

A PHENOMENOLOGICAL STUDY ON CAREER READINESS AMONG GRADUATES  
FROM COLLEGE AND CAREER ACADEMY HIGH SCHOOLS

by

Suzanne Rene Morse

Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Education

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## ABSTRACT

The purpose of this phenomenological study is to understand how graduates of college and career academy (CCA) high schools perceive the influence of the non-traditional educational program on career readiness for participants in a local school district in northern Georgia. The central research question guiding the study is as follows: How do graduates perceive the lived experience of developing career readiness through their participation in the CCA model of secondary education? The theory guiding this study is the Social Cognitive Career Theory developed by Lent, Brown, and Hackett in 1994. The theory has its origins in Bandura's Social Cognitive Theory. To connect to the topic of CCA education, the researcher sought to explain the processes through which children and adolescents made meaning of their social experiences regarding career choice, goals, and persistence. Data was collected through lesson plan evaluations, individual participant interviews, and focus group interviews. Data were analyzed using inductive coding to identify themes and patterns among participant responses, and to make meaning of the lived experiences of the participants.

*Keywords:* college and career academy, career readiness, career technical and agricultural education, Social Cognitive Career Theory, vocational education.

### **Dedication**

I would like to dedicate this dissertation to my husband, Joe, without whose support and encouragement I would never have made it through this journey. I am sure when I started graduate school a week after our wedding in 2010, he never imagined it would go this far or take this long, but he has sacrificed his own time and dreams for the sake of mine and I am so grateful to be married to someone who loves me enough to give of himself so that I could reach my goals. I also dedicate this work to my son, Jack. I pray he sees this as an example of the impact that determination and hard work can have and that it inspires him to chase after his dreams no matter how big or small.

## **Acknowledgments**

I would like to acknowledge the contribution made to this project by Dr. Paul Sabin. As a principal, mentor, and friend he has been an example of Christ's love on display for students every day. He never fails to put the best interests of students first, displaying grace, compassion, and wisdom in every interaction. He is the epitome of a servant leader and an example to every educator he meets. His dedication to the establishment of the Bartow County College and Career Academy and the good of students in our community inspired this work and the dream to see more students given access to the opportunity to pursue their goals and get one step closer to their promising future.

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**List of Abbreviations**

Career Technical Education (CTE)

Certified Nursing Assisting (CNA)

College and Career Academy (CCA)

Every Student Succeeds Act (ESSA)

Institutional Review Board (IRB)

Integrated Basic Education and Skills Training (I-BEST)

National Occupational Competency Testing Institute's (NOCTI)

Patient Care Technician (PCT)

Rigorous and Accelerated Data Reduction (RADaR)

Social Cognitive Theory (SCT)

Social Cognitive Career Theory (SCCT)

Science, Technology, Engineering, and Mathematics (STEM)

Students with Disabilities (SWD)

Workforce Development (WFD)

Work-Based Learning (WBL)

Work-Integrated Learning (WIL)

## CHAPTER ONE: INTRODUCTION

### Overview

The need for improved career readiness has become evident in society as many employers report lack of employability skills that are essential to success in the workforce (Collet, Hine, & du Plessis, 2015). In fact, a recent Gallup poll indicated that only five percent of Americans believe that graduating high school students possess the necessary skills to be successful in the workforce (Gewertz, 2018). Gewertz (2018) reported that the results of the study were consistent across groups including income, ethnicity, and level of education, with younger participants more often reporting unpreparedness for the workforce. States across the country including Florida, Georgia, and Mississippi have implemented career readiness programs in their public school systems which vary in structure and purpose (Lakes & Burns, 2012; Mokher, Leeds, & Harris, 2018; Walker, Hillesheim, & Coley, 2015). While studies exist regarding the importance of developing career readiness skills at the collegiate level, there are gaps in the knowledge base regarding how secondary schools in the United States attempt to prepare students to enter the workforce with the employability skills necessary for success (Backes-Gellner & Geel, 2014; Muniz & Eimerbrink, 2018; Pavlov & Trofimov, 2018).

In 2012, the Georgia General Assembly established the grant that would fund the creation of college and career academies (CCA) around the state (Lakes & Burns, 2012). This established the guidelines and procedures for creating CCAs and set the stage for a shift in the way that students are educated in preparation for college and careers (Lakes & Burns, 2012). While vocational education is not a new concept and has been the subject of much debate for over a century, it is important to critically evaluate the programs and strategies being used for this purpose and to determine which of these is most appropriate for preparing students for their post-

secondary pursuits (Rageth & Renold, 2019; Schwendimann, De Wever, Hamalainen, & Cattaneo, 2018). Chapter One of this study details the background to the study, a review of the role of the researcher, an explanation of the problem, purpose and significance of the study, the research questions and definitions that are pertinent in conducting the study and making meaning of the results.

### **Background**

Preparing students for post-secondary options is undoubtedly a primary purpose of the current educational system in America (Pak & Desimone, 2018). A look inside most secondary schools across the country reveals an offering of a variety of academic, fine arts, and vocational courses (Cooney, 2017). This smattering of course offerings appear, at least on the surface, to address the various interests of students, but schedules are typically built based on certifications of staff members and traditional course offerings in the schools (Angus, 2006). Alternatively, vocational education programs draw on student interests and generally result in higher levels of student engagement and achievement (Dubeau, Plante, & Frenay, 2017). This indicates that vocational education has benefits for both academic achievement and career readiness (Dubeau et al., 2017).

Vocational education is not a new trend in the United States. As early as 1906, the importance of preparing students for the demands of the labor market have been championed as a primary purpose of the American education system (Eliot, 1906). Since the passage of the Smith-Hughes Act in 1917, which granted the first federal funds to vocational education in the United States, schools across the country have sought strategies and programs that prepare students to enter trade and industry (Friedel, 2011; Kosar, 2011). The Smith Hughes Act – later renamed the Carl D. Perkins Career and Technical Education Act – originally provided funding for up to half

the salaries of school staff in CTAE subjects and preparation for CTAE teachers (Friedel, 2011). This increase in funding was followed by an increase in CTAE program enrollment from 31,000 in 1920 to 548,000 only 20 years later (Scott & Sarkees-Wircenski, 2008).

### **Historical Background**

Throughout the history of vocational education in the United States, funding has increased from approximately \$3 million in annual federal funding in 1934 to \$14 million per year in 1936, eventually requiring annual evaluation by the Department of Education that continues to the present day (Friedel, 2011). By 1963 the federal government began to recognize the need to fund and support at-risk students in vocational education programs, leading to more federal programs and oversight of funding for students in at-risk subgroups (Scott & Sarkees-Wircenski, 2008).

In more recent years, the federal government has allocated more funding to vocational and career education programs (Behrens, 2019). This action is due in part to research that proved that students who complete career education programs are significantly more likely to graduate from high school (Gerwertz, 2017). The Carl D. Perkins Act was originally passed in 1984 and was reauthorized in 2006 and expanded upon in 2018 with the signing of the Strengthening Career and Technical Education for the 21<sup>st</sup> Century Act (Ferguson, 2018). Both acts provided federal funding for vocational education that met the specific needs of the current labor market, allowed for the expansion of career and vocational education programs in schools across the nation and more adequately addressed the opportunities for students with special needs in vocational education (Scott & Sarkees-Wircenski, 2008). However, there has been little, or no guidance provided on how schools should allocate those funds to meet the needs of the students regarding workforce preparedness, especially regarding the development and implementation of

formalized career readiness education programs (Miami University, n.d.). Hackmann, Malin, and Gilley (2017) suggested career academies as an effective structure at improving college and career readiness for secondary students.

### **Social Background**

The State of Georgia recently began implementing the CCA high school model to address the growing need for the development of employability skills among high school graduates and a competitive workforce across the state (Lakes & Burns, 2012). This study addressed the central question of whether or not graduates perceive the CCA model as effective at equipping students with the employability skills that are being demanded by employers in today's labor market. Participants provided valuable feedback on the CCA model that can be used to guide policy and procedure in the future. In the past, career and technical education has been viewed as a means to track lower achieving students into less rigorous courses, but new changes in education policy aimed at educating and preparing students for the workforce has changed this perception and the purpose of vocational education programs (Giani,2019).

Literature on the development of career readiness also reveals the significant influence of teachers in developing career readiness for high school students (Busteed & Seymour, 2017). In the development of career readiness programs, recruiting and retaining quality instructors is paramount to the success of the program (Viadero, 2018). Rayner and Papakonstantinou (2015) conducted a study at the collegiate level in which students reported that they perceived higher levels of career readiness when they were engaged in work-integrated learning (WIL), sometimes referred to as work-based learning (WBL) with instructors, some of whom were industry experts and were able to contribute meaningful knowledge of preparing for specific careers to the students' learning experiences.



## **Theoretical Background**

The guiding theory of the study was the Social Cognitive Career Theory (SCCT) which indicates that students develop their career interests through social interactions and experiences (Lent, Brown, & Hackett, 1994). Bandura's Social Cognitive Theory (SCT) was used in the development of SCCT and states that people use multiple processes to make decisions that influence outcomes in their lives (Bandura, 1989). One potential use for the results of the current study is to create career and education planning templates and processes to aid students in making informed decisions about their post-secondary options using social and cognitive processes. Jackson (2017) stated that the development of a pre-professional identity through work experience embedded in the students' education is essential to the development of career self-efficacy, confirming the applicability of SCCT in present career readiness development efforts.

Plasman (2018) indicated that formalized career and educational planning aids students in persistence and success in their post-secondary path. These plans are effective at engaging students in a more relevant educational experience that improves self-efficacy and achievement (Olivier, Archambault, De Clercq, & Galand, 2019). According to Dumas (2018), taking a person-centered approach to education can increase engagement and achievement among students. The CCA model and its associated curriculum and instruction is a potentially viable option for this type of career and educational planning. However, there is a lack of research on this emerging educational model. This study has the potential to add to the body of knowledge on CCAs and their effectiveness and could provide valuable input for decision-makers in education at various levels.

Social constructivism is the guiding framework for this study, and states that meaning

and reality are constructed through the interactions and experiences of individuals in various contexts (Bozkurt, 2017). Jackson (2017) promoted work-integrated learning experiences for the development of career readiness skills. My ontological assumption is that personal experiences and interactions shape our knowledge, and that reality is created through those interactions. For example, when students engage in social interactions with their peers, educators, community and business partners and industry experts they create and obtain knowledge based on those interactions. Therefore, their reality is shaped by the knowledge obtained through social interactions.

In a transcendental phenomenological study, the researcher must determine and explain the essence of the lived experiences of the research subjects without allowing personal assumptions to influence the outcome of the study (Moustakas, 1994). Because followers of transcendental phenomenology believe that experiences and the objects of those experiences cannot be separated, this theoretical framework requires the researcher to make skilled observations and develop relationships between the experiences and the objects to make meaning of a phenomenon (Christias, 2018). In order to do this, it was necessary for me to form a trusting relationship with the participants so that they were willing to divulge their true perceptions of their education as it relates to career readiness and the CCA model. Only through honesty in their responses to the interview questions, was the true meaning and implications of their experiences revealed. To get as close to the reality of the participants as possible it was necessary to conduct evaluations of career readiness lesson plans from the CCA from which the participants graduated. I devoted significant attention to epoché in order to separate my personal feelings from the research at all phases. This allowed me to link, as accurately as possible, the responses of participants and data from lesson plan evaluations to the context of education within the CCA.

Regarding the axiological assumptions that I brought to the study, I operated under the assumption that the values each person, including myself and the participants, brought to the study influenced the responses given by the participants, how I interpreted those responses, and what readers of the study may believe about the results. For example, I believe that education is only effective insofar as it prepares students for their post-secondary goals. As I proceeded through the research and writing of this dissertation, it was imperative that my beliefs about education were acknowledged, and that any bias created by those beliefs was appropriately addressed.

### **Problem Statement**

The issue of career readiness has been at the forefront of the educational landscape for many years (Mokher, Rosenbaum, Gable, Ahearn, & Jacobson, 2018). As high schools attempt to find the most appropriate model for preparing students for college and/or careers, research has emerged on the benefits of such programs including decreased future unemployment and improved student engagement (Blinova, Bylina, & Rusanovskiy, 2015; Plasman, 2018). Recent studies have focused on the implementation and effectiveness of CCAs as a secondary option for improving career readiness but lack a focus on student perceptions on the model (Hackmann, Malin, & Gilley, 2017).

The problem is that career readiness is not being addressed consistently in secondary schools. There is a need for stakeholders in education to determine the most appropriate strategy or program from improving career readiness among high school graduates. According to the Bureau of Labor Statistics (2019), approximately 47% of high school graduates are working or actively looking for work. Since such a significant portion of the population of the United States enters the workforce after graduating from high school, it is important that schools are equipping

students with the “soft skills” necessary to be successful. A phenomenological approach to this topic gave a voice to graduates of CCAs regarding if and how their education under the CCA model impacted their preparedness for the post-secondary path of their choosing.

### **Purpose Statement**

The purpose of this transcendental phenomenological study was to understand how graduates from a CCA in northern Georgia perceived the impact of the CCA model on their preparedness to enter and succeed in the workforce. For this study, career readiness was defined as the state of being prepared to enter college and/or the world of work (Malin, Bragg, & Hackmann, 2017). The theory guiding this study is the Social Cognitive Career Theory developed by Lent, Brown, and Hackett (1994) which connects to the study of graduates’ perceptions of career readiness after participating in CCA education by addressing how students develop career interests, make choices about their future careers, and examine their potential for success in those careers through social interactions and experiences (Rogers & Creed, 2011).

### **Significance of the Study**

Much research on career readiness is related to its implementation through modeling practical skills and integrating soft skills lessons into the academic curriculum (Monahan, Lombardi, & Madus, 2018). Studies by Malin, Bragg, and Hackmann (2017) and Hackmann, Malin, and Gilley (2017) indicated that CCAs are emerging as a viable option for improving career readiness. However, there is a gap in the existing research regarding the impact that CCAs have on career readiness from the perspectives of former CCA students. Malin and Hackman (2018) indicated that future researchers should prioritize research on CCAs and their implementation to provide guidance to practitioners and other stakeholders. This study contributes to the body of knowledge on CCAs by allowing graduates of CCAs to articulate their

perceptions of the impact of the CCA model on their career readiness. Tootoonchi (2016) stated that how the student perceives their education influences their in-school behavior, emotional well-being, approach to learning and their learning outcomes. This indicates that the inclusion of student perceptions of their education and its influence on career readiness is paramount to creating a substantive body of knowledge on career readiness as it relates to educational programs and outcomes.

Georgia has been in the process of a wide-spread implementation of CCAs across the state since 2012 (Lakes & Burns, 2012). Research indicated that students are more likely to be engaged and successful in their educational pursuits when they feel their satisfaction with the approaches to their education is of concern to teachers and school leaders (Tootoonchi, 2016). As a teacher in Georgia, it is important to me that the educational programs and models utilized in my state are appropriate for preparing students for college, careers, or the military. I chose to utilize participants from Georgia so that policymakers can include student input in their decisions on future implementation of CCAs and other educational models, including how to staff, structure and support schools in providing the most sound educational options available. Locally, the district from which the participants were derived can use the feedback from graduates to further refine and improve the CCA model for future students.

Within the social context, there has been a movement to aid students in preparing for careers through industry-specific training and certification during high school. However, formalized programs to teach “soft skills” such as effective communication skills, teamwork, problem solving abilities and personal characteristics that are valued in the workplace are limited (Sharvari & Kulkarni, 2019; Lavender, 2019) . There is a need for the development of such programs and an examination of existing informal programs that address soft skills needed in the

workforce (Lakes & Burns, 2012). Bandaranaike and Willison (2015) promoted the use of WIL/WBL to bridge the gap between students' cognitive skills and the demands of the workplace. Not only are students who participate in WIL/WBL able to gain industry-specific experience, but also able to acquire the type of soft skills that are necessary for successfully transitioning into the workforce (Bilsland, Carter, & Wood, 2019). When graduates enter the workforce with well-developed employability skills, they are more likely to remain employed in the long run and to make more valuable economic and social contributions to their communities (Hall, 2016).

### **Research Questions**

To guide the study on career readiness as it relates to the CCA model of secondary education, a central research question and associated sub-questions were used. These questions focused on student perceptions of the development of career readiness skills under the CCA model. This provided feedback that can be used to guide stakeholders in education to make decisions that best address the inconsistency of practice that exists regarding career readiness development among high school students. While flexibility among teachers allows for more adaptive teaching and behavior management, this can create implications for students including resistance to teachers' attempts to maintain order in the classroom when attempting to implement a systematic approach to career readiness education (Calarco, 2014).

#### **Central Research Question**

How do graduates perceive the lived experience of developing career readiness through their participation in the CCA model of secondary education?

Examining any topic through a transcendental phenomenological approach requires that the essence of the experience be captured and explored through the eyes of the participants

(Moustakas, 1994). The central research question in this study was intended to elicit meaningful responses from the participants that would allow the researcher to gain a more in-depth understanding of what the CCA experience meant to the graduates, and how it shaped their career readiness.

### **Sub-Question 1**

How do graduates of CCAs describe the lived experience of interactions among themselves, their peers, instructors, community members, and school leaders in the CCA model as it relates to the development of career readiness?

Using social constructivism and SCCT to guide the study meant that I had to examine the social interactions participants experienced as part of their education under the CCA model.

Bandura (1986) stated that personal cognitive and physical attributes, external environmental factors, overt behaviors of individuals involved in a situation all influence the meaning a person creates from a situation. Based on this theory, SCCT indicates that students' self-efficacy, interests, and expectations related to their future careers are developed through social interactions with peers and adults, including educators (Lent, Brown, & Hackett, 1994).

### **Sub-Question 2**

How do graduates describe the lived experience of participation in the CCA model on their career choices?

Career choice is highly linked to student interests in particular topics or skills, making it imperative that schools offer courses and career pathways that effectively guide students toward their next steps after graduation (Gewertz, 2017). By examining how students perceived the influence of their education in CCAs on their career development, I was able to provide data that

supports the need for more student input in the selection and offering of specific courses and career pathways.

### **Sub-Question 3**

How do graduates describe the lived experience of participation in the CCA model on their self-concept of success in their desired career field?

Self-efficacy is the most powerful indicator of student achievement among various motivational factors (Won, Lee, & Bong, 2017). To connect this fact to the influence of self-efficacy in the area of career success, a sub-question was developed to allow students to articulate their beliefs about the influence of participation in the CCA model on their potential for success in a career area of interest.

### **Definitions**

1. *College and Career readiness* – The skills and attributes that prepare students for a successful transition into the workforce (Muñiz & Eimerbrink, 2018).
2. *College and Career Academy* – A model of secondary education that is designed to provide students with the knowledge and skills necessary to more successfully transition to college and/or careers (Lakes & Burns, 2012).
3. *Integrated Curriculum* – A curriculum that combines both academic and career knowledge and skills (Park, Pearson, & Richardson, 2017).
4. *Self-efficacy* – A cognitive judgement of one’s capabilities to meet a certain goal or fulfill specific requirements (Ayllon, Alsina, Colomer, 2019).
5. *Social Cognitive Career Theory* – The theory that students develop their career identities, self-efficacy, and career goals through social interactions throughout their lives (Rogers & Creed, 2011).



## Summary

The problem of inconsistent implementation of career readiness programs in secondary schools across America should include input from current and former students. The purpose of this study was to give a voice to graduates of CCA high schools regarding the influence this model of education had on their overall career readiness including their career choices, motivation, and success. The study has the potential to fill the gap in the research on the effectiveness of CCAs from the former students' perspectives. The population was obtained from a CCA in the north Georgia area, and included graduates from ages 18-25 who were currently employed in or receiving training in the career field in which they studied under the CCA model.

A phenomenological design was used to understand the essence of the participants' experiences and the meaning that has for future implementation of CCAs across the United States. Using the SCCT to guide the study allowed for a deeper examination into the meaning of the experiences CCA students share, and how schools can use those experiences to effectively influence career readiness.

