the topic. A second read of the transcripts allowed me to focus on the emergent consistent ideas and concepts to create memos. The memos consisted of phrases from participants’ quotes which focused on a concept linked to the topic. Memos were then classified into codes.

A key element of analyzing data collected from the face-to-face interviews is coding. Creswell and Poth (2018) described coding as the “heart of qualitative data analysis” (p. 190). To begin the coding process, I reviewed memos from the transcripts and assigned each a code. Each code consisted of a word or short phrase related to community college experience soft skills preparation.

In qualitative data analysis, it is critical for the researcher to review the data a number of times to ensure all of the concepts, ideas, and thoughts have been captured adequately. This often requires coding to take place in cycles (Saldaña, 2016). Coding data in cycles speaks to the qualitative analysis process which requires researchers to make meaningful comparisons to data. Saldaña (2016) suggested coding data into two cycles, with a hybrid method between the two.

The first cycle involves initial coding and the second cycle becomes more analytical. The first cycle of coding in this research was done manually. I employed the method of process coding. Process coding involves connecting actions to participants’ responses as it related to their perspectives on their soft skills preparation (Saldaña, 2016). As I read transcripts and re-listened to raw interview data, I created memos based on key factors from quotes shared by the
participants about their community college experiences. Each of the initial memos was
organized on a Microsoft spreadsheet. To organize the data, initial memos were assigned
process codes according to their relation to participants’ perspectives. I observed that multiple
memos were connected to the same or a similar code.

In addition to coding manually, I utilized Computer Assisted Qualitative Data Analysis
Software (CAQDAS) as a method of data organization. According to Saldaña (2016), CAQDAS
can provide the researcher with a more efficient means of visualizing and managing data. By
using the CAQDAS Atlas.ti, I was able to analyze data in a more organized way and create
additional codes. Atlas.ti allowed me to organize each code by color, which enabled me to have
a full visual representation of each quote and code. Atlas.ti was beneficial in me being able to
assign multiple codes to quotes and quantify codes. A total of 62 initial codes were created and
published in a codebook for further organization (see Appendix F).

Prior to making the transition to the second coding cycle, I engaged in additional analysis
through theming. Theming provides an opportunity for the researcher to “draw out a code’s
truncated essence by elaborating on its meanings” (Saldaña, 2018, p. 231). In theming the data, I
was able to assign descriptions to each code. The descriptions assisted in connecting the codes
to participants’ perspectives on soft skills preparation.

The data analysis process continued with a second cycle of coding. During the second
cycle of coding, each initial code was assigned a label related to emergent themes from the data
collection. Analysis of the interview data created the development of three major themes around
community college experience preparation. These themes were developed from the analysis of
the consistency of each participant’s response and were categorized as the three major
community college factors which impacted students’ community colleges experience role in soft
skills preparation. Those three major themes were WBL, KSAs, and additional soft skills. Two minor themes which emerged were CTE program curriculum and overall experience.

Further analysis of the data included pattern matching. Pattern matching involves comparing empirically-based patterns from case study findings to those from others predicted before data collection (Yin, 2018). Utilizing the analytic technique of pattern matching, I was able to observe congruency in the data collected and experiences provided for students to demonstrate soft skills. Pattern matching allowed me to observe that students perceived there were particular community college experiences that prepared them to demonstrate soft skills. The emerging themes from the findings matched those from literature around the topic and the theoretical framework, human capital theory. This provided additional internal validity to the study.

**Ethical Considerations**

Yin (2018) acknowledged that being able to “conduct research ethically, from a professional standpoint but also by being sensitive to contrary evidence” (p. 83) is a skill necessary in case study research. This involves the researcher releasing any prejudice and bias related to the topic and study. Only data from participants who provide their consent was used in this study. My professional connection to the research as a WBL coordinator was not used to influence the study. The selection of college champions was useful in me protecting and maintaining my role as the researcher.

Participants were provided and signed the informed consent form which verified the steps of confidentiality and informed them of their right to withdraw from the study at any point. Further, they were informed that participation in the study was voluntary and their decision to withdraw would not impact the professional relationship with any employers, students, faculty
members, or me as the researcher. Additionally, data collected would in no way impact students’ grades for any of their courses.

Additional issues of ethics involve being careful to not “use participants by gathering data and leaving the site without giving back” (Creswell & Poth, 2018, p. 55). For their time, each participant was compensated with a $25 Amazon gift card and a thank you note. College champions will receive a summary of the research findings in an effort to inform for continuous improvement.

Measures were taken to safeguard all data collected. This included safeguarding the identities of participants. Each participant was given a pseudonym as their name. All interview recordings took place via a private recorder that I own. The recorder was stored in a fireproof safe, which is secured by two locks. All data was stored securely on my personal, password-protected computer. These records will be maintained for five years in these secure locations.

**Chapter Summary**

This chapter discussed the research methodology for this study focusing on how students enrolled in CTE programs at community colleges in North Carolina perceive their experience has prepared them to have soft skills. This chapter shared the research design and rationale for utilizing case study in this research. It focused on the participant sampling and the profiles of the colleges within the NCCCS which served as sites in the study. The method of participant access, and my role as the data collection instrument were discussed. This chapter also provided an overview of the procedures of data analysis. A discussion of the forms of data collected and the measures and guides in collecting that data is located in this chapter. The importance of trustworthiness, validity, reliability, and ethics was also discussed. Chapter Four will discuss information related to study findings. This will include the key factors related to the five
emergent themes discovered from the data collection that contributed to participants’ perspectives on soft skills preparation.
CHAPTER FOUR: FINDINGS

The purpose of this single case qualitative study was to examine students’ perspectives about the role their community college experience played on the development of their soft skills. The research question guiding this study was the following: How do North Carolina community college students enrolled in CTE programs perceive their community college experience has prepared them to demonstrate soft skills? This chapter discusses the findings of the study and provides a discussion of themes and key factors discovered through data analysis.

Introduction

The need for employees to be equipped with all of skills needed for success continues to increase. The employment outlook projects there will be 55 million job openings in the U.S. by 2020. Carneval et al. (2013) projected that 2020 will also be the year that 65% of all jobs will require postsecondary education and training, with a total of 30% requiring some college or an associate degree combined. In addition to the need for employees to be equipped with a postsecondary credential, the skills gap continues to increase. This is particularly true as it pertains to soft skills. While employers are able to hire and train potential employees with the technical skills for the job, many are finding it challenging to provide the soft skills training their employees need.

Community colleges are key to providing education for individuals in CTE. They support students in obtaining skills, knowledge, training, and expertise and, therefore, purposefully contribute to human capital. A student’s completion of their academic credential is a signal to a prospective employer they have, at a minimum, the technical skills needed for a job (Connelly et al., 2011). This study explored the training provided in one particular state’s
community college system in soft skills. In the study, students shared their perspectives on their community college experiences preparing them to demonstrate soft skills.

The findings for this study are based on primary data collected from participant interviews. During analysis of the interviews, data from the transcripts was triangulated with a review of a course syllabus from an academic WBL course and the curriculum from the NC-NET Employability Skills Toolkit. The academic WBL course and the NC-NET Employability Skills Toolkit are supplemental resources available to faculty in the NCCCS. Both of these resources provide curriculum on soft skills. There was one community college in the study which coupled these resources with students’ experiential WBL course.

Data from 682 quotations solicited through 11 face-to-face interview transcripts were organized into process codes. A process code allows the researcher to label actions to significant information related to the study (Saldaña, 2016). A total of 62 process codes emerged from data analysis. Figure 1 presents the top 10 process codes which emerged in the study.
In the analysis of the top 10 process codes, it was found that participants referenced prioritizing communication in their quotations on soft skills development as it related to their community college experience. Prioritizing communication appeared 118 times in the analysis of the participant quotations. Each participant in the study shared a quote on their perspective as to how experiences in their community college experience helped them to prioritize the soft skill of communication.

Each process code was grouped into broader categories which served as the final themes of the study. These codes allowed me to discover themes connected to soft skills. There were five top themes in the study. The top five themes were identified as such based upon their frequency in the participants’ quotations. Data analysis found that students enrolled in CTE programs in the NCCCS were prepared to demonstrate soft skills through three key community college experiences. Those key experiences were WBL, the CTE program, and elements from
their overall community college experiences. In the next sections of this chapter, I review the research question and the top five themes discovered through data analysis. This is followed by a review of the findings which identify students’ perspectives on the key community college experiences which have prepared them to demonstrate soft skills.

**Research Question**

This research study aimed to answer the following question: How do North Carolina community college students enrolled in CTE programs perceive their community college experience has prepared them to demonstrate soft skills? The three main soft skills focused on in this study were communication, teamwork, and problem solving. These three were chosen as the focus as they were consistently recognized in the literature connected to soft skills.

Through data analysis, the findings of this study answered the research question by discovering five emergent themes connected to community college experiences preparing students to demonstrate soft skills. Eleven participants enrolled in nine different CTE programs across the NCCCS were participants in the study. Overall, participants shared that three of the emergent themes were key factors to their soft skills preparation. Those key factors were WBL, the CTE program, and additional elements of their overall community college experience. Additionally, participants perceived that through WBL and their CTE program they were able to enhance their KSAs and gain experience demonstrating additional soft skills.

**Identification of Themes**

During data collection, participants shared their perspectives on their community college experience and the role it played on their soft skills development. Specifically, their responses focused on three main soft skills. Those soft skills were communication, teamwork, and problem solving. These three soft skills were the most consistently referred to in literature on the topic.
Participants shared information about their WBL experience and the expectations of displaying soft skills during that experience. They also shared perceptions about their CTE program curriculum, specifically, what elements of that curriculum prepared them to have soft skills. Participants also shared their perspectives on what additional experiences they engaged in during their overall community college experience that contributed to their soft skills development.

Analysis of data from the participant interviews revealed a total of nine consistent themes around soft skills preparation. Those nine themes were WBL, CTE program curriculum, overall community college experience, KSAs, soft skills, technical skills, program enhancement, preparation, and additional soft skills. Of the nine themes, I identified five of them as being the most significant. The number of process codes connected to each of the themes supported them becoming a significant theme. There was consistency in the responses provided by each participant in how these areas were connected to the research question. The participants’ quotes were connected to process codes related to processes that contributed to soft skills development. Figure 2 shows an example of the technique I employed to assign process codes to participants’ quotes.

![Figure 2. Development of process codes and themes](image)

Each of the themes was attached to one of the 62 codes created during data analysis. The codes represent the actions participants shared in the form of processes. The process was identified as the role each of the themes played in their soft skills development. There were five
top themes identified in the study. Those top five themes were WBL, KSAs, preparation, additional soft skills, and CTE program curriculum. Each theme was divided into a category of a major theme or a minor theme based on their frequency in the process codes assigned to each theme. Table 3 provides a list of themes, their classification, frequency in participants’ quotations, and process code frequency. Themes identified as major themes appeared to have a more significant role in soft skills development as the participants connected a process code to it more frequently. Minor themes played a less significant role, as they had fewer process codes assigned to them. However, minor themes still played a role in the participants' soft skills development while enrolled in a community college CTE program.

