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THE LIVED EXPERIENCE OF RURAL CTE TEACHERS AS MEMBERS OF THE SECONDARY EDUCATION TEACHING CORPS

By

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A DISSERTATION

Presented to the Affiliated Faculty of

the College of Graduate and Professional Studies at the University of New England

Submitted in Partial Fulfillment of Requirements

For the Degree of Doctor of Education

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November 2021

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College of Graduate and Professional Studies

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ABSTRACT

The secondary education system in the United States provides the opportunity for students to earn a high school diploma in preparation for post-secondary college and career. These students are taught by certified high school teachers with similar pedagogy but deliver instruction in different content areas. This qualitative study was conducted to understand how rural CTE high school teachers describe their lived experience of being a member of the secondary education teaching corps. Guided by two research questions that ask (1) how rural CTE teachers describe their teacher professional identity and (2) how rural CTE teachers characterize the role of vocational training in secondary education, the study used transcendental phenomenology as a methodology to explicate data collected through semi-structured interviews of six certified rural CTE high school teachers. The explication process followed Moustakas' (1994) modification of the van Kaam method of analysis of phenomenological data. From the development of individual textural-structural descriptions of the phenomenon, a composite synthesis of data resulted in a description of the essences and meanings of the experience of teacher professional identity by the participant group. These findings indicate rural CTE high school teachers exhibit attributes of Teacher Professional Identity and Teacher Agency in their lived experience as a secondary education teacher.

Keywords: Teacher Professional Identity, Teacher Agency, Career and Technical Education,
Transcendental Phenomenology

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To my sons Josiah, Leo, and Ben

You remind me of my true North. I am grateful to be your father!

DEDICATION

To Julie Speno, my wife and best friend, I dedicate this dissertation to you. On more than one occasion, I let you know I wanted to quit, and your reply was usually, "go ahead, quit!" Well, I took your advice and did not quit! Your enduring support, encouragement, and humor gave me great determination to cross the finish line.

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CHAPTER 1: INTRODUCTION

In 2018, just over half of secondary learners were enrolled in at least one Career and Technical Education (CTE) class among the 98% of public high schools in the United States that offer CTE programs (Gray & Lewis, 2018). While these figures seem to indicate an acceptable enrollment level in CTE, when compared to an inadequately skilled workforce in the country's business and industry, these enrollment figures did not support the number of college and careerready CTE graduates needed to shrink the skills gap (Hodes & Kelley, 2017). Thus, providing college and career success opportunities by utilizing intentional learning pathways such as academic and technical is of paramount importance for secondary education in the United States (Castellano, Sundell, Overman, & Aliaga, 2012). In addition, the need for effective college and career readiness development in the United States provides the structure for education reform to supply our economy with the human capital needed to compete in a global economy (Borek, 2008; Eng. 2015). Although structural enhancements that provide fiscal and pedagogical reform for CTE's role in workforce development (Hyslop, 2018) can act as a solution that addresses, in isolation, one pathway of learning, CTE is part of a more extensive comprehensive delivery of secondary education that provides college and career readiness in the United States.

For secondary schools in the United States, the academic and CTE pathways represent options most learners pursue to develop college and career readiness skills. (Holzer & Baum, 2017). Although these pathways differ in their core content, there are similarities in pedagogy that academic and CTE high school teachers rely on when developing and delivering their curriculum (Berger & Lê Van, 2019). In a society that assumes college-going as a preferred goal of secondary education, competition for equality between the pathways has emerged (Stone, 2017). Understanding equity issues that impact CTE related to perception can begin from the

place of teacher professional identity (TPI) and how its development is provisional upon a frame of reference that can uncover inconsistencies that attribute bias towards CTE (Hendrikx, 2020; Richardson, Castellano, Stone, & Sanning, 2016; Zembylas, 2018).

For more than a century, the United States Federal Government has passed legislation supporting CTE in secondary and post-secondary schools at the state and local level (Gordon, 2014; Imperatore & Hyslop, 2017). Though the federal government does not have direct oversight on education in the United States, it can mandate guidelines for states to provide legislative and fiscal support for integrative opportunity pathways for college or career; CTE is one such pathway (Haubenreich, 2012). The most recent iteration of federal CTE legislation is the Strengthening Career and Technical Education for the 21st Century Act, signed into law by President Trump on July 31, 2018 (Hyslop, 2018). Also, to establish an essential link to the enduring brand awareness for previous CTE legislation named after Senator Carl D. Perkins, a staunch supporter of vocational education, stakeholder groups refer to the law as Perkins V (Hyslop, 2018).

To support continued efforts to prepare learners in the United States for college and career readiness, current initiatives incubated by Perkins V provide for deeper discussions related to pathways of success at the state and local level (Perry, 2019). One solution is to develop strategies to leverage CTE as a secondary education pathway to prepare learners for workforce and college readiness (Cheng & Hitt, 2018; Jackson & Hasak, 2014). Unlike the theoretical foundation of the academic approach to learning, CTE provides a blended approach of technical, hands-on, experiential, and academic opportunities to develop skills needed for the workforce (Threeton, 2007). Furthermore, as a reform initiative that is funded in part by the federal government to provide workforce training at the state and local levels, CTE provides a

pedagogical framework to ensure learners are exposed to the rigor needed to support success in existing and developing careers (World Bank, 2018).

Personal Interest

In contrast to the post-industrial, uniform approach to curriculum development and delivery, a 21st-century education provides for an individual, knowledge-based curriculum for learning academic and vocational skills (Imperatore & Hyslop, 2017; Schwahn & McGarvey, 2012). This reformed approach to education, whereby CTE is a viable pathway for earning a high school diploma, subsequently provides an alternative career and college preparation framework necessary to address a growing skills gap (Hodes & Kelley, 2017). Stakeholders continue to navigate and cultivate the elevated responsibility of providing the educational, social, and economic solutions to support the leadership of the United States in competing in the global economic environment (Gomułka, 2018; World Bank, 2018).

In the last quarter of the 20th century, the educational trajectory of attending a four-year college and earning a degree represented a shared desire of the United States culture to enlist its citizens in white-collar professional careers (Licht & Grossman, 1988). Thus, during the researcher's high school years, obtaining a "B" grade point average, earning high scores on college entrance exams, and excelling at extracurricular activities were the common pathways to college acceptance. However, the researcher's experience with high school academics was dominated by academic failure and a lack of basic academic skills. Furthermore, in the researcher's opinion, his interest in learning a trade was treated as a transient desire stigmatized as a pathway for less able students.

Statement of Problem

Notwithstanding agreement among educators, policymakers, and industry leaders about the educational and economic value of CTE, how programs are positioned within secondary school course offerings in the United States continues to hinder the true growth potential and equity of CTE pathways for career and college readiness (Fletcher, Lasonen, & Hernandez, 2014; Morehead, 2015). Opportunities for CTE learners to earn esteemed industry-recognized credentials (IRC) may be diminished by misunderstanding the benefits CTE provides concerning comprehensive secondary education learning outcomes that lead to a high school diploma (Handy, 2012). In the absence of bias, emphasis on the importance of CTE as a learning opportunity for all replaces a belief that vocational education is appropriate only for learners thought unable to attend a four-year college (Helping Students Succeed, 2016).

With significant legislative support by the U.S. Federal Government beginning with the passage of the Smith-Hughes Act of 1917, CTE became a vehicle of education reform, but the dialogue is often framed as programming for students who are unsuccessful in academic education settings (Aliaga, Kotamraju, & Stone, 2014; Hyland, 2019). Though this early legislation provided federal endorsement and protected funding for vocational education in schools, the Smith-Hughes Act enacted several mandates like the separation of academic and vocational curricula and the subsequent development of state boards of vocational education that were created separately from other educational governing boards (Aliaga et al., 2014; Gordon, 2014; Imperatore & Hyslop, 2017). From the residue of a perceived inequality of program development, delivery, and learning outcomes, CTE became categorized as a second-class educational pathway appropriate only for learners who were at risk, disengaged, and not on a college-prep track (Jackson & Hasak, 2014, Helping Students Succeed, 2016).

Misconceptions about the significance of CTE by society and educators at all levels may diminish its potential as a viable high school graduation pathway (Brand, Valent, & Browning, 2013; Richardson et al., 2016). As a result, the positioning of high school CTE programming continues to support the classification of CTE as a second-class option appropriate for learners who are not college-bound (Malkus, 2019). Many believe a four-year college degree is a prerequisite for workforce readiness (Finlayson, 2009; Jackson & Hasak, 2014). The idea that an academic curriculum is developed upon the rigor of critical thinking skills, which are noncontextual in their approach, is a central assumption to what Stone (2017) designates as a noncareer readiness protocol. On the other hand, presumed shortcomings of a hands-on experiential learning model represented within a CTE curriculum; many academic teachers believe outcomes do not provide the academic rigor necessary in an educational system based that is a product of a college-going culture (Knight & Duncheon, 2019; Malkus, 2019). Perceptions that college-prep curricula teach thinking skills and CTE curricula teach doing skills characterize the divide between secondary academic and vocational pathways for earning a high school diploma (Richardson et al., 2016). For example, the perception about how CTE lacks rigor, that the CTE teacher certification and training process is inadequate, and that CTE does not honor the cultural mores of enrolling in college justify stereotyping CTE as a second-class educational and workforce training pathway (Park, Pearson, & Richardson, 2017). The distinguishing value of a thinking curricula versus the shortcomings of a doing curricula perpetuates discrimination against the latter (Stone, 2017).