## CHAPTER TWO: LITERATURE REVIEW

### Overview

Many studies have been conducted regarding the development of career readiness (Bissel, 2017; Ireland & Lent, 2018; Lombardi, Freeman, & Rifenshield, 2017; Malin et al., 2017; Mokher et al., 2018; Muñiz & Eimerbrink, 2018; Nassar, Al-Qimlass, Karacan-Ozdemir, & Tovar, 2019; Park et al., 2017; Plasman, 2018). The majority of these studies focused on evaluating the importance of career readiness and specific strategies for that purpose (Lombardi et al., 2017; Zilic, 2018). Suter and Camilli (2019) stated that failure to develop appropriate strategies for career readiness and workforce development in the United States could have negative implications for the economy. Despite resounding evidence that career readiness is critical to student success and economic sustainability, little research exists on specific school models and/or instructional models for delivering career readiness instruction (Castellano, Sundell, & Richardson, 2017).

Research has also emerged that asserts the benefits of integrated career and academic education at improving youth employment rates and outcomes (Blinova et al., 2015). For example, when integrating historical thinking skills with vocational education topics, researchers in Sweden found that students were more engaged and had more success in their academic course (Ledman, 2014). This research reveals that there is a need for consistency in practice for developing career readiness which supports the need for the current study on CCAs as a relevant option for the development of strategies for addressing career readiness among high school students (Suter & Camilli, 2019). Existing research presents various models for developing career readiness among secondary students, leaving room for the examination of the CCA model as an

effective educational alternative to traditional high school models (Bissell, 2017; Dixon, Cotner, Wilson, & Borman, 2011).

This chapter presents a theoretical framework and synthesis of the relevant literature for understanding the importance of developing and implementing effective career readiness models and programs using SCCT (Bandura, 1989). Because self-efficacy is a key component of SCCT (Bandura, 1989), particular attention was paid to how high school students develop career self-efficacy through interactions with educators and peers, and through their educational opportunities provided by the CCA model. Literature was also examined that revealed the evolving nature of career and vocational education in the United States, including the development and implementation of CCAs across the country.

SCCT was used to frame this study by examining how individuals develop career interests, make career choices, and exhibit self-efficacy in their career areas (Lent, Brown, & Hackett, 1994). As social interactions and self-efficacy have a significant impact on student engagement and achievement (Olivier et al., 2019), it is relevant to the study of any model of secondary education including the CCA model. The review of relevant literature established how community and business needs, school leadership, teacher recruitment and retention, and implementation of career academies influence student perceptions of their readiness for the workforce.

### **Theoretical Framework**

The guiding theory of this study is SCCT; a theory developed by Lent, Brown and Hackett (1994) that says that individuals use multiple social processes and interactions to develop career interests, make career choices, and develop career self-efficacy. At its heart, SCCT helps individuals and organizations develop an understanding of how career interest and

development occur across a lifespan based on factors such as personal inputs of race and gender, individual learning experiences, and contextual influences of the learning and social environment (Lent, Lopez, Lopez & Sheu, 2008). Additionally, SCCT addresses the processes people use to develop career and academic interests, create, and revise educational and career plans and goals, and evaluate their performance in academic and career pursuits (Lent et al., 2008). SCCT has its roots in social constructivism which states that all knowledge is constructed through social interactions (Laroche, Badnarz, & Garrison, 1998). This framework provides significant guidance in the qualitative study of how students perceive their career readiness after participating in the CCA model.

### **Self-Efficacy**

Self-efficacy beliefs, outcome expectations, and personal goals are the major constructs of SCCT (Plasman, 2018). It is important to consider how students develop in these areas when developing a plan for improving career readiness. For example, when students have the opportunity to learn and be mentored by industry experts in their desired career field, these social interactions have significant positive impacts on the students' academic achievement and future career outcomes (AdvanceCTE, 2016). Schaub and Tokar (2005) also linked personality and learning experiences to SCCT and stated that these factors provide additional influence on the development of self-efficacy, career determination and persistence. These constructs were used to explore the topic of graduates' perceptions of the influence of CCA education on their career readiness, and draw conclusions based on graduate focus-group interview responses. Particular attention in participant interviews was paid to graduates' self-efficacy in career development and outcomes.

Lent, Brown, and Hackett's (1994) SCCT was derived from Bandura's (1989) Social Cognitive Theory (SCT), which suggests that people utilize motivational, affective, and selection processes to make decisions that determine outcomes in their lives. SCCT differs from earlier concepts of career development in a variety of ways. One major difference is that previous theories suggested a singular self-concept as the motivating factor for career development, while SCCT believes that people use a self-system in which one's own performance is self-observed and self-evaluated within the context in which the performance occurs in order to develop self-efficacy beliefs and personal standards of performance (Hartung & Subich, 2011).

Student self-assessment can take on two forms: (1) describing the characteristics of the work and/or (2) evaluating the quality of the work (Brown, Andrade, & Chen, 2015). Teaching students how to self-assess and self-evaluate is a critical skill for applying SCCT in the educational setting, as students must know the appropriate criteria and how to judge themselves against that criteria (Brown et al., 2015; Lent, Morris, Penn, & Ireland, 2019). If research is to truly prove that self-assessment has a positive impact on student achievement, both academically and in regard to career development, then pitfalls associated with student self-assessment such as deficits in information needed to accurately evaluate one's self and over-confidence in one's abilities must be addressed by instructing students on how to self-assess prior to implementing this practice in the classroom (Brown et al., 2015).

### **Modeling Career Skills**

One strategy that is suggested for the development of career readiness is modeling of career skills (Lombardi et al., 2017). Modeling of academic skills has long been a key practice for improving student learning, with students as young as elementary age being exposed to modeling of letter sounds for building phonological awareness (Olszewski, Soto, & Goldstein,

2017). In middle and secondary schools, teachers use modeling of scientific skills to improve conceptual understanding among students (Malone, Schunn, & Schuchardt, 2018). In CCAs frequently offer opportunities for students to observe teachers modeling industry-specific skills, then practice, and refine those skills to improve their readiness to enter to workforce (Lakes & Burns, 2012). The current study utilized lesson plan evaluations to determine the context in which these experiences occurred. Combined with the interviews of CCA graduates, this study confirmed the validity of SCCT and provided evidence to promote the CCA model of career readiness development.

In more recent research, Lent and Brown (2013) developed a list of adaptive career behaviors organized by career-life period. The five career-life periods are “growth” during the childhood phase as a student, “exploration” which occurs during the adolescent/student phase, “establishment” as a worker, “maintenance” as a worker, and “disengagement/reengagement” as a retiree or, leisure worker (Lent & Brown, 2013, p. 559). When applied to educational and career readiness efforts, these adaptive career behaviors are evident in how individuals make choices at various phases of life that influence their career choices, career self-efficacy, career persistence, and career outcomes (Plasman, 2018).

Casas and Blanco-Blanco (2016) carried out a study that supported the viability of SCCT in predicting occupational choices and outcomes of Columbian secondary students. Associated research indicated that self-efficacy impacts students’ ability to succeed in various pursuits such as career readiness and development, and that early successes in those areas can positively impact educational and social outcomes (Olivier et al., 2019; Shogren, Villareal, Lang, & Seo, 2017). The mission of CCAs is to provide rigorous academic education, while simultaneously increasing career preparedness, skill development and vocational certifications for high school

students and demonstrates the usefulness of SCCT in guiding career readiness efforts (Lakes & Burns, 2012; Lent & Brown, 2013). Therefore, utilizing SCCT as a means of designing and implementing CCAs is a sound choice.

Plasman (2018) emphasized the use of formal career/educational plans to aid students in making appropriate choices regarding their academic and vocational pursuits. The research indicated that beginning career/education planning early in high school can lead to higher levels of overall student engagement and improved career outcomes after graduation (Plasman, 2018). Ireland and Lent (2018) expanded on Plasman's suggestions by asserting that allowing students to develop, manage, and track their own progress toward the development of career readiness skills improves student engagement and achievement as it relates to career skill acquisition by giving students a sense of ownership and control over the process. While this research provides suggestions for how to improve career development and readiness, there is a significant gap in the research about formalized school models, such as CCAs, for this purpose.

Bandura (1989) asserted that motivational processes help students persist in educational and career pursuits when students have high levels of self-efficacy in those areas. This motivation is influenced by the affective and selective processes a person utilizes, including his or her level of stress and anxiety and the environments in which they place themselves, respectively (Bandura, 1989). For example, in Lent and Brown's (2013) study, children began to develop vocational interests based on external motivations about which careers are the most interesting based on personal attributes and continue that development through adolescence as peer and adult influences begin to guide their choices.

Gaylor and Nicol (2016) found that while students are mostly intrinsically motivated about career exploration and development, this motivation was increased by implementing a

formalized sequence of courses designed to aid students in exploring career interests and developing career skills. Schools and districts can utilize SCCT to offer alternative curricular and educational models to better prepare students to succeed in their career pursuits by influencing self-efficacy, outcome beliefs, and personal goals (Plasman, 2018). Furthermore, integrating career planning into curriculum and school models can aid in overall career development and preparedness for secondary students (Rogers & Creed, 2011).

### **Related Literature**

Preparing students for careers cannot be negated as an important part of the schooling process. In fact, Cooney (2017) asserted that the federal government of the United States finds improving productivity and self-sufficiency of workers as a top priority for schools, making career readiness a primary educational goal. This is a shift from previous schools' focus, which ranged from promoting democracy and good citizenship, to providing every student with basic skills in reading, writing and mathematics (Christensen, Horn, & Johnson, 2016). Despite the research that supports the need for vocational and career education, there is still a long-standing debate about how to appropriately educate students in terms of their preparedness to enter the workforce (Dougherty & Lombardi, 2016).

Many studies exist that examine the effectiveness of general education versus vocational education (Hoffman, 2011; Zillic, 2018). Hampf and Woessmann (2017) indicated that students who participated in vocational education experience initial advantages in employment, particularly among those students who participated in apprenticeship programs, but tend to see those advantages decrease over their lifespan due to challenges in adapting to changing technology and workforce/workplace structures. The study utilized the Program for the International Assessment of Adult Competencies (PIAAC) which examines the effects of



vocational and general education programs on employment (Hampf & Woessmann, 2017). Present efforts at improving career readiness among high school students range from using funds such as those from the Carl D. Perkins Act to increase the number of career pathways offered, to implementing new school models such as the CCA (Hackmann et al., 2017; Simoneau, 2018). Utilizing the Hampf and Woessmann (2017) study in developing models to improve career readiness could prove useful in addressing issues in the adaptability of students to changes in the workforce. The present study seeks to examine CCAs as a model for effective development of career readiness skills among high school students.

### **History of Vocational Education in the United States**

Through extensive research on social cognitive theory and other theories related to career development, Lent, Brown, and Hackett (1994) determined that children and adolescents acquire career values through social interactions and social learning processes over their lifetime. These findings are evidenced through the ever-evolving history of vocational education in the United States. In 1917, the Smith-Hughes Act was passed which mandated that federal funds be allocated to vocational education due to the increasing industrialization of the nation (Kosar, 2011). Schools had to rise to the challenge of providing training and education that would prepare students to fill the industrial jobs emerging in the United States (Kosar, 2011). The historical literature on general and vocational education has expanded rapidly since the 1960s, particularly regarding how different geographic regions choose to focus on general or vocational education (Freeman & Kirke, 2017).

As vocational education continued to evolve into the 20<sup>th</sup> and 21<sup>st</sup> centuries, it took on a more comprehensive form; integrating academic and career development into programs that prepare students for the post-secondary pursuits whether academic or vocational (National

Center for Education Statistics, 2000). This development continues to drive vocational education in the United States as the youth unemployment rate is consistently higher than that of the economy as a whole (Federal Reserve Bank of St. Louis, 2018).

In 1984, the U.S. government authorized the Carl D. Perkins Vocational and Technical Education Act, and reauthorized the act in 1998, 2006, and 2018 (American Association of Community Colleges, 2018). This act provided federal funding to aid schools in developing academic and career skills of secondary and post-secondary students (Simoneau, 2018). This comes on the heels of a decades-long focus on preparing all students to attend college, despite resounding evidence that not all students are equipped or motivated to attend college (Schwartz, 2016). However, as the problem addressed in the current study examined, there is inconsistency in the utilization of these funds from state to state and district to district (Simoneau, 2018). Hanushek, Schwerdt, Woessman, and Zhang (2017) conducted a study of vocational education programs in 11 countries. The study determined that young people in countries where general education was the primary focus faced worse employment outcomes when compared to countries like Denmark and Germany where vocational/apprenticeship programs lead the educational culture (Hanushek et al., 2017). Utilization of funding from the Carl D. Perkins Act should be consistently implemented across the United States to improve career development and outcomes (Simoneau, 2018).

**Science, Technology, Engineering, and Mathematics Education.** In recent decades, the United States government has also increased appropriations to science, technology, engineering, and mathematics (STEM) programs; over \$1 billion in 2017 (Suter & Camilli, 2019). Integrated STEM programs are designed to connect science, technology, engineering, and mathematics to the creative aspects of education (Kelley & Knowles, 2016). As previously

stated, the reauthorization of the Carl D. Perkins Act also allocated funding to academic and career education, emphasizing the importance of vocational and career education to the long-term viability of the nation (Simoneau, 2018). Research has indicated that consistent implementation of college and career readiness curriculums can produce significant advantages for students including improved engagement, grade point average, and graduation rates (Perry, Wallace, & McCormick, 2018). As time has progressed, new laws regarding funding directly to vocational education have left room for interpretation by state and local systems on how to allocate federal funds to vocational programs, despite the evidence that supports the importance of consistency of practice (Miami University, n.d.; Perry et al., 2018).

When examining the Carl D. Perkins Act specifically, a summary of how states can choose to use Perkins funds is provided, but the terminology and explanations in the summary are vague and allow for much objective interpretation (AdvanceCTE, 2017). For example, the Perkins Act requires states and districts to use 85% of funds for local recipients such as secondary schools and technical centers, but the decision of how those funds should be split between local high schools and post-secondary institutions is left to the state agency in charge of Perkins funds (AdvanceCTE, 2017).

In Chile, flexibility in interpretation of how to allocate funds contributed to inconsistency of practice in how to best utilize funds to provide high quality vocational education that benefits students regarding their preparedness to enter the workforce; a problem mirrored in the United States as systems are allowed autonomy in choosing how to allocate federal funds for career and technical education programs (Farias & Sevilla, 2015). In the United States, most CCAs are funded through state grants and local monies that are targeted at improving specific aspects of

vocational training in local communities, leading to inconsistent practices in secondary schools (Lakes & Burns, 2012).

### **College and Career Readiness**

Muñiz and Eimerbrink (2018) defined college and career readiness as the inter- and intrapersonal skills and attributes necessary to be successful in college and/or the workforce. While Pulliam and Bartek (2018) indicated that career readiness efforts should begin in elementary school, most programs are not implemented until middle school or high school due to the maturity of the students. Since entering the workforce today requires an increasing number of industry credentials, it has become important that preparing students for both college and careers is an essential priority of today's schools at all levels (Carnevale, Cheah, & Hanson, 2015). However, career-specific technical skills are not the sole indicator of career readiness (Jackson, 2017). Di Gregorio, Moggioni, Mauri, and Mazzucchelli (2019) used a mixed-methods approach to develop a list of non-technical skills that are essential for workforce success (Table 1). This data ranks problem-solving and interpersonal skills as the most significant factors in a successful transition to college and careers (Di Gregorio et al., 2019).

Table 1	
<i>Non-Technical Skills for Career Success</i>	
<u>Non-Technical Skill</u>	<u>Significance in Career Success</u>
Initiative	0.662
Teamwork	0.708
Interpersonal Skills	0.714
Motivation	0.627
Flexibility	0.713
Oral communication and presentation	0.615
Stress resilience	0.487
Problem-solving	0.744
Critical thinking	0.705
<i>Note.</i> Significance calculated using principal component extraction and promax rotation (Di Gregorio et al., 2019)	

Table 1

**School-to-work transition.** The transition from school to work is one that presents many students with challenges they are not equipped to overcome if their secondary education does not appropriately address career readiness preparation through the development of technical and non-technical career skills (Lent & Worthington, 1999). As state and local governments across the United States and in other countries have begun to recognize the disparity between the number of students completing high school and the health of their respective economies,

education policy-makers have started the process of developing and implementing programs to address this issue (Pavlova, Lee, & Maclean, 2017). The European Union has recently begun implementing a program that provides an employment opportunity to all students participating in the public education system in an effort to close the readiness gap between completion of secondary school and entry into the labor force (Pastore & Zimmermann, 2019).

**College and Career Readiness and the Every Student Succeeds Act.** According to Malin, Bragg, and Hackmann (2017) the Every Student Succeeds Act (ESSA), developed by President Obama, includes college and career readiness provisions such as work-based learning, but lacks a clear focus on implementation and accountability. The ESSA and other education policies are designed to provide a high school academic curriculum that works alongside career education and planning at the secondary level, leaving room for improvements that include expanding career education programs to all grade levels and creating consistent interdisciplinary programs that improve student outcomes (Lakes & Donovan, 2018). Without consistent career readiness programs and strategies being implemented at the state and national level, each state finds its own way to address the important area of career readiness with its students (Malin et al., 2017). That is not to say that there should not be differentiation to meet specific student needs within career readiness programs. For example, Morningstar, Zagona, Uyanik, Xie, and Mahal (2017) addressed the need for career readiness education aimed specifically at improving outcomes for students with severe disabilities. While general career readiness curriculum may be appropriate for these students, specific career skills should be tailored to their individual capabilities and goals (Morningstar et al., 2017).

When reviewing career readiness programs across the country, a variety of approaches emerge (Lakes & Burns, 2012; Lombardi et al., 2018; Mokher et al., 2018). While educational

leaders agree that schools should prepare students for the demands of the 21<sup>st</sup> century workforce, there is little agreement on how to utilize funding and other resources to achieve that goal (Pak & Desimone, 2018). For example, in Florida a career readiness program was implemented that required participation and testing in career readiness coursework for all high school students, while Georgia has implemented a network of career academies that provide optional career-specific coursework for high school students (Lakes & Burns, 2012; Mokher et al., 2018). The present study will draw on the research that reveals the inconsistency of practice in career and technical education (CTE) and career development programs and highlight the strength of CCAs as a solution to the problem.

Monahan et al. (2018) proposed practical strategies including career mapping for improving college and career readiness that allow educators increase engagement and improve transition competencies among students. Involving students in an inquiry-based process on any topic has been proven to increase student ownership of the process, which contributes to more long-term success (MacKenzie, 2016). Mentoring that includes mapping out a college and career plan, exposing students to college and career options and navigating the application and financial aid process has also been promoted as a strategy for improving career readiness (Olwell, 2016). Supporting successful transitions from education to careers is a key component of effective mentoring programs (Roach, 2018). These mentoring programs, sometimes referred to as career consultation models, can be especially beneficial for students in marginalized populations; intellectually and developmentally disabled, emotionally and behavioral disordered, and juvenile justice system participants (Morningstar et al., 2017; Raines & Talapatra, 2019). The current study addressed the specific student-driven career readiness development strategies used in a CCA in northern Georgia to attempt to expose the problem of inconsistent practice and to allow

former students to articulate their perceptions of how these practices influenced their readiness to enter the workforce and be successful in their careers.

Dougherty (2018) explored how the acquisition of human capital through CTE programs impacts future employment and income of students. Human capital are the skills, knowledge, and other capabilities possessed by individuals (Dougherty, 2018). Research based on CTE programs in Massachusetts indicated that participation in CTE programs increases human capital through vocational skill acquisition and improves graduation rates by seven to ten percent (Dougherty, 2018). In Georgia, incomes were significantly higher for areas in which STEM and vocational education programs had been implemented (Board of Regents for the University System of Georgia, 2017). This reveals a need for an exploration of how to best utilize local schools to improve employment outcomes and incomes for students.