Table 3

<table>
<thead>
<tr>
<th>Description of Top Five Themes</th>
</tr>
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<tbody>
<tr>
<td>Theme</td>
</tr>
<tr>
<td>-------</td>
</tr>
<tr>
<td>WBL</td>
</tr>
<tr>
<td>KSAs</td>
</tr>
<tr>
<td>Preparation</td>
</tr>
<tr>
<td>Additional Soft Skills</td>
</tr>
<tr>
<td>CTE Program Curriculum</td>
</tr>
</tbody>
</table>

Major Themes

Major themes in the study were classified as such based upon the frequency in which they emerged through participants’ quotations and their connections to the process codes. WBL, KSAs, and preparation were classified as major themes. Participants provided quotes regarding how each connected to their soft skills. In their responses, participants shared how they felt
various aspects of their community college program prepared them to develop soft skills. The major themes of WBL, KSAs, and preparation emerged as key factors to either contributing to their soft skills development or being important to their overall success in pursuing their future career. A description of each major theme and the connection to this study can be found in the following sections.

**WBL**

WBL provides students an opportunity for students to engage in hands-on work experience related to their curriculum program of study. This type of learning has been regarded as an essential component to learning (Johnston, 2001). Participants in the study were community college students engaged in WBL work experiences related to their CTE program of study.

In the analysis of the data, it was found that participants attributed WBL to playing a significant role in their soft skills development. There was a total of 377 quotes from the participants responses during the face-to-face interviews which related to their WBL experience. Each of the quotes were associated with 50 of the 62 total codes. The top three codes connected to WBL from the participants' responses were prioritizing communication, prioritizing teamwork, and relating WBL to their CTE program. Table 4 presents the frequency of the top three codes connected to WBL from the participants responses.
### Table 4

*Process Codes and Major Themes WBL*

<table>
<thead>
<tr>
<th>Code</th>
<th>Frequency in Quotation</th>
<th>Example Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prioritizing communication</td>
<td>118</td>
<td>“And if you get communication with people, you can network.” (Shirley, College #3)</td>
</tr>
<tr>
<td>Prioritizing teamwork</td>
<td>51</td>
<td>“Everybody has to work together.” (Melissa, College #2)</td>
</tr>
<tr>
<td>Relating WBL to CTE program</td>
<td>31</td>
<td>“It is good that colleges do offer work-based so it could prepare you for your job.” (Tonya, College #4)</td>
</tr>
</tbody>
</table>

**Prioritizing communication.** In their responses, participants discussed how having the opportunity to participate in a WBL work experience allowed them to understand how communication was prioritized during their work experience. In sharing their perception on how WBL helped them to understand and prioritize communication, participants shared how interacting with their WBL supervisors and co-workers were essential contributors to the development of this soft skill. One participant in particular, Michelle from College #1, shared how learning to prioritize communication during WBL was helpful for her. This was a skill she recognized that she lacked as she began her WBL experience. When I asked her about the feedback she received from her supervisor regarding her soft skills, she immediately began to share how she could have communicated better. Michelle stated, “I didn’t communicate with her [the supervisor] as I should have.” When asked about the advice she would share with future WBL students, Michelle again focused on the importance of prioritizing communication. She shared the following statement, “Make sure you communicate with your supervisors and treat the work-based learning as it’s a real job.” Prioritizing communication was a theme that connected to 118 participant quotations in the major theme of WBL. Michelle, along with other
participants, perceived prioritizing communication as being a key to success during their WBL work experience.

**Prioritizing teamwork.** In addition to the major theme WBL receiving high response rates from participants when it came to prioritizing communication, findings also showed that prioritizing teamwork was discussed during the face-to-face interviews. Participants shared how they perceived WBL assisted them in being able to understand the importance of teamwork. I observed 51 participant quotations connected to the process code prioritizing teamwork under the theme WBL. Lisa, who was studying Computer Science at College #4, had no work experience prior to taking the WBL experiential course. In her interview, she shared her perspective on the importance of prioritizing teamwork. When asked about what the WBL course taught her about teamwork, Lisa said, “They taught me … teamwork is a huge part because when you get out in the real world, you have to talk to people about different topics, about computers, and how they want computers fixed.” Lisa perceived that prioritizing teamwork was beneficial to her success during WBL.

**Relating WBL to CTE program.** Being able to relate their WBL experience to what they learned in their CTE program was important for participants. Overall, participants shared 31 quotations connected to the process code, relating WBL to CTE program. In these quotations, participants discussed how they were able to connect theories and concepts they learned in the classroom to hands on processes they performed in their WBL experience. Similar to Lisa, for Tonya, also from College #4, WBL was her first work experience. Tonya expressed how her WBL work experience prepared her to get a job in her area of study—business—so she would have a better understanding of what to do before she gets the jobs. Additionally, Vanessa, who
was enrolled in a computer science program while attending College #1, shared she felt she was able to blend what she learned in the classroom with her WBL work experience.

The theme WBL proved to be regarded as a key factor to the participants’ soft skills development. With 377 quotations connected to this theme, participants shared how they perceived WBL prepared them to develop soft skills. It should also be noted that I identified this theme as a major theme, as well as an experience that influenced soft skills development. Further along in this chapter is a more focused discussion on the role WBL played in developing the participants’ soft skills.

**KSAs**

Human capital theory focuses on the efforts to enhance KSAs to receive a return on the investments in doing so (Mihm-herold, 2010). This theory provides the theoretical framework of this study. The cognitive essence of talent lies within an individual’s KSAs (Merisotis, 2015). During data analysis, it was observed that participants shared how their KSAs were enhanced during their time as a community college student. Primarily, participants attributed their WBL experience to being a key element to developing their KSAs. They also shared how pursuing their CTE credential was an additional enhancement to the development of their KSAs. There was a total of 506 quotes from participants collected during the face-to-face interviews that I connected to KSAs. Each of the quotes was assigned to one of 38 process codes. The top three process codes were connected to 208 quotations. The top three process codes were prioritizing communication, prioritizing teamwork, and prioritizing and strategizing problem solving. Table 5 presents the frequency of each of the top three process codes connected to the major theme of KSAs and provides examples of participant quotes which align with each code.
Table 5

*Process Codes and Major Theme KSAs*

<table>
<thead>
<tr>
<th>Code</th>
<th>Frequency in Quotation</th>
<th>Example Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prioritizing communication</td>
<td>118</td>
<td>“I did learn how to communicate in the office through the emails and through the phone calls.” (Tonya, College #4)</td>
</tr>
<tr>
<td>Prioritizing teamwork</td>
<td>51</td>
<td>“They taught me about that teamwork is a huge part.” (Lisa, College #4)</td>
</tr>
<tr>
<td>Prioritizing and strategizing</td>
<td>39</td>
<td>“Whether it's like an actual physical problem or it's interpersonal problems. Just taking time to think” (Vanessa, College #1)</td>
</tr>
</tbody>
</table>

**Prioritizing communication and prioritizing teamwork.** Consistent with WBL, prioritizing communication and prioritizing teamwork were the top two of three process codes which I observed in the theme KSAs. Participants shared their perspectives on how learning to prioritize their communication and teamwork skills were key to improving their KSAs. Thomas, a public safety program major from College #2 shared the following statement on both prioritizing communication and teamwork in his WBL work experience and prior work experience:

> And everybody was assigned to a certain task and you know, obviously he [co-worker] got busy at times … When the store got busy … it was time to go to work and everybody knew the role … And being in my current profession is more so teamwork, trust, communication, just understanding who you're working with.

Thomas shared how in his previous work in retail it was important to be able to recognize when a co-worker got busy and he had to take on another role at the store. Also, in his current job for his WBL work experience, teamwork was necessary in order to be successful.
**Prioritizing and strategizing problem solving.** One process code founds in the KSAs theme, and not in the WBL theme, was prioritizing problem solving. I observed 39 participant quotations connected to the process code prioritizing problem solving. Participants who provided a perspective connected to this code discussed how problem solving played a key role to enhancing their KSAs. William, a business program major enrolled in College #4, shared how asking questions was a strategy he employed to solve problems. William stated, “Don't be afraid to ask questions because once you have asked the question, you have gained knowledge. And from the knowledge you gain from answering, asking the question, you can apply it to different areas.” Asking questions as a problem-solving strategy helped William grow his KSAs.

Enhancing their KSAs emerged as a priority for the participants. In their responses, I observed how participants focused on sharing information about the skills they were enhancing or gaining. The top three skills from the data were congruent with those preferred by employers. While KSAs emerged as a separate major theme, it was primarily connected to participants' engagement in their WBL work experience. Their participation in this course provided them with the opportunity to enhance their KSAs and ultimately, their human capital.

**Preparation**

The next major theme noted in the study was preparation. There were a number of factors connected to preparation. Community colleges are one of the contributors to the over 800 percent increase in the number of academic credentials awarded since the 1980s; therefore, it is imperative to examine the factors connected to student preparation (Merisotis, 2015). During data analysis, I observed participants respond to interview questions as they related to the various factors connected to their overall preparation to demonstrate soft skills. There was a total of 403 quotations connected to the theme preparation. Each of the quotations was connected to one of
49 codes. The top three codes I observed were prioritizing communication, prioritizing technical skills, and prioritizing CTE/WBL soft skills preparation. Table 6 represents the frequency of the major theme preparation captured during the face-to-face interviews.

Table 6

<table>
<thead>
<tr>
<th>Code</th>
<th>Frequency</th>
<th>Examples of Quotations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prioritizing communication</td>
<td>40</td>
<td>Because if somebody else did, already filed a paper and I didn't know they filed a paper, I got to communicate with my coworker and to see, did they file the paper or did they pull the chart out or anything. (Tonya, College #4)</td>
</tr>
<tr>
<td>Prioritizing technical skills</td>
<td>34</td>
<td>“One thing, we learned about the sorting,” (Michelle, College #1)</td>
</tr>
<tr>
<td>Prioritizing CTE/WBL program soft skills</td>
<td>31</td>
<td>Everything is perfect, because when I experience something while I'm at work and I've already read about it before the situation happens … I feel like the curriculum has prepared me … for the situation when it comes. (William, College #4)</td>
</tr>
</tbody>
</table>

Prioritizing communication. In their quotations related to prioritizing communication, participants shared how preparation was essential in order for them to learn to make this soft skill a priority. As it related to preparation, Shirley, who was enrolled in a health science program at College #3, remarked on how her supervisor felt her preparation was connected to her doing a good job during her WBL experience. Shirley said, “He [supervisor] was very happy with my level of communication with everyone.” Any experience that students perceived to prepare them before they embarked upon the career contributed to their ability to prioritize communication.