From the reference of understanding how CTE high school teachers describe their TPI (Zembylas, 2018), determining a foundational context from where identity develops may provide insight into how CTE high school teachers feel accepted into the wider secondary education

teacher corps (Gee 2001, as cited in Beauchamp & Thomas, 2009). Findings from a mixed-methods study that addressed the issue of improving access to the CTE teaching profession by industry experts indicate the need for innovative action and policies to ensure learners are taught by industry experts. For example, conclusive evidence about data collection by individual states indicates 43% track data related to how many industry experts are full-time teachers, 13% track the necessary human capital needed to fill vacancies, and 24% track how many have access to industry experts. A striking datum of 41% represents the states that do not provide data that provides information on the access to secondary education by industry experts (Advance CTE, 2016).

While the Advance CTE report (2016) provides context for the rigorous delivery of CTE curricula by industry experts, data published by the U.S. Department of Education about national CTE teacher distribution, certification, and education provide a more comprehensive view of the CTE teacher inclusion in US secondary education (National Center for Education Statistics, 2007). According to these data: 33.8% of CTE teachers enter teaching through alternative certification compared to 17.7% of academic teachers; 31.4% of CTE teachers are age 55 years or older compared to 22.1% of academic teachers; although the percentage of teachers who have a bachelor's degree is 27.8% for CTE and 44.5% for academic, 21% of CTE teachers have less than a bachelor's degree compared to 0.4% for Academic teachers (National Center for Education Statistics, 2007). These data may provide, in terms of the context of developing teacher identity, representation of a unique set of life-experiences separate from those that impact academic teacher professional identity (Hendrikx, 2020; Lortie, 2002; Thomas & Beauchamp, 2011; Zembylas, 2018).

The lived experience of a rural CTE teacher's role in secondary education examined through a horizontal lens of thematic essences provide substance for the subjective nature of the appearance of the phenomenon of teacher professional identity (van Manen, 2016). Research indicates a high percentage of CTE teachers enter the teaching profession after a successful career in industry (Advance CTE, 2016; Stephens, 2015). In addition, many CTE teachers who have industry experience and alternative pathways for certification become members of a profession where colleagues in academic high schools follow more traditional teacher preparation processes (Wilkin, Nwoke, & Technology, 2011). However, compared to how academic high school teachers develop a professional identity, researchers have an incomplete understanding of how CTE high school teachers describe their teacher professional identity. This study provides the research necessary to fill the gap in the literature.

Purpose of Study

This phenomenological study aimed to describe high school teacher professional identity from the lived experience of rural CTE teachers as members of the secondary education teaching profession (Moustakas, 1994). Employing Husserl's transcendental phenomenology (TPh) for the design of this qualitative study, a composite synthesis of the meanings and essences related to the lived experience of teacher professional identity in rural high school CTE teachers was described (Giorgi, 2012; Moustakas, 1994). The awareness of CTE teacher professional identity supports an understanding of its existence (Giorgi, 1997) and provides the structure to make collective generalizations about the phenomenon's essence within the natural attitude of the lifeworld (van Manen, 2016). Furthermore, through the analysis of the lived experience (van Manen, 2016) of a rural CTE teacher's role in comprehensive secondary education, the study provided insight and understanding of related obstacles such as teacher certification, bias, and

equitable treatment of CTE as an integrated learning pathway for high school students. The rationale for the study was to investigate how rural CTE high school teachers experience teacher professional identity from their conscious attitude and how any parallels can be generalized to a small group of research subjects (Giorgi, 2012; Moustakas, 1994). Embracing the intentionality of the transcendental phenomenological explication for the conscious object of identity, the experience of phenomena is presented in the form as it exists within the research subject (Giorgi, 1997).

Research Questions

According to Bloomberg and Volpe (2016), the development of good research questions provides a framework to understand a specific phenomenon. To establish the relevant inquiry, open-ended questions that provide a foundational descriptive nature (Maxwell as cited in Bloomberg & Volpe, 2016) are more appropriate to uncover how the likeness of patterns inclusive to teacher professional identity is realized. Through questions that prompted individuals to share their lived experience related to teacher professional identity as a rural CTE teacher, the understanding of how CTE fits into comprehensive secondary education is facilitated by capturing shared elements of essence evident in individual accounts (Creswell, 2013). Therefore, the following research questions are posited:

RQ₁: How do rural CTE teachers describe their teacher professional identity?

RQ₂: How do rural CTE teachers characterize the role of vocational training in secondary education?

Conceptual Framework

In social science research, the terms conceptual and theoretical frameworks are often interchangeable (Roberts & Hyatt, 2018); when these frameworks are treated similarly in research, Ravitch and Riggan (2017) caution that the overarching foundation for the research is at risk of being absent. A central principle of a valid conceptual framework is the assertion of the relevance of a topic of study, which can be established at varying degrees of urgency (Anfara & Mertz, 2015; Ravitch & Riggan, 2017). Ravitch and Riggan also discussed the organic nature of a conceptual framework as providing direction for a study based on research questions. They established an integrated approach where a personal connection, review of the literature (topical research), and theory provide resources for the scholarly evolution of research.

By engaging in phenomenological reduction, which is the practice of finding the essence of phenomena sans reflection (Giorgi, 1997), the researcher reveals an affinity for CTE and is convinced of its pedagogical value for learner achievement. Furthermore, as a secondary school educator, the researcher has experienced how CTE programs and teachers are considered non-essential by colleagues, parents, and other stakeholders. Therefore, to protect the integrity of the study from bias, the researcher bracketed his personal experience by conducting a phenomenological reduction. The bracketing process, addressed in Chapter 3, provides a mechanism to describe lived experiences free of presuppositions (Bloomberg & Volpe, 2016; Creswell, 2013; Giorgi, 1997).

To understand the essence of teacher professional identity and its impact on the lived experience of a rural CTE high school teacher, the phenomenological basis for how meaning becomes conscious in the individual provides a valuable research tool (van Manen, 2016).

Therefore, a review of the literature was conducted to examine the history of vocational

education in the United States, to consider the place of CTE within formal educational settings, and to identify how teacher professional identity is defined. Although themes such as the absence of academic rigor, the effectiveness of CTE teacher certification, how CTE is placed in comprehensive secondary education, CTE teacher identity, or the changing nature of work were identified, a gap in the literature associated with the lived experience of a rural CTE teacher as a member of the secondary teaching corps was discovered (Bloomberg & Volpe, 2016; J. Creswell, 2013, 2015). This study will seek to fill this gap and provide a discussion point for further inquiry.

Assumptions, Limitations, and Scope

An essential assumption of the study is represented by the ontological philosophy of engaging in a phenomenological research design providing insight into the variation of realties in which the phenomenon exists (J. Creswell, 2013; Giorgi, 1997; Moustakas, 1994). Another assumption is focused on the ability of participants to describe their transition from working in industry to joining the teaching ranks and how professional development was utilized to support them as new teachers (Holzer & Baum, 2017). One aspect of this transition relates to workplace experience, and its application and relevance to teacher training might provide a structure to import the hermeneutic value of industry language into the classroom (Hyland, 2019; Stephens, 2015). It is further assumed that CTE high school teachers have opportunities to develop a teacher professional identity.

A limitation of the study is represented by the thematic nature of the qualitative phenomenological research approach. While quantitative data is explanatory with a research approach that can be replicated, it depends on the researcher's ability to analyze lived experience (Creswell, 2015; Giorgi, 1997; Moustakas, 1994). Another limitation of the study is the small

research sample of six subjects. The scope of the study is the analysis of interview data collected from CTE teachers located in a rural environment, a limitation. The research questions are openended, and researcher bias and presuppositions will be bracketed to ensure the construction of an unbiased description of rural CTE teacher professional identity.

Rationale and Significance

With the advent of a global marketplace that demands a highly skilled workforce, CTE has been identified as an alternative pathway for workforce training (Stone, 2017). As CTE has become more attractive as a vehicle for educational attainment, key stakeholders such as government, educators, students, industry consider CTE as a source for a competent and educated workforce (Jackson & Hasak, 2014). The study provides an opportunity to discuss the obstacles that inhibit the development of CTE and realize its comprehensive benefits for education and workplace training outcomes.

In this instance, awareness of a curriculum hierarchy that values abstract academic over practical vocational disciplines implies that one subject carries more importance than other subjects (Bleazby, 2015). For decades, mainstream high school learners have been directed away from CTE enrollment by parents and guidance counselors who see a four-year college degree as more valuable in future employment and earnings potential (Morehead, 2015; Threeton, 2007). Furthermore, contrary to the mandated blending of academic and technical curricula, college preparatory and CTE curricula are often stigmatized by their academic peers based on a belief that a CTE curriculum is not academically rigorous and that the CTE teacher is not properly credentialed as a teacher (Stephens, 2015; Stone, 2017). With hard data indicating that the U.S. is falling behind in global workplace readiness (Castellano, Sundell, & Richardson, 2017), the positioning of CTE programs in secondary education settings will continue to need examination.

The recruitment and professional socialization of CTE teachers into those settings play a vital role in how their programs are perceived. Understanding how stigma about technical training might impact the CTE teacher identity can inform and potentially address CTE bias and stereotypes. Findings can guide the development of a collaborative environment for teachers to work together to integrate CTE more fully in general education.

Definition of Terms

Career and Technical Education (CTE). CTE is an educational approach that provides learners with technical and academic learning opportunities to develop skills needed for entry into the workforce (Threeton, 2007).

Career Readiness. Career readiness is an outcome of a sequence of learning activities where a learner gains the knowledge and skills necessary for successful placement into a career (Park et al., 2017).