In a related study out of Mississippi, Walker et al. (2015) indicated that due to reliance on high stakes test scores, many schools are failing to graduate students who are college and career ready. High stakes testing has become increasingly prevalent in the educational environment in the United States since the passage of No Child Left Behind, and the Every Student Succeeds Act (Dianis, Jackson, & Noguera, 2015). The study by Walker et al. (2015) revealed that schools' human capital development has been focused on preparing students for standardized tests instead of preparing them for life after their high school education. The results of this study emphasized the need for programs that prepare students, not only to enter college, but to enter the workforce at a skill level that will allow them to be competitive and able to persist in their desired career field (Walker et al., 2015). Students have reported that participating in career pathways during high school had a significant impact on their sense of preparedness for the workforce (Stipanovic, Stringfield, & Witherell, 2017).



A case study of high school graduates' perceptions of the impact of career readiness on their post-secondary life indicated that students believed their experiences with educators who engaged in the development of career readiness skills had a significant positive impact on their post-secondary life (Bissell, 2017). The utilization of industry experts as instructors and other key roles in schools not only improves career readiness but gives students more connection and investment in the relationships with these experts, which can have a positive impact on future employment outcomes (AdvanceCTE, 2016). Dumas (2018) conducted a similar study on student perceptions of learning opportunities which indicated that personalizing learning opportunities to students can increase achievement and engagement. The present study of CCAs as an option for improving career readiness revealed how this school model can increase student access to industry experts and experiences to improve their career readiness.

Lombardi et al. (2017) used a bifactor approach to examine frameworks for improving college and career readiness. The study found that multiple models and frameworks for college and career readiness often confuse the issue of determining the most appropriate approach which confirms the problem being examined by this study (Lombardi et al., 2017). Similarly, Nassar et al. (2019) suggested a narrower approach to improving college and career readiness that focuses on the implementation of career intervention services such as career counselors and strategic career planning in secondary schools that are directed at the students' individual postsecondary goals. The study also indicated that career intervention services help prepare a workforce for the communities in which schools exist and allow students to enjoy a higher level of engagement in their educational endeavors (Nassar et al., 2019). These findings coincide with work by Plasman (2018) that supports the use of individualized career/educational plans to improve career readiness based on SCCT. Most career academies in Georgia use a personalized career planning

model for each student, increasing the practical significance of CCAs as a secondary education option (Lakes & Burns, 2012).

### **Community and Business Needs**

Ketonen (2016) indicated that effective community and business partnerships are the cornerstone of successful workforce development. Since the communities and businesses that seek to employ graduates are unlikely to consider high-stakes test scores such as those from the Georgia Milestone Assessment when making hiring decisions, it is important that schools work closely with these stakeholders to determine how to best prepare students to be contributing members of society and the workforce. Boocock (2019) indicated that utilizing distributed leadership to identify and address needs of the local community in education programs can have a significant positive impact on students and community members. To implement distributed leadership to meet the needs of community and business needs, inclusion of community and business partners in the planning, implementation, and accountability process of designing educational program is critical (Boocock, 2019).

Current research on the demands of the workforce indicated that a combination of technical and non-technical skills is desired by today's employers (Jackson, 2017). Many schools and districts have begun implementing collaborative partnership with business and industry stakeholders to address these needs (Kaufman, 2015). Balsas, Swingruber and Lin (2018) indicated that successful business and education partnerships include an workforce infrastructure policy driven by local employers, a policy that draws on workforce needs and opportunities, and a policy that integrates economic development strategies with local anti-poverty efforts. One prospective model of meeting the evolving needs of today's workforce is the STEM Workforce Education Logic Model. This model is based on reports of most current workforce needs and

integrates dispositions, knowledge, skills, and actions to deliver content knowledge and workforce skills to students (Reider, Knestis, & Malyn-Smith, 2016).

Research has also indicated that approximately 35% of jobs in the early 2000's required a professional licensure or credential (Holzer & Lerman, 2007). Research indicates that schools should take a more focused approach to educating students in a way that prepares them for the careers that are in highest demand in their respective communities (Walker et al., 2015). STEM programs have become a popular approach to addressing the growing need for a qualified workforce in the United States, focusing on content and skills that are meant to make students more competitive in today's industries and careers (Gwynne, 2018). Suter and Camilli (2019) indicated that while STEM skills are important, they must be integrated into a more comprehensive academic and vocational education program in order to have the intended effect of improving career readiness in the United States. Programs that combine industry-specific skills and general workplace readiness typically have more positive impacts on students' school-to-work transitions, providing a more effective workforce for communities (Jackson, 2017).

### **Vocational and Career Education**

Holzer and Lerman (2007) indicated that the development of skills for industry-specific careers will slow significantly through the year 2020. This means that schools must adapt their vocational and career education programs to promote career skill development and career readiness. Research out of Sweden confirmed that students, especially male students, experienced higher levels of unemployment after a general secondary education than those who participated in vocational education programs (Hall, 2016). Zillic (2018) conducted a quasi-experimental study of education reform in Croatia that proved that extending general education did not contribute to improved workforce outcomes; career and vocational training were most

influential. Mobley, Sharp, Hammond, and Withington (2017) conducted a study that proved that career planning and development was improved for CTE students who participated in career-focused education when compared to non-CTE students. Additional research proved that appropriate educational opportunities, such as vocational education models like the CCA, improve employment outcomes and provide a strategic competitive advantage to students entering the workforce after completing secondary school (Blinova et al., 2015).

Eichhorst, Rodriquez-Planas, Schmidl, and Zimmerman (2015) described three types of vocational education systems: vocational and technical schools, formal apprenticeships, and dual-apprenticeships. CCAs in Georgia utilize all three systems but promote the dual-apprenticeship model in which students receive school-based and apprenticeship training simultaneously (Lakes & Burns, 2012). Ireland and Lent (2018) tested the career self-management model and found that factors such as the interrelation of learning experiences to career exploration were positively linked to the development of self-efficacy, outcome expectations, and career choice.

Nassar et al. (2019) identified six key components that influence youth workforce development (WFD): a holistic, systemic, and comprehensive framework, a needs assessment, trainer curriculum, participant curriculum, delivery, and evaluation. Among these, the development of a holistic, systemic, and comprehensive framework that utilizes progressive career theories can have the most impact on socioeconomic outcomes (Nassar et al., 2019). This study was based on a report by the United Nations (2015) that outlined the importance planning and goal setting for improving economic conditions on the world scale in the long term. The Nassar study indicated that to improve economic conditions, development of the youth workforce must be an integral focus (2019).

Many vocational education models focus on integration of academic and career education to meet the desired outcomes for students (Couch, Ross, Vavrek, 2017). Integrated curriculum models that allow students to bridge multiple content areas or disciplines, build higher order thinking skills, problem solving and participate in active learning experiences have been advocated at various levels of education for many years (Wong & Nguyen, 2019). An integrated curriculum is one in which students are provided academic and career education in a blended learning process (Park et al., 2017). One method for integrating curriculum at the secondary level is WIL/WBL programs (Jackson, 2017). Polidano and Tabasso (2014) conducted a study to evaluate the effectiveness of WIL/WBL programs in upper-secondary school. The study proved that WIL/WBL programs that integrate classroom learning with on-the-job training have a positive impact on school completion and successful school-to-work transitions (Polidano & Tabasso, 2014).

Research at the national level indicated that integrated curriculum models such as the Integrated Basic Education and Skills Training (I-BEST) program led to improved workforce outcomes for participants when compared to students who participated in traditional vocational education (Couch et al., 2017). The most effective vocational and CTE programs take a deeper approach to career skill development rather than attempting to cover as many topics and careers as possible, giving students more time to explore specific careers and related skills (Kreisman & Stange, 2018). In addition, Park et al. (2017) indicated that context-specific literacy integration into CTE programs can improve problem solving, decision making, and career development. A gap in literacy can have a significant negative impact on the development of career readiness skills and should be addressed by any integrated curriculum program (Hayes & Wilson, 2016).

Research indicates that curriculum integration should begin at the individual district level, allowing stakeholders to choose how to integrate career and academic education into a program of study that best meets the demands of the community and its workforce (Park et al, 2017). Gonzalez-Herrera and Marquez-Dominquez (2018) stressed the importance of teacher training on integrating academic and vocational curriculum, which would improve individual teacher practices and consistency of practice if the training is uniform across a state, or region. Many CCAs across the United States have adapted integrated curriculum programs, but consistency in practice among career academies is lacking which contributes to the need for further study on the topic of methods of improving career readiness among high school students (Mokher et al., 2018).

### **Career Academy Implementation**

Across the nation, school districts have increasingly begun using labor market data to inform educational offerings at the local level (Gewertz, 2018). This is a primary tenet of the CCA model, in which students are engaged in academic and career focused study at the high school level, leading to improved knowledge of the local and regional job market and increased industry certifications earned by high school students (Gewertz, 2018). Many CCAs are designed based on a school-within-a-school model (College and Career Academy Support Network, 2014). That is, academic courses are included in a rigorous career-focused theme (Dixon et al., 2011). Additional models of CCAs include the separate program model which situates the CCA on a separate campus as an extension of the local schools, and the independent school model in which the CCA becomes an additional high school in the district (College and Career Academy Support Network, 2014).

At the forefront of research on these academies are scholars such as Hackmann, Malin, and Gilley (2017) whose studies have addressed the effective implementation of CCAs on a broad scale. Hemelt, Lenard, and Paepflow (2019) championed career academies as a viable option for increasing students' attachment to their education and their development of career skills that will benefit their life after high school. Recent research asserted the importance of cross-sector collaborations between education and industry which includes increasing access to industry experts as instructors and mentors in the CCA model (Advance CTE, 2016; Hackmann et al., 2017). The current study provided further exploration of the CCA model, focusing on student perceptions to address the need for more consistent practice in developing career readiness skills.

**Programs of study in college and career academies.** Career academies across the nation utilize programs of study based on industry-specific needs in their local communities to prepare a skilled workforce to the area (Lanford & Maruco, 2017). In the State of Georgia, the Georgia Board of Education, in partnership with the Governor's Strategic Industries and Workforce Development Taskforce, have developed seventeen program concentrations that are aimed at improving the workforce in the state through vocational education; Agriculture, Food, and Natural Resources, Arts, A/V Technology, and Communications, Business Management and Administration, Education and Training, Energy, Finance, Government and Public Administration, Health Science, Hospitality and Tourism, Human Services, Information Technology, Law, Public Safety, Corrections and Security, Manufacturing, Marketing, STEM, and Transportation, Distribution and Logistics. (Georgia Department of Education, 2019). These programs of study, like the example in Appendix A, include academic, health/physical education,

and CTAE components; many states requiring a specific sequence for completing the program while fulfilling general graduation requirements (Georgia Department of Education, 2018).

Career pathways/programs of study address the emerging notion that all students need a post-secondary option, but not necessarily a degree from a four-year college or university (Schwartz, 2016). Research indicated that 68% of high school students proceed immediately to college, but only 63% of those students complete a bachelor's degree in six year or less (Witteveen & Attewell, 2017). Many students who failed to complete college cite the inability to repay student debt due to lack of employment opportunities as a contributing factor to the low level of college completion in the United States (Houle & Warner, 2017). This is improved through dual enrollment programs of study that offer free, or low-cost college credits to students who may not otherwise be able to attend college (Lin, Borden, & Chen, 2018).

**Industry certifications and credentials.** Lakes and Burns (2012) promoted the usefulness of career academies in providing industry certification and credentials for high school students as an alternative to entering a four-year degree program. The viability of providing post-secondary routes to employment other than college and university completion was confirmed by Fletcher and Tyson (2017) who proved that students who obtain industry credentials and certifications in STEM fields while in high school are more likely to become employed in those fields after graduating from high school. While this may decrease the percentage of students entering a four-year degree program, it could improve successful entry into the workforce and the economic stability of the nation (Balsas et al., 2018).

A study out of Florida indicated strong positive results in academic achievement among traditionally lower-performing students, higher levels of student engagement, and a positive transformation of the climate of the school after implementing an industry-credentialed



information technology program in the school (Spence, 2012). Spence (2012) indicated that the school utilized industry experts as instructors in courses such as information technology, web design, and television production. Giania and Fox (2016) confirmed that students who participate in credentialing programs in secondary school are more likely to go on to pursue additional credentials after graduation, confirming the notion that implementing credentialing programs in CCAs is a significant benefit to students.

**Dual enrollment opportunities.** Dual enrollment has long been an option for high school students seeking more rigorous academic courses and/or the opportunity to obtain college credits while in high school (Young, Joyner, & Slate, 2013). Witowsky and Clayton (2019) stated that dual enrollment typically has positive effects on student preparation for college-level coursework and increasing college access to minorities and other subgroups. Research also indicated that students who participated in dual enrollment in high school were more than three times less likely to require remedial college courses, and 28% more likely to graduate college within three years (Grubb, Scott, & Good, 2016). Because of this, many school districts across the nation have begun to encourage students to participate in dual enrollment academic and career courses during high school; more than one-third of all high school students taking at least one dual enrolled class during their high school career (Gewertz, 2019). Cowan and Goldhaber (2015) reported that dual enrollment ranks second in popularity only to Advanced Placement courses regarding college preparation.

Similar to traditional high schools, many career academies and other programs aimed at improving the transition to college and careers offer dual enrollment options for students to meet their various post-secondary goals (Fletcher, Warren, Hernandez-Gantes, 2018). Charles Dayton (2014), Coordinator of the Career Academy Network, indicated that a partnership between career

academies and local technical schools, colleges, and universities should be a component of any career academy seeking to meet the various post-secondary needs of their students.

Students who participate in dual enrollment courses reported a variety of benefits and detriments to the experience (Allison, 2015). Benefits included exposure to college-level curriculum and learning to manage the responsibilities and freedoms of college enrollment, but students also reported a negative impact on their high school grade point average (Allison, 2015). Lile, Ottusch, Jones and Richards (2018) reported that dual enrollment students also referenced the development of their identity as a college student as a strong positive characteristic of the dual enrollment experience, particularly among low-income and first-generation college students.

**Work-based learning.** Since the passage of the School-to-Work Opportunities Act in 1994, secondary schools across the United States have implemented work-based learning as an option for linking classroom instruction from academic and CTAE courses to real-world work experiences (Griffith, 2001). Research by Kenny et al. (2016) indicated that work-based learning has a positive effect on students' social, professional communication, and self-reflection skills, particularly for low-income youth. Related research also indicated that work-based learning has more a more positive long-term impact on career readiness and employment outcomes than project-based learning models, especially when the students' employment is directly related to their future career field (Suyitno & Pardjono, 2018; ).

In CCAs, work-based learning, apprenticeships and internships are often a significant component of the overall instructional model (Lakes & Burns, 2012). Prior to the wide-spread implementation of these academies, only 34% of students who completed a career pathway while in high school reported participating in an internship, or WBL program (Lanford & Maruco,

2017). Hora, Benbow, and Oleson (2016) emphatically stress the importance of internships and WBL in career-specific fields in order for students to compete in a global job market, particularly for economically disadvantaged students. In CCAs, teachers are expected to make meaningful connections between course work and industry experience, making WBL a viable option for these schools (Lanford & Maruco, 2017).

**School and community collaboration and leadership.** School-community collaboration is defined as the working relationship between schools and community businesses and organizations to accomplish the collective goals of improving student outcomes and community viability (Kim, 2019). Leadership within these collaborative partnerships is, without argument, a significant factor in implementing new curriculum programs and school models that positively impact school and community outcomes, with distributed leadership among various stakeholders having the most positive impact on the success of the CCA model (Kim, 2019; Malin & Hackmann, 2017). Distributed leadership in the school setting involves allowing formal and informal leaders to take an active role in school decision-making (Fasso, Knight, & Purnell, 2016). Spillane, Halverson, and Diamond (2004) described a framework for distributed leadership that included four key elements: leadership and task functions, task enactment, social distribution of task enactment, and situational distribution of task enactment. Under the CCA model, formal and informal leadership in the school is assumed by various stakeholders including school personnel and community members (Lakes & Burns, 2012). In a career academy or other school setting where this type of leadership is embedded, research showed that teacher job satisfaction increased which led to positive outcomes for students (Garcia-Torres, 2019).

Although Hattie's (2009) meta-analysis proved that school leadership, with an effect size of 0.32 (0.40 = one year of academic growth), was less important than other factors contributing to student achievement, Malin and Hackmann (2017) indicated that leadership is crucial in implementing the CCA model. Teachers, students, and other stakeholders benefit when leaders are committed to the CCA model and can provide guidance on how to best integrate career-related themes throughout the school culture (Hackmann et al., 2017). DeWitt (2018) stated that for school leadership to be most effective, especially when implementing new programs or initiatives, the leader must consider his or her experiences as a teacher and building leader to create a climate that fosters effective change. When community stakeholders and education leaders collaborate, the needs of the workforce can be more adequately addressed through academic and career education courses that address specific community needs (Balsas et al., 2018).

Students in schools with strong community partnerships also see significant benefits including access to industry experts, increased networking opportunities and a sense of importance to the success of the community (Kim, 2019; AdvanceCTE, 2016). Tyler, Symington, and Clark (2017) indicated that students in STEM programs with meaningful community partnerships are more likely to engage and succeed in STEM-related career fields. Additionally, when exploring outcomes for students in various racial/ethnic subgroups, Morrison (2018) indicated that community partnerships with organizations that promote racial equality and advancement can aid in closing the achievement gap for students of color in science content areas.

Community leaders also provide a significant source of leadership in establishing and maintaining CCAs (Bryson, Crosby, & Stone, 2015). Cross-sector collaborations such as those

between businesses, industries, community members, and schools increase buy-in from the public, and provide substantial benefits to CCAs as various areas of expertise are represented and can contribute knowledge to inform decision-making about the structure and implementation of CCAs (Bryson et al., 2015). DePetris and Eames (2018) confirmed the importance of community partnerships in education through their study on effective school-community partnerships. These partnerships increase community buy-in on this new educational model and improve access to industry experts for use in student learning opportunities (AdvanceCTE, 2016; DePetris & Eames, 2018). Collaboration theory supports this type of work through the themes of interpersonal influence and cohesion among group members (Milian, 2018). This theory is supported by much research on cross-sector collaboration and its impact on improving educational outcomes for all students (Riehl & Lyon, 2017). As Malin and Hackmann (2019) indicated utilizing school, community, and business leaders during the implementation of CCAs improves stakeholder commitment which increases the likelihood of the success of a CCA.

**Teachers in career academies.** Effective leadership is essential to implementing any new educational model but recruiting and retaining quality teachers is paramount to success in any educational program or model (Viadero, 2018). Leadership is typically most influential as it relates to improving collective teacher efficacy, which has the most significant impact on student achievement (Qadach, Schechter & Daas, 2020). Despite the important role that leaders play in schools, teachers remain the primary role in designing and implementing a framework for instruction that builds a desire for learning among students (Chauby, Bhattacharya, & Das Mandal, 2018).

In CTAE programs, employing industry experts as mentors and instructors is essential in improving the quality of learning for students (AdvanceCTE, 2016). However, there are

concerns about the transferability of industry- and/or subject-specific knowledge to classroom instructional effectiveness (Diezmann & Watters, 2015). To address this concern Australia recently implemented a career change program that is designed specifically for transitioning from industry to the classroom (Pitard & Greenfield, 2012). The program involves industry experts who are transitioning to the role of classroom teacher in a performance-based training program much like that of student teaching in America; providing opportunities for the development of pedagogical knowledge that is important to increasing student achievement (Pitard & Greenfield, 2012).