Prioritizing technical skills. Participants shared 34 quotations on how the major theme of preparation was key to prioritizing technical skills. Enrolled in a computer science program at
College #1, Henry emphasized the importance of preparation to prioritizing technical skills. Henry stated, “Technical skills, this one is ... to me, important as well because you always have to have a grasp of technology in general, the way it evolves, and being that I work in computer science, things are always changing.” Henry’s sentiments were congruent with those of other participants who perceived that preparation was critical to prioritizing technical skills.

Prioritizing CTE/WBL program soft skills development. The major theme preparation yielded prioritizing CTE course offerings as its third process code. Most participants connect the preparation provided by their CTE courses to being a key factor to their success during their WBL work experience. Recalling CTE course work and making connections to the world of work was essential for Tammy who was enrolled at College #3 in a public service program. Tammy said that learning the proper way to conduct a procedure in her CTE courses helped her to understand concepts she encountered during WBL. This confirmed there was value added to the participants’ preparation from their CTE course offerings.

During the interviews, participants discussed their perspectives on how they have been prepared to demonstrate soft skills. They shared how this preparation was done either through their CTE program or through their WBL work experience. They also shared their perspective on elements which could be added to their CTE program to enhance their preparation to demonstrate soft skills and be successful in the workforce.

Minor Themes

To develop a full understanding of students’ perspectives on how their community college experience contributed to their soft skills development, it was essential for me to consider additional themes which emerged during data analysis. In doing so, I observed two minor themes. These themes emerged from an analysis of participants' responses during the
face-to-face interviews. The two emergent minor themes were additional soft skills and CTE program curriculum. Participants responded to questions during the interview which allowed them to share the role these themes played on their soft skills development during their community college experience.

**Additional Soft Skills**

While the focus of the study was on three of the soft skills desired by employers—communication, teamwork, and problem solving—I observed additional soft skills which emerged from participants' responses during the face-to-face interview. There was a total of 295 quotations connected to participants revealing the knowledge of and/or enhancement of additional soft skills. Each of the quotations was assigned to 49 process codes. Prioritizing communication, and prioritizing and strategizing problem solving, were at the top of the process codes associated with additional soft skills. They were identified as skills needed to develop additional soft skills.

Since participants consistently shared their perspectives on prioritizing communication and prioritizing problem solving in other themes in the study, I explored process codes which connected to this theme which appeared for the first time in the study. An analysis of data discovered the top three codes connected to developing additional soft skills which were different from communication and problem solving. Those three additional soft skills were prioritizing time management, building relationships, and considering different perspectives. Participants shared the importance of these three additional soft skills for workplace success.

Table 7 presents the frequency of each of the three process codes which represented the additional soft skills that were different from the most common found in the study—
communication and problem solving. The table also displays examples of participant quotes which align with each code.

Table 7

<table>
<thead>
<tr>
<th>Code</th>
<th>Frequency in Quotation</th>
<th>Example Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prioritizing time management</td>
<td>31</td>
<td>“Again, if you're in a prep position you've got a list of things you've gotta get done by 11:00 you go in at eight. You've got three hours to get this stuff done. So, if you know what your cook times are, you know what you have to start first.” (Tammy, College #3)</td>
</tr>
<tr>
<td>Building relationships</td>
<td>24</td>
<td>“I have to get to know people to be comfortable with them.” (Elizabeth, College #2)</td>
</tr>
<tr>
<td>Considering different perspectives</td>
<td>19</td>
<td>“You have to rely on the knowledge of other people 'cause everybody has their years of experience or they have seen a situation before that you're just encountering.” (Melissa, College #1)</td>
</tr>
</tbody>
</table>

Prioritizing time management. Participants shared how time management contributed to their success during WBL and overall community college experience. Participants, such as public service program student Elizabeth who was enrolled in College #2, shared how she was able to prioritize time management during her WBL work experience. When asked what was expected of her as a student she said, “We’re expected to be punctual.” Elizabeth continued in her interview to share how time management was connected to organizing particular elements of her college experience, such as submitting assignments on time and working with groups to complete projects in a timely manner. She shared how time management was a skill she felt she needed to be successful in all of her work experiences, past and present.
**Building relationships.** Being able to build relationships emerged as a key process code under the minor theme additional soft skills. From their perspective, participants shared that being able to build relationships was an important soft skill to have. Melissa, who was enrolled in a health science program at College #1, shared how building relationships was effective in her being able to get her job done and done well. Melissa shared that building relationships was essential because so much of what is expected of an individual in health science careers is dependent upon other people. From the participants’ perspectives having to work and interact with many people required them to build relationships with others. This was an additional soft skill they felt was needed for success.

**Considering different perspectives.** Working with different people meant the participants had to learn how to consider varying perspectives. Considering different perspectives involved participants sharing how they came to understand how the knowledge of others can be helpful in completing tasks and accomplishing goals. Tammy attributed this to the fact she had to work with different personalities during her WBL experience. She shared how she had to be open and would have been unsuccessful during her WBL experience if she only allowed her way of doing things to be the only way. Tammy even discussed how working with colleagues who were autistic helped her to understand the importance of considering others’ perspectives. When asked about how her overall community college experience enhanced her soft skills, she stated:

> Being able to work with [an] autistic [person] because I haven't had a lot of exposure with that. While I was annoyed at first, because I can't wrap my head around it, … it helped me to have patience and get a better understanding of other people and how they think.
Tammy shared how knowing and valuing the different personalities she encountered was a skill she appreciated. Her perspective on developing the soft skills of considering different perspectives was congruent with other participants in the study.

While the focus of the study was on exploring participant perspectives on the role their community college experience played on their soft skills development with a focus on the soft skills communication, teamwork, and problem solving, it was important to note other soft skills which emerged in the participants quotes from the face-to-face interviews. Participants shared how the soft skills of prioritizing time management, building relationships, and considering others’ perspectives were additional soft skills they were able to develop as they engaged in their WBL and overall community college experience. Having the opportunity to enhance and discover these additional soft skills will be helpful to their future careers.

**CTE Program Curriculum**

According to Gordon (2014), CTE programs have historically focused on educating individuals on the connection of education to work and developing employability skills. To gain an understanding of the impact participants’ CTE program curriculum had on their soft skills development, they were asked specific questions about its role. In this research the CTE program curriculum theme referred to participants providing perspectives on how any element of their CTE program curriculum prepared them to demonstrate soft skills. There was a total of 159 participant quotes connected to the minor theme CTE program curriculum. The top three process codes associated with this minor theme were prioritizing CTE/WBL program and soft skills preparation, prioritizing CTE course offerings, and defining WBL. Table 8 presents the frequency of each of the top three process codes connected to the minor theme CTE program curriculum and examples of participant quotes which aligned with each code.
Table 8

Process Codes and Minor Theme CTE Program Curriculum

<table>
<thead>
<tr>
<th>Code</th>
<th>Frequency of quotations</th>
<th>Example from participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prioritizing CTE/WBL program and soft skills</td>
<td>32</td>
<td>“I think they did well in helping me to figure out how to know what to do when I get out in the real world.” (Lisa, College #4)</td>
</tr>
<tr>
<td>Prioritizing CTE course offerings</td>
<td>31</td>
<td>“Because in the textbook you have the technical skills that teach you how to do whatever you're learning or pursuing.” (Shirley, College #3)</td>
</tr>
<tr>
<td>Defining WBL</td>
<td>27</td>
<td>“For those that are looking to work in a particular work field, it gives them a chance to, to actually learn about it.” (Thomas, College #4)</td>
</tr>
</tbody>
</table>

**Prioritizing CTE/WBL program and soft skills.** Questions from the interview protocol connecting to this theme asked participants to identify courses, activities, and curriculum they felt contributed to their soft skills development. Thomas, in particular, attributed WBL as helping him develop his time management skills. He stated, “compared to all the work I was doing for my other classes, work-based learning just taught me time management.” Additionally, Tonya remarked on how her CTE program offering WBL was helpful in that it prepared her for her future career. The combination of CTE/WBL was found to contribute to the development of participants’ soft skills development and future career success.

**Prioritizing CTE course offerings.** During the face-to-face interviews, participants were asked to share their perspectives on how their CTE program course offerings could be enhanced in a way to develop students’ soft skills. Overall, participants perceived their CTE
program courses as mainly contributing to the development of their technical skills. They were able to make the connection of what they learned in the classroom to what they were able to do during their WBL experience. In regard to soft skills, participants shared the need for more courses, assignments, and projects which would allow them to practice their soft skills. Henry stated that his computer science program provided him with project-based learning assignments that provided him with scenarios he may encounter in the workplace. Additionally, William shared he was able to take a course in his business program focused on customer service. He stated, “Customer service is a class, so it teaches you the best way to answer the phone, different tactics that you can use to get someone to participate with what your objective is.” With the CTE course offerings focused on technical skills, I observed that more opportunities are needed in these courses to develop students’ soft skills to fully prepare them for career success.

**Defining WBL.** I felt it was critical to the study to examine how participants defined WBL as it was a process code connected to 27 quotations in the CTE program curriculum theme. Each participant provided a definition of WBL that was consistent with that in the literature. Elizabeth defined WBL as “actual hands-on experience.” Similarly, Shirley defined WBL as “on-the-job training.” Overall, participants defined WBL as an opportunity to apply the theory from the classroom to a practical hands-on experience.

Participants were asked questions during the face-to-face interviews that allowed them to provide information about their CTE program curriculum. Questions during the interview asked participants to share their perspectives on their CTE course offerings. Participants were also asked to identify areas they felt their CTE programs could be enhanced. They also shared their definition of WBL as it related to connecting their classroom learning to their hands-on learning.
Overall, participants felt as though their CTE program curriculum offering WBL courses was a significant experience that contributed to their soft skills development.

**Relevancy of Themes to Research Question**

The purpose of this study was to examine community college students’ perceptions on their soft skills development. The research question, how do community college students enrolled in CTE programs perceive their community college experience has prepared them to demonstrate soft skills, was explored. Data analysis revealed 62 process codes in which participants described processes they encountered during their community college experience that were connected to soft skills development. Each of the process codes was connected to one or more of nine emergent themes. In further analysis of the findings, I explored the top five emergent themes because they were connected to more process codes than other themes in the study. The top five emergent themes were WBL, KSAs, preparation, additional soft skills, and CTE program curriculum.

In my review of the major and minor emergent themes, WBL appeared to be the one which served as an experience that each participant perceived played a significant role in their soft skills development. While the other themes supported participants, the development of soft skills through WBL was the primary theme which could be connected to an experience. Participants perceived that being enrolled in a course which provided them with hands-on work experience helped them make connections between the theory they learned in the classroom and what they planned to do in their career.

While the conversations with participants demonstrated that WBL played the most significant role in their soft skill development, I continued to explore other areas of their community college experience in order to answer the research question. Questions which
prompted participants to share more about their overall community college experience provided additional perspectives on how participants were prepared to demonstrate soft skills. Factors, such as working in groups with others and participation in campus activities, played a role in participants’ soft skills development. However, this role was less significant than the one of WBL.