Industry-Recognized Credential (IRC). The industry-recognized credential (IRC) is a CTE qualification that a learner has attained in a specific level of workplace skill(s) that employers seek. IRC's are CTE-specific but provide a level of academic learning that could be transferrable to an academic credential, e.g., high school diploma (Stone, 2017).

Perkins V. Perkins V is an abbreviated title that refers to the Strengthening Career and Technical Education for the 21st Century Act signed into law by President Trump on July 31, 2018. Perkins V is a reauthorization of the 2006 Carl D. Perkins Career and Technical Education Act, which provides robust guidance on CTE funding, amongst other items (Hyslop, 2018).

Transcendental phenomenology (TPh). Predominately developed by Edmund Husserl, transcendental phenomenology is a research methodology with a strong relationship to

philosophy. TPh is used as a research design methodology to understand the human experience of a specific phenomenon (Moustakas, 1994).

Epoché. The process where presuppositions and bias are blocked when a researcher is conducting a phenomenology (Moustakas, 1994).

Phenomenological reduction. The process where textural language is used to describe what an individual experiences (Moustakas, 1994).

Individual textural description. A cohesive description of what the individual experiences in the context of the phenomenon and its themes (Moustakas, 1994).

Individual structural description. A cohesive description of how the individual experiences the phenomenon's context and themes (Moustakas, 1994).

Individual textural-structural description. A description of the meanings and essences of a phenomenon by an individual (Moustakas, 1994).

Composite textural description. A cohesive description of what the group of research participants experiences in the context of the phenomenon (Moustakas, 1994).

Composite structural description. A cohesive description of how the group of research participants experiences the meanings and essences of the phenomenon (Moustakas, 1994).

Composite textural-structural description. The development of the composite textural and composite structural descriptions into a synthesis of essences in the context of the phenomenon (Moustakas, 1994).

Conclusion

Developing a workforce in the United States to meet the needs of the 21st-century global marketplace requires training in current and yet-to-be-identified skills as a point of entry into a career (Venkatraman, Souza-Daw, & Kaspi, 2018). With the development of CTE as a viable

pathway for career readiness, the separation of academic and technical education and its effectiveness in preparing young people for college or career provides a rationale for researching how rural CTE high school teachers describe their teacher professional identity. A historical split between thinking curricula of conventional high schools and doing curricula of CTE schools inform the debate about the purpose of secondary education. This debate expends valuable energy and resources necessary for providing better access to effective workforce training (Dougherty, 2018; Handy, 2012).

Chapter 1 provided an understanding of the problem by discussing its context, background, and history. Tied back to the study's problem and purpose, the research questions provide a rationale for the conceptual framework. Assumptions, limitations, and scope and the study rationale and significance provide insight into challenges encountered in the study. Finally, a list of the definitions of terms provides the reader with key terms that promote understanding of the study-specific language.

In Chapter 2, the literature review will address the history of CTE in the U.S. related to its perception as a pathway for education, teacher professional identity, and teacher agency. In addition, a discussion of the nature of work and the need for a growing workforce implicate how important CTE is for economic growth. Also included in Chapter 2 is a further comprehensive conceptual framework to guide scholars in understanding how rural CTE high school teachers describe their lived experience of teacher professional identity.

Chapter 3 will describe how the theoretical underpinning of the transcendental phenomenological methodology was used to address the purpose of the study and the research questions. The description of the research design includes the site description, a synopsis of the participants, and the sampling method employed. A discussion about the instrumentation and

data collection procedures provides the rationale for relying on explication rather than pure data analysis to support the study's narrative nature. The methodology chapter also addresses ethical concerns such as member checking to establish credibility, dependability, transferability, and confirmability. The study's findings are presented in Chapter 4, with Chapter 5 concluding the study with implications and recommendations.

CHAPTER 2: LITERATURE REVIEW

For approximately two centuries, the United States Legislature has written policy to support the effective delivery of Career and Technical Education (CTE) at the school level in curriculum, teacher training, and post-secondary opportunities (Aliaga et al., 2014). An important outcome of the lawmaking process is how CTE policy supports a blended learning model that provides rigorous academic and vocational learning at the state and local levels (Friedel, 2011). Employing CTE as a solution to shrink the gap responsible for underemployment in the skilled trades, current and future policy and practice can potentially change the narrative of CTE inequity to one of equity (Shivakumar, 2018). Lured by the promise of higher incomes from earning a college degree, high school graduates should be informed that a skilled trade can pay just as well as white-collar occupations (Toppin, 2018). Although the economic potential is equitable for a CTE graduate, disparity associated with CTE (Dougherty, 2018) has created a shortage of skilled workers needed for the 21st-century global economy in the United States. Furthermore, as the nature of work relies on a vocational skill set that combines knowledge- and skill-based learning, stereotyping CTE allows the marginalization of a valuable educational pathway for effective workforce development (Shivakumar, 2018).

After a dramatic change of circumstances in the nature of work resulting from several industrial revolutions, the workforce of the 21st-century global economy needs an updated-technical skill set learned from CTE opportunities (Rojewski & Hill, 2017). While the individuals needed for this trained workforce have yet to enroll in CTE programming (Morehead, 2015), knowing how educators and policymakers regard the efficacy of CTE is a crucial consideration for cultivating the development of modern workforce skills. Reflecting how secondary education has developed within the United States, the lived experience of CTE high

school teacher professional identity can provide insight into how CTE teachers also identify as members of the secondary teaching profession. Furthermore, by offering opportunities to learn skills applicable to the new economy's demands (Imperatore & Hyslop, 2017), this study supports the rationale to research the CTE teacher's lived experience in comprehensive secondary education and how it might impact CTE equity.

Since the turn of the 19th century, the educational landscape in the U.S. has grown to value a college-for-all mindset over CTE, which limits opportunities for workforce growth through the development of trade and vocational skills (Shivakumar, 2018; Malkus, 2019). Additionally, although industry leaders understood the imbalance as a threat to workforce development, the academic world supported an educational proxy that a four-year degree constituted workforce readiness across career sectors (Kreisman & Stange, 2017). This prejudiced approach to academic versus vocational education has an established history (Aliaga et al., 2014) in the discourse of educational reform and policy development. Though CTE began its position in secondary education as a separate pathway for learning, various reform enactments have attempted to provide more equity for CTE and, more importantly, diminish the resulting stigma CTE holds due to this policy separation (Aliaga et al., 2014; Fitzgerald, 2018).

With the advent of an economy that relies on a blend of knowledge- and skills-based education, Morehead (2015) discussed how dispelling biased perceptions of CTE strengthened the structure for growth and support for workforce development through academic and vocational learning opportunities. In addition, the new economy, which can be thought of as a fourth industrial revolution (Industry 4.0), relies on the ability of workers to be trained in and to be able to navigate systems of production that combine cyber-connected and physical production processes (Postelnicu & Câlea, 2019; Venkatraman et al., 2018). Issues like these help provide a

foundation to understand the internal structures of the lived experience of how CTE high school teachers describe their teacher professional identity (van Manen, 2016).

The call to action by educators and politicians to position CTE as an alternative pathway for workforce development represents a resurgence of the set of values the United States relied upon in its development as a nation-state (Kett, 2017; National Commission on Excellence in Education, 1983). Intertwined in this history is the ingenuity and innovation its citizens embody to adapt to the needs of a growing economy based upon technological change. Thus, in the United States, opportunities for training in vocational trades remained a cornerstone of social and economic growth reminiscent of the industrial revolutions of the 18th, 19th, and 20th centuries (Imperatore & Hyslop, 2017; Stringfield & Stone, 2017; Towle, 2018).

Though the development of vocational education and its role in cultivating an industrial advantage for the United States in the global marketplace, any perception of CTE inequity can disenfranchise the qualities of this pathway to facilitate career and college preparedness (Di Pietro, 2018; Rosenbaum, Stephan, & Rosenbaum, 2010). At the same time, it is essential to identify obstacles to career and college success in the secondary educational system, specifically with lost CTE opportunities, a foundational understanding of how bias towards vocational education may provide information to consider how CTE is an equitable pathway (Imperatore & Hyslop, 2017). That bias exists against CTE provides a segue to understand how this perception may or may not impact CTE high school teachers' descriptions of their teacher professional identity.

Contemporary Secondary School Environment

In 1983, the U.S. Department of Education enlisted the National Commission on Excellence in Education to report on the state of America's educational system. The report, A

Nation At Risk: The Imperative for Educational Reform, described a dire situation related to lack of standards and innovation that hindered the capacity for the US to compete in an expanding global economy (National Commission on Excellence in Education, 1983). To develop a curriculum at the secondary and post-secondary levels, A Nation at Risk outlined the necessary steps to improve our schools by focusing on math and science to advance outcomes and achievement (Carlson & Planty, 2011). As reform efforts began to take hold, as seen in CTE-specific legislation, academic and vocational knowledge were central components of how a student can earn a high school diploma (Ciccolo, 2008).

College and Career Readiness

In response to a growing global economy that requires a workforce with academic and vocational acumen, secondary schools in the United States have created opportunities to teach students blended skills to facilitate career and college readiness (Knight & Duncheon, 2019; Threeton & Pellock, 2010). As distinct pathways for earning a high school diploma, academic and vocational high school curricula address the skills necessary for achievement and preparation for post-secondary college and career opportunities (Phelps & Chan, 2016; Threeton & Pellock, 2010). The application of a blended approach to skill development not only provides a collaborative and innovative platform for school reform, but its result is also realized in improved achievement and graduation rates (Holzer & Baum, 2017; Stipanovic, Stringfield, & Witherell, 2017). However, considering the impact educational reform can have on curriculum delivery by certified teachers, differences in the development and delivery of viable pathways for secondary learning become evident (Park et al., 2017). A critical component of this consideration is the reliance upon human capital in our schools that considers the mystique of teacher professional identity (Djankov & Saliola, 2018).