Regarding the importance of teachers in building student engagement and career readiness skills, Busted and Seymour (2017) identified six key factors to which college graduates attributed their success in the workplace. Of the six factors, three were focused on relationships and interactions with professors and mentors (Busted & Seymour, 2017). The study concluded that college graduates were more than twice as likely to be engaged in the workplace if they had a mentor who encouraged them regarding their career goals and aspirations (Busted & Seymour, 2017). When industry experts are properly trained and utilized as classroom teachers in their area of expertise, these working relationships with students can increase the likelihood of students to pursuing a career in that field (Finkel, L., 2017).

Many educators who lean on traditional practices in schools may find a challenge in transitioning to newer, more progressive models (Araujo-Oliveira & Gregoire, 2018). This challenge can extend into modern vocational education as veteran teachers attempt to adapt to new demands in the workforce (Kreuzer & Weber, 2017). Utilizing industry experts has been proven to be an effective method of providing instruction, mentorships, and field experience opportunities to students (Advance CTE, 2016). However, recruiting industry experts who are

willing to leave typically higher paid industry jobs for teaching positions in vocational education, may be a significant challenge for schools (Advance CTE, 2016). In Sweden, vocational education teachers who previously worked in industry noted workload and paid time off as significant factors in moving from industry to teaching (Hof & Strupler-Leiser, 2014). This report is contrary to many teachers who entered the field through a traditional path, with secondary English teachers reporting that increased workload caused by curriculum changes, monitoring and reporting requirements, and high-stakes assessment preparation to have considerably increased the workload in recent years (Manuel, Carter, & Dutton, 2018).

Hasselquist and Graves (2020) indicated that CTE teachers face additional challenges due to a lack of guidance and support specifically aligned to their subject area, which can contribute to problems retaining highly qualified instructors in these areas. Oman, Self, and Cole (2017) conducted a quantitative analysis of factors that influence CTE teacher retention. The study indicated that CTE teacher retention is typically influenced by similar factors as traditional academic teachers; low pay, workload, and evaluation and assessment of job performance (Oman et al., 2017). These factors all influence teacher effectiveness and retention which, in turn, influence student achievement (Young, 2018).

Hattie (2009) indicated that collective teacher efficacy was the most influential factor impacting student achievement. Teacher efficacy is directly related to job satisfaction and student achievement (Hattie, 2009). A study by Banerjee, Stearns, Moller, and Mickelson (2017) confirmed these facts by indicating a strong correlation between teacher job satisfaction and student reading achievement in elementary grades. When teachers are compensated and evaluated comparably to their peers outside of the field of education, morale and self-efficacy are improved which contributes to the overall success and achievement of students (Robertson-Kraft

& Zhang, 2016). Because self-efficacy is a key component of SCCT, it is important that teachers demonstrate high levels of career self-efficacy as an example to students of how to develop self-efficacy related to career development and readiness (Lent et al., 1994; Lent, Brown, & Hackett, 1999).

Students also reported that teachers' self-efficacy had a direct influence on their perceptions of teacher competency and success (Miller, Ramirez, Murdock, 2017). These results support the research that proves that collective teacher efficacy has the second most significant impact on student achievement (Hattie, 2009). While teachers are not the primary focus of the present study, it did reveal that student perceptions related to the importance and influence of CTE teachers had a significant relationship to their perception of the effectiveness of the CCA model at positively impacting the development of career readiness skills.

While much research exists on the importance of skilled vocational education teachers, there is a lack of research specifically addressing teachers in CCAs (Boldrini, Sappa, & Aprea, 2017; Khan & Markauskaite, 2017; Kopsen, 2015). What is clear from the research is that vocational teachers should have industry experience and certifications in order to serve as teachers in their field regardless of the type of school in which they teach (Hof & Strupler-Leiser, 2014). The present study examined the importance of CCA teachers as it relates to the experiences described by CCA graduates regarding the development of their career readiness skills.

### **Summary**

Current literature on college and career academy education as an option for improving career readiness is limited (Dixon et al., 2011; Hackmann et al., 2017; Lakes & Burns, 2012). However, research on vocational education and career readiness presents significant evidence to



support that vocational education provides significant benefits to students in reducing the risk of future unemployment and improving career readiness (Blinova et al., 2015; Malin et al., 2017; Mobley et al., 2017). The research also indicates that utilizing industry experts as vocational education instructors has significant positive impacts on student outcomes (AdvanceCTE, 2016).

This chapter outlined the theoretical framework of SCCT and its significance regarding vocational and career education efforts. Additionally, the chapter provided a review of the literature on college and career readiness, vocational and career education, and the implementation of CCAs including the importance of school and community collaboration and teacher recruitment, retention, and effectiveness. The literature provided a significant representation of the inconsistency of practice in career preparation, and leaves room for additional research on the most appropriate models for improving career readiness among high school students.

## **CHAPTER THREE: METHODS**

### **Overview**

The issue of career readiness has been at the forefront of the educational landscape for many years (Mokher et al., 2018). As high schools attempt to find the most appropriate model for preparing students for college and/or careers, research has emerged on the benefits of these programs such as decreased future unemployment and improved student engagement (Blinova et al., 2015; Plasman, 2018). Recent studies exist on the effectiveness of CCAs as a secondary education option (Hackmann et al., 2017), but there is a lack of research on how graduates perceive the influence of educational models like the CCA on their career readiness. A phenomenological approach to this topic provided a voice to graduates of CCAs regarding how their education under the CCA model contributed to their preparedness for the post-secondary path of their choosing (Plasman, 2018).

The purpose of this phenomenological study was to understand how graduates from a CCA in northern Georgia perceived the influence of the CCA model on their career readiness. The forthcoming chapter describes the phenomenological design, setting, participants, and data collection and analysis procedures for the study. It also addresses the role of the researcher and present the research questions that will be used to guide the study.

### **Design**

A qualitative, transcendental phenomenological design was used for this study. Creswell and Poth (2018) stated that qualitative studies are appropriate when a problem needs to be explored and there is a need for a complex understanding of the problem. There are many qualitative designs that can be used, and while ethnography, grounded theory, hermeneutics, phenomenology and heuristic research all seek to make meaning from human experiences,

phenomenology is most appropriate for determining the true essence of the experience and its implications on society (Moustakas, 1994).

Researchers who undertake a phenomenological study seek to explain the essence of the experience of individuals involved in certain situations by setting aside any preconceptions about the phenomenon and allowing the qualitative data to reveal meaning (Smith, 2016). Because the proposed study seeks to explain how graduates perceive their experiences related to developing career readiness skills under the CCA model, a qualitative phenomenological study is appropriate.

Phenomenology was initially promoted by Husserl (1931) and made popular by Van Kaam (1966) because of the belief that strictly quantitative studies could hinder the development of theories and conclusions regarding the phenomenon under examination by failing to account for the perceptions of those involved in the phenomenon. While a quantitative analysis of the effectiveness of CCAs in developing career readiness in high school students would provide valuable data, it would not provide a voice to the students who were directly influenced by the model. Dumas (2018) highlighted the importance of student perceptions of their learning experiences, and the usefulness of those perceptions for developing educational strategies and programs. The present study addressed the limitations that would exist in a purely quantitative study by allowing students to explain their experiences in the CCA and how those experiences influenced their readiness for careers after high school.

Moustakas (1994) explained that transcendental phenomenological research is based on Husserl's (1931) research, in which epoché, noema, and noesis are the primary components of sound phenomenology. Epoché is the suspension of one's own ideas and beliefs about a phenomenon in order to uncover the essence of that experience (Moustakas, 1994). Noema and

noesis involve the physical experience, and the perception and judgment of the experience, respectively (Sheehan, 2014). In carrying out the study of CCAs as a model of improving career readiness for high school students, it was important that I diligently considered each of these aspects of phenomenology so that reliable results could be obtained. For example, I believe that CCAs are the most effective model for developing career readiness in high school students. I was careful not to allow that belief to influence the outcome of the study; therefore, I was required to pay close attention to the noema and noesis of the phenomenon and use epoché to protect the study from my personal biases.

In transcendental phenomenology significant attention is paid to intentionality; intentionally perceiving, judging, and valuing an experience (Moustakas, 1994). The rationale for selecting transcendental phenomenology for the present study lied in intentionally choosing an experience to examine and using the perspectives of high school graduates to make judgements and valuations on the effectiveness of CCAs at improving the career readiness of high school students. Moustakas (1994) explained that the objectifying quality of a phenomenon is its existence, and the interpretive form is what allows the perception of the phenomenon to appear. Additionally, a transcendental phenomenological approach in this study allowed for an examination of the objectifying quality of CCA participation and the interpretive form of how it is perceived.

To implement this transcendental phenomenological study the following procedures were followed based on the direction of Moustakas (1994). First, the topic was selected based on the need to provide more clarification about the importance of consistent practices in developing career readiness skills for high school students. Relevant literature was reviewed to determine if there was a wide enough gap in the existing body of knowledge for a study on this topic. After

reviewing the literature, it became clear that there were many gaps in the research on CCAs, but the most significant area in need of further research was that of the experiences of students in the CCA model.

Informed consent forms and procedures for protecting the confidentiality of participants were developed and implemented prior to data collection and analysis. Questions that guided individual and focus group interviews were developed and are included later in this chapter. Interviews were conducted in the individual and focus group format. Data analysis was used to derive textural and structural descriptions, and a thorough synthesis of those descriptions was conducted to derive the essence of the phenomenon. Information obtained from the results of this study have the potential for use in guiding policy and program decisions at the school and district level.

Because student engagement is a critical issue in today's educational environment, it is important to give students a voice about the factors that influence engagement and the quality of education (Brenneman, 2016). The current study provided students with the opportunity to add their voice to the conversation on effective career readiness education models. Additionally, transcendental phenomenological studies of this nature can be used to explain how individuals understand, interpret and apply their educational experiences to later states of life, which confirms the validity of SCCT as the foundational theory on the development of career choice and career self-efficacy (Ireland & Lent, 2018). Participants in the present study provided detailed explanations of their experiences in the CCA model and how those experiences shaped their career readiness and self-concept of success in the workforce.

### **Research Questions**

The following central research question and associated sub-questions will be used to

guide the study:

### **Central Question**

How do graduates perceive the lived experience of developing career readiness through their participation in the CCA model of secondary education?

### **Sub-question 1**

How do graduates of CCAs describe the lived experience of interactions among themselves, their peers, instructors, community members, and school leaders in the CCA model as it relates to the development of career readiness?

### **Sub-question 2**

How do graduates describe the lived experience of participation in the CCA model on their career choices?

### **Sub-question 3**

How do graduates describe the lived experience of participation in the CCA model on their self-concept of success in their desired career field?

### **Setting**

The setting for this study is Sabin County in northwest Georgia. This setting was selected because of the popularity of CCAs in the region. As of the 2018-2019 school year, there were 48 CCAs operating across Georgia; nine in the Northwest Georgia region (Georgia Department of Education, 2019). Participants are all graduates of a CCA-model high school and have experience with aspects of career preparation that occurred in that setting. Because Georgia is one state leading the charge in implementing CCAs, it is logical that a site in Georgia be the setting in this study (Lakes & Burns, 2012). In the future, researchers could replicate this study by carrying it out in other states, or regions. Since the purpose of the study was to determine the

effectiveness of CCAs at improving career readiness for high school graduates, a transcendental phenomenological approach was still be appropriate in a limited geographic area.

The CCA that participated in this study operates under the organizational model of a stand-alone program/campus (College and Career Academy Support Network, 2014). Stand-alone program/campus CCAs are a separate facility from local schools that allow students from surrounding traditional high schools to be transported to and attend the CCA for a selection of career and academically integrated courses during the regular school day (Dayton, 2014). Interdisciplinary approaches to education are preferred in many cases because research has proven that interdisciplinary learning improves critical thinking skills, development of knowledge, and openness to various perspectives (Klaassen, 2018). In any CCA model, students can earn high school credit for academic and career courses while simultaneously earning possible college credits, industry credentials, and professional certifications and licenses (Lakes & Burns, 2012).

The demographics of the district that will participate in the study are as follows: Total student population – 14,202; Economically disadvantaged – 57.5%, students with disabilities (SWD) – 12.8%, White – 70%, African American/Black – 9.8%, Hispanic/Latino – 13.9%, American Indian – 0.16%, Asian/Pacific Islander – 0.95%, Multiracial – 4.9% (Governor’s Office of Student Achievement, 2019). Table 2 presents detailed demographics.

<u>Demographic</u>	<u>Number of Students</u>
Student Population	14,202
Economically Disadvantaged	8,173
Students with Disabilities	1,832
White	9,995
African American/Black	1,401
Hispanic/Latino	1,984
American Indian	23
Asian/Pacific Islander	135
Multiracial	704

Table 2

### **Participants**

Sensitizing concept exemplars sampling, a form of purposeful sampling based on group characteristics, was used for this study (Patton, 2015). Utilizing sensitizing concept exemplars sampling involves using participants who can provide rich information about the meaning of concepts or ideas within a specific context (Patton, 2015). This sampling strategy was appropriate for the study of graduates' perceptions of the influence of CCA education on career readiness because it allowed for the selection of participants who were able to provide the most valuable input to the study due to their shared experiences as CCA students. To qualify to participate in the study, individuals must be 18 to 25 years old, have graduated from a CCA-model high school and be currently employed, or in college or training for a career related to the pathway completed during their enrollment in the CCA.



To obtain the sample, I contacted the CCA principals from a district in northern Georgia to identify potential participants. Requests for participation were sent after the list of potential participants had been compiled. From the list of willing participants, a group of 15 individuals was selected for interviews based on their employment status and availability to participate in the interviews on given dates. This sample size is appropriate for a study of an educational program in a small geographic area because data saturation – the point where additional evaluations and interviews would yield no new information or themes – will likely be reached with 15 participants (Boddy, 2016). The demographics of the participants in the current study are as follows: 40% Male, 60% Female, 73% White Non-Hispanic, 13% Hispanic, and 13% Black.

### **Procedures**

The study began with applying for approval of the study by the Institutional Review Board (IRB). Once the study was approved by the IRB, I contacted district officials such as the superintendent, deputy superintendent and academic officers for permission to conduct the study in the CCA within their district. Next, I contacted the principal of the CCA in the participating district to obtain a list of graduates and their contact information so that requests for participation could be sent. Emails or letters were sent to potential participants to request participation (Appendix B). The letter explained my background and interest in the study in order to begin establishing familiarity with the participants. A deadline for response was included in the email/letter so that participants could be obtained in a timely manner. This created a convenience sample based on geographic location of the CCA and the individuals' agreement to participate in the study. Additionally, I requested permission from the CCA principal to evaluate career readiness lesson plans prepared by teachers in the school.

Each participant who agreed to take part in the study was asked to take part in a screening

survey, an individual interview and a focus group interview. Patton (2015) indicated that interviews have become a crucial feature in society and are required to make sense of life and experiences. The individual interviews and focus group interviews preceded lesson plan evaluations so that the responses from participants could be understood in the context of the instruction that occurred in the CCA. Interview questions were developed for the individual and focus group interviews, as well as, an evaluation instrument to be used in evaluating career readiness lesson plans. The lesson plan evaluation instrument aided in establishing the context in which the participants were educated (Appendix D).

Evaluations of career readiness lesson plans were conducted at the participating CCA to allow me to understand the structure, procedures, and daily operations of the school from which participants were obtained. Patton (2015) asserted that no phenomenon can be truly explained without experiencing the context in which it took place. Detailed evidence of efforts at providing career readiness instruction was collected from the lesson plans and analyzed under the categories and themes that arose during the participant interviews.

Research indicates that participant interviews allow for a complex and more in-depth explanation of phenomenon than field observations alone (Patton, 2015). During the interviews participants were asked to discuss general perceptions of attending CCAs and specific perceptions related to career readiness skills obtained by participating in the CCA model. The interview questions were designed in such a way to allow for the essence of the participants' experiences in the CCA model high school to be revealed through their responses.

During the process of data collection, I kept a detailed journal of my own thoughts and reflections on interview responses, lesson plan content and other parts of the study as they arise. Identifying and guarding against epoché in any phenomenological study is of the utmost

importance in ensuring that the results and implications of the study are not influenced by the researcher's personal biases (Moustakas, 1994). Keeping this record allowed me to acknowledge and guard against allowing my views and beliefs to inappropriately influence the study. All information obtained during the data collection process was stored in password-protected files, on a password-protected personal computer to which only I had access.

### **The Researcher's Role**

An epistemological paradigm framed this study to ensure that my biases and prior assumptions about CCAs did not influence the conclusions of the study (Benton, 2017). I currently work in and have served a significant role in the development of a local CCA, bringing significant predispositions about the topic into the study. Those include the belief that CCAs are a superior high school model that improves student engagement and achievement, and that students who participate in the CCA model of secondary education are more prepared for entering the workforce than students who participate in traditional secondary schooling. There is also a possibility that some of the graduates who agree to participate in the study may have attended the CCA in which I teach. Conflict of interest is minimal since participants from the CCA in which I am employed have already graduated from high school and entered the workforce. To further reduce the likelihood of influencing their participation, or responses I did not include any participants who I directly taught during their time at the CCA. Using participants who have a direct relationship to the researcher can skew the responses of the participants as they seek to satisfy the researcher due to an imbalance of power between the researcher and the participants (Creswell & Poth, 2018).

A variety of steps were taken to address my personal assumption that CCAs are the superior model of high school education and avoid any undue influence on the results of the

study. Member checks were conducted after individual interviews and focus group interviews by sending field notes, interview transcripts and any inferences, or generalizations to participants to obtain their feedback (Korstjens & Moser, 2018). An audit of data collection and analysis procedures was also implemented to avoid allowing my personal opinions and predispositions to influence the study (Korstjens & Moser, 2018). Additionally, triangulation of the methods used in the study reduced my influence on the outcome of the study (Chowdhury, 2015). Triangulation occurred by integrating the data collected from individual interviews, focus group interviews and lesson plan evaluations.

### **Data Collection**

I used a transcendental phenomenological approach for the study of CCA graduates' perceptions of the model on their career readiness. Data collection began after IRB approval and the selection of participants. Each participant was asked to complete a personal survey regarding their individual demographics, employment, and educational status. This data was compiled into a password protected spreadsheet. Each participant was randomly assigned a pseudonym to protect their privacy. This data allowed me to use background info on the participants to inform the analysis of their responses during the individual interviews.

In addition to the collection of the demographic data described above, career readiness lesson plan evaluations, individual participant interviews and focus group interviews were used to collect data for the study of career readiness under the CCA model of secondary education. The use of multiple data collection techniques allowed for the triangulation of the data from the individual interviews, focus group interviews and lesson plan evaluations which confirmed the credibility of the participants' perceptions of their lived experience in CCAs as it results to the development of career readiness skills (Rooshenas, Paramasivan, Jepson, & Donovan, 2019).

## **Participant Interviews**

Interviews play a critical part in a qualitative study by eliciting information that is useful to the study and provides focus to the study by gathering data that could not be obtained through simple observation (Patton, 2015). Individual interviews with CCA graduates were conducted following the gathering of demographic and career data from each participant. These served as program evaluation interviews which used the perspectives of the participants to bring light to the effectiveness or ineffectiveness of a program (Patton, 2015).

I began the data collection process with interviews to facilitate in the development of the themes and patterns that were used to understand the essence of the participants' experiences in CCAs. With these categories in hand, evaluation of career readiness lesson plans was conducted through a critical lens that allowed what was indicated and revealed in the lesson plans to further illuminate the essence of the phenomenon. The participant interviews were conducted within three weeks of IRB approval and the signing of informed consent documents. Interviews were offered via Microsoft Teams at times convenient to each participant. To account for attrition, I conducted a total of 18 participant interviews.

The interviews were recorded and transcribed by the Dragon Dictation application. Recording the interviews allowed me to listen to the participants' responses during the transcription and coding process which allows for more reliable themes and patterns to be derived (Carey & Asbury, 2016). Additionally, conducting the interviews first allowed the context derived from the career readiness lesson plans to be used in conjunction with the interview responses to effectively code the data. After transcription and coding occurred, the transcripts and themes and patterns were distributed to the participants for member feedback and suggested edits, or additions. No additional changes, or additions were recommended, but would

have been added to the transcripts and associated documents to improve credibility of the study if they had been provided by participants (Patton, 2015).