The themes revealed in the study verified that CTE students were being prepared to demonstrate soft skills. Specifically, participants perceived that WBL work experiences being a part of their CTE program overwhelmingly created an opportunity to enhance current soft skills and develop new soft skills. Additionally, participants shared that elements of their overall community college experience, such as working in groups and participating in campus activities, supported their soft skills development. Regardless of their experience, it was discovered it was essential for the participants to engage in a community college experience that was intentional in preparing them to demonstrate soft skills.

**Community College Experience Factors**

The NCCCS (n.d.b) has made its mission to provide “education, training and retraining for the workforce including basic skills and literacy education, occupational and pre-baccalaureate programs.” (para. 1). To successfully accomplish this mission the NCCCS must provide students with experiences that contribute to success in their careers. This study aimed to gather data on how North Carolina community college students enrolled in CTE programs perceived their community college experience prepared them to demonstrate soft skills.

Primary data collected were from face-to-face interviews with the participants. The data were triangulated with course syllabus from the WBL academic course and the curriculum from the NC-NET Employability Skills Toolkit. Only one course syllabus from the WBL academic
course was use from one college. This is because only one of the colleges requires that both the academic and experiential course are taken at the same time. Themes related to the participants’ soft skills preparations were discovered during data analysis. Each of the themes was connected to participants’ soft skills development. This was determined based upon the frequency each theme was connected to a process code.

The study explored particular experiences participants engaged in as a community college student. Participants shared how they perceived those particular experiences contributed to their soft skills development. In order to discover those experiences, participants were asked specific questions during face-to-face interviews. The complete interview protocol can be found in Appendix E. Questions which sought to collect specific data about the role participants’ community college experiences played in their soft skills development asked them to define soft skills. Participants were asked to share what they already knew about soft skills prior to taking WBL. Additionally, there was an opportunity for participants to discuss how they felt their overall community college experience prepared them to demonstrate soft skills.

As the researcher, I found it essential to assess the participant knowledge of how soft skills were defined in this study. Being able to define soft skills provided participants with a frame of reference when it came to identifying experiences they encountered which prepared them to demonstrate soft skills. In analyzing participant responses, I discovered there were some students who were unable to define the term “soft skills.” Once I provided a baseline definition of soft skills and provided the examples of communication, teamwork, and problem solving, participants understood what the term meant. Participants then shared their references to having soft skills and recognized them according to their understanding. Henry described soft skills as “the skills that allow you to interact with others.” Elizabeth defined soft skills as “Skills that you
already know … that are from experience.” It was essential for the participants to understand what soft skills were in order to identify a particular experience they had to prepare them to demonstrate these skills.

Further analysis of the data discovered that participants identified specific community college experiences in which participants were engaged. These experiences were noted as key experiences in preparing participants to demonstrate soft skills. Overall, the major theme WBL was connected to more codes than any of the emergent themes in the study. In addition to WBL being a major theme in the study, it was also perceived to be the experience each participant identified as playing a significant role in their soft skills preparation. While WBL was the primary experience that prepared students to demonstrate soft skills, participants also shared their perceptions on how additional elements from their overall community college experience, such as working in collaborative groups and participation in campus activities, played a role on their soft skills development. Figure 3 presents the community college experiences participants referenced as having contributed to their soft skills development. WBL is at the peak of the figure to represent this experience playing the most significant role in students’ soft skills development.
Figure 3. Participants soft skills development community college experiences
Participants perceived that WBL allowed them the opportunity to focus on enhancing three areas of their development: prioritizing communication, prioritizing teamwork, and relating their WBL experience to the CTE program. Additionally, community college experiences also played a minor role in the participants’ soft skills development—if the participant had the opportunity to participate in them.

**Community College Experience One: WBL**

Of the major themes discovered in the study, WBL was identified for playing a significant role in participants’ development of soft skills. Each participant in the study was engaged in a WBL experience directly related to their program of study. WBL provided students with an opportunity to apply theory and concepts from courses in their CTE program to practical situations. Viewed as a form of experiential learning, WBL not only enhanced participants’ technical skills, but also their soft skills. Participants were asked questions in the face-to-face interview about their WBL experience and the role it played in their development of soft skills. Participants were asked to define WBL and describe the type of WBL they engaged in as a student. They were asked to share the role they felt communication, teamwork, and problem solving played in their WBL experience. I also asked participants to share what the WBL course taught them about soft skills. Additionally, participants were asked to discuss some things they noticed about their soft skills during WBL and how they felt the experience was helpful in practicing those skills.

Participant responses to the questions were related to their perceptions on the role their WBL experience played on their soft skills development. Participants were consistent in their responses. Overall, participants perceived that WBL was the community college experience
which prepared them to have soft skills. Connected to 50 of the 62 process codes, all 11 participants were able to enhance their soft skills through their WBL experience.

As noted in literature, WBL serves the purpose of enriching learning through work experience and student reflection (Raelin, 2011). Participants in the study shared how this experience enriched their soft skills. Three key elements of WBL enhanced participants’ soft skills development. Those three elements were prioritizing communication, prioritizing teamwork, and relating their WBL experience to their CTE program.

One participant, Michelle, shared strong views on how WBL prepare her to be able to prioritize communication. Even with at least five years of prior work experience, Michelle discussed how she began her WBL lacking effective communication skills. Her issues with communication during her WBL experience were grounded in the fact that she chose to view the experience less serious than it was. Michelle referred back to the skill of prioritizing communication consistently throughout her interview. Michelle even shared how her lack of communication at the onset of her WBL experience almost cost her a positive relationship with her supervisor. Michelle shared the following:

Communication plays a big role in WBL. If you don’t talk, you’re going to have conflict. In order to have teamwork, you have to communicate, and if you don’t communicate, you’re not going to succeed. I like what I saw in the office during my WBL when everyone communicates. When they communicate, they got the job done. During my WBL, I learned how to communicate through emails, phone calls, and face-to-face conversations. I definitely improved my communication skills.
Michelle’s perspective on the role WBL played in developing communication skills was not unique to the study. Other participants shared similar perspectives to Michelle on how WBL enhanced the skill of prioritizing communication.

Another example of the participants’ perspectives on the role WBL played developing the skill of prioritizing communication was from Vanessa. With more than 15 years of prior work experience, Vanessa perceived WBL to play a pivotal role in her learning to prioritize communication. This was important for Vanessa because she was changing her career. Her participation in WBL allowed her the opportunity to learn more about the role of communication in her new-found career. Compared to her former career as an educator, Vanessa discovered there were differences in the style and preferred method of communication in her new career, computer science. Vanessa stated:

I had lot of forward facing [communication] in my previous work experiences. Now, there is not as much face to face. Some phone conversations … You have to learn which people preferred which type of communication because some people prefer all electronic, some people would prefer a phone call … Not very much face to face because people were all over. The WBL experience helped me to learn more about communication in this career.

Having the opportunity to experience this aspect of Vanessa’s new career through WBL was key for her. WBL allowed her the opportunity to learn how to communicate in the computer science career space. While this could be explained and possibly practiced in the classroom setting, the real-time experiential learning in WBL provided her with the hands-on experience she needed to practice this up close and personal.
In addition to contributing to learning how to prioritize communication, WBL also played a significant role in participants’ prioritizing the soft skill of teamwork. Throughout the interviews, participants discussed how the importance of teamwork was a vast discovery for them. One such example was Lisa. With no prior work experience, WBL provided Lisa with an opportunity to understand what it was like to work as a team in her future computer science career. When asked how she perceived teamwork to be important in her WBL experience, Lisa stated, “I think teamwork is important because you can learn a lot from different people’s opinions.” She also shared how WBL taught her that teamwork helped her to learn that she will have to rely on other to solve programs in the real world. According to Lisa, learning to prioritize teamwork helped her to understand that if she is unable to solve a problem, there may be someone else who can. Not having work experience, WBL was key for Lisa because it provided her the opportunity to observe what teamwork looked like before she obtained a job in the field.

Along with Lisa, participants with prior work experience shared parallel perspectives on the role WBL played in helping them understand the importance of prioritizing teamwork. Shirley began WBL with at least 10 years of work experience, including time in the military. Even with her work history and experience working in a team, she shared how significant the role of WBL was to her being able to prioritize teamwork. Shirley said, “I can’t do everything by myself. When everything comes together during WBL, that is actually teamwork. One person can’t do it without the other person.” While Shirley had a foundation in teamwork, her WBL experience enhanced her teamwork skills.

While relating WBL to their CTE program may not classify as a soft skill, participants found it to be valuable. Participants perceived that being able to make connections between their
coursework to the hands-on work experience gained during WBL allowed them the opportunity to gain a better understanding of their future careers. William shared how being able to connect coursework to practical experience gave him the confidence that he was able to successfully perform tasks:

The curriculum prepares you … When I’m at the work-based learning, I do a homework assignment the night before … I find myself thinking about my assignments as I’m working with a client. As far as the customer service class, it teaches you the best way to answer the phone, and different tactics you can use to get someone to participate with what your objective is.

With over 10 years of work experience, Elizabeth found that WBL was the opportunity she needed to connect theory to practice. Elizabeth has some experience working in the public service area she was studying. However, WBL was more closely aligned with her interests than any work experience she had encountered in the field. Elizabeth said, “WBL provided experience in the program you are studying. It provides good hand-on experience.” Elizabeth, along with other participants, shared how WBL being a part of their academic program enhanced their overall workplace skills.

As participants shared their perspectives on their WBL experiences, they reflected on the impact it had on the development of their soft skills. Participants shared how WBL allowed them to prioritize communication. Through WBL they were engaged in activities that influenced this major soft skill. Participants also discussed the soft skill of teamwork. Each discussed how WBL gave them the opportunity to get close with the concept of teamwork in the world of work. Participants also shared how being able to relate their WBL experience to theories and concepts in the classroom prepared them to be successful in performing assigned tasks and responsibilities.
during their experience. These findings support WBL as playing a major role in preparing students to demonstrate soft skills.

**Community College Experience Two: The Overall Experience**

In my observation of the study’s findings, it was obvious that participants perceived WBL to play a significant role on their soft skills development. In an effort to develop valuable recommendations and implications for future practice, I continued to analyze data from the face-to-face interviews. The purpose was to observe additional community college experiences in which participants perceived to have played a role on the development of their soft skills. As the researcher, I deemed this to be essential because community colleges provide students with comprehensive educational experiences. Elements of the community college experience can be connected directly to instructional and academic development. Other elements of the community college experience can serve the purpose of fostering students’ social and leadership skills.