Teacher Professional Identity

Research by Hendrikx (2020) on teacher professional identity (TPI) provides insight into managerial-based reforms in educational institutions across the globe. Managerial reform replaces individual efficacy towards improvement and achievement with systems where teachers are micromanaged (Hendrikx, 2020) to make the profession and its learning outcomes predictable and uniform (Fletcher, 2006). TPI gained popularity as a research topic in the latter 20th century to understand the professionalism situated in the identity of a teacher either as an occupation of service or as a station on the hierarchy of tenure (Lortie, 2002; Thomas & Beauchamp, 2011).

Findings from a qualitative study conducted by Thomas and Beauchamp (2011) provide valuable insight into the shaping of TPI against the backdrop of a changing global learning community. Using a semi-structured interview approach for collecting data from 45 recent graduates of teacher training programs in Canada, the study spanned three cohorts of participants over three years. The researchers used a methodology based on metaphor to invite participants to describe their self-identity as a teacher concerning who they are rather than the role they play. Although this study uses pre-service teachers, findings discussed the implications for further research into how the intentional development of TPI on the level of self-identity rather than their role in the education landscape (Beauchamp & Thomas, 2009; Thomas & Beauchamp, 2011).

In the age of managerialism educational reform, a teacher's self-identity is subject to apprehension by the role a teacher must play to support high stakes accountability of student achievement (Hendrikx, 2020). A teacher's personal and professional visions of their identity are subjected to a comprehensive assault on teacher agency as prescribed by policy (Buchanan,

2015; Imants & Van der Wal, 2020). Buchanan (2015) studied nine elementary teachers from schools having different contexts to understand the complex development of teacher professional identity against an environment of strict accountability. Using an interview methodology to understand prior teaching and work experience, Buchanan researched how the relationship between school culture and teacher identity development created a disconnect that impacted how teachers viewed their efficacy.

Quantitative research conducted by Berger and Lê Van (2019) examined the multidimensional presentation of teacher TPI when associated with teacher pedagogy. In addition, the study researched the correlation between TPI and pedagogical beliefs. The participant pool consisted of 236 secondary school teachers in Switzerland; 124 were general education high school teachers, and 112 were vocational high school teachers. Although the study concluded that the structure of TPI is relevant for the pedogogical beliefs of teachers, the finding of similar invariants of TPI between the two participant groups indicates equitable TPI among academic and vocational high school teachers.

Although a consistent definition of TPI is ambiguous within the literature (Beauchamp & Thomas, 2009; Solari & Martín Ortega, 2020), a belief that identity is better understood through the contextual lens was posited by Gee (2001). By identifying four specific ways to perceive identity, Gee established a framework that can describe the lived experience of TPI. Table 1 describes the four ways Gee used to view identity and provide meaning for establishing individual traits of TPI.

Table 1

Four ways to view identity (Gee, 2001)

Process		Power	Source of Power
Nature Identity: a state	developed from	forces	in nature
Institution-identity: <i>a position</i>	authorized from	authorities	within institutions
Discourse-identity: an individual trait	recognized in	the discourse/dialogue	of/with "rational" individuals
Affinity-identity: experiences	shared in	the practice	of "affinity groups"

Note: Identity as an Analytic Lens for Research in Education, Gee, 2001, p. 100.

It is important to note that when Gee's (2001) structure to view TPI is employed, the categories are not delineated by sharp contrasts, but rather, a complex amalgamation of the categories and, other contexts exemplify various concentrations of categorical characteristics attached to TPI (Solari & Martín Ortega, 2020).

Teacher Agency

While TPI can be viewed as a phenomenon that is constructed over a teacher's career (Solari & Martín Ortega, 2020), the inclusion of teacher agency (TA) in the discussion provides insight into the activities a teacher engages in as an indication of achievement of professional competence (Leijen, Pedaste, & Lepp, 2020; Priestley, Biesta, & Robinson, 2016). Figure 1 shows the model of attaining TA as postulated by Priestly et al. (2016).

According to current research, the concept of teacher agency and its distinctions as a variant phenomenon is defined as something that an individual does rather than something that one possesses (Buchanan, 2015; Imants & Van der Wal, 2020; Priestley et al., 2016). Building on theory from Emirbayer and Mische (as cited Priestly et al., 2016), Priestly et al. apply their

ecological model of achieving agency which resulted in identifying how the past and future dimensions conduct relevancy on the acting upon agency in the present.

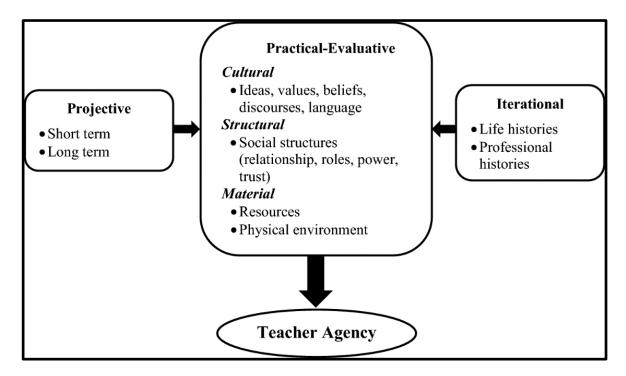


Figure 1. Teacher Agency Attainment Model (Priestly, Biesta, and Robinson, 2016)

The Role of CTE in American Education

Since the early 20th century, federal legislation elevated vocational education, known today as Career and Technical Education (CTE), on the United States' educational landscape. The educational system continues to be subject to reform efforts to develop a world-class system with several pathways leading to a high school diploma (Friedel, 2011). By developing a legislative framework to support the growth of CTE, educational reform has provided another avenue to effect change (Imperatore & Hyslop, 2017).

With a global economy that motivates stakeholders in secondary schools to prepare the leaders of tomorrow, our educational system provides solutions through multiple pathways for

learners to earn a high school diploma in preparation for career and college (Stone, 2017; Towle, 2018). Using CTE as a viable route to effectively prepare a high school graduate to enter the workplace or further education provides policymakers an option that enfranchises a group of learners who have great potential as future leaders in an expanding global marketplace (Aliaga et al., 2014; Threeton, 2007).

Policy opinions about CTE formed in social and political initiatives in the 19th century continue to impact current legislation at the local, state, and federal educational policy levels (Gordon, 2014a). For example, a major shift in current CTE educational policy regarding the necessary combination of academic and vocational teaching is an iteration of federal policy that began with the Smith-Hughes Act of 1917. The benefits of this policy shift resulted in the development of rigorous curricula to support a pathway for CTE for sustainable and challenging careers (Park et al., 2017; Threeton & Pellock, 2010).

Social Reform and Vocational Education

In the late 19th century, social and educational reform led to activities that would shape the development of CTE over the next 100-plus years. Gordon (2014) discussed European influencers and other reformers who cultivated conditions for vocational education to become part of the US educational tapestry. While it is beyond the scope of this review, it is important to understand that the origins of CTE along economic and class lines prompted reform to call for stable equity in educational access and achievement (Castellano, Stringfield, & Stone, 2003). Furthermore, Imperatore and Hyslop (2017) supported the evolution of CTE as a response to changing economic and social constructs seen in the 20th century, which continue to mature in the 21st century. Failure to do so would negatively impact the ability of the US industry to compete in the global marketplace (Jocson, 2015; Threeton, 2007).

CTE Legislation

Towards the end of the 19th century, reformers like Booker T. Washington, John Dewey, and Charles Prosser argued the importance of including vocational training in general education (Gordon, 2014). The ideas presented by these reformers reflect the philosophical assumptions each held, such as Washington viewing the characteristics of learning as more than rote memorization; Dewey believing that to be successful in an era of science, learners needed instruction in doing-activities along with thinking-instruction; and Prosser's view about theory and practice as being essentially tied to the success of a learner's career in a vocational trade (Gordon, 2014). In addition, the ideas held by these reformers indicate the formalization of CTE as strategies for federal legislation in the US to meet the shifting needs of a developing industrial nation (Imperatore & Hyslop, 2017).

Smith-Hughes Act of 1917. It was not until 1917 that the federal government developed and passed legislation `supporting vocational education in public education. The Smith-Hughes Act of 1917 promoted vocational education in public schools whereby learners would learn skills needed to enter the workplace (Friedel, 2011; Jocson, 2015). An important feature of the Smith-Hughes Act was the allocation of federal funds to create vocational educational opportunities at the secondary school level, which would be overseen by a mandated state board of vocational education (Brand, Valent, & Browning, 2013; Gordon, 2014). Though this legislation provided funds for developing vocational education pathways, it resulted in the separation of CTE from academic curricula in our secondary schools, which many believe created an inequity between vocational and academic education (Fletcher Jr., 2006; Imperatore & Hyslop, 2017). Moreover, the Smith-Hughes Act resulted in the unintended tracking of students entering the workforce or attending post-secondary college (Friedel, 2011; Giani, 2019).

George Acts. Between 1929 and 1956, several pieces of legislation were brought forth by Senator Walter F. George and others (Friedel, 2011; Gordon, 2014). These Acts provided necessary financial support to ensure the growth of vocational education and its availability to all learners. For example, the George-Reed Act of 1929 provided annual funding to expand vocational programming for agriculture and home economics with funding appropriations based on formulas that differed from Smith-Hughes.