The standardized interview questions below were used so that the instrument is available for examination by anyone who might use the results of the study, so variation from interview to interview is minimized, and so that the responses from multiple participants are easy to find and compare during the analysis phase of the study (Patton, 2015). Interviews lasted approximately 45 to 60 minutes per participant.

#### Open-Ended Interview Questions:

1. Please take a moment to introduce yourself, including the career pathway you studied in high school, and whether, or not you are currently employed in that career area.
2. How did attending a CCA-model high school influence the development of your career readiness skills?
3. Which experiences in the CCA do you believe were most significant to the development of career readiness skills? Please explain.
4. What, if any, facets of your experience in a CCA-model high school hindered your development of career readiness skills?
5. How did your experiences interacting with experts in your pathway industry impact your preparedness for the workforce?
6. How did the experience of interacting with your peers and instructors influence your career readiness?
7. In what ways were your academic and career classes integrated to combine your career interests with the academic content?
8. How did the experience of attending a CCA for the completion of a career pathway

- influence your career/post-secondary goals and choices?
9. How have you been able to apply the career readiness skills you obtained while attending a CCA to your experience in the workforce?
  10. Which areas of your work do you believe your experience in the CCA setting was not appropriate/adequate to prepare you?
  11. Based on your experiences in the workforce, in what ways do you believe CCA education could be improved to increase career readiness skills of future graduates?
  12. What other information would you like to share about your experiences in a CCA-model high school as it relates to the development of career readiness skills?

Question 1 was designed to get to know the participants and to establish a trusting relationship between myself and the participants (Patton, 2015). As participants responded to the question, additional questions were asked, if necessary, to further establish knowledge of the respondent. Questions 2 through 7 were designed to gather information about the experiences of the participants in the CCA, including interactions with industry experts that are considered essential to successfully implementing a career readiness program (AdvanceCTE, 2016).

It is important to give individuals an opportunity to reflect on their experiences so they can connect those experiences to application in the real world (Ivy & Jacobs, 2017). Question 8 asked participants to explain if and how their experience in the CCA model influenced their choices in the post-secondary phase of their education and/or career. Questions 9 through 11 allowed the participants to connect their educational experiences to their significance in the workplace and to provide feedback on the methods, or strategies that would have been helpful in further developing their career readiness. Research by Busted and Seymour (2017) indicated that college graduates cited relationships with instructors and opportunities for deep learning

experiences as contributing factors to their success in the workplace. The present study sought to determine if high school graduates attributed workplace success to similar factors. Question 12 is the final question and allowed the participants to add any other input from his, or her experiences that they believe could contribute to the dialogue on the topic, and the development of patterns and themes in the responses.

### **Focus Group Interviews**

In addition to individual participant interviews, participants were asked to participate in a focus group interview that drew on their shared experiences to explain the phenomenon of improving career readiness under the CCA model. Carey and Asbury (2016) defines a focus group as a group of individuals who share a common experience, or point of view and can provide rich feedback and input on that experience. For the current study, a sampling of eight participants who mirrored the general demographics of the participants as a whole was used. It was important that the focus group be representative of the entire participant population so that the results of the interviews were representative of the overall sample (Traynor, 2015). The original intention was to include a sampling of individuals who participated in the individual interviews and new participants who could provide additional data in the focus group interviews, but this was not achieved due to restrictions and implications of school closing due to COVID-19.

At the conclusion of the individual interview I asked each participant if they would be willing to participate in a focus group at a later date. From those willing to participate, I selected participants who most closely represented the demographics of the entire population of participants. I communicated with this group via email to set up a convenient date and time for the focus group interview. This interview was conducted on Microsoft Teams and was video



recorded to allow for accurate transcription of the participants' responses. A set of open-ended interview questions was developed for the focus group interviews to guide the conversation and allowed participants to discuss their experiences in a group setting, often leading to richer descriptions of the experiences (APPENDIX E).

#### Focus Group Interview Questions:

1. Why did you choose to participate in the CCA model during high school?
2. What aspects of your education under the CCA model were most beneficial to developing your career readiness?
3. Which aspects of your career-specific training in the CCA model have been most beneficial while working in the industry?
4. What specific concepts/skills/experiences were not present in your education at a CCA that would have benefitted you in the workforce?
5. What impact did your interaction with your peers in the same career pathway influence your career readiness?
6. What impact did interactions with instructors and industry-experts have on your career readiness?
7. Please explain the reasons why you would or would not recommend attending a CCA to future students.

Question 1 was designed to establish commonalities among participants that could improve group dynamics. Positive group dynamics are essential for effective focus group research as the participants need to feel comfortable enough to be willing to share their experiences in the group (Carey & Asbury, 2016). Questions 2 through 4 allowed participants to share the benefits of attending a CCA to their career readiness. These questions were most

essential to addressing the research questions of the study. In any focus group research, it is critical that key questions are developed that can generate data that is useful to addressing the research questions (Carey & Asbury, 2016). Walden (2015) stated that people are a product of their environments and the interactions that occur within that environment. Questions 5 and 6 examined the impact of human interactions in the CCA model on the experience of developing career readiness. Question 7 allowed participants to share their direct opinion on whether or not CCAs are beneficial enough to be recommended to others. This allowed for the exposure of any factors not addressed by the interview questions due to the wide range of responses that can be elicited (Walden, 2015).

### **Career Readiness Lesson Plan Evaluations**

Evaluations of career readiness lesson plans were conducted to obtain background information on the context of CCA education and any structures, procedures, or other policies within the CCAs that may influence the participants' responses and the outcome of the study. Five lesson plan evaluations were conducted of classes taught at the career academy participating in the study. Lesson plans were evaluated until thematic saturation was achieved. The KY Skills U Adapted Career Readiness Lesson Plan Evaluation Instrument (Appendix B) was used during the lesson plan evaluations to standardize the procedures among each lesson plan that was evaluated. The KY Skills U Observation Instrument was developed after surveying educators and workplace leaders and based on the Equipped for the Future standards (Commonwealth of Kentucky, 2019). It was adapted to be used for evaluating career readiness lesson plans by adjusting the language of the document to fit lesson plan evaluations, instead of classroom observations, while maintaining the ability to determine if instructional plans indicate efforts at improving career readiness among high school students.

During the evaluation of lesson plans, I looked for evidence of instructional practices related to career readiness; either in the development of soft skills applicable to all industries, or career-specific skills graduates would need when entering a specific job. When these practices were indicated on the lesson plans, they were used to further refine the analysis of participant responses during the interviews. Gibton (2016) stated that document analysis can be a powerful tool in qualitative research; allowing ideas and content of the document to be evaluated without the obtrusiveness that often comes with observations and other qualitative data collection and analysis procedures.

The use of phenomenological reduction is essential in qualitative studies because it provides a description of exactly what is seen and heard (Moustakas, 1994). Detailed, descriptive comments were included on the lesson plan observation instrument to provide a more complete picture of the type of instruction that occurred in the CCA model high school. The use of this evidence was important to establishing the context of the setting from which the participants were obtained and the impact of that context on the results of the study, which have been reported in the reflective portion of the study (Philippi & Lauderdale, 2017).

### **Data Analysis**

Phenomenological analysis based on the guidance of Moustakas (1994) was used in this study. The process began with horizontalizing the data by accepting each relevant statement from the participant interviews as having equal value to the study (Moustakas, 1994). A list of meanings or meaning units was compiled from those responses and clustered into themes that emerged throughout the examination of the responses (Moustakas, 1994). This method of thematic coding allowed for logical organization and sorting of collected data that was then used

to make meaning of the experience being studied (Williams & Moser, 2019). Moustakas (1994) asserted that the themes and categories derived during the coding process are essential for developing the textual and structural descriptions that will be used to make meaning of the phenomenon. Emic and etic perspectives were balanced to ensure that the themes and patterns derived from the data analysis process are true to the language and meanings of the participants and my own interpretation (Patton, 2015).

The strategies involved in any data analysis procedures should be directly linked to the objectives of the research (Thomas, 2006). Additionally, it is important that the categories and themes used for the data are reflective of what I wish to convey to readers (Stuckey, 2015). When reviewing data, any responses or other pieces of information that did not fit the purpose and objectives of the study were not be aligned to one of the categories or themes so that data that might have distracted from the purpose of the study was not included (Thomas, 2006).

### **Participant Interviews**

To analyze the participant interviews, each Microsoft Teams interview was audio-recorded and transcribed into a Word Document. Because qualitative studies require the researcher to reflect and draw conclusions from data, audio-recording interviews allowed the researcher to repeatedly review the raw responses from participants to ensure the most accurate conclusions are drawn from those responses (Renz, Carrington, and Badger, 2018).

Thematic analysis was used to derive the patterns that emerged from participant responses. Nowell, Norris, White, and Moules (2017) indicated that thematic analysis can be used to address many research questions and provides a framework for identifying, organizing, analyzing, and describing the themes and patterns derived from qualitative data. This process of analyzing the content of what participants said during the individual interviews was used to

understand the phenomenon being studied (Zhang & Wildemuth, 2009). Thematic analysis is useful for triangulating multiple data points in qualitative students such as this one because it allows for an increase in the quality of the conclusions that are inferred from the data (Renz et al., 2018). Nowell et al. (2017) recommended the following phases of any thematic analysis:

1. Familiarization with the data
2. Generation of initial codes
3. Searching for themes
4. Reviewing and refining themes
5. Defining and naming themes
6. Producing the report

For the present study, interview data was reviewed repeatedly to ensure familiarity with participant responses. Following this phase, initial codes were developed based on commonalities among responses and other significant pieces of information gained from the data that related directly to the concept of career readiness development under the CCA model. Those initial codes were subsequently sorted into themes that emerged throughout the familiarization and coding process. Themes are typically developed by combining similar pieces of the ideas and experiences of all the participants (Nowell et al., 2017). For example, in the present study, there was a pattern of responses among participants that indicated that interactions with industry experts during the instructional process at the CCA was a significant factor in the development of career readiness skills. In that case the theme of access to industry experts logically emerged.

Once themes were identified, they were reviewed to ensure that they are an accurate representation of what is presented in the data (Nowell et al., 2017). This meant that some of the themes that originally emerged were not supported with enough data to be included in the final

report, or that some themes were so closely connected that they were able to be combined into one theme for the purpose of clarity and conciseness in the results. This process was undertaken in the present study to provide the most relevant themes to use for preparing the final report of the data. The final report included an account of the data within individual themes and across multiple themes in which single data points fall.

### **Focus Group Interviews**

Like the individual interviews, the focus group interviews were electronically recorded and transcribed into a Word Document by the researcher. However, video recording was utilized in place of audio recording for the focus groups to allow for more accurate transcription of the responses of each participant. This allowed the researcher to take additional notes during the interview that were able to be used in the coding process to process and analyze the large amount of input garnered from the focus group and the interaction of participants in that group (Flynn, Albrecht & Scott, 2018). Axial coding was used to develop labels by which the responses could be effectively categorized to derive data that was used to appropriately address the research questions (Krueger, 1998). A code was only be developed if it aided in answering the research question (Vaughn, Schumm, & Sinagub, 1996). The initial process began with identifying categories that emerged after conducting the interview and reading the transcript. The categories were then narrowed down into codes by finding specific responses from the participants that supported the theme. This required multiple reviews of the transcripts and a careful consideration of whether or not there was enough information in the participant responses to support the use of the code (Vaughn et al, 1996). Following the coding process, a written report of the summary statements was developed and distributed to all participants for verification, allowing for more reliability and validity of the data (Vaughn et al, 1996; Krueger, 1998).

### **Career Readiness Lesson Plan Evaluations**

Career readiness lesson plans written by teachers who are employed at the participating CCA were evaluated after the individual and focus group interviews. The data collected from the lesson plan evaluation instrument was used to establish the context in which the graduates who participated in the study were educated, thus creating an opportunity to make more reliable judgements about their responses in the interviews. The lesson plans were evaluated using an adaptation of the KY Skills U Career Readiness Observation Instrument that focused on lesson plan content rather than classroom observations (Appendix B). The data from the instrument will be analyzed using the Rigorous and Accelerated Data Reduction (RADaR) technique (Watkins, 2017). The RADaR technique is described in Figure 1 below and lays out the steps in using standard word processing tools to complete analysis of qualitative data (Watkins, 2017).



*Figure 1.* RADaR data analysis technique. Illustrates the steps in the RADaR process of data analysis (Watkins, 2017).

The use of the KY Skills U Adapted Lesson Plan Evaluation Instrument (Appendix B) facilitated consistent formatting of the data obtained during the lesson plan evaluations. The next step was to create a phase 1 Table (Table 3) which included evidence from each career readiness lesson plan that were evaluated (Watkins, 2017). To create this table for the present study, the data for each item on the lesson plan evaluation instrument was entered into the table. From this point, commonalities were identified by the researcher to produce the phase 2 Table. This process occurred through eliminating superfluous and/or repeated responses to narrow the focus of the data analysis process to only those data points that supported the research question (Watkins, 2017). The phase 1 and phase 2 tables were formatted in the same manner, but with data removed as described above.

Table 3				
<i>Phase 1 Table</i>				
Criteria	Lesson plan content is based on standards and learner goals.	Lesson plan includes strategies for engaging students.	Lesson plan includes opportunities for students to engage in career-related, higher-order thinking.	Lesson plan is contextualized to equip students with skills and dispositions needed for workforce success.
Lesson Plan 1				
Lesson Plan 2				
Lesson Plan 3				
Lesson Plan 4				
Lesson Plan 5				

Table 3

The next step in the RADaR data analysis process was to code the data in a way that made it easier to interpret for deriving meaning (Watkins, 2017). For this step, an additional table was created that included a column for the codes that emerge from the lesson plan evaluation



data (Table 4). These codes were developed after repeatedly reviewing the data from the lesson plan evaluation instrument. This allowed for the development of codes that were likely to be prevalent throughout the entire study (Watkins, 2017). Once the codes were established a final report was produced that included the codes that have been established and any associated support for those codes such as quotes and/or frequency data from the lesson plan evaluation instrument (Watkins, 2017).

Table 4					
<i>RADaR Coding Table</i>					
Criteria	Lesson plan content is based on standards and learner goals.	Lesson plan includes strategies for engaging students.	Lesson plan includes opportunities for students to engage in career-related, higher-order thinking.	Lesson plan is contextualized to equip students with skills and dispositions needed for workforce success.	Code
Lesson Plan 1					
Lesson Plan 2					
Lesson Plan 3					
Lesson Plan 4					
Lesson Plan 5					

Table 4

### **Trustworthiness**

Establishing trustworthiness is the cornerstone of qualitative research (Amankwaa, 2016). Korstjens and Moser (2018) stated that the quality criteria for establishing trustworthiness are credibility, transferability, dependability, confirmability, and reflexivity. Methods exist to ensure these criteria are met by all qualitative studies (Hays, Wood, Dahl, & Kirk-Jenkins, 2016). Those methods include prolonged engagement, triangulation, member checking, and providing an audit

trail (Korstjens & Moser, 2018). The methods used for establishing trustworthiness in this study are described in each of the sections that follow.

### **Credibility**

Credibility in qualitative research addresses how well the results of the study reflect reality (Korstjens & Moser, 2018). Using standard procedures for establishing credibility such as reflective journaling is considered effective practice for qualitative studies of any topic (Connelly, 2016). Credibility in the present study was established through member checks that were conducted after lesson plan evaluations, participant interviews and focus group interviews. Member checks involved providing copies of transcripts of interviews, any inferences and generalizations derived from those interviews and copies of lesson plan evaluations to participants for their feedback (Korstjens & Moser, 2018). Member checks were conducted within two weeks of any significant study activity and provided participants with an opportunity to determine if the content of the documents reflected their words and meanings during the lesson plan evaluations or interviews (Amankwaa, 2016).

In addition to member checks, credibility was ensured through triangulation of the data and methodology of the study. Data triangulation is achieved by using multiple data sources and times/places of data collection (Korstjens & Moser, 2018). Chowdhury (2015) stated that triangulation reduces the impact of bias by providing additional data sources to confirm the results. In the current study, data sources included individual participant interviews, focus group interviews, and lesson plan evaluations that took place in various times and places. These sources provided an opportunity to prove that the results of the study were applicable in real situations by presenting data of various types and relating that data to the results of the study. This is

important to establishing credibility in the results of the study and their application to real world contexts.

### **Dependability and Confirmability**

Dependability and confirmability are related, but not synonymous terms. Dependability refers to consistency in the analysis process, while confirmability deals with the neutrality of the researcher in presenting the results of the study (Korstjens & Moser, 2018). To ensure dependability and confirmability in this study, an audit trail was established. The audit trail included detailed records of the steps taken from the inception of the study to its completion (Korstjens & Moser, 2018). This provided an unbiased source of descriptions of the study procedures, including methodology, data collection and analysis, and other aspects of the study (Amanskwaa, 2016).

### **Transferability**

Transferability was established by providing rich descriptions of the settings in which participants received their high school education and career readiness instruction (i.e., school-within-a-school model, standalone program) and how the results of the study were able to be applied to the broader social setting of career readiness. Because context can be derived from a variety of sources, it was essential that I asked questions that elicited rich responses from the participants so the phenomenon could be described in full detail (Amankwaa, 2016). Hays et al. (2016) asserted that transferability of the results must be established through rigorous application of the contextual implications of the setting on the responses of the participants.

### **Ethical Considerations**

Ethical considerations surrounding this study were generally focused on protecting the safety and privacy of the participants. The interactional nature of qualitative research necessitates

a focus on preventing harm to participants in the study (Wolff-Michael & von Unger, 2018). Obtaining informed consent is the first step in this process (Ryen, 2016). Consent was obtained from system- and building-level leaders, teachers, and participants who were interviewed, or whose lesson plans were evaluated during the study. No data was collected until all consent forms were signed. To protect the privacy and confidentiality of the participants, pseudonyms were used for all districts, schools, and participants in the study. All documents related to the study were scanned and stored on a password-protected computer with hard copies being stored in a locked file cabinet and destroyed six months after the completion of the study. Only the researcher has access to these files. Use of member checks also ensured that the results of the study accurately reflect the participants' input (Creswell & Poth, 2018).

### **Summary**

Approaches and efforts to improve career readiness for high school students must be given appropriate attention in the field of educational research if the United States wishes to remain competitive in a global workforce (Gwynne, 2018). A limited body of research exists on CCAs (Dixon et al., 2011; Hackmann et al., 2017; Hemelt et al., 2019). This study adds to the present body of knowledge on CCAs as an effective strategy for improving career readiness in high school students. More research is needed to determine how CCAs compare to traditional high schools in their effectiveness at improving career readiness. A quantitative study would allow for statistical data to be used to support or refute the results of a qualitative study which can have a more significant impact on policy and practice (Patton, 2015).

This chapter presented an overview of how the research was completed, including the selection of participants, data collection and analysis methods, and efforts at establishing trustworthiness of the study. The following chapter will explore the experiences of the

participants and the perspectives they provided on how the CCA model of secondary education influenced their career readiness.

## CHAPTER FOUR: FINDINGS

### Overview

The purpose of this transcendental phenomenological study was to understand how graduates from a CCA in northern Georgia perceived the impact of their participation in the CCA model on their preparedness to enter and succeed in the workforce. The study sought to understand the experience of graduates who participated in the CCA model and to use those experiences to improve upon the CCA model of career education across the state of Georgia, and potentially, the United States. To gain insight into this phenomenon, the following central research question was used: How do graduates perceive the lived experience of developing career readiness through their participation in the CCA model of secondary education? Additionally, three sub-questions were also used to guide the study. The subquestions are as follows:

#### **Sub-question 1**

How do graduates of CCAs describe the lived experience of interactions among themselves, their peers, instructors, community members, and school leaders in the CCA model as it relates to the development of career readiness?