During the interview, I asked participants to share how they perceived their overall community college experience prepared them to demonstrate soft skills. Participants shared 81 quotations about how elements of their community college experience helped them develop soft skills. The process code prioritizing additional college experiences was assigned to 30 of the 81 quotations. Participants perceived that their community college experience did provide them with an opportunity to demonstrate soft skills through other experiences beyond WBL they encountered. Experiences, such as group/cooperative learning, interacting with others, and navigating through college, were additional elements of the participants’ overall community college experience in which they discussed as being an added benefit to their soft skills development.
In addition to WBL, Elizabeth shared the benefit of group/cooperative learning to her soft skills development. During her first semester in the public service program, she was able to take courses on another campus and had very little interaction with other students at the college’s main campus. She became comfortable with the campus where her program was taught and the students on that campus. As she progressed in her program, it became necessary for her to take more courses on the college’s main campus and meet new students. Elizabeth shared:

I had to learn time management. Since I had to go to the main campus, I needed to learn my way around. That required me to be on time. Also, I had to learn how to build relationships with people I did not know and that I had not worked with before. Having to work with those other student groups and on assignments helped with that.

Attending classes on main campus provided Elizabeth with another opportunity to practice the soft skill of time management. It was also beneficial for her to work in groups with new people. This provided her with the skills she needed to build relationships.

Michelle shared how her overall experience at College #1 provided her with additional experiences beyond WBL that helped her to develop and enhance her soft skills. She discovered that by her just being enrolled at the community college she was able to develop soft skills. Michelle discussed how she was shy and being at the community college helped her to overcome her shyness and improve her communication. Michelle met a lot of people at the college. She said, “The overall college experience did help. I talked to and met a lot of people.” Interacting with her academic advisor was helpful in building Michelle’s communication skills. Learning to talk to her academic advisor was a “big step” because communication was a skill Michelle admittingly lacked during her WBL experience.
Learning how to navigate through college is not unique to one student. This was an element of Vanessa’s overall experience at College #1 that she perceived, coupled with WBL, prepared her to demonstrate soft skills. For Vanessa, navigating through the community college often meant she spent time on campus figuring out how to get processes completed from office to office. She had to learn who could help her in getting tasks completed. She described:

Being able to figure out where to go was important. That helped with problem solving.
Then I had to communicate with people. If I submitted a form and it came back to me, I had to learn who I needed to communicate to in order to help me get the form to the right place and the answer I needed.

The processes involved in navigating through college created opportunities for Vanessa to enhance her communication and problem-solving skills. Even with prior work experience, and a solid WBL, Vanessa shared she appreciated the overall community college experience and being able to make the connection to her soft skills development.

The overall community college experience was explored in the study as a way to have participants share all possible factors they perceived to have contributed to their soft skills development. Exploring the overall experience allowed participants to reflect beyond their WBL experience and share any additional perspectives they had to offer as it related to the development of their soft skills. Overall, participants felt as though there were experiences that played a minor unintentional role in developing their soft skills.

**Chapter Summary**

The study provided insight on how community college students perceived their college experience prepared them to develop soft skills. Eleven students enrolled in nine different CTE programs in North Carolina were participants in the study. Each participant was enrolled in a
WBL experiential learning course. In the course, they were given the opportunity to demonstrate soft skills, as the course provided them with work experience in their program area of study. Through face-to-face interviews, participants shared their perspectives on the topic of soft skills preparation as it related to their community college experience.

A total of 682 quotations from the interview transcripts were organized into 62 process codes in their connection with the topic. Each of the quotations were linked with a theme. There were nine themes, with five of the themes being explored in the study due to the frequency of quotations in which they were linked. The top five themes were: 1) WBL, 2) KSAs, 3) preparation, 4) additional soft skills, and 5) CTE program curriculum. Based on the number of process codes, each of the top five themes were classified as either major or minor. WBL, KSAs, and preparation were major themes. Additional soft skills and CTE program curriculum were minor. These themes provided insight into elements of the participants’ community college experience which supported the discovery of the experiences participants perceived to have played a role in their soft skills development.

In analyzing the themes and participants’ responses, the study found that WBL played the most significant role in students’ soft skills development. According to participants, WBL overwhelmingly helped them to develop or enhance the importance of prioritizing communication and teamwork. Participants also perceived that being able to relate their WBL work experience to their CTE program curriculum was beneficial. It provided them with an idea of what to expect when they began their future careers.

The study also explored how the participants perceived how elements of their overall community college experience played a role in their soft skills development. While WBL was the dominate experience, participants remarked upon other aspects of the community college
experience as having played a significant role on their development on soft skills, including such experiences as group/cooperative learning, interacting with others, and navigating through college. Though they played a minor role, these experiences, coupled with WBL, provided the students with opportunities to develop their soft skills.

This study provided participants with an opportunity to reflect on WBL and their overall community college experience. Each participant contributed meaningful insight on WBL which can be useful for practitioners in the field. The concluding chapter provides an interpretation of the findings, conclusions, and implications for future research and practice.
CHAPTER FIVE: CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

This single-case qualitative study explored perspectives on the role of college experiences on the soft skills development of North Carolina community college students enrolled in CTE programs. Eleven students enrolled in nine different CTE program areas were participants in the study. The participants were students at four different community colleges in North Carolina. Each participant was enrolled in an experiential learning course, WBL, at the time of the study. Through face-to-face interviews, participants shared their perspectives on how various experiences through their community college journey afforded them the opportunity to demonstrate their soft skills. The experiences which helped them to demonstrate soft skills, ultimately, aided in the development of those skills in the process.

Data collected during face-to-face interviews were triangulated with a course syllabus from an academic WBL course offered at one of the community colleges in the study, along with curriculum from the NC-NET Employability Skills Toolkit. Both of these resources are available to NCCCS faculty and provide curriculum on the topic of soft skills. I sought to triangulate the data discovered in the interviews with other curriculum resources related to the topic. Through this data analysis, I was able to develop the findings of the study. These findings will contribute to existing literature on the importance of providing experiences for students to demonstrate soft skills in an effort to enhance and develop these skills, as shared from the perspectives of CTE students.

Introduction

Community colleges are the talent pipeline to the country’s workforce. These institutions of higher learning and continuing education are complex in the broad range of functions they provide around educational, social, and economic development (Boggs & McPhail, 2016).
While the mode of delivery of the community college education has been redesigned over the years, the college mission has remained constant. That mission is a focus on accessible education and student success (Boggs & McPhail, 2016). Student success calls for community colleges to provide a myriad of experiences that prepare students for various careers. Once students have the education needed to contribute to the workforce, they are able to make contributions to the state, national, and global economy. They can also provide a living for their families and an alternative life for themselves.

Offering viable CTE programs at community colleges supports students obtaining the skills needed to fill gaps in the talent pipeline. Employers have a demand for highly skilled workers to meet the demands of the country’s labor market. According to Gordon (2014), the skills needed for the labor market extend beyond the technical skills of math, science, and literacy. Employers are demanding current and future workforce talent include employees who are equipped with a set of 21st century skills which allow them to be ready to compete in the global economy. These 21st century skills are commonly known as soft skills. While there are core technical and academic subjects students must learn, soft skills—such as communication, problem solving, and teamwork—are essential to learning and preparing students for the workplace (Partnership for 21st Century Skills, 2009).

To contribute to improvement efforts in CTE community college students’ soft skills preparation, this study examined the efforts of the NCCCS in preparing students with the soft skills needed for success. The NCCCS has answered the challenge to fulfilling the community college mission of access and student success in all areas. This community college system has made efforts to provide curriculum and resources which provide students with experiences to enhance their soft skills and ensure they are prepared for the labor market. Through courses such
as WBL, and resources such as NC-NET Employability Skills Toolkit and the curriculum of the Employability Skills Alignment Project (ESAP), NCCCS provides resources and experiences for soft skills development.

Even though colleges within the NCCCS provide resources to support soft skills development, there is little evidence on the outcome of some of these efforts. Follow up and assessment on soft skills development resources is lacking. To understand the effectiveness of soft skills development efforts, the NCCCS would benefit from gathering perspectives through an assessment and study of each. An assessment of these experiences and curriculum can inform other colleges within the NCCCS on how to make continuous improvements in these areas. To contribute to the enhancement of efforts in providing soft skills development, this study explored the perspectives of North Carolina community college students enrolled in CTE programs about the experiences they perceived to have played a significant role in their development of soft skills.

**Conclusions**

This study produced two significant conclusions regarding the perceptions of community college students enrolled in CTE programs on the role their college experience played on their soft skills development. The first conclusion is that students perceived they received soft skills development through an intentional community college experience. Intentional community college experiences that provide students with an opportunity develop their soft skills purposely place students in situations where they are able to demonstrate both technical and soft skills. The primary intentional experience for students in this study was WBL. The study also revealed that students perceived there were unintentional experiences which played a role in their soft skills development. These unintentional experiences included participation in cooperative learning
groups, navigating through college, and being able to casually interact with others. Whether intentional or unintentional, it was determined that community colleges provided experiences that students perceived contributed to their soft skills development.

**The Intentional Experience**

WBL provides students with the opportunity to gain work exposure and experience in a particular career field. WBL can be classified as job shadowing, service-learning, internships, cooperative work experience, and apprenticeships (Brown, 2003). These opportunities are valuable experiences in which students can develop professionally and personally. WBL also allows employers to make assessments about how to deal with issues in the workplace (Lester & Costley, 2010). Participants in this study engaged in WBL as a part of their CTE curriculum programs. Each provided their perspective on the role WBL played on their soft skills development. Overwhelmingly, participants perceived their participation in WBL as providing them an optimal experience to demonstrate their soft skills. Through WBL, participants shared how they were able to understand the importance of prioritizing three soft skills consistently found in the literature: communication, problem solving, and teamwork.

**Unintentional Experiences**

Interviews in case study research often require researchers to pay close attention to all information provided by the interviewees, as it provides a gateway to key sources of evidence in the study (Yin, 2018). In this study, it was key to observe additional data provided by the participants in the face-to-face interviews which may have unintentionally played a role in their soft skills development.

Participants remarked how opportunities to participate in cooperative learning groups with classmates allowed them to develop skills in communication and teamwork. These learning
opportunities brought students together in situations where they collaborated and learned to consider the ideas of others. Learning to navigate through the processes at the community college also contributed to the enhancement of participant communication skills. Participants shared how having to learn how particular processes worked in the community college helped them to problem solve.

Lastly, the overall community college experience provided participants the opportunity to interact with others in a way that contributed to their communication skills and time management. Each of these elements of their overall community college experience provided unintentional opportunities to develop soft skills.

**Implications for Practice**

The findings of this study yield implications useful for stakeholders in the community college and CTE. These implications speak to WBL and CTE curriculum development. The implications of this study also provide the relevancy of the findings to its theoretical framework, human capital theory. Each implication should be considered as CTE practitioners consider soft skills development training for community college students.