In 1934 the George-Ellezy Act, along with the subsequent George-Deen Act of 1936, the George-Barden Act of 1946, and the George-Barden Amendments of 1956, ensured vocational education had the necessary funds appropriated for continued growth and mandated how funds could be dispersed. Along with increased federal monies for expanding separate programs in agriculture, industry, and home economics, the later George Acts provided dedicated funds for school construction, teacher training, and youth outreach programs (Friedel, 2011). In addition, in 1956, the George-Barden Amendments provided new nursing and fishery programs to fill a shortage of qualified individuals (Gordon, 2014).

The Vocational Education Act of 1963. Despite the current social and economic demands, when President Lyndon B. Johnson signed the Vocational Education Act of 1963 into law, it was a major shift in how the US approached funding and growing vocational education, assuring access to quality vocational programs (Threeton, 2007). Furthermore, in 1968 and again in 1976, amendments to the Vocational Education Act of 1963 provided funds to expand vocational education opportunities by improving post-secondary programs, ensuring an inclusive learning opportunity for all learners, and building new schools (Imperatore & Hyslop, 2017). Another important outcome of the Vocational Education Act of 1963, and its amendments from

1968 and 1978, was the positioning of vocational education within the boundaries of general education (Gordon, 2014).

CTE Reform: The Perkins Act iterations. As vocational education in America evolved to provide solutions for economic and social problems in the country, the Carl D. Perkins Vocational Education Act of 1984 was enacted to amend the original Vocational Education Act of 1963 and repeal its amendments (Gordon, 2014; Threeton, 2007). It is important to notice that the economy's needs and curriculum development in schools became further aligned with each legislative turn. Furthermore, legislative activities began to spread their influence across the diversity of schools in the United States. While the Carl D. Perkins Vocational Education Act of 1984 (Perkins I) provided a structure to ensure access for learners with special needs along with provisions for funding program refinement, it was in Perkins II and III that the balance and integration of academics and vocational education began to build its foundational pillar of CTE reform in the US (Castellano et al., 2003).

When President George H. W. Bush signed the Carl D. Perkins Vocational and Applied Technology Act (Perkins II) into law on September 25, 1990, vocational education along with applied technology, became an essential ingredient in an academic education needed to meet the demands of an emerging economy reliant upon technological advances (Gordon, 2014; Threeton, 2007). Perkins II represented a shift in national priorities related to how the integration of vocational education and rigorous academics could provide the catalyst to improve workplace readiness for secondary and post-secondary learners (Castellano et al., 2003; Threeton, 2007; Threeton & Pellock, 2010). Perkins II provided funding to bolster relationships providing expansion for school-to-work opportunities and improving the opportunities for learners to

engage in secondary and post-secondary vocational programs leading to qualifications at the Associate or Bachelor's levels (Friedel, 2011; Gordon, 2014; Jocson, 2015).

The impact of Perkins I and II began a movement to reform how CTE opportunities were cultivated in secondary and post-secondary schools (Imperatore & Hyslop, 2017). In particular, vocational opportunities in the form of Career Academies were developed in comprehensive high schools to offer learners the opportunity to pursue a robust cohort of CTE coursework (Ciccolo, 2008; Jacob, 2017). Research into the outcomes of CTE course taking in comprehensive high schools indicates low post-secondary college enrollment but improved earning potential support the initiative to continue offering CTE in secondary schools in terms of programmatic quality over quantity (Kreisman & Stange, 2017).

While these two early iterations of Perkins legislation set the tone for future legislation, other necessary regulations supported the growth of CTE through workforce improvement initiatives. For example, the Workforce Investment Act (WIA) was signed into law on August 7, 1998, by President Clinton, aimed to consolidate various workforce reform programs championed by the "Department of Labor, Education and, Health and Human Services [to create] a one-stop center system" (Friedel, 2011, p. 46). This legislation provided the momentum to continue a federal policy that improved CTE accountability, program access, and integration (Gordon, 2014).

On October 31, 1998, President Clinton signed the Carl D. Perkins Vocational and Technical Education Act of 1998 into law (Gordon, 2014; Imperatore & Hyslop, 2017). The Act, known as Perkins III, continued the trend of providing favorable conditions to integrate CTE by establishing equitable funding appropriations for states and requiring a more robust accountability reporting system (Imperatore & Hyslop, 2017). Along with continued funding and

a focus on learner achievement, Perkins III sought to establish a scaffolding for learners to earn qualifications such as a high school or post-secondary diploma or an industry-recognized certificate (Gordon, 2014; Imperatore & Hyslop, 2017). In addition, with the allocation of funding for Tech Prep programs, Perkins III provided the catalyst to reinforce school-to-work initiatives aimed at bridging the gap between secondary and post-secondary academic and technical education (Gordon, 2014; Threeton, 2007).

The Carl D. Perkins Career and Technical Education Improvement Act of 2006 (Perkins IV), which became law and was re-authorized in 2006 and 2012, respectively, authorized 1.3 billion dollars of federal aid to be shared with state boards of education (Threeton, 2007).

Moreover, Perkins IV revealed the replacement of Vocational Education with the term Career and Technical Education (CTE) to reflect the move to elevate CTE to encompass the skills needed to provide the human capital for a changing workforce (Friedel, 2011; Threeton, 2007). With the adoption of a comprehensive definition of CTE by Perkins IV, the treatment of CTE as a viable pathway towards earning industry-recognized credentials or a high school diploma was embedded in educational reform platforms in the US (Rojewski & Hill, 2017). The House and Senate passed House Bill H.R.2353, and the bill was sent to the President on July 25, 2018, and on July 31, 2018, President Trump signed The Strengthening CTE for the 21st Century Act into law (Hyslop, 2018). In concert with previous Perkins legislation, this law is referred to as Perkins V, and it continues to improve the equity of CTE in America through new language and definitions, funding mechanisms, and expanded access to programming (Carruthers, 2019).

The Concept of Stigma

Erving Goffman (1963) developed a general framework from which stigma research extends in the seminal book *Stigma: Notes on the Management of Spoiled Identity*. Goffman (1963) posited that the language of stigma is established in social interaction, and the process of identifying stigma can be attributed to physical appearance or social inequity (Bos, Pryor, Reeder, & Stutterheim, 2013). According to Link and Phelan (2001; 2013), in the stigma research conducted since Goffman, new definitions have been developed that relate to the sociology of bias, stereotyping, and discrimination, among others.

From the work of Goffman (1993), CTE stigma can be conceptualized as a social phenomenon that considers an individual or institution, in the case of structural stigma (Bos et al., 2013), as less than normal, originating from attributes that discount societal roles. Identifying stigma, not from its origins but by its impact and consequence, provides insight into the assignment of stigma onto a collective (Link & Phelan, 2001). Moreover, the frame of teacher professional identity from academic and vocational pathways references the stereotyping of CTE as an inferior learning pathway (Link & Phelan, 2001; Richardson et al., 2016).

When stigma is attached to CTE, the discussion seems to be a given or accepted norm within the US educational system (Key, 2018). However, for the sake of simplicity, for this study, the origins of CTE stigma can be traced to the legislative separation of academic and vocational education in the Smith-Hughes Act of 1917 (Gordon, 2014; Imperatore & Hyslop, 2017). This separation marked CTE as an educational pathway that was non-academic and appropriate only for individuals who were stereotyped as unmotivated, less able, second-class learners (Handy & Braley, 2012).

Attitudes Towards CTE

Concurrent to the value government and industry place on CTE as a pathway for workforce training for the 21st century, the misconception of CTE as a low-level educational opportunity continues to perpetuate the college-for-all approach to learning (Brand et al., 2013). Reflecting on Dewey's opinion of vocational education as a balance between a thinking and a doing curriculum for training an individual in a trade (Kett, 2017), the thinking aspect, also referred to as academic rigor, is thought to be absent in CTE. This view is one example of the stigma against CTE which does not reflect the reality that CTE provides academic rigor alongside technical content (Castellano et al., 2003).

In a study designed to research the perceived variance between academic and technical curricula, Handy and Braley (2012) found positive benefits related to student achievement when curricula were delivered in a blended approach. The qualitative study used a grounded theory approach to ascertain the perceptions of several groups of stakeholders in a large school district. The sample, which consisted of 54 teachers, 32 counselors, and 24 administrators from the Anchorage School District, received surveys and engaged in interviews. A randomly selected subsample was chosen to participate in face-to-face interviews; the subsample was taken from the survey sample, but the number of participants was not offered. The perceptual control theory was used as a lens to view participant responses. The study's findings indicated how perceptions of CTE and academic programs, with the former viewed as less rigorous, were accepted as either complementary or equal when there was a blended approach to content delivery. Additionally, related to different perceptions of equity towards each pathway, conventional high school teachers indicated they were not aware of the scholastic opportunities CTE provided learners (Aliaga et al., 2014).

To highlight the benefits of enrollment in CTE related to the employability and earning capabilities of learners who learn a trade, a study endorsed by the American Enterprise Institute found promising results dispelling the stereotype that CTE is a sub-standard learning pathway (Cheng & Hitt, 2018). The study was conducted to investigate how the stigmatization of CTE attracted students who found academic courses [English language Arts (ELA) and Math] difficult and its correlation to longer-term success in employability and wage-earning. Using data from the Educational Longitudinal Study of 2002 (ELS, 2002), the study concentrated on 780 of the 15,000 10th graders enrolled in CTE schools. Although most CTE course takers showed low standardized test scores in ELA and Math, data analysis by Cheng and Hitt (2018) indicated stronger non-cognitive skills were instrumental for high graduation rates, employability, and earning potential. Moreover, having a set of non-cognitive skills like integrity, motivation, and interpersonal skills embedded in a CTE curriculum, innovative teaching by the CTE teacher provides the structure for successful curriculum delivery (Stringfield & Stone, 2017).