#### **Sub-question 2**

How do graduates describe the lived experience of participation in the CCA model on their career choices?

#### **Sub-question 3**

How do graduates describe the lived experience of participation in the CCA model on their self-concept of success in their desired career field?

Chapter Four allows the voices of the participants to be heard through rich and detailed descriptions of their experiences that were collected during individual and focus group interviews. The chapter also examines lesson plans that were used in the education of these students during their time in a CCA model high school to establish the context in which they received career readiness instruction. Phenomenological data analysis techniques based on the work of Moustakas (1994) were used to analyze the data from each data collection method used in the study and presented in this chapter: individual interviews, one focus group interview, and lesson plan evaluations. The chapter concludes with a description of the context and phenomenon experienced by the study participants.

### **Participants**

Fifteen CCA graduates participated in individual and focus group interviews. All participants graduated from a CCA model high school after having completed a three-course career pathway. Sensitizing concept exemplars sampling was used to choose participants who could provide the most detailed accounts of their experiences with career readiness resulting from participating in a CCA (Patton, 2015). The demographic data of each participant can be found in Table 5.

<i>Individual Participant Demographics</i>						
	<b>Pseudonym</b>	<b>Age</b>	<b>Gender</b>	<b>Ethnicity</b>	<b>Individual Interview</b>	<b>Focus Group Interview</b>
1	Ellen	20	F	White; Non-Hisp	X	X
2	Jenny	19	F	White; Non-Hisp	X	X
3	Ansleigh	19	F	White; Non-Hisp	X	
4	Haley	18	F	White; Non-Hisp	X	
5	Jordan	23	F	White; Non-Hisp	X	
6	Dominic	20	M	Hispanic	X	X
7	Marcus	22	M	White, Non-Hisp	X	X
8	Trevor	22	M	Black	X	
9	Caden	20	M	White, Non-Hisp	X	
10	Marcia	21	F	Hispanic	X	X
11	Tracie	19	F	White; Non-Hisp	X	
12	Michael	23	M	White; Non-Hisp	X	X
13	Hillary	21	F	White; Non-Hisp	X	X
14	Maggie	21	F	White; Non-Hisp	X	
15	Jimmy	23	M	Black	X	X

Table 5

To obtain participants for interviews in the study, I contacted the principal of the CCA involved in the study and asked for a list of recent graduates to be used as a pool of potential participants. From this list, I sent an email (Appendix C) explaining the purpose, procedures, and timeline for the study. I also asked for a response if they were willing to participate based on the information provided. This only yielded eight responses, so I made a post on social media asking



for teachers and students to contact me if they would be willing to participate or knew someone who would be willing. This resulted in approximately 25 responses, from which I proceeded by following the same email dialogue I had used with the original list of potential participants. As participants responded to the email, they were asked to fill out a screening survey (Appendix F) to ensure they met the study criteria. As screening survey responses were received, participants were selected on a first-come, first-served basis until I reached the 15 participants needed for individual interviews. Fifteen was chosen as the appropriate number of participants as data saturation was achieved with this number.

As an additional data point, I evaluated career readiness lesson plans created by teachers who had been employed in a CCA. To obtain participants for this portion of the study, I sent an email to career education teachers at the participating CCA (Appendix G). As teachers responded to the email agreeing to participate, I requested that they send a lesson plan via email with their name removed to protect confidentiality. Once I received the five required lesson plans to be evaluated, I responded to subsequent emails by thanking the teacher for their participation and informing them that I had reached the maximum number of participants for this portion of the study.

### **Participant Descriptions**

To ensure that the results of the study were transferable to a broader demographic, participants were asked to provide an introduction that included information about their age, the pathway in which they participated at the CCA and their current educational or employment status. The following descriptions allow for the establishment of a deeper understanding of the characteristics of the individuals that participated in the study.

**Ellen.** Ellen is a 20-year-old, White female. She participated in a CCA for four

semesters, completing a career pathway in healthcare. While completing her pathway, Ellen earned industry certification in phlebotomy, sports medicine, and certified nursing assisting (CNA). She also earned 49 college credit hours through dual enrollment during her time at the CCA. Ellen is currently working in Special Education and plans to specialize in the education of medically fragile and mentally/physically disabled children after graduating from college.

**Jenny.** Jenny is a 19-year-old, White female. She participated in the CCA model for five semesters and completed a career pathway in healthcare. She earned industry certifications in CNA, phlebotomy, and patient care technician (PCT) and sports medicine during her time at the CCA. Jenny has been offered a position as a PCT at a local hospital that will begin in September 2020.

**Ansleigh.** Ansleigh is a 19-year-old, White female who attended a CCA for three semesters. While completing the healthcare pathway, Ansleigh earned certifications in phlebotomy and CNA. She currently works as a CNA at a local long-term care facility and is in school to pursue a degree in nursing.

**Haley.** Haley is an 18-year-old, White female. She attended a CCA for four semesters and completed the healthcare pathway. Haley earned industry certification in phlebotomy, pharmacy technician and EKG technician while attending the CCA. She currently works in a childcare facility and will be attending college in the fall to study pre-medicine and pediatrics.

**Jordan.** Jordan is a 23-year-old, White female who attended a CCA for three semesters. She completed the healthcare pathway and earned certifications in phlebotomy, CNA and PCT while attending the CCA. She is currently employed at a PCT at a local hospital and is enrolled in college to study pre-medicine. She plans to work in family medicine after completing medical school. Jordan also earned 12 credit hours of college academic credit during her time at the CCA.

**Dominic.** Dominic is a 20-year-old, Hispanic male. He attended a CCA for three semesters, completing a dual-enrolled program in HVAC technology. Upon graduating from high school, Dominic not only earned a high school diploma, but also a diploma in his career pathway from a local technical college. Dominic went on to apply the knowledge obtained during his time at a CCA in the field of diesel mechanics in which he works as a certified mechanic at a major diesel repair garage.

**Marcus.** Marcus is a 22-year old, White male. He attended a CCA model high school for four semesters, completing a pathway in Audio-Visual Technology. Marcus is currently attending a four-year university but has yet to declare a major. He currently does not plan to pursue the pathway he completed during his time at a CCA. He currently works at a local manufacturing facility.

**Trevor.** Trevor is a 22-year-old, Black male who attended a CCA for five semesters. He completed the engineering pathway and passed the National Occupational Competency Testing Institute's (NOCTI) exam for engineering and mechatronics, as well as earning nine college credit hours in academic subject areas. The NOCTI exam is a national certification exam that allows students to demonstrate knowledge gained in their career pathway and allows schools to report on the effectiveness of their career pathway instruction (Applied Educational Systems, 2020). He is currently enrolled at a local college studying chemical engineering and participating in an internship at a local manufacturing facility. Should he complete his degree and internship successfully, the company at which Trevor serves as an intern has offered him a permanent position in the company.

**Caden.** Caden is a 20-year-old, White male. He spent six semesters at a CCA and completed career pathways in both welding and engineering. Caden currently serves in the

United States Army and works in the design, maintenance, and repair of unmanned surveillance drones. While attending the CCA, Caden earned two college-level certifications in welding and passed the NOCTI exam for engineering and mechatronics. Caden plans to continue his college education in engineering after completing his time in the military.

**Marcia.** Marcia is a 21-year-old, Hispanic female who spent four semesters at a CCA model high school. She completed the healthcare pathway during her time at the CCA. Marcia earned certifications in CNA, phlebotomy, and sports medicine. She is currently in the nursing program at a local college. Marcia is in the process of deciding if she will continue to pursue a degree in nursing or transfer to a pre-medicine program.

**Tracie.** Tracie is a 19-year-old, White female. She attended a CCA for four semesters, completing a career pathway in healthcare. While completing the pathway she earned certifications in sports medicine, phlebotomy, and pharmacy. Tracie is currently attending a university in Georgia as a pre-medicine student, working as an office assistant in a local physical therapy practice and plans to pursue a career in sports medicine or physical therapy after graduating from college.

**Michael.** Michael is a 23-year-old, White male who attended a CCA for six semesters in the public safety pathway. After graduating from a CCA, Michael became employed with the local fire and emergency services department, working as a firefighter and member of the Emergency Response Team. Michael earned a certification in private security and passed the NOCTI exam for criminal justice.

**Hillary.** Hillary is a 21-year-old, White female who attended a CCA for three semesters and completed a pathway in healthcare. While attending the CCA she completed certifications in CNA and phlebotomy. She currently works at an assisted living facility as a nursing assistant and

plans to attend college to pursue a degree in nursing. Her long-term goal is to attend graduate school to become a Licensed Practical Nurse (LPN).

**Maggie.** Maggie is a 21-year-old, White female who attended a CCA for five semesters. During her time at the CCA, Maggie completed the healthcare pathway and earned certifications in phlebotomy, pharmacy technician, and certified nursing assistant. She currently works as a medical assistant at a local family practice office and is attending college to pursue a degree in nursing, with the goal of becoming a nurse practitioner in the future.

**Jimmy.** Jimmy is a 23-year-old, Black male. He attended a CCA for four semesters, completing a career pathway in criminal justice. After graduation, Jimmy attended the police academy and now serves the community on the local police force. He is attending college part-time to pursue a degree in criminal justice. Jimmy's long-term goal is to open a private investigation company after graduating from college.

### **Results**

The data collection in this study began with individual participant interviews. Each interview was conducted through Microsoft Teams to allow for social distancing required by state and local ordinances during the COVID-19 pandemic. The individual interviews were audio recorded and the files saved on a password-protected computer to which only the researcher has access. There were fifteen individual interviews, which were followed by a focus-group interview of nine participants. The focus group interview was also conducted on Microsoft Teams. Focus group interviews were video recorded to allow for accurate transcription of the data. Files from the video recording were stored in the same manner as the audio recordings of the individual interviews to protect the privacy of participants. The final data collection method was an evaluation of career readiness lesson plans from teachers at the CCA involved in the

study. Teachers were asked to submit lesson plans that they would use to teach career readiness in their classes on a regular basis. Each lesson plan was saved with no identifying information on a password protected computer to which only the researcher has access. All questions in the individual interviews, focus group interview, and career readiness lesson plan evaluations were developed based on the central research question and subquestions of the study.

### **Theme Development**

Thematic development in a phenomenological study allows for patterns in data to be identified that can provide a clearer understanding of the lived experience of the participants (Scharp & Sanders, 2018). The transcripts from the individual and focus group interviews provided significant, first-hand insights into how graduates perceived the influence of attending a CCA on their overall career readiness. The addition of the evaluation of career readiness lesson plans provided context and support for the assertions of the interview participants. While analyzing the data, it was important to prevent my personal biases from influencing the development of the themes. To do this, I created a system to review the data repeatedly; initially to find commonalities among the data, then reduced those commonalities into major themes, and then used a color-coding system to identify specific data points that supported those themes. This allowed me to ensure that I only developed themes based on the direct responses of the participants and the content of the career readiness lesson plans.

The first data collection method in this study was individual participant interviews with 15 graduates of a CCA, all between the ages of 18 and 25. The interviews were conducted through Microsoft Teams. The audio from these interviews was recorded to allow for proper transcription of the participants' responses. Upon completing the interviews, the audio recordings were saved to a password-protected file on my personal laptop. The next step was the

focus group interview. Of the original 15 individual interview participants, nine participated in the focus group interview. The focus group interview was also video recorded using Microsoft Teams. Video recording was necessary during this step of the data collection process to allow me to keep an accurate record of who was speaking, which was useful during the transcription process.

The final data collection point was career readiness lesson plan evaluation. I evaluated five career readiness lesson plans using the KY Skills U Adapted Career Readiness Lesson Plan Evaluation Instrument (Appendix B). Four major criteria were included in the lesson plan evaluation instrument. Those criteria were as follows: (1) lesson content based on standards and learner goals, (2) engaging lesson delivery format, (3) monitoring of learning and adaptation of lessons based on data, inclusion of higher-order thinking skills, and (4) contextualization of lessons to facilitate the development of workforce success. Each of the main criteria included additional evaluation points to allow for an in-depth analysis of the lesson plan. These criteria were sufficient in deriving data points that correlated to the themes developed through the interview responses and providing context for understanding participant responses during the individual and focus group interviews.

Ensuring trustworthiness in a qualitative study is a critical component of creating reliability and validity in the results of the study (Amankwaa, 2016). To ensure trustworthiness, a transcript of each individual interview and the focus group interview was emailed to each participant for their review and feedback. Participants were given seven days to respond with any comments regarding the transcription of the data. A list of themes with narrative descriptions was also included in the email to allow participants to confirm or refute that the meaning derived from their responses is an accurate representation of their experience in developing career

readiness as a CCA student. Additionally, teachers who submitted lesson plans for evaluation were also sent a copy of the completed evaluation instrument and the themes that were derived from those evaluations. Each teacher had seven days to respond with any clarification or corrections to the conclusions drawn from their contributions to the study.

### **Theme 1 – Advanced Readiness for College/Post-Secondary Training**

The first theme that developed through the individual and focus group interviews was advanced readiness for college and/or post-secondary training. More than half of the participants indicated that attending a CCA allowed them to be better prepared for college, or to receive a head start on their college, or post-secondary training by completing dual enrollment classes for college credit or industry certification. Of the 18 participants, six completed dual enrollment academic or career courses while attending the CCA. This was reported as a major advantage by multiple participants. According to Maggie, “Instead of going to college and having to do all my core classes over plus some extra credentials, I was able to go to a college-based program that offered the degree I wanted and finished in only two months.” Another participant, Ellen, said, “I graduated from high school with 49 college credit hours that I earned at my CCA and recently graduated from the University of West Georgia with a Bachelor’s of Science in Elementary Education with a dual certification in General Education and Special Education. I completed all that in only three years because of the jump-start I got through dual enrollment at my career academy.”

During the focus group interview, five of the nine participants indicated that being more prepared for college and/or post-secondary training was a major benefit of attending a CCA. Marcus stated that “being able to see what college classes are like helped me know how to study when I started college after graduation.” Tracie confirmed Marcus’ statement, saying, “It feels



like I can do better in college now because I don't have to figure out what they expect from me as much since I already did college classes in high school." A study by Kremer (2020) supports the input from the participants in this study, showing that students who participate in dual enrollment programs in high school are more likely to attend college, take full-time course loads and graduate from college than those who do not.

## **Theme 2 – Substantial Development of Career Readiness Skills**

Research on career readiness skills versus technical skills in the workplace indicates that career readiness skills account for 75% of the success of employees (Litecky, Arnett, & Prabahakar, 2004; Churyk, St. Pierre, & Rebele, 2019). As the data analysis portion of the study continued, it became evident that the development of career readiness skills is at the forefront of the work of the CCA. In three of the five lesson plans evaluated, students were required to write resumés and cover letters and/or fill out job applications that were specific to their pathway. In one healthcare pathway course, teachers spent two days prior to the resumé writing lesson teaching students about specific careers in the healthcare field ranging from emergency medical technician to neurosurgeon. This type of activity allowed students to explore various career options then choose one on which to focus when writing their resumé and cover letter.

It was evident in the lesson plans that career readiness standards and goals are a primary focus of the courses and that students are frequently allowed to apply these skills to real-world scenarios. For example, in the Public Safety pathway, students are taught how to effectively fill out a police report form during a lesson that explained each part of the form, how to complete it, and the appropriate legal codes to be used while completing it. Students were then allowed to watch pre-recorded statements from witnesses to mock crimes and fill out the report from that

information. This aided students in developing industry-specific skills that are directly transferable to their work in the field of public safety.

Data derived from individual and focus group interviews also supported the theme of substantial development of career readiness skills. Graduates who participated in the individual interviews reported that they felt more confident in their ability to enter the workforce in their career pathway because of the instruction that occurred at the CCA. Dominic reported that the “real-world experiences, customer service skills, problem solving, and conflict solutions” were a major benefit of participating in the HVAC pathway and helped provide him with the tools necessary to be successful in the job market after graduating from high school. Another graduate, Michael, stated that attending the CCA prepared him for the “skills as far as communication, self-presentation, first impressions and knowledge of different situations I would experience in my career as an EMT.” These students completed pathways that required vastly different technical knowledge and skillsets, yet they both noted the significance of developing career readiness skills through their pathways at the CCA. Participants in the focus group interview mirrored these responses. Hillary stated, “I think what helped the most was when I got to go into a nursing home and work with nurses and CNAs doing the job I was training for. I felt like my school had gotten me ready for what I would need to do once I got a job.”

Another career readiness skill that was widely reported as beneficial by graduates was participation in mock interviews during their time at the CCA. Eleven of the 18 participants stated that the interviews were beneficial. Five stated that they believed that completing mock interviews with real employers from their pathways helped them develop interview skills that aided them in securing employment in their pathway after graduation. Research by Lord, Lorimer, Babraj and Richardson (2019) indicated that a job candidate’s interpersonal skills, as

demonstrated in an interview, are the most significant factor in whether or not a person is hired for a job. Michael stated that the “trial interview taught me body language, confidence, eye contact, and professionalism.” By allowing students to participate in mock interviews specific to their pathway, the CCA provided an opportunity for students to develop the interpersonal skills necessary to be successful in real-world interviews in the future.

### **Theme 3 – Access to Industry Experts and Professional Connections**

The use of industry experts as mentors, guest speakers, providers of internships opportunities and teachers has a significant impact on the development of career readiness among students (AdvanceCTE, 2016). Both Ellen and Michael reported that they were able to obtain internships during high school from an industry expert that served in their high school classes. Michael also went on to be employed by the local fire and emergency services department after graduation because of his connection to the fire chief who came to provide emergency response training to the public safety class he was taking. Maggie stated, “I was able to shadow at the hospital and the nursing home, so it really gave me in-person training as if I were actually working my own job.” The College and Career Readiness and Success Center reported that a quality CTAE program must provide students with job-imbedded training and the opportunity to experience the realities of the workforce in their career pathways (2013). The input from the participants in this study indicated that the CCA provided those opportunities to students across all the career pathways offered in the school.

In addition to the connections made between students and local employers and industry experts, students benefit from the input of people who have worked in their desired career field and can attest to the specific knowledge, skills and expectations of the job. Caden said, “There is only so much information you can get from a textbook, but the knowledge they were able to

impart from their years of experience was unmatched.” While it was not evident in the lesson plans submitted for this study, the student responses indicate that the CTAE instructors in their schools utilized industry experts in a variety of ways that positively impacted their career readiness and post-secondary success. In fact, Trevor stated that the time he spent interacting with the expert who visited his Audio-Visual Technology course was some of the only instruction that provided value to their education in regard to their career pathway, giving him “more insight on what I would be involved in and the people I would be around in the field.”

### **Research Question Responses**

The research questions in the present study sought to address the gap in the literature relating to the lived experience of graduates from CCA model high schools. The central research question focused on how participation in the CCA model influenced the development of career readiness skills among high school graduates. The following information provides responses from participants that answer the central and sub-questions of the study.

**CQ: How do graduates perceive the lived experience of developing career readiness through their participation in the CCA model of secondary education?** While career education is not a new idea in American schools – dating as far back as the Smith-Hughes Act of 1917 (Kosar, 2011) – educational institutions are continuously looking to improve the ways in which students are prepared to enter the workforce after high school, or post-secondary training. CCAs are an emerging model of career readiness education (Lakes & Burns, 2012). Each participant in the present study indicated that attending a CCA was in some way beneficial to their development of career readiness, whether through participating in a mock interview, hands-on skill development in the classroom or through internships in the community, or learning problem solving skills that were transferable to the workforce. Marcus, Tracie, Ellen, Jenny, and

Marcia all cited the mock interviews as one of the most helpful parts of preparing for work after high school. During her individual interview, Marcia stated, “The mock interview definitely benefited me the most. I would be so nervous for them but leaving high school I could interview without hesitation.”