**Implications for WBL**

While the pedagogy of WBL and its place in higher education has created global debate, it is clear this form of learning provides a complement to classroom instruction (Nottingham, 2017). The participants in the study undeniably perceived that WBL played a major role in their soft skills development. Having the opportunity to demonstrate these skills in a work environment comparable to their future career was beneficial. As community college CTE programs are planning curriculum for credentials, it is important to consider adding a WBL experience as a required component. The participants in the study were enrolled in a WBL
course at the end of their CTE program. Offering WBL at the end of a student’s program can
serve as a capstone and assessment of student’s technical and soft skills; however, offering WBL
opportunities at the beginning and throughout a CTE program, such as mentorships, job
shadowing, and short-term internships, can provide students with career exposure early in their
community college journey. While offering WBL opportunities can cause additional learning
objectives colleges could explore incorporating a work plan model in order to address offering
WBL. Perhaps requiring WBL as a part of an Individual Career Plan (ICP) for students would be
beneficial. This will allow students the opportunity to intentionally plan WBL activities along
their academic experience. The ICP model would include career exploration, career exposure
and career experience activities. Opportunities for CTE students to engage with employers early
play a key role in their soft skills development.

Quality WBL experience provides opportunities for students to engage in reflective
practice. According to Siebert and Walsh (2012), reflection and evaluation of work require an
analysis of the learner’s performance. Reflective practice also challenges the learner to engage
in honest dialogue about ways they can enhance their workplace skills. Growth and expansion of
WBL in colleges calls for more opportunities for students to reflect and share their perspectives
on this learning experience (Siebert & Walsh, 2012). Opportunities for reflection and feedback
in experiential learning are critical for developing learning outcomes for these types of
experiences (Eyler, 2009). This study served as an opportunity for students enrolled in a WBL
course to participate in reflective practice. Questions about their WBL experience invited
participants to think about their performance, what they learned, and how they will apply what
they learned when they embark upon their future career. Participants also had the opportunity to
be thoughtful about their soft skills. They identified the skills they developed and areas where
they could continue to grow. Reflecting on their experience can provide students with an experience that will contribute to their success, as well as provide the CTE practitioner with feedback on areas where experiences can be enhanced.

**Implications for CTE**

Jobs in the labor market identified as middle-skilled represent one-half of today’s careers. With the continued influx of technology, growth in construction, and health career jobs, the need for highly trained middle-skilled employees will continue to grow (Gordon, 2014). The skills gap will need to be closed significantly to meet the demand for today’s labor market. Employers are not only finding a technical skills gap. There is a gap in soft skills. CTE curriculum is key resource to closing that gap.

Soft skills training and education is critical. This study found that community college students enrolled in CTE programs in North Carolina perceived that while their overall college experience provided them with opportunities to develop soft skills, it was WBL which played a significant role in the development of those skills. To prepare graduates to close the skills gap, practitioners in CTE are encouraged to review their current curriculum to include more intentional opportunities, such as WBL, to develop students’ soft skills. Practitioners and stakeholders in CTE should also ensure they understand the soft skills needed for success. This may involve conducting consistent program assessment that includes input from employers in the field to ensure colleges are equipping graduates with the skills needed to be successful and to make contributions to the labor market.

**Implications for Theory**

This study was explored through the framework of the human capital theory. According to Becker (1993), the opportunity for employees to learn new skills as they work can lead to an
increase in their productivity. An investment in higher education is included in the ways in which individuals choose to obtain new skills. Investments in education contribute to human capital (Schultz, 1961). The pursuit of higher education provides an opportunity to advance one’s living and ability to contribute economically to society (Harris & King, 2015). Participants in the study engaged in education and training that contributed to the growth and development of their KSAs. Their pursuit of higher education demonstrates a commitment to improving their human capital and overall quality of life for now and the future.

**Recommendations for Further Research**

This study explored perceptions on the role of college experiences on the soft skills development of North Carolina community college students enrolled in CTE programs. The study identified five top themes in soft skills development: 1) WBL, 2) KSAs, 3) preparation, 4) additional soft skills, and 5) CTE program curriculum. Of the top five themes, WBL was the one which provided students with an actual experience where they could demonstrate their soft skills. Participants in the study also shared how elements from the overall community college experience made minor contributions to their soft skills development. Those elements were cooperative/group learning, navigating through college, and interacting with others.

This study contributes to existing literature on soft skills development by filling in the gap on this topic from the perspective of students. There are limitations in the study which should be documented. The diversity in prior work experience in the sample should be explored. There were 11 participants in the study. Of the 11, two had no work experience before enrolling in the experiential WBL course. The remaining participants had a minimum of five years of work experience. This created an imbalance in exploring the topic from the perspectives of those who had prior work experience which could contribute to the participants’ knowledge of soft
skills. Further research should explore the topic with participants having more diversity in their years of prior work experience to see if there are varying perspectives.

The community colleges in the study were classified as medium or small. This is based upon each of the colleges’ FTE over the past three to five years. With FTE connected to each colleges’ funding, this could play a part on the resources they are able to offer students. Exploring the topic from a broader scope that includes large colleges may bring additional contributions to the literature.

Lastly, further research on the topic should explore the perspectives of CTE program graduates. Graduates employed in careers which align with their CTE credential have a responsibility to demonstrate soft skills on the job. It would be beneficial to CTE community college faculty and other stakeholders in this space to understand experiences recent graduates had in college that they perceived had been most useful in their soft skills development. Graduates can share how they are now able to demonstrate these skills in their careers.

Summary and Personal Reflection

This study explored how CTE students perceived their community college experience contributed to their soft skills development. Students perceived the primary element of their community college experience that contributed to their soft skills development was WBL. Having the opportunity to engage in a learning experience where they were able to demonstrate these skills and receive immediate feedback on their performance played a significant role in their soft skills development. Framed around the human capital theory, students shared how developing their soft skills contributed to their KSAs. More opportunities are needed in the CTE curriculum for students to develop and enhance their soft skills to be successful in the workplace.
Just a few short weeks ago, I became ill and visited a doctor. My visit began with a check-in with the receptionist at the front desk. The medical office administrator greeted me with eye contact and proceeded to ask me vital questions about my health and current symptoms. She then instructed me to wait in the office’s waiting area. In about two minutes, my name was called and I followed a registered medical assistant (RMA). The RMA asked me a series of questions to understand what the next steps should be. After analyzing my responses, the RMA examined my vital signs and ran a quick medical test. The medical test was taken to an in-house lab. There, a lab assistant shared the results with the RMA, who shared them with the doctor, who then provided a diagnosis and prescription. Upon leaving the doctor’s office, I proceeded to pick up the prescription from the drug store. The pharmacy technician filled the request and explained the directions that accompanied the medication. In a few short minutes, I was home in my bed and resting. I began to reflect on the events that occurred from the time I registered at the front desk of the doctor’s office until the time I was getting my rest. In my reflection, I took notice of how each of the professionals who assisted me on the road to recovery possessed not only the technical skills needed to perform their job properly, but they also possessed and displayed the appropriate soft skills. The skills each displayed, such as communication, problem solving and teamwork, contributed to my recovery. This experience confirmed for me just how essential effective soft skills are to the world of work.
REFERENCES


Appendix A: NCCCS ESAP Request for Proposal Memorandum

NORTH CAROLINA COMMUNITY COLLEGE SYSTEM

Jennifer Haygood Acting President
Mailing Address: 5016 Mail Service Center | Raleigh, NC | 27699-5016
Street Address: 200 West Jones | Raleigh, NC 27603 |
Phone: 919-807-7100 | Fax: 919-807-7173
www.nccommunitycolleges.edu

AN EQUAL OPPORTUNITY EMPLOYER

November 20, 2017

RESPONSE DEADLINE: December 8, 2017

MEMORANDUM

TO: Presidents
Chief Academic Officers
Career and Technical Education Directors College and Career Readiness Directors Workforce Continuing Education Directors

FROM: Lisa M. Chapman, Ed.D.  Senior Vice President / CAO

SUBJECT: Employability Skills Alignment Project Grant for 2017-2019

Proposals are being solicited for an Employability Skills Alignment Project (ESAP) to occur between February 1, 2018, and June 30, 2019. The ESAP is supported by the Carl D. Perkins Career and Technical Education Act of 2006, the North Carolina State Board of Community Colleges, and the College and Career Readiness/Basic Skills Division supported by the Adult Education and Family Literacy Act as reauthorized by Title II of the Workforce Innovation and Opportunity Act (WIOA), 2014. The funding is contingent upon receipt of funds from the U.S. Department of Education, North Carolina State Board of Community Colleges, and College and Career Readiness.

This grant will be administered collaboratively by the following sections of the North Carolina Community College Programs and Student Services Division: Academic Programs, Career and Technical Education, College and Career Readiness, and Workforce Continuing Education.

Presidents
Chief Academic Officers
Career and Technical Education Directors
College and Career Readiness Directors
Workforce Continuing Education Directors
Goals of the ESAP include the following: (1) assessment of employability skills training and tools currently utilized in the NC Community College System; (2) identification of employability skills that employers have defined as “in demand”; (3) alignment of existing employability skills training with current industry needs through a skills-gap analysis; (4) curation of existing resources and materials addressing industry needs; (5) development of new employability skills training materials such as courses and modules to reflect the needs of North Carolina employers and workforce; (6) creation of a framework for disseminating integrated resources and materials; (7) professional development for vested stakeholders including faculty and staff.

The results of this time-limited project must include innovative and streamlined curriculum revision strategies, which have a long-term, systemic impact in the targeted areas.

Requests should be reasonable and appropriate for activities that must conclude by June 30, 2019. Funds may be used for faculty release time (substitute pay), travel and subsistence, materials and supplies necessary for project implementation, and contracted services. Colleges interested in taking the lead on this initiative are encouraged to apply.

A link to the RFP has also been posted on the NCCCS Requests for Proposal (RFPs) website at http://www.nccommunitycolleges.edu/requests-proposal-rfps. If you have questions about the RFP or the ESAP, please contact Dr. Hilmi Lahoud, Program Coordinator for Business Technologies, at 919-807-7116 or lahoudh@nccommunitycolleges.edu.

LMC/HL
Attachment
c: Ms. Margaret Roberton
Ms. Gilda Rubio-Festa
Mr. Wesley Beddard
Dr. Robert J. Witchger
Dr. Hilmi Lahoud

Email
Appendix B: College Champion Email and Qualtrics Survey

Greetings,

My name is (College Champion Name), and I serve (name of college) as the (College Champion Title). I am assisting Micara Lewis-Sessoms, a graduate student at North Carolina State University. Micara is conducting research at the college on Career and Technical Program students’ college experiences. I am emailing you to solicit your participation in the study. Participation is completely voluntary. Participants will receive a $25 Amazon gift card for their time.