The Nature of Work

The evolution of work across the ages illustrates a history of shifting activities that define the skills used for work (Dupré & Gagnier, 1996). This history also provides a vantage point to identify how the nature of work continues to develop (Joyce, as cited in Dupré & Gagnier, 1996). From primitive societies to current 21st-century circumstances, the nature of work continues to associate high value with activities that drive growth in global economies (Lafuente, Acs, Sanders, & Szerb, 2019). The skills desired to drive growth are encapsulated in the improvement of human capital intended to meet the labor needs of an emerging, global 21st-century economy (Dougherty, 2018; Ployhart, Nyberg, Reilly, & Maltarich, 2011). At the intersection of human

capital and the nature of work, labor moves from an insular economic commodity to include social implications that facilitate the cultivation of self-identity (Dupré & Gagnier, 1996).

Since the late 19th century, the nature of work in the US has adapted to industrial revolutions brought on by improvements in technology and processes utilized to produce goods and services (Gomułka, 2018). During succeeding industrial paradigm shifts (Kuhn & Hacking, 2012), social, economic, and educational systems adjusted to provide the social-care and workforce training to create encouraging outcomes for new goods and services being created (Eng, 2015). With advances in technology and digital processes in the early 21st century, a unique demand for a workforce with a skill set to meet the demands of technological advances hastened the emergence of a new global economy based on a non-cognitive skill set (Djankov & Saliola, 2018). This new economy, also called *Industry 4.0* or *The Internet of Things*, demanded a workforce that balanced academic knowledge and technical skills-based learning (Gottfried & Plasman, 2017; Postelnicu & Câlea, 2019).

The emergence of a new economy presents a shift in the nature of work from a formal and predictable employment to an economy that embraces more flexible employment trends replacing the codified, industry-specific skills of the former with skills that are adaptable to higher-order tasks presented by Industry 4.0 (Meagher, 2020). When the labor needs of a digital economy can be satisfied by employing a workforce whose skills are adaptable to the moment, informal work remains unstable and economically delicate (Djankov & Saliola, 2018). Although Industry 4.0 embraces the change enhanced by digital technology, the United States' economy requires vocational training to fill the vacancies in industries reliant on skilled tradespeople (Meagher, 2020). This need for workers trained in vocational trades is more acute as the new

economy becomes ubiquitous (Decker, 2019) in need to further adapt human capital to the mobility of the nature of work.

Conceptual Framework

According to Ravitch and Riggan (2017), not only does the conceptual framework provide a comprehensible guide for research but facilitates an argument that aids in the development and execution of a study. A further consideration about the development of the conceptual framework for this study, separate from a theoretical framework, supports justification of the study in the absence of theory (Qutoshi, 2018). In the tradition of conducting a phenomenology, the application of theory in this study has the potential for the researcher to make assumptions that prejudice the phenomenological aim of understanding lived experience of others, as it presents itself in presuppositional consciousness (Christensen, Welch, & Barr, 2017).

A primary consideration for this study's conceptual framework is reflected by the generalized characteristics of TPI that most high school teachers exhibit (Beauchamp & Thomas, 2009; Buchanan, 2015). As members of the wider high school teacher community, CTE teachers share the similar characteristics of TPI and teach content to students necessary for earning a high school diploma; academic high school teachers also teach students who are pursuing a high school diploma. Furthermore, like their academic colleagues, CTE high school teachers intentionally pursue professional development activities to cultivate their teacher agency, a substantial pillar for understanding TPI (Buchanan, 2015; Leijen et al., 2020).

Topical Research

To gain further insight into how CTE high school teachers describe their TPI, the researcher reviewed the literature that highlighted a gap whereby CTE high school TPI is not

addressed. Furthermore, research into TPI conducted by scholars such as Mockler (2011), Thomas and Beauchamp (2001), and Buchanan (2015) indicated the effort to define TPI as disjointed. Therefore, this study has employed tenets of TPI research to show equality among CTE and academic teachers in place of defining TPI as a research focus.

Stigma. It is essential to note that although the treatment of stigma against CTE is present within much of this study, it is not a focal point. Instead, the conversation about CTE bias was treated as an advent to addressing the lived experience of TPI by CTE high school teachers. Stigma against having a trade and CTE, which is one pathway for developing trade skills, can be considered a systematic issue which is one of the reasons this study was undertaken. Moreover, the presentation of CTE history in the United States was addressed as a frame of reference for CTE treatment in secondary education.

Nature of work. Change occurs in work, driven by how society approaches its relationship with the economy to provide opportunities for citizens to contribute to the success of its economy in a domestic and global nature. While a succession of industrial and digital revolutions has provided templates for how workers approach production and outcomes, global issues can also have a tremendous impact on the nature of work. For example, the COVID-19 pandemic highlighted how the nature of work relies on an organic application of skills that are integral for sustaining global economic growth. As a result, widespread remote work, which was once the exception, became the rule for a pandemic economy. Unfortunately, the lack of skilled workers from the trades became glaringly apparent as trades like construction, supply-chain operations, and healthcare were in short supply as the globe relied upon them to keep the global economy from crashing.

Teacher professional identity. As mentioned earlier, it has been difficult for researchers to agree on a consistent definition of TPI because of the multi-dimensional components which contribute to its development (Beauchamp & Thomas, 2009; Berger & Lê Van, 2019; Thomas & Beauchamp, 2011; Zembylas, 2018). With its complex underpinnings, as unique as the individual who describes it, understanding the lived experience of teacher professional identity may be better situated within Gee's (2011) framework of four ways to look at identity. By doing so, the multi-faceted nature of identity can be coded in a more manageable approach, making the essence of the lived experience of TPI in CTE high school teachers more transparent.

Teacher agency. During a teacher's career, opportunities to develop their pedagogical effectiveness are available in every teacher's experience, both in their professional and personal lives. According to Priestly et al. (2015), the agency is a phenomenon that conducts how teachers educate, rather than a thing that a teacher has. Looking at teacher agency can provide discourse for the conversation about how a CTE high school teacher describes their TPI. In this capacity, describing the essence of teacher agency can be titrated down to specific aspects of an ecological model of teacher agency; the iterational, projective, and practical-evaluative dimensions. (Priestly et al., 2015)

Conclusion

The value of vocational education for educational, social, and economic systems represents an essential topic for workforce development in the United States (Perry, 2019). The history of CTE in the United States provides insight into the roles federal, state, and local governments play in promoting learning a trade related to national economic success.

Furthermore, with the advent of Industry 4.0, the nature of work has changed with the need for a

development (Handy, 2012). This blended approach to education and career training supports the renaissance of CTE as an educational priority for secondary and post-secondary institutions (Stringfield & Stone, 2017). However, with workforce development becoming a focus of education, increasing the growth and reliance upon CTE to meet industry needs, negative perception hinders the equality of CTE as perceptions of the pathway are believed to be inferior to a college education (Handy, 2012).

In response to the need for a well-trained and skilled workforce to represent America in the 21st-century global economy, the value of CTE has been assessed to meet the needs of a changing workplace (Shivakumar, 2018). Although federal legislation supports, at the state level, the structure and foundation to promote CTE as an important pathway to career or college, CTE teachers and programming continue to experience a stigmatized imbalance to the real educational and economic needs in the US (Aliaga et al., 2014; Friedel, 2011). The value of CTE is an important aspect of learning. It is also a viable solution to developing a well-trained workforce to meet the needs of an expanding global economy that presents variable challenges equal to the consistent turns of technological advances (Bor et al., 2017). As a solution for preparing a workforce to meet the demands of a 21st-century global economy, CTE stakeholders are focused on shrinking the skills gap that relies on increased integration of academic skills (Fletcher & Gordon, 2017). This shift in how CTE is approached does soften the perception of stigma, but there is still a level of misunderstanding about CTE and the efficacy of CTE high school teachers who hold state teaching credentials commensurate with their peers in academic schools.

CHAPTER 3: METHODOLOGY

Utilizing a qualitative research methodology, the research design for this study is based on Edmund Husserl's transcendental phenomenology (TPh). According to Creswell (2015) and Giorgi (2009), supporting a qualitative stance for research inquiry provides the structure for exploring individual narratives of experience. Incorporating the tenets of TPh in the explication of data facilitates the development of individual textural and structural descriptions of the lived experience of teacher professional identity (Creswell, 2015; Moustakas, 1994; van Manen, 2016). A composite description of the conscious presence of the phenomenon is crafted from individual descriptions of the essences and meanings. This study concentrated on the phenomenon of teacher professional identity (TPI) in the lived experience of rural CTE high school teachers. Exploring the phenomenon of TPI as a conscious object having presence in the experience of an individual necessitates negation of the researcher's perception of the phenomenon in terms of its presence versus existence (Giorgi, 2009, 2012; van Manen, 2016).

The purpose of this study was to understand how rural CTE high school teachers describe their TPI as a member of the high school teaching profession. The rationale was that rural CTE high school teachers exhibit the same or comparable certification requirements and pedagogical abilities as their colleagues from academic schools. Using a semi-structured interview protocol, the researcher explicated individual descriptions of the phenomenon to create a composite description of the meanings and essences of the target phenomenon.