Participants also cited the hands-on experiences and interactions with industry experts as having a significant positive impact on their development of career readiness skills. During the focus group, Michael stated, “Having the ability to interact with visitors that were a part of our pathways to help guide us in the direction we needed to be to achieve personal growth” was very beneficial as he began working in the field after graduation. Haley, a graduate of the healthcare pathway, stated in the focus group interview, “For phlebotomy and EKG we were encouraged to bring in guests to practice on. During those experiences, it showed what working with an actual patient would be like and made everything more real.”

**SQ1: How do graduates describe the lived experience of interactions among themselves, peers, instructors, community members and school leaders in the CCA model as it relates to their development of career readiness?** Participants in the study most frequently mentioned the benefits of interactions with industry experts in their responses. Hillary, a student who participated in a class in which the instructor had 28 years of experience in the healthcare field said, “His knowledge of being out there doing it was super helpful. When we had to do sticks for phlebotomy it felt good knowing he had been in our shoes.” One participant, Caden, specifically mentioned the interactions with peers in the school as most significant in developing career readiness, stating, “The dialogue and the sense of family that was created there, me being pretty shy, it helped me open up and develop as a person.” These responses support SCCT, the guiding theory of this study, by providing input from graduates that suggests

that their interpersonal interactions had a significant input on their career choices and development.

**SQ2: How do graduates describe the lived experience of participation in the CCA model on their career choices?** Career exploration is a key component of many vocational education programs in the United States and around the world (Lazarides, Rohowski, Ohlemann & Ittel, 2016). Many of the participants in this study indicated that participating in the CCA model gave them an opportunity to explore careers on a deeper level and to have some direction to take after high school, whether that be entering the workforce immediately, or attending college/post-secondary training. In her individual interview, Tracie stated, “After taking intro classes for healthcare, we had a few options of classes to take. For example, I could’ve taken phlebotomy or sports medicine. I chose sports medicine because I played softball and enjoy working out. That class helped me see that type of career up close and helped me decide that that’s what I want to go to college to do.” Caden said that “Completing the engineering and welding pathways showed me I wanted to work with my hands, but that it had to be something challenging, too. I took a job in industrial maintenance after graduation, but that wasn’t what I really wanted. After I joined the Army, I was able to know I wanted to work on machines and software somehow, so I got into working on the unmanned aerial systems.”

**SQ3: How do graduates perceive the lived experience of developing career readiness through the CCA model of secondary education on their self-concept of success in their desired career field?** Research shows that students should begin exploring careers and developing career self-efficacy as early as middle school in order to be best prepared to enter and succeed in the workforce after high school (Glessner, Rockinson-Szapkiw & Lopez, 2017). The responses of participants in the individual and focus group interviews indicate that students who

participate in the CCA model of high school education develop a strong sense of career self-efficacy due to the soft-skills and industry-specific skills that are developed in the CCA. Jenny, a graduate of the healthcare pathway stated, “I know that going to the Academy gave me a leg up in my career. Once I become a nurse, I’ll be able to look back on getting to work with patients and doctors in high school and use it to make me better at my job.” Another healthcare graduate, Maggie, said, “I’m better at my job now because I was able to go in and apply my skills and show my boss that I was more than ready to go to work because I had the classroom and in-the-field training beforehand.”

### **Summary**

Chapter Four provides detailed descriptions of the participants in the study, the data collection techniques, and the information obtained from the data collection. Three themes were developed during data analysis: (1) advanced readiness for college/post-secondary training, (2) substantial development of career readiness skills, and (3) access to industry experts and professional connections. The themes and associated data provide answers the CQ and subsequent SQs of the study and add to the overall understanding of how the CCA model of secondary education impacts career readiness.

Quotes from individual and focus group interviews, and examples obtained from teacher lesson plan evaluations confirmed that students’ career readiness is significantly positively influenced that the interpersonal interactions, career readiness and soft skill training, and industry-specific instruction that occurs in the CCA. Answers to the research questions were provided and supported with specific data from the study.

## **CHAPTER FIVE: CONCLUSION**

### **Overview**

The purpose of this transcendental phenomenological study is to understand how graduates of CCA model high schools perceive the impact of this model of secondary education on their career readiness. Fifteen graduates of a CCA model high school participated in an individual interview; 9 participated in a focus group interview. Additionally, five teachers submitted career readiness lesson plans for evaluation. Thematic coding and analysis were used to generate themes from the interviews and lesson plan evaluations to allow for the responses of the participants and the data from the lesson plan evaluations to illuminate the lived experience of developing career readiness among the graduates of CCAs (Williams & Moser, 2019; Nowell et al., 2017). Based on the data analysis, three themes were identified: (1) advanced readiness for college/post-secondary training, (2) substantial development of career readiness skills, and (3) access to industry experts and professional connections. Chapter Five will consist of six sections; an overview of the chapter, summary of the findings, discussion of the findings and the implications in light of the relevant literature and theory, methodological and practical implications, delimitations and limitations, and recommendations for future research.

### **Summary of Findings**

The purpose of the present study was to gain insights into the perceptions of CCA graduates on their experience of developing career readiness skills through the CCA model of secondary schooling. Their insights into the strengths and weaknesses of CCAs led to the development of three themes: (1) advanced readiness for college/post-secondary training, (2) substantial development of career readiness skills, and (3) access to industry experts and professional connections. As participants described their experiences in the CCA, answers the



central and subsequent research questions emerged. The following research questions were used to guide this transcendental phenomenological study:

**CQ:** How do graduates describe the lived experience of developing career readiness through their participation in the CCA model of secondary education?

**SQ1:** How do graduates of CCAs describe the lived experience of interactions among themselves, their peers, instructors, community members, and school leaders in the CCA model as it relates to the development of career readiness?

**SQ 2:** How do graduates describe the lived experience of participation in the CCA model on their career choices?

**SQ 3:** How do graduates describe the lived experience of participation in the CCA model on their self-concept of success in their desired career field?

### **Central Research Question**

**How do graduates describe the lived experience of developing career readiness through their participation in the CCA model of secondary education?** All participant responses included information that pointed to developing career readiness skills under the CCA model. Several common influences on the development of these skills were access to industry experts and hands-on activities that provided real-world experience and insight into the career pathways, ability to develop strong interview skills through mock interviews, and the opportunity to participate in dual enrollment courses that gave them a head start on their post-secondary training, or acquisition of employment in the career field. The lesson plans evaluated provided significant context for understanding the responses of the participants regarding the central research question. Each lesson plan that was evaluated included opportunities for developing career-specific skills, and/or soft skills necessary for success in the workforce. While some

participants reported that they did not pursue a career or training in the pathway they completed at the CCA, each participant credited their time in the CCA model with positively impacting the success in college or the workforce overall.

### **Sub-Question 1**

**How do graduates of CCAs describe the lived experience of interactions among themselves, their peers, instructors, community members, and school leaders in the CCA model as it relates to the development of career readiness?** This question directly links to the SCCT, seeking to understand how interpersonal interactions influenced the development of career readiness among CCA graduates. The lesson plans evaluated in this study indicate that students in the CCA are consistently provided with opportunities to collaborate with each other, the instructors and community members. Many participants in the individual and focus group interviews indicated that they benefited from their instructors – many of whom came out of industry into the classroom – and the industry experts from the community who gave their time to work with, mentor, and support the students. Several participants stated that they were able to make valuable connections to community members during these interactions and were sometimes able to secure internship and employment opportunities because of these interactions. Additionally, participants frequently asserted that learning how to work collaboratively with others to solve problems and face challenges gave them the opportunity to develop soft skills that are reported as significantly valuable to employers (Litecky et al., 2004; Churyk et al., 2019).

### **Sub-Question 2**

**How do graduates describe the lived experience of participation in the CCA model on their career choices?** Many high school students have difficulty with career choice based on an absence of general self-efficacy and a lack of guidance on their vocational interests

(Argyropoulou, Sidiropoulou-Dimakakou, & Besevegis, 2007). The specialized career pathways completed by participants in the present study were revealed to provide significant guidance on choosing whether or not to persist in that career pathways, and which specific vocation to pursue within that pathway. Each participant in the study indicated that they were able to choose a specific vocational pursuit (i.e., sports medicine), or to pursue an entirely different career pathway due to the experiences in the CCA. This type of career guidance could have an impact on students' post-secondary goals in terms of choosing a college, technical school, or industry.

### **Sub-Question 3**

**How do graduates describe the lived experience of participation in the CCA model on their self-concept of success in their desired career field?** Student self-efficacy is a critical component of SCCT (Lent et al., 1994). The current study indicates that student participation in the CCA model of secondary education yields significant gains in graduates' self-concept of success in their desired career field. Multiple participants reported that they believed they were more prepared for their job and more likely to be successful in the field because of the experiences they had at the CCA. Responses in the individual and focus group interviews indicated that participants felt the interactions with industry experts and mock interviews combined with hands-on learning experiences gave them an advantage when entering the workforce. Two participants stated that they were more confident in interviews because of the opportunity to practice interviewing for a job in their career pathway. Another graduate stated that she was able to show her employer that she was ready for the job because of all the skills practice she was able to complete at the CCA.

## Discussion

The findings of this study corroborate SCT by Bandura (1989) and SCCT Lent et al. (1994). Bandura's (1989) SCT holds that individuals use multiple processes through social interactions that have a direct influence on the development of personality, self-efficacy, and other cognitive traits. This theory was expanded on by Lent et al. (1994) to include the development of career interests, choices, and career self-efficacy. As schools across the country continuously seek to improve career education, it is important to analyze the effectiveness of the various models and programs being used for this purpose. The following sections expand upon the theoretical and empirical information from the literature review.

### Theoretical Framework

The study focuses on two theories; Bandura's (1989) SCT and Lent et al. SCCT (1994). Both theories stress the importance of social interactions in developing cognitive processes such as decision-making and self-efficacy. The study by Lent et al. (1994) indicates that social interactions with peers, instructors and other adults have a significant impact on students' development of career interests and career self-efficacy. A study by Jackson (2017) expanded on these findings by indicating that embedding work experiences in career readiness education is critical to the development of pre-professional identity in children and teenagers. These theories have a direct correlation to efforts at teaching career readiness and should influence the models by which schools seek to improve career readiness among students.

This study included several points that confirm the theories previously discussed by revealing that graduates of CCA's draw on the social interactions and experiences offered at the CCA to develop career-specific and soft skills that are valuable in the workforce. All participants in the study indicated that interacting with instructors who previously worked in the career

pathway being taught and with current industry experts contributed to their learning while in school and their success in the career field after graduation. Kaminsky and Behrend (2014) cited research that indicated that students must be informed and inspired to choose and succeed in a career. The input from participants confirms that many of the social interactions with experts in the desired career field empowered them to make a choice to either persist in the career pathway or choose a specific job in the pathway.

Lent and Brown (2013) expanded on their previous research on SCCT by exploring five phases of career life: growth, exploration, establishment, maintenance, and disengagement/reengagement. The CCA model of high school education exists in the exploration and establishment phases with adolescents, students, and new workers. However, students who participate in the CCA model may have more success in the maintenance phase because of the skills developed while completing their career pathway. Rogers and Creed (2011) used SCCT to frame a study that confirmed that career exploration and career planning models had a substantial impact on student career self-efficacy. Under the CCA model student have an opportunity to explore various careers within specific pathways. For example, in the healthcare pathway at the CCA involved in this study, students can explore phlebotomy, sports medicine, certified nursing assisting, and EKG technician. This give students an opportunity to develop a more comprehensive picture of potential careers and allows them to exercise career exploration and planning as indicated by SCCT. Multiple participants in this study stated that they were able to choose a specific career in their pathway because they were able to explore different options and determine which one was the best fit for their abilities, interests, and goals.

Research on SCCT also indicates that the context in which career education occurs has a significant impact on student outcomes in career choice and success (Lent et al., 2008). The

lesson plans evaluated during the present study reveal the context in which the participants were educated. Every class included practical experiences and interactions that deepened the students' understanding of the career pathway and their eventual choices regarding their careers. Some participants chose not to pursue a career in the pathway they completed at the CCA, but still credited the experience of participating in the pathway courses with aiding in making the choice to pursue a different career. When combined with SCCT, this input from participants reveals the importance of utilizing a real-world context in teaching career readiness skills.

The results of the study also confirm previous research that proved that students should begin developing career self-efficacy as early as possible in order to be more successful in the workforce (Olivier et al., 2019; Shogren et al., 2017). Currently, career academies are implemented at the high school level (Lakes & Burns, 2012), but schools and districts should consider expanding programs to earlier grade levels where appropriate. This is confirmed by Lent and Brown (2013) whose study proved that students are influenced by various career motivators in early childhood and that influence extends into adolescence with increasing influences by peers and adults effect career choice. Bandura (1989) stated that higher levels of self-efficacy leads to improved persistence in career pursuits. Therefore, the earlier students can be exposed to formalized career exploration and career readiness education, the more likely they are to persist in that career field (Gaylor & Nicol, 2016). The present study indicates the positive impact of the CCA model on career exploration and the development of career readiness skills which could potentially be improved by utilizing CCAs with younger students.

### **Empirical Framework**

The two theories discussed in the previous section indicate that social interactions and processes influence how students explore, choose, and persist in careers. The current literature on

career readiness instruction provides little guidance on formalized school models, focusing mainly on individual programs and procedures. This section will explore the relationship between the existing literature on career readiness education and the data derived from the current study.

***Vocational and career education.*** Schools across the nation are frequently expected to provide students with an academic education, but also with career-specific training that prepares them to enter the workforce and be successful (Holzer & Lerman, 2007). Perry et al. (2018) reported that participation in effective career readiness programs can lead to high levels of student engagement, grade point average and graduation rate. CCAs like the one involved in the current study seek to achieve these goals by integrating academic and career instruction in a school model that allows students to take academic coursework in the same place as specialized career training courses that may not be able to be offered at a traditional high school. For example, at the CCA in this study students have an opportunity to take English and Social Studies academic classes while also participating in a dual enrollment welding program. Since funding does not allow for each of the three traditional high schools in the district to have a fully operational welding lab, having one lab at the CCA that can serve students from across the district increases access to quality career education. This confirms research from the existing literature that suggests that schools and school systems should utilize vocational and career education systems that provide these opportunities to students (Dougherty & Lombardi, 2016).

Research shows that integrated academic and career education programs are more effective for improving student achievement than traditional models where academic and career coursework are kept separate (Couch et al., 2017). Many participants in this study stated that their academic instructors made concerted efforts at using their career interests to reinforce

academic instructors. This confirms the previous research and indicates that students were able to make meaningful connections to their academic coursework when instructors used their career pathways in their classrooms. For example, one participant referenced a lesson on scarcity in an Economics class that used a case study of choosing which patient would receive an organ transplant. This shows that the students were more likely to remember key concepts in an academic class when it is directly linked to their career interests.

The existing literature suggests that vocational and technical schools utilize apprenticeship and/or internship programs to increase opportunities for students (Eichorst et al., 2015). CCAs often seek to combine these apprenticeship and internship programs with academic instruction and career-specific coursework (Lakes & Burns, 2012). This was confirmed by the present study as multiple participants reported having the opportunity to complete internships and apprenticeships in local industries including medical facilities, local radio stations, and manufacturing facilities. Lent and Worthington (1999) reported that students find the transition from school to work as one of the most challenging aspect of life after high school. The current study indicates that participation in apprenticeships or internships through a CCA make that transition more manageable.

Current literature states that developing a workforce from students in local schools should be done using a systemic and comprehensive framework (Nassar et al., 2019). While WBL programs have long existed, they rarely provide a structure for developing long-term workers for the businesses they serve (Park et al., 2017; Polidano & Tabasso, 2014). This study contributes a significant piece of information to the literature on youth workforce development, indicating that CCAs could be utilized as part of that framework that includes WBL with a significant positive impact on the development of well-prepared employees for local businesses and industries. This



means that WBL placements should be coordinated within the CCA to ensure that students are provided with the opportunity to work in businesses or industries that are directly related to their career area of interest.

*College and career readiness.* Research by Carnevale et al. (2015) indicated that instruction aimed at improving college and career readiness is vital at all grade levels, but most schools across the nation implement vocational and career education programs at the secondary level almost exclusively due to the funding and provisions set forth by the ESSA (Lakes & Donovan, 2018). Hackman et al. (2017) indicated that CCAs improve college and career readiness for secondary students. The present study corroborates this information by presenting data that shows that graduates of CCAs find their career readiness to have been improved by attending a CCA and completing a pathway in their career area of interest. Participants indicated that their career readiness was significantly impacted by their interactions with adults who were experienced in the industry they were studying. This is due in large part to the expertise and experiences that these experts are able to share with CCA students that contribute to their understanding of the requirements and realities of the profession.

In 2007, the State of Georgia established the College and Career Academy Network to address deficits in college and career readiness among Georgia's high school graduates, beginning with five CCAs across the state (Georgia Department of Education, 2019). As other school systems began to see the benefits in student engagement, graduation rate, and employment in local communities, CCAs continued to be established across the state; today 39 CCAs operate in Georgia, serving more than 35,000 students (Georgia Department of Education, 2019). The present study focused on one CCA in northern Georgia which serves approximately 800 students from the district's three traditional high schools, including a significant number of

students who participate in dual enrollment academic and career programs of study. The results of the study confirmed research by Hackman et al. (2017) that touted the benefits of CCA implementation as a method of improving college and career readiness among secondary students.

The results of this study also showed that students were not only graduating from high school with more advanced career readiness skills, but significant advantages in their preparedness for college or other post-secondary training. Kremer (2020) published a study that showed that high school dual enrollment participation increased the likelihood of college success. Many of the participants in the present study stated that they earned multiple college credits through the dual enrollment program, with some completing diploma programs in career programs that allowed them to graduate with a high school and technical college diploma at the same time. Participants also reported that they believed they were more prepared to attend college after graduating from high school because they had already had an opportunity to participate in dual enrollment classes.

### **Implications**

Much research exists on the importance of effective career readiness education (Carnevale et al., 2015; Perry et al., 2018; Holzer & Lerman, 2007), but there is a significant gap in the research related to specific models of career readiness education, specifically the CCA model. There are no studies that address the experiences of students who have participated in the CCA model in relation to their development of career readiness which should be considered when assessing the effectiveness of any program of this nature. Participants in this study were candid in their responses regarding the aspects of their experiences in the CCA model that were

both positive and negative. Additionally, the lesson plan evaluations provided insight into areas of strength and need that existed in the CCA that participated in the study.

### **Theoretical Implications**

Two theories provided the guidance for this study on the effectiveness of CCAs at improve career readiness among high school graduates. Bandura's (1989) SCT indicated that people use a variety of decision-making processes based on social interactions to make choices that directly impact their lives. The present study indicates that the interactions that occur inside the CCA have a significant impact on the choices high school students make. This is also connected to the SCCT presented by Lent et al. (1994) that states that students' career self-efficacy, interests, and expectations are also directly influenced by social interactions with peers and adults. Positive interactions in the CCA such as hands-on practice with career skills, mock interviews, and instruction provided by industry experts were proven to have an impact on the likelihood that graduates would persist in their career pathway and on their self-concept of expected success in the field. As CCA graduates reported high levels of interaction with industry experts in the field, they also reported more confidence in their abilities related to obtaining and keeping a job in their career pathways. It is the responsibility of education policymakers and school leaders to increase access to these types of interactions as part of an effective career education program.

### **Empirical Implications**

As students face difficulties in maintaining engagement in their education due to factors such as lack of parental support and intrinsic motivation (Virtanen, Lerkkanen, Poikkeus, & Kuorelahti, 2018), it is important that school systems seek solutions to this problem. The current study confirms that CCAs, when implemented to fidelity, are an effective model of career

readiness education for high school students. The following section provides suggestions for practice in implementing CCAs that could positively impact student achievement related to the development of career readiness skills.