Please click on the following link to complete the student questionnaire to determine your eligibility to participate and express your interest in the study. **Be sure to take the survey in private location with your web browser in private or incognito mode. Once you are finished with the survey, please erase your browser history and close your browser.**

https://ncsu.qualtrics.com/jfe/form/SV_07d6ldxLXZgZhfT

If you have any questions, or are interested in learning more about the study, you may contact the researcher at mclewis5@ncsu.edu or (919) 679-7305.

Thank you for your time,

(College Champion name, position and contact information)

Your college will be participating in a research study on the role community college experiences play on the soft skills development of students enrolled in Career and Technical Education programs.

You have been selected to complete the following student questionnaire as a way to determine your eligibility and interest in participating in this study. The responses will be reviewed by the researcher. Upon completion of the questionnaire, you will receive a follow-up email regarding next steps.
Please complete the questionnaire to the best of your ability. Your responses will be kept confidential. Your time is greatly appreciated.

Q1. What is your name? (First, Middle, Last)
Q2. Provide your date of birth.
Q3. What is your mailing address?
Q4. List your best available contact phone number. Be sure to include the area code.
Q5. Provide your best available contact email address.
Q6. What is your program of study?
Q7. When do you plan to complete your program of study? (Select one.)
   Fall 2019
   Spring 2020
Q8. Will you be or are you enrolled in work-based learning (WBL) courses for the Fall 2019 semester? (Select one.)
   yes
   No
Q9. Please verify your interest in this study. (Select one.)
   I am interested in participating in this study. (If you have selected this choice, answer Question 10.) I am not interested in participating in this study.
Q10. The researcher may contact me using the information I provided with next steps. Yes
Appendix C: Participant Email and Informed Consent

Greetings,

Thank you for your interest in participating in the research study being conducted at your community college. Your responses to the student questionnaire have identified you as being a student who is eligible and interested in participating in this study. As a reminder, participants will receive an Amazon gift card for their time.

As a reminder, I am a graduate student at North Carolina State University. In the coming weeks, I will be in touch with you using the contact information you provided to discuss next steps in the process.

If you should have any questions prior my reaching you, please feel free to contact me Monday-Saturday, 9:00am-7:00pm on her private phone at (919) 697-7305. You may also email me anytime at mclewis5@ncsu.edu.

Again, thank you for participating in this study.

Sincerely,

Micara Lewis-Sessoms

Title of Study: A case study exploring perspectives on the role of community college experiences on the development of soft skills of North Carolina community college students enrolled in career and technical programs (eIRB # 16899)
Principal Investigator: Micara Lewis Sessoms, mclewis@ncsu.edu, (919) 697-7305
Funding Source: None
Faculty Point of Contact: James E. Bartlett, II, Ph.D. james_bartlett@ncsu.edu, (919) 208-1697

What are some general things you should know about research studies?

You are invited to take part in a research study. Your participation in this study is voluntary. You have the right to be a part of this study, to choose not to participate, and to stop participating at any time without penalty. The purpose of this research study is to gain a better understanding of is to gain a better understanding of the role community college experiences play in the soft skills development of students enrolled in career and technical education (CTE) programs. Soft skills are personal attributes which contribute to career development. This study will focus on the soft skills of communication, teamwork, and problem solving. We will do this through collecting data from and surveying students who are enrolled in CTE programs at a (Name of College here) in North Carolina.

You are not guaranteed any personal benefits from being in this study. Research studies also may pose risks to those who participate. You may want to participate in this research because you want to reflect on how your community college experiences have shaped your soft skills or have
a desire to help others. You may not want to participate in this research because you may be a private person who does not want to share your academic records, thoughts, or experiences of WBL courses with a researcher.

Specific details about the research in which you are invited to participate are contained below. If you do not understand something in this form, please ask the researcher for clarification or more information. A copy of this consent form will be provided to you. If, at any time, you have questions about your participation in this research, do not hesitate to contact the researcher(s) named above or the NC State IRB office. The IRB office’s contact information is listed in the What if you have questions about your rights as a research participant? section of this form.

What is the purpose of this study?

The purpose of the study is to examine students’ perspectives about the role their community college experiences play on their soft skills development.

Am I eligible to be a participant in this study?

There will be approximately 6-30 participants in this study.

In order to be a participant in this study, you must agree to be in the study and

- Between the ages of 18-64
- Enrolled as a student in a Career and Technical Education (CTE) program at (Name of College)
- In your last semester or next to last semester before completing an academic credential; this can be a degree, certificate or diploma as determined by your program of study.
- Registered in Work-Based Learning (WBL) courses at the time of the study
- CTE program must list WBL courses as a requirement for completion of degree, diploma or certificate.

You cannot participate in this study if you do not want to be in the study or you are

- Under the age of 18 or over the age of 64
- Enrolled in an academic program not identified as a Career and Technical Education (CTE) program at (Name of College)
- Not in your last semester of next to last semester before completing a degree, diploma, or certificate.
- Not registered in Work-Based Learning (WBL) courses at the time of the study

What will happen if you take part in the study?

If you agree to participate in this study, you will be asked to do all of the following:
1. Allow the researcher to access your WBL110 academic records for research. Specifically, I would like access to all assignments, evaluations, and completed materials produced in conjunction with this course. This will take no additional time or effort on your part other than consenting to share your records with me for the purposes of this research.

2. Participate in two face-to-face interviews that will ask you about the role you feel your community college experience has played on your development of soft skills (i.e. teamwork, communication, and problem solving). These interviews can occur in person or over a secure platform such as Zoom. Both interviews will take place between August 2019 and December 2019. Each interview is expected to last 45-90 minutes each. These interviews will be audio-recorded and transcribed by a transcription service.

The total amount of time that you will be participating in this study is 60 to 90 minutes.

Audio recording
If you want to participate in this research, you must agree to be audio recorded. If you do not agree to be audio recorded, you cannot participate in this research.

Risks and benefits
There are minimal risks associated with participation in this research. The risks to you as a result of this research include possible embarrassment or harm to relationships with previous, current, or future employers. I am taking many steps to prevent that from occurring. The academic records that you are agreeing to share with me will be redacted so that your identity cannot be linked to the research data at the conclusion of this study. Your name, and the names of other people or institutions, will be redacted from the survey data that you choose to share. Moreover, I will be careful not to report any information which has the potential to identify you or others in any presentations or publications that emerge from this research.

There are no direct benefits to your participation in the research. The indirect benefits are that the information that you share with me has the possibility to help others in CTE WBL programs at (Name of College here) and other institutions.

Right to withdraw your participation
You can stop participating in this study at any time for any reason. In order to stop your participation, please tell the researcher in person or contact the researcher via the following personal and private phone number, (919) 697-7305. Your data will be used unless you revoke your consent.
If you choose to withdraw your consent and to stop participating in this research, you can expect that any information you provided (identified, de-identified or re-identified as yours) will be removed immediately from the researcher’s data set and destroyed. If you choose to revoke your consent after the data is published, the PI will attempt to remove your data from the data set. This is possible in some, but not all, cases.

Confidentiality, personal privacy, and data management

Trust is the foundation of the participant/researcher relationship. Much of that principle of trust is tied to keeping your information private and in the manner that we have described to you in this form. The information that you share with me will be held in confidence to the fullest extent allowed by law. Protecting your privacy as related to this research is of utmost importance to me. However, there are very rare circumstances related to confidentiality where I may have to share information about you. These are limited to instances in which imminent harm could come to you or others.

All data will be stored securely on a private, password protected secure computer. Certain data will be secured on the researcher’s private, password protected N.C. State Google share drive. Forms collected and thumb drives used will be secured by two locks. They will be locked in a fireproof safe which will be locked in a cabinet.

How I manage, protect, and share your data are the principal ways that I protect your personal privacy. Data generated about you in this study will be de-identified.

De-identified. De-identified data is information or bio-specimen(s) that at one time could directly identify you, but that I plan to record this data so that your identity is separated from the data. I will have a master list with your code and real name that I can use to link to your data. The master list of names will allow me to analyzing the research data. This master list will be saved on a Microsoft Excel spreadsheet on the PI/researcher's password-protected and private personal computer. This information will also be saved on the PI/researcher's flash drive which will be locked in a personal and private locked fireproof safe which will be kept in a locked cabinet only being used for this study. Additionally, the master list will be stored in a N.C. State Google drive folder via the PI/researcher's private password-protected student account. While I might be able to link your identity to your data at earlier stages in the research, when the research concludes, there will be no way your real identity will be linked to the data I publish.

The PI/researcher, faculty advisor, transcription service and others on the research team will have access to the raw research data; however, only de-identified data about you will be shared with others in future publications, presentations or research endeavors. And to help maximize the benefits of your participation in this project, by further contributing to science and our community, your de-identified information will be stored securely and indefinitely for future research and may be shared with other people without additional consent from you. Your de-
identified information may also be made available to the public as required by a professional association, or journal for future publications, presentations and research endeavors.

**Compensation**

For participating in this study, you will receive a $25 Amazon gift card after completing all study activities. This gift card will be to the address you provide to the PI/researcher.

If you withdraw from the study or revoke your consent prior to completing all of the study’s activities, you will not receive any compensation.

**What if you are a (Name of College) student?**

Your participation in this study is not a course requirement and your participation or lack thereof, will not affect your class standing or grades at (Name of College).

**What if you are a (Name of College) employee?**

Your participation in this study is not a requirement of your employment at (Name of College) Community College, and your participation or lack thereof, will not affect your job.

**What if you have questions about this study?**

If you have questions at any time about the study itself or the procedures implemented in this study, you may contact the researcher, Micara Lewis Sessoms, 150 Sutherland Drive, Franklinton, North Carolina, 27525, mclewis5@ncsu.edu, and (919)697-7305. You may also contact the researcher’s faculty advisor, James E. Bartlett, II, Ph.D., james_bartlett@ncsu.edu, and (919) 208-1697.

**What if you have questions about your rights as a research participant?**

If you feel you have not been treated according to the descriptions in this form, or your rights as a participant in research have been violated during the course of this project, you may contact the NC State IRB (Institutional Review Board) Office. An IRB office helps participants if they have any issues regarding research activities. You can contact the NC State IRB Office via email at irb-director@ncsu.edu or via phone at (919) 515-8754.

**Consent to Participate**

By signing this consent form, I am affirming that I have read and understand the above information. All of the questions that I had about this research have been answered. I have chosen to participate in this study with the understanding that I may stop participating at any
time without penalty or loss of benefits to which I am otherwise entitled. I am aware that I may revoke my consent at any time.