This chapter presents the theoretical underpinning and purpose of researching how rural CTE teachers describe their lived experience of teacher professional identity. The research questions and choice of a phenomenological method of research provided a framework to study the phenomenon of teacher professional identity of CTE high school teachers and how the role of

CTE in secondary education is understood. The site information and participant sections include several sending schools to the rural CTE regional center. The chapter continues with sampling methods and instrumentation, including a short discussion on pre-study protocols. Explication, limitations, credibility, ethical concerns, and a discussion on any conflict of interest conclude the chapter.

Theoretical Underpinning

Conducting a phenomenology obliges a philosophical stance in place of a theoretical framework necessary for qualitative research (Creswell, 2013; Yin, 2016). The ontological method of transcendental phenomenology (TPh) developed by Edmund Husserl suspends assumptions and judgments to facilitate the reduction of a phenomenon to the lived experience of its essence (Peoples, 2020). Husserl emphasizes the awareness of something in consciousness as a central thematic principle of his philosophical structure. Intentionality is Husserl's explanation of pure consciousness of objective internal meaning recognized through the Ego and the feeling nature of the lifeworld (Anthony, 2008; Creswell, 2013; Denzin & Lincoln, 2017; Neubauer, Witkop, & Varpio, 2019).

Researching the lived experience of teacher professional identity in rural CTE teachers as members of the secondary teaching corps reflects the phenomenon's appearance as an object that is considered experiential. When the role CTE occupies in secondary education is viewed through the frame of teacher professional identity and researched from the stance of phenomenological reduction, the researcher not only suspends judgment but resists explanation of objects as they appear (Giorgi, 2012). Husserl believes the action of bracketing, the epoché, provides for the suspension of bias which facilitates study and analysis of lived experience (Peoples, 2020). The phenomenological appearance of teacher professional identity in the

noematic sense as a *thing* complements how the object gains structural perception as an act of consciousness through noetic thinking (Christensen et al., 2017; Moustakas, 1994). In the phenomenological tradition, the phenomenon is reduced to pure essence as the basis for describing lived experience (Christensen et al., 2017; Creswell, 2013).

Purpose of the Study

CTE offers a pathway toward post-secondary college and career opportunities as a vehicle to encourage educational reform in the United States. Cultivating the understanding of how CTE high school teachers develop their professional identity in terms of what or who they perceive provides insight into how teachers, in general, develop a psychological or political sense of identity (Beauchamp & Thomas, 2009; Zembylas, 2018). One of the obstacles for positive CTE growth is an underlying perception of bias related to the perceived lack of academic value of a CTE curriculum and how it is taught and the effectiveness of CTE pedagogy (Dougherty, 2018). In this phenomenology, the lived experience of how rural CTE teachers describe their teacher professional identity was examined at the individual level through the lens of the whole (van Manen, 2016). A rich description of the lived experience of a rural CTE teacher, developed from a semi-structured interview protocol, describes the essence of the phenomenon needed to clarify the experience of teacher professional identity (Moustakas, 1994; Stake, 1995).

With the growing need for learners to increase vocational and academic skills to thrive in a 21st-century labor market, the study sought to identify potential obstacles teachers face when developing and delivering the CTE program curricula (Rojewski & Hill, 2017). Similarly, descriptions and suggestions for further research can inform how other stakeholder groups describe the lived experience of CTE teacher professional identity and bias against technical

education, leading to an enhanced view of educational reform providing alternative pathways to high school graduation, entrance into the workforce, and pursuit of a post-secondary degree (Creswell, 2008).

Research Questions and Design

According to Bloomberg and Volpe (2016), the development of good research questions provides a framework to understand a specific phenomenon. To establish the relevant inquiry, open-ended questions that provide a descriptive nature (Maxwell as cited in Bloomberg & Volpe, 2016) are more appropriate to uncovering how the givenness of the phenomenon of teacher professional identity may provide insights to obstacles that may impact the perception of CTE in comprehensive secondary education. Through questions that ask individuals to share their lived experience related to being a secondary education CTE teacher, understanding teacher professional identity is facilitated by shared elements of individual accounts (Creswell, 2013). The following research questions are posited:

RQ₁: How do rural CTE teachers describe their teacher professional identity?

RQ₂: How do rural CTE teachers characterize the role of vocational training in secondary education?

The paradigmatic focus of this qualitative study is to describe the lived experience of a phenomenon that supports the choice for employing a phenomenological research design (Giorgi, 2012; Moustakas, 1994). Furthermore, using Husserl's transcendental phenomenology (TPh) is a natural choice because it provides the framework to study how the lived experience of being a CTE teacher in the institution of secondary education is represented in the consciousness of the participants (Leach, 2012; Moustakas, 1994; Peoples, 2020). TPh as a methodology provides the structure to research a phenomenon from several points of view using a single data

source to create a composite description of the essence of teacher professional identity in the lives of CTE teachers (Groenewald, 2004; Moustakas, 1994; Peoples, 2020).

Site Information

In the United States, CTE programs are delivered in either self-contained or regional centers (Gordon, 2014). Depending on the size of the student population and the need for more comprehensive CTE program delivery, the regional CTE center model allows access to industry-standard programming (Zeehandelaar Shaw, 2016). The sample was selected from a regional CTE center located in rural New England. For anonymity, the school will be referred to as Tech Center School (TCS). The TCS Board of Directors has completed the construction of a new, state-of-the-art CTE facility designed to grow and adapt to current and future programming needs. The design of the building allows for the delivery of experiential lab learning along with dedicated space needed for the demands of academic components of the curriculum (personal communication, J. W., Board Chair TCS, December 2019).

TCS offers its 350+ students the opportunity to study one (or more) of 18 standardized and industry-recognized CTE programs; dedicated academic courses in math, social studies, and English language arts (ELA) are also offered. Utilizing Perkins V funding, TCS has created and delivered programming that introduces CTE to middle school students in grades six through eight. In addition to its high school curriculum, TCS has developed partnerships with community colleges to offer dual-enrollment opportunities for several program offerings. TCS is a vocational school that has provided CTE for surrounding communities for over 45 years.

Sending schools

Although each sending school accounts for varying numbers of TCS students, all the schools, including the regional CTE center, are considered rural (U.S. Department of Education,

Institute of Education Sciences, National Center for Education Statistics, 2019). Three districts are maritime-based economies, with a small population of residents identified as low-to-midincome, blue-collar workers. One district, designated as a larger municipality, has a predominately low-income population that can be considered blue-collar to under-employed. Two districts have high real estate values and consist of middle-to-upper-class citizens employed predominately in the white-collar sector. Finally, one district is a diverse population mix of low-to middle-class that represents the maritime, forestry, and professional industries. Although local industries within the locality of sending schools value post-secondary college or career opportunities, the college-for-all mindset focuses on area guidance counselors and administrative teams (personal communication, B. F., November 2019).

Population Description

Beginning with the 2020–21 school year, TCS administration replaced the term CTE instructor with CTE teacher to reflect the professional designation of a high school CTE educator. Per State Department of Education (DOE) requirements, teachers at TCS must have current teacher certification/designation in their program or academic area. While the range of teaching experience at TCS is 1 to 25 years with an average of 11.8 years, TCS teachers have been employed at the school for an average of 15.9 years. CTE teachers deliver vocational instruction using a shop-based experiential, hands-on method, whereby the technical education standards lead to an industry-recognized credential (IRC). TCS teachers also address academic skills in their lessons that not only support the vocational concentration but are equitable to academic standards used by the sending schools.

Sampling Method

The study used purposive sampling to recruit rural CTE teachers who have experience developing teacher professional identity—applying the dual criteria of possessing a DOE-issued CTE teacher certification and having industry workforce experience above 350 hours identified individuals who are authentic stakeholders with appropriate credentialing (Bloomberg & Volpe, 2016; Creswell, 2015; Moustakas, 1994). The sample size of three to six participants provided the opportunity to reach thematic saturation during interviews (Guest, Bunce, & Johnson, 2006). Once saturation occurs, individual descriptions of rural CTE teacher professional identity provide substance for a description of universal essence which supports the purpose of phenomenological inquiry (Bloomberg & Volpe, 2016; Merriam & Tisdell, 2015). Participants were chosen from the larger TCS faculty based on a first-come, first-served basis. Prior to opening the participant roster, a letter of instruction was provided to the larger teacher group explaining the nature of the study and informing them about the dual criteria discussed above. In addition, had to be willing to participate in the interview process based on the initial and followup protocol, be interested in the phenomenon of CTE teacher identity, and agree to the publishing of the data in a dissertation (Moustakas, 1994).

Instrumentation & Data Collection Procedures

An important quality of the phenomenological tradition relies on discovering the essence separate from a participant's judgments, feelings, or viewpoints (Peoples, 2020). During the data collection phase, the researcher was concerned with the lived experience of a particular phenomenon. The tradition of TPh enlists the epoché to conduct data gathering through the lens of newness that has no individual or institutional memory (Giorgi, 1997; Peoples, 2020).

Epoché

As an integral step in conducting transcendental phenomenological research, the epoché provided the opportunity for the researcher to suspend their prior knowledge and opinions about the target phenomenon (Merriam & Tisdell, 2015). Epoché is an ancient Greek term typically translated as suspension of judgment, and according to (Moustakas, 1994). Moustakas was reminded of his Greek roots where epoché equals alertness, awareness, and being cautious about knowledge and thinking that emerges from common events. Husserl (1931) used the epoché for the basis of his bracketing process that provides a mechanism for a phenomenologist to secure their bias or presuppositions to facilitate a fresh view of a phenomenon.

The term bracketing does not fully encapsulate the stance one must enter to step away from previous lived experiences. While freeing oneself from prior knowledge, bias, or opinion is an aim of bracketing, the researcher needs to appreciate instances where bracketing will be more difficult (Moerer-Urdahl & Creswell, 2004). As a correction to the imperfect process, Husserl discussed in his approach how a researcher must assume an attitude of phenomenology that provides the structure to observe a phenomenon from many different viewpoints (Chan, Fung, & Chien, 2013; Husserl, 1931; Moustakas, 1994). When describing the consciousness of a phenomenon as an object, the transcendental phenomenological attitude becomes an anchor for perception in a process where multiple horizons of an essence occur (Weiss, 2016).

Interview Protocol

According to Peoples (2020), utilizing a semi-structured interview protocol (see Appendix A) in a phenomenology prompt, the participant could describe their lived experience of a phenomenon. The semi-structured protocol allowed the researcher flexibility and direction during the questioning and follow-up processes. The primary aim of the protocol was to arrive at the saturation point for data collection as a positive measure of research validity (Guest et al., 2006). The initial long interview was used as the primary instrument to ensure data provided insight into the lived experience of teacher identity, along with member checking to provide clarity and fill in any missing details (Moustakas, 1994). Due to precautions necessitated by the COVID-19 pandemic, individual interviews were conducted virtually using the Zoom meeting platform. The interviews were recorded using audio and video files, with the latter being used to record the participants' body language for a deeper understanding of their lived experiences (Peoples, 2020). A professional transcriptionist transcribed each audio recording. The recordings and transcripts were then digitally stored in digital cloud locations using the highest level of encryption; data were only available to the researcher. The data were destroyed at the conclusion of the study.

Explication

The data analysis process provided for the review of the data in isolation from the comprehensive dataset to understand how it informed the research process and the role it played in developing findings and discussions (Peoples, 2020). To subject a phenomenology to a filtered quantitative approach of organizing data goes against the Husserlian maxim of *to the things themselves*, inhibiting the TPh methodology from describing the essence of the whole of a lived experience relative to the target phenomenon (Lossky, 2016). Data analysis is reminiscent of how physical and natural science approach information gathering; it is a calculated and determined affair. Within the founding of the philosophy of a science of all science Husserl regarded as phenomenology, the process of data gathering and analysis is a stranger to the rooted heading of *Data Analysis* found in the majority of dissertation research (Peoples, 2020).

Phenomenology is concerned with the whole of an experience as an essence, not individual data

points, which according to Hycner (1985), supports the grounding context of constituents that represent the whole of the lived experience. To establish a data analysis framework that provides a phased process of developing constituents thematically, substituting the heading Explication for Data Analysis considers the qualitative nature of descriptive phenomenology (Groenewald, 2004). This descriptive property of phenomenology is the product of what Husserl identified as the transcendental phenomenological reduction (Giorgi, 2012; Moustakas, 1994).

Transcendental Phenomenological Reduction

Before the explication of interview data was conducted, the researcher expanded the epoché to include the transcendental phenomenological reduction, which, if absent, would have rendered the phenomenology's efficacy null (Christensen et al., 2017; Schmitt, 1959). In the transcendental phenomenological reduction, the researcher took a reflective stance in perspective that did not change the content of the phenomenon but viewed the experience with new eyes (Giorgi, 2012; Husserl, 1931; Moustakas, 1994). The world in which a phenomenon is grounded becomes less of a given and more of a possibility as constitutional attitudes and opinions are identified and bracketed (van Manen, 2016).

As a result of the epoché and its technique of bracketing individuals' world view of a phenomenon, the natural attitude becomes suspended, but in the reduction, it does not go away; instead, its perception is put aside to allow for further reflective mediations (Weiss, 2016). These reflective mediations make the different sides of perception a reality even though the gaze of perception is linear. Thus, to arrive at the essence of a phenomenon during a transcendental phenomenological inquiry, the object within the consciousness is revealed through reflection, thinking, and imagination (Giorgi, 2012; Moustakas, 1994). The net effect of this process allows the researcher to explicate interview data using a process that will result in a structural

description of the lived experience of the phenomenon. For this study, the analysis process employed the modified van Kam method of data analysis imagined by Clark Moustakas (1994).

Modified van Kaam Method of Phenomenological Analysis

Moustakas (1994) provided a modified version of van Kaam's method of qualitative analysis to explicate phenomenological data embedded in the semi-structural interviews conducted for this study. The modified method uses eight steps to assist in a thorough explication for each individual, providing structures to describe the essence of the phenomenon under investigation (Sullivan & Bhattacharya, 2017). According to Moustakas (1994), the steps involve: (1) cataloging each participant statement relevant to the lived experience [horizontalization], (2) identifying the invariant constituents, testing each statement for characteristics that establish it as a horizon of lived experience [reduction and elimination], (3) grouping the core themes that share similar codes [positioning invariant constituents into clusters and thematic groupings], (4) establishing the validity of the invariant constituent as relevant to the interview transcript and setting those that are irrelevant aside [conclusive test of horizonal validity], (5) using appropriate invariant constituents and verbatim examples from an individual's transcript, creating an individual textural description of the lived experience [organizing the analysis into an individual textural description], (6) examining textural descriptions using imaginative variations (various perspectives) to create an individual structural description of the phenomenon [constructing individual structural descriptions for each participant], (7) relying on established themes and invariant constituents to create an individual textural-structural description of the phenomenon [developing a textural-structural description for each participant], and (8) using the description from the previous step to create a global description that includes the essence and meanings related to the lived experience of the

phenomenon (Sullivan & Bhattacharya, 2017). Utilizing the above steps provides a structure to identify individual horizons of lived experience that can be interpreted as the essence of consciousness.

Limitations of the Research Design

A limitation of the study is the small sample size from a narrow geographical area that is not indicative of the wider representation of CTE teachers in the United States. In addition, although personal bias was addressed during the epoché, the process is difficult to master; thus, bias might be present without intention (Moustakas, 1994). Finally, addressing the difference between qualitative and quantitative research, Creswell (2015) indicates the specificity of the latter as an explaining approach and the former as an exploratory approach. From this consideration, enlisting a descriptive methodology produces results that are not fully generalizable or transferable but provide priorities that others may use in similar situations.

When the significance of the quantitative definition of validity and reliability are established in research, their qualitative applications become inadequate, limiting their application to research situations that are quantitative in design (Creswell, 2015). In response, many qualitative researchers establish revisionist meanings for the language used to describe the valuations of validity and reliability, namely credibility and dependability (Bloomberg & Volpe, 2016). In essence, the use of alternative terminology and its purpose of strengthening trustworthiness will provide structure to deliver descriptions of the conscious presence of the phenomenon based on the explication process (Creswell, 2013; Merriam, 1998; Peoples, 2020). This section discusses the plan to establish research trustworthiness using strategies based on credibility, dependability, transferability, and confirmability (Baxter & Jack, 2008; Bloomberg & Volpe, 2016; Creswell, 2013).

Credibility

An essential facet of qualitative research is the *why* of developing a study (Merriam & Tisdell, 2015). The development of this phenomenological inquiry was prompted by the personal and professional opinions of the researcher. Sans the subject of any research study, the process and its findings must be credible to the reader, participants, and wider audience. The phenomenon researched in this study is teacher professional identity and how it is represented in the lived experience of CTE teachers as a member of the secondary teaching corps.

It is paramount that the researcher's individual textural and structural descriptions developed by the researcher align with the lived experience shared by the participants (Bloomberg & Volpe, 2016). Humphry (in Moustakas, 1994) employed member-checks by providing participants with abstracts of their textural-structural descriptions of their lived experience related to his problem of practice. This process established credibility by allowing participants to review Humphry's summations for accuracy and to recommend any necessary additions or omissions (Bloomberg & Volpe, 2016; Creswell, 2013; Moustakas, 1994). In addition, the participants for this study had the opportunity to review sanitized transcripts and provide clarification necessary to ensure researcher accuracy.

Although triangulation of data is a popular process to establish credibility for a qualitative study, the methodology of this phenomenology relied on the interview protocol for data gathering due to the lack of institutional documentation of the phenomenon (Alase, 2017; Bloomberg & Volpe, 2016). With one source of data, the development of rich descriptions of the lived experience developing a professional identity provided further credibility by showing the thematic intricacies of the participants' lived experience (Peoples, 2020). Also, as it relates to crafting thick descriptions of lived experience from the individual and composite textural-

structural descriptions, the bracketing of researcher bias and presuppositions again plays a pertinent role in the study as a mechanism of credibility (Moustakas, 1994).

Dependability

A constitutional difference between qualitative and quantitative research has to do with the research foundation of each, the former concentrating on human science and the latter on natural science (Merriam & Tisdell, 2015). Within these traditions, specific research designs are available for a researcher to apply to their research questions. For example, for quantitative, there is the experimental design, and for qualitative, a phenomenology. Each design has its own set of terminology to address the efficacy of methodology and theory. For example, in the case of replicability of a study, quantitative uses the term *reliability*, and qualitative use *dependability* (Baxter & Jack, 2008). What is vital with this distinction is that in quantitative research, the understanding of data is primary and qualitative research is more concerned with a description of a phenomenon based on data (Merriam, 1998). For this study, the development of a structured sampling method, interview protocol, discussion of the researcher's epoché, application of the TPh reduction, and explication methodology