***Funding.*** In 2019, the United States Department of Education allocated \$1.1 billion dollars in funding to the reauthorization of the Perkins Career and Technical Education Act (U.S. Department of Education, 2019). As states receive this funding, it is critical that guidance from the U.S. Department of Education on allocating this funding to expanding apprenticeships and partnerships with community businesses and stakeholders is followed. The CCA involved in this study utilizes a wide variety of community partnerships including the use of business and industry members in mock interviews, classroom instruction, and mentoring programs. Participants in the study frequently referenced the impact of their interactions with experienced adults from business and industry on their success in the career field.

***Work-based learning, internships, and apprenticeships.*** In 2017, President Trump issued an executive order that expanded apprenticeship programs in the U.S. in an effort to facilitate workforce development (U.S. Department of Education, 2019). While many schools utilize WBL as a course offering at the high school level (Park et al., 2017), participants in the study stated that WBL was often just a class period where they could go work at their retail or food service jobs. The participants who were able to secure internships and apprenticeships reported that they felt more prepared and confident when entering a career related to their pathway after graduation. This implies that formalized, career-specific internships are more effective in terms of developing career readiness skills among high school students and should be utilized in place of less formalized WBL programs in CCAs and other schools seeking to improve career education.

*Access to industry experts.* Industry experts can be used in a variety of ways to improve career education. AdvanceCTE (2016) reported that increasing access to industry experts is a key initiative in career education. The results of the current study imply that CCAs should utilize industry experts as instructors, mentors, and community partners in order to have a significant impact on career readiness. Much of the feedback from participants in this study presents a compelling case for the influence of interactions with industry experts on the development of career readiness. From participating in mock interviews with current community partners and business owners to working with instructors who previously worked in the career pathway they now teach, graduates of the CCA in this study reported that these interactions were part of what made their experience in a CCA so relevant and impactful on the development of career readiness skills.

### **Practical Implications**

The CCA model of secondary education has spread significantly across the State of Georgia since its inception in 2007 (Georgia Department of Education, 2019). As the state and the nation continue to pursue efforts at improving career education and career readiness in young adults, it is important that the number of CCAs continue to grow and that research on best practices in the CCA model are shared with stakeholders at all levels.

*Policy makers.* The most significant implication for policy makers is to continue to allow education law and policy regarding career education to be shaped by the best interests of the students who are the future workforce of the state. The limited research on CCAs indicates that this model is effective at improving career education at the high school level by providing students with learning experiences and opportunities that are relevant to their future goals (Hackmann et al., 2018). The results of the current study suggest that CCAs are an effective

model of career readiness education so lawmakers at the state and national level should allocate funding from the Perkins Act and other sources to support the creation of additional CCAs across the nation. When policy makers allocate funding to the creation of CCAs, local school systems can choose how to best implement the CCA model in their district (i.e., school-within-a-school, separate program, separate school) based on the specific needs of their community.

*School leaders and teachers.* At the district level, school leaders should be studying existing CCAs and beginning to consider if this model is a viable option for their students. The present study was conducted in a mid-sized, rural school district in North Georgia. Several of the participants indicated that they had more opportunities to advance in their career because of the programs at the CCA. This can have far-reaching economic implications as these graduates obtain jobs that have higher salaries and achieve a standard of living that is higher than previous generations. This evidence should indicate to school leaders that the model is worth careful consideration when selecting a program for career education.

For leaders at the building level, the results of this study have more specific, practical implications. First, in districts where CCAs already exist, it is important that the input from graduates of CCAs regarding the effectiveness of their career pathways, internships, and hands-on experiences with workplace skills be at the forefront of all instructional decisions. School leaders can share the results of this study with their teachers to provide guidance on the types of instructional activities and other programs that were deemed most impactful by students who completed pathways in the CCA.

Likewise, teachers can use the results of this study to inform their instructional and program planning. This does not have to wait until future semesters or school years. Many of the suggestions from participants provide guidance that can be used immediately to improve day-to-

day instruction. For example, two participants indicated that their instructor did not provide enough real-world application of the skills they were learning about in class, leaving them feeling unprepared for the challenges they would face when working in that field after graduation. That instructor and others who have not yet integrated a significant amount of hands-on practice in their courses, should use this input to immediately begin offering more practice in applying the skills taught in the course. Changes to the programs can also be implemented, though these changes may take more time to develop. Program changes like establishing internship and apprenticeships require more planning but are indicated by the present study to be a worthy investment of time and resources when attempting to improve career readiness and career/vocational education.

### **Delimitations and Limitations**

As with all studies, I made decisions as the researcher that created delimitations and limitations. The following section will discuss the implications of those decisions on the results of the present study.

#### **Delimitations**

A major delimitation of this study is the age of participants. While the CCA involved in the current study has been operational for eight years, I limited the participants to those who graduated in the past five years. The rationale behind this decision was based on the desire to gather the richest information to explain the phenomenon being examined. Concern over using participants who graduated more than five years ago was that they would have less input to offer because of the length of time that had passed since they attended the CCA. Also, many of the programs and pathways have been redesigned by the Georgia Department of Education in recent years so there was a desire to utilize participants who had received their instruction under the

redesigned programs so that their input would be relevant to the current implementation of the career pathways at the CCA.

### **Limitations**

The major limitation of this study is geographic location. Out of 180 counties in Georgia, only 39 have CCAs so the original pool of potential CCAs from which to draw participants was limited from the outset of the study. In northern Georgia, the geographic area in which I live, only a limited number of CCAs are in operation. The original intent was to use participants from four surrounding school districts. However, when COVID-19 shut down schools in April, contact from other school systems that had originally expressed interest in participating in the study came to a halt. After multiple attempts to reestablish contact with these systems, the decision was made to utilize the district in which I live so that participants could be more easily accessible for interviews. This limited the number of participants impacts the transferability of the results to other states and regions and should be considered in future studies regarding CCAs.

### **Recommendations for Future Research**

The purpose of this study was to gain an understanding of how the experience of participating in the CCA model of secondary education influenced graduates' development of career readiness. Results from the study have provided significant insight into practices and procedures utilized in the CCA as they relate to how graduates perceived their effectiveness at positively impacting their career readiness. The study highlighted the importance of dual enrollment, soft skills development, access to industry experts, and real-world application of career-specific skills that are viewed as integral to the success of CCAs in developing career readiness among high school students.



Future studies should start by replicating the study in more school systems with a variety of demographics so that the results can be transferable to other states and regions. This could be undertaken by school systems piloting the CCA model, or by researchers who wish to determine if students from different socioeconomic or other demographic groups report similar outcomes to the participants in this study. Extending the scope of the study will give the results more credibility and allow for a more meaningful discussion of the effectiveness of CCAs in the future.

Many participants in the study cited the impact of participating in dual enrollment academic and career programs on their readiness to enter college and/or the workforce after graduation. Future studies should examine the effects of dual enrollment in CCAs on college persistence, graduation rates, and career attainment. Additionally, dual enrollment programs that provide degree level courses in technical fields such as welding and automotive repair should be studied to determine if high school students who were able to simultaneously earn high school and college diplomas through these programs were more or less likely to obtain and sustain employment in those fields.

### **Summary**

The purpose of this transcendental phenomenological study was to examine the lived experience of developing career readiness skills among graduates of CCAs. The study indicated that graduates of CCAs reported that they believed attending the CCA allowed them to more fully develop those career readiness skills and provided them with other advantages that they would not have obtained if they had participated in the traditional high school model. Factors that were credited with this advantage were dual enrollment, interactions with industry experts, and the use of hands-on application of career skills in their daily classroom experiences.

One of the most significant implications of this study is the need for more CCAs across the nation. The CCA model is new but growing and it is important that educational policymakers and leaders at that state and national level consider its potential impact on the future workforce of the country. Students who are leaving high school with more soft skills and career-specific skills that can lead to more persistence in employment and education and are important to supporting the sustainability of our nation's workforce and economy. As older blue-collar workers retire and exit the workforce, there is a need to replace them with workers who are capable of keeping industries viable and competitive on the world stage. CCAs can be used to achieve this goal and support our nation's growth in the future.

In addition, it is critical that school leaders in areas where CCAs already exist draw on the input of their past and present students to inform decisions about programs of study and instructional initiatives that should be implemented at the CCAs. For example, many participants stated the WBL was insignificant in developing career readiness because the jobs were typically not related to their future career goals and plans. School leaders can use information such as that to move toward youth apprenticeship or internship programs that are more meaningful and relevant to the students.

This study has only started to reveal the significance of CCAs as a model for improving career readiness among the nation's young people. Further studies that delve into more specific aspects of CCA education must be conducted to increase the body of knowledge on this important educational model. I believe the CCA model can have lasting, generational impacts in communities that desperately need to see economic growth and further research can look deeper into how to implement and sustain those programs in such areas. Most importantly, this study should encourage educators to continuously evaluate the importance of preparing students for

life after high school. Academic knowledge, while important, is not the deciding factor in the livelihood of most of our students when they enter the adult world. It is far more likely that obtaining and keeping employment in a critical industry will provide the stability so many students need. By constantly evaluating and adjusting our work as educators as it influences the lives of students once they leave our schools, we can prepare them to be contributing, successful members of a society that is constantly changing and demanding more of its workers.

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## APPENDIX A: EXAMPLE PROGRAM OF STUDY

### Program of Study: Distribution and Logistics



This Program of Study may serve as a graduation guide for the next four plus years, along with other career planning and educational materials. Courses listed in this model may include recommended coursework and should be individualized to students' educational and career goals. Each graduation plan needs to meet minimum high school graduation requirements. Dual Enrollment courses can be high school academic and/or career technical education courses.

Course/Grade	Secondary: Distribution and Logistics				Postsecondary		
	Ninth	Tenth	Eleventh	Twelfth	TCC	Diploma or AAS	Bachelor of Science
<b>English</b>	9 <sup>th</sup> grade Lit/Composition	10 <sup>th</sup> grade Lit/Composition	American Lit/Composition	World Lit/Composition / British Literature	<b>Entrance or Exit Point</b>  <b>LS21 TCC Logistics Specialist TCC</b>  - LOGI 1000 Business Logistics  - LOGI 1015 Purchasing and Materials Management  - LOGI 1030 Product Lifecycle Management	Completion of the LS21 TCC leads to the Logistics and Supply Chain diploma (LAS2) and the Logistics and Supply Chain Management degree (LAS3).	<b>Entrance or Exit Point</b>  The University System of Georgia offers students' higher education options at 30 institutions throughout the state, providing a wide range of academic programming including certificates and associate, baccalaureate, masters, doctoral and professional degrees.  <a href="https://apps.usg.edu/ords/?p=118:1:0:">https://apps.usg.edu/ords/?p=118:1:0:...</a>
<b>Mathematics</b>	Coordinate Algebra/Algebra I	Analytic Geometry/Geometry	Advanced Algebra/Algebra II	Pre-calculus			
<b>Science</b>	Physical Science	Biology	Chemistry	Physics			
<b>Social Studies</b>	Psychology	World History	US History	Government (½ unit) Economics (½ unit)			
<b>Pathway Completer</b>	<b>Logistics Fundamentals</b>	<b>Logistics Operations</b>	<b>Materials Management</b>	Work-Based Learning, Youth Apprenticeship, or Capstone Project			
<b>Industry Recognized Credential (Pathway Completer)</b>	<a href="#">Visit the End of Pathway Assessment Page</a> (see note below)						
<b>Required/ Selective Electives</b>	Health & Personal Fitness (can be taken in grades 9-12)	Spanish I	Introduction to Business and Technology	Business and Technology			
	<b>Modern Language/Latin</b> 2 units required for admissions to Georgia University System Colleges/Universities For a listing of Modern Language/Latin courses offered at your high school, please contact your advisor, counselor, or curriculum handbook.		<b>Other Electives</b> For a listing of other elective courses offered at your high school, please check with your advisor, counselor, or curriculum handbook.				

**NOTE:** Students have many options to **ENTER** and **EXIT** from their academic studies into the workforce. When a student graduates from high school, they are eligible to choose one of many **ENTRANCE POINT** options: **1.** Enroll in either a 2 or 4 year post-secondary program; **2.** Enroll in an apprenticeship program or the military; or **3.** Enter the workforce using technical skills learned in high school. When a student finishes a 2- or 4-year degree program, they may choose to **EXIT** and **1.** Enroll in an apprenticeship program or the military; **2.** Enroll in a professional university degree program; or **3.** Enter the workforce using technical skills learned.

#### Distribution and Logistics Career Pathway Completers - Industry Credentialing for High School Students

Upon completion of sequenced courses in the Distribution and Logistics Career Pathway, students are eligible to complete the Industry-Recognized student credential for fulfillment of the End of Pathway Assessment. Secondary students completing the Distribution and Logistics pathway will be able to sit for the National Industry Credential assessment offered on-line from MSSC-CLA and MSSC-CLT. Once mastery is reached, students will receive recognition for completion and use this credential in conjunction with their job or continuing training. For specific assessment information, refer to: <http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/tsai-tdl.aspx>

## APPENDIX B: KY SKILLS U ADAPTED CAREER READINESS LESSON PLAN

### EVALUATION INSTRUMENT

\*Adapted from the KY Skills U Classroom Evaluation Tool\*

Number of Days in Plan: \_\_\_\_\_ Class/Subject: \_\_\_\_\_

<b>3 = Evident; 2 = Somewhat Evident; 1 = Not Observed</b>					
<b>Category</b>	<b>Indicator</b>	<b>Score</b>			<b>Evidence</b>
		<b>3</b>	<b>2</b>	<b>1</b>	
<b>A: Lesson plan content is based on standards and learner goals</b>	1. Lesson Plan includes a targeted set of standards that builds on their natural connections.				
	2. The lesson has an explicit, standards-based objective and purpose, stated in terms of the desired student learning outcomes.				
	3. Students use level-appropriate resources and materials directly related to the targeted standards.				
	4. Lesson content connects to learners' goals, interests, or needs, and is applicable to their lives.				
	5. Students are made aware of the connections among the content and objectives of current, previous and subsequent lessons throughout and at the close of the lesson.				

<b>B</b> <b>Lesson</b> <b>delivery</b> <b>engages</b> <b>students</b>	1. Lesson is communicated clearly with regard to directions, content, questions, and evaluations of student work and ideas.				
	2. Lesson delivery is varied in presentation, instructional activities, and examples to improve classroom interaction, student engagement, conceptual understanding and skill development.				
	3. Students have various opportunities (beyond worksheets) to apply new learning in authentic or practical adult-oriented contexts.				
	4. Students have appropriate hands-on opportunities to interact with computers, the Internet, and other digital media.				
<b>C</b> <b>Learning is</b> <b>monitored</b> <b>and</b> <b>instruction</b> <b>adapted</b>	1. Instruction is adjusted according to students' demonstration of understanding (e.g. re-presenting, re-teaching, modeling, etc.).				
	2. Struggling learners, as well as learners who would benefit from extra challenges, have opportunities for supplemental activities and materials that meet their needs.				
<b>D</b> <b>Learning</b> <b>engages</b> <b>students in</b> <b>higher-order</b> <b>thinking</b>	1. Students participate in activities that require suspending judgment, coming to consensus, discussing alternatives, prioritizing, negotiating, problem-solving, evaluating, and other skills.				
<b>3 = Evident; 2 = Somewhat Evident; 1 = Not Observed</b>					

<b>E</b> <b>Lesson is</b> <b>contextualized</b> <b>to equip</b> <b>students with</b> <b>the skills and</b> <b>dispositions</b> <b>needed for</b> <b>workforce</b> <b>success</b>	1. Classroom activities include opportunities to learn and practice the Employability Standards listed in the lesson plan.			
	2. Students work in pairs or small groups on assignments, projects or presentations to model professionalism in workplace communication.			
	3. The instructor explicitly models and explains how the selected Employability Standards relate to the academic content and prepares students for job opportunities in their local communities.			
	4. Instruction includes examples of how one or more of the Employability Standards apply to jobs in the local community.			
	5. Lesson culminates with an opportunity for student reflection of how they will apply employability skills outside of the classroom.			



**APPENDIX C: PARTICIPANT INVITATION EMAIL**

Dear Potential Study Participant,

My name is Suzanne Morse and I am a doctoral student at Liberty University. I am respectfully requesting your participation in a research study regarding the perceptions of graduates from career academies across the State of Georgia. The intent of this study is to determine if graduates of career academies believe that their education in the career academy setting had a positive effect on their readiness to enter the workforce.

Participation in the study is completely voluntary and will involve a demographic survey and individual and focus group interviews about career academy participation. If you would like to participate in the study, please respond to this email for further instructions.

Your participation in this study will provide valuable insight into the benefits of the career academy model of high school education and could lead to improved educational and career outcomes for future graduates.

Thank you for your time and consideration.

Sincerely,

Suzanne R. Morse

**APPENDIX D: INDIVIDUAL INTERVIEW QUESTIONS**

1. Please take a moment to introduce yourself, including the career pathway you studied in high school, and whether, or not you are currently employed in that career area.
2. How did attending a CCA-model high school influence the development of your career readiness skills?
3. Which experiences in the CCA do you believe were most significant to the development of career readiness skills? Please explain.
4. What, if any, facets of your experience in a CCA-model high school hindered your development of career readiness skills?
5. How did your experiences interacting with experts in your pathway industry impact your preparedness for the workforce?
6. How did the experience of interacting with your peers and instructors influence your career readiness?
7. In what ways were your academic and career classes integrated to combine your career interests with the academic content?
8. How did the experience of attending a CCA for the completion of a career pathway influence your career/post-secondary goals and choices?
9. How have you been able to apply the career readiness skills you obtained while attending a CCA to your experience in the workforce?
10. Which areas of your work in which you believe your experience in the CCA setting was not appropriate/adequate to prepare you?
11. Based on your experiences in the workforce, in what ways do you believe CCA education could be improved to increase career readiness skills of future graduates?

12. What other information would you like to share about your experiences in a CCA-model high school as it relates to the development of career readiness skills?

## **APPENDIX E: FOCUS GROUP INTERVIEW QUESTIONS**

### Group Interview Questions:

1. Why did you choose to participate in the CCA model during high school?
2. What aspects of your education under the CCA model were most beneficial to developing your career readiness?
3. Which aspects of your career-specific training in the CCA model have been most beneficial while working in the industry?
4. What specific concepts/skills/experiences were not present in your education at a CCA that would have benefitted you in the workforce?
5. What impact did your interaction with your peers in the same career pathway influence your career readiness?
6. What impact did interactions with instructors and industry-experts have on your career readiness?
7. Please explain the reasons why you would or would not recommend attending a CCA to future students.

**APPENDIX F: PARTICIPANT SCREENING SURVEY**

Email Address: \_\_\_\_\_

Full Name: \_\_\_\_\_

Age (select one):

- 18-19
- 20-21
- 22-23
- 24-25
- >25

Phone number: \_\_\_\_\_

Race/Ethnicity (select one):

- White/non-Hispanic
- African American
- Hispanic
- American Indian
- Asian/Pacific Islander
- Other

Number of Years CCA Attended: \_\_\_\_\_

Did you complete a 3-course career pathway?

- Yes
- No

If you answered “yes” to the previous question, please list the career pathway you completed in the space below.

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**APPENDIX G: TEACHER PARTICIPATION EMAIL**

Dear Potential Study Participant,

My name is Suzanne Morse and I am a doctoral student at Liberty University. I am respectfully requesting your participation in a research study regarding the perceptions of graduates from career academies across the State of Georgia. The intent of this study is to determine if graduate of career academies believe that their education in the career academy setting had a positive effect on their readiness to enter the workforce.

Participation in the study is completely voluntary and will involve submission of one career readiness lesson plan that you have used in your instruction at the career academy in which you are employed. If you would like to participate in the study, please respond to this email for further instructions.

Your participation in this study will provide valuable insight into the benefits of the career academy model of high school education and could lead to improved educational and career outcomes for future graduates.

Thank you for your time and consideration.

Sincerely,

Suzanne R. Morse