Participant’s printed name ______________________________
Participant's signature ___________________ Date ____________
Investigator's signature ___________________ Date ____________
Appendix D: WBL Academic Course Syllabus and Schedule

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Assignment(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Friday, January 17th</td>
<td>Soft Skills</td>
<td>Soft Skills Assessment #1 due by 9am. This assignment must be completed in order for you to remain in the course; Select mock interview date and time.</td>
</tr>
<tr>
<td>Wednesday, January 22nd</td>
<td>Interpersonal Skills and Teamwork</td>
<td>Discussion Board One completed by 9am Select mock interview date and time.</td>
</tr>
<tr>
<td>Wednesday, January 29th</td>
<td>Communication</td>
<td>Discussion Forum Two completed by 9am Last day to select mock interview date and time.</td>
</tr>
<tr>
<td>Wednesday, February 5th</td>
<td>Integrity and Professionalism</td>
<td>Discussion Forum Three completed by 9am Mock interviews begin this week. Be sure to attend the session you selected.</td>
</tr>
<tr>
<td>Wednesday, February 12th</td>
<td>Problem Solving and Decision Making</td>
<td>Discussion Forum Four completed by 9am Be sure to attend the mock interview session you selected.</td>
</tr>
<tr>
<td>Wednesday, February 19th</td>
<td>Cover Letters/ Initiative and Dependability</td>
<td>Begin working on cover letter Discussion Forum Five completed by 9am Be sure to attend the mock interview session you selected.</td>
</tr>
<tr>
<td>Wednesday, February 26th</td>
<td>Resumes/ Information Processing</td>
<td>Cover Letter due by 9am Be sure to attend the mock interview session you selected.</td>
</tr>
<tr>
<td>Wednesday, March 4th</td>
<td>Interview Process/ Adaptability</td>
<td>Resumes due by 9am Soft Skills Assessment #2 due by 9am Be sure to attend the mock interview session you selected.</td>
</tr>
</tbody>
</table>
Appendix E: Interview Protocol

Pseudonym:  
Interviewer: Micara Lewis-Sessoms
Date:  
Place:  
Scheduled Time:  
Start:  
End: 

Opening Statement/Consent: (Name of Participant) you have agreed to participate in a research study being conducted at your community college.

As a participant, you will be interviewed to assist your college in understanding students’ perspectives on the role community college experiences play on the soft skills development of students in Career and Technical Education programs. The advisor of this researcher is Dr. James Bartlett, II and he will supervise this project.

While there are no direct benefits to you for participating in the study, I hope you will enjoy this opportunity to share your views on your community college experiences with me. This interview is solely for the purposes of collecting data for the study.

You will be asked to respond to several open-ended questions. The interview should last approximately 30-45 minutes. With your permission, I will audiotape the interview so that I can analyze the data, afterwards. Your responses will be kept confidential and used for the purposes of the study.

Transcripts will not be released in any individually identifiable form without your prior consent, unless otherwise required by law. No discomforts or stresses are anticipated as a result of this interview. Likewise, no risks are expected. You are free to withdraw your participation in this interview at any time should you become uncomfortable. Your participation in this study is voluntary. You can stop participating without giving any reason, and without penalty. You may also decide to revoke your participation in this study. You can request to have all of the information that can be identified as yours returned to you, removed from my transcription, or destroyed.

If you have any questions or concerns, please feel free to contact me at (919) 697-7305 or the advisor and committee chair at (919) 208-1697. You may also contact the NC State IRB (Institutional Review Board) Office via email at irb-director@ncsu.edu or via phone at (919) 515-8754.

Do you have any questions regarding what I have shared thus far? Would you be willing to provide your consent for this interview?
Opening Questions
1. Tell me a little bit about yourself.
   Potential follow up questions:
   a. When did you take WBL 111?
   b. What program of study did you or are you pursuing at the community college?
   c. How did you decide to pursue the program of study you chose?
   d. Describe how your work experience in WBL 111 related to your program of study?

Questions for Interview

2. What is your program of study?
3. What was your reason for selecting that particular program of study?
4. How would you define work-based learning?
5. Share with me a little about your former work experience?
6. What types of skills do you need to be successful during those work experiences?
7. How would you define soft skills?
8. Before you begin your WBL work experience, share with me your what you already know about soft skills prior to taking work-based learning (WBL)?
9. What role do you feel communication will play in your WBL work experience?
10. How important is teamwork?
11. What are some experiences you have had solving problems?
12. What are you expecting to learn from this work experience?
13. What type of work-based learning experiences were you involved in as a student?
14. What has your WBL course taught you about soft skills thus far?
15. How were or have you been able to demonstrate your soft skills during your WBL experience?
16. What are some things you have noticed about your soft skills during the work experience?

17. What type of feedback has your WBL supervisor provided for you during your experience regarding your soft skills?

18. How helpful has your WBL experience been in shaping your soft skills?

19. What were some expectations for you as a student conducting your work-based learning in WBL 111?

20. What suggestions would you provide future WBL 111 students regarding the role of soft skills on their work experience?

21. What is something you feel your curriculum program did well in preparing you for your work-based learning experience?

22. What is something you feel should be added to your curriculum program to enhance future students’ work-based learning experience?

23. In what ways do you believe you will be able to apply what you learned about soft skills, while enrolled in WBL, to the workplace upon graduation?

24. What are some additional soft skills you would like to develop?

Closing the Interview/Possible Probes

Interviewer: What additional information would you like to share about this topic that you have not mentioned?

Thank you for sharing your experience and participating in the interview. The following are probes that may be employed during the interview:

What do you mean? I’m not sure that I am following you.
Would you explain that? What did you say then?
Tell me more about that. Can you give me an example?
What would that look like? How would you do that?
Can you provide me with more information? What do you mean by that?
### Appendix F: Codebook Excerpt of Top Ten Codes

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Examples/Quotes</th>
<th>Theme</th>
</tr>
</thead>
</table>
| Prioritizing communication    | Assessing participants’ perspective on the role of communication during WBL experience. | “Having to report to … communication part played a role … having to coordinate meetings.” (Thomas, College #2)  
“You have to talk to people every day … asking questions … Communication plays a huge role.” (Lisa, College #4) | Communication  
Soft Skills  
Additional Soft Skills |
| Prioritizing teamwork         | Assessing participants’ perspective on the role of teamwork during WBL experience. | “Teamwork was huge.” (Thomas, College #2)  
“Teamwork is important. If I can’t figure out … I ask other person.” (Lisa, College #4)  
“Teamwork is definitely a part of a lot of jobs.” (Shirley, College #3) | Soft Skills  
WBL |
| Prioritizing and strategizing problem solving | Assessing participants’ perspective on the role of problem solving in WBL experience. | “Got…thrown tasks that most people would decline to do … Cook like 200 donuts … that’s something most people don’t see … I’ll be by myself … deescalate by myself … Communication with whoever is on the scene.” (Thomas, College #2)  
“I didn’t know how to do coding … It can be complicated … I ask for help” (Lisa, College #4) “Zip tied her to his crate.” (Shirley, College #3) | Human Capital/KSAs  
Communication  
WBL |
<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Examples/Quotes</th>
<th>Theme</th>
</tr>
</thead>
</table>
| Prioritizing technical skills | How participants were able to connect their technical skills to WBL experience. | “In the textbook you have the technical skills that teach you how to do whatever you're learning or pursuing.” (Shirley, College #3)                                                                                                                                 | • Technical Skills  
• WBL                                                  |
|                              |                                                                              | “I think just everything … like the sorting, the types of filing cabinets.” (Michelle, College #1)                                                                                                                                                  |                                    |
| Prioritizing CTE/WBL program soft skills preparation | Discusses how CTE program has prepared students to demonstrate soft skills during WBL. | “Taught me about communication … teamwork is a huge part”  
“Helped me figure out what to do in the real world” (Lisa, College #4)                                                                                                                                                                 | • CTE Curriculum Program  
• WBL  
• Preparation  
• Human Capital/KSAs |
|                              |                                                                              | “Definitely more about communication … I have basic understanding and knowledge.” (Shirley, College #3)                                                                                                                                              |                                    |
| Prioritizing CTE course offerings | Participants share the importance of their CTE course offerings to their WBL experience and future job success. | “I learned most of those soft skills, in my customer service class.” (William, College #4)                                                                                                                                                                 | • CTE Curriculum Program  
• WBL  
• Preparation |
<p>|                              |                                                                              | “A project that we're our final cap stone we have to come up with you know, two appetizers, a salad, a soup you know. I was just kind of overwhelmed over the amount of food that we're going to have to prepare by a certain time. That course was helpful.” (Tammy, College #3) |                                    |</p>
<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Examples/Quotes</th>
<th>Theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time management</td>
<td>Identifying time management as a skill needed for success in WBL.</td>
<td>“Just taught me time management.” (Thomas, College #2) “I have been getting to work on time.” (Lisa, College #4)</td>
<td>Preparation, Human Capital/KSAs</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relating WBL to CTE program</td>
<td>Being able to relate the participants WBL work experience to their CTE program area of study.</td>
<td></td>
<td>CTE Curriculum Program, WBL</td>
</tr>
<tr>
<td>Additional college experience</td>
<td>Participants identified additional community college experiences or involvement connected to soft skills.</td>
<td>“I do work study, too.” (Lisa, College #4)</td>
<td>Technical Skills, WBL</td>
</tr>
<tr>
<td>Asking questions</td>
<td>The importance of asking questions led to success for participants.</td>
<td>“Make sure you ask questions.” (Lisa, College #2) “If you don’t know what you’re doing, ask questions.” (Shirley, College #3)</td>
<td>Preparation, Human Capital/KSAs</td>
</tr>
</tbody>
</table>
## Appendix G: Research Timeline

The following research timeline was followed after IRB approval.

<table>
<thead>
<tr>
<th>Task</th>
<th>Target Date(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>IRB Approval</td>
<td>08/28/2019</td>
</tr>
<tr>
<td>Contact college administration to obtain approval for research</td>
<td>09/01/2019</td>
</tr>
<tr>
<td>Send NCSU IRB to Colleges and solicit College Champion</td>
<td>09/11/2019</td>
</tr>
<tr>
<td>Work with college champions to recruit participants</td>
<td>09/16/2019</td>
</tr>
<tr>
<td>Solicitation period for participants</td>
<td>10/01/2019–10/05/2019</td>
</tr>
<tr>
<td>Begin interview period number with participants</td>
<td>10/07/2019–12/13/2019</td>
</tr>
<tr>
<td>Begin transcribing interviews</td>
<td>10/18/2019</td>
</tr>
<tr>
<td>Analyze data for themes</td>
<td>12/20/19–01/17/20</td>
</tr>
<tr>
<td>Begin drafting final dissertation based on findings</td>
<td>01/24/2020</td>
</tr>
<tr>
<td>Update Chapters One-Three</td>
<td>01/24/2020</td>
</tr>
<tr>
<td>Begin Chapter Four draft</td>
<td>01/31/2020</td>
</tr>
<tr>
<td>Begin Chapter Five draft</td>
<td>02/14/2020</td>
</tr>
<tr>
<td>Submit final dissertation draft to editor</td>
<td>02/21/2020</td>
</tr>
<tr>
<td>Submit dissertation draft to committee</td>
<td>03/6/2020</td>
</tr>
<tr>
<td>Dissertation defense</td>
<td>03/18/2020</td>
</tr>
</tbody>
</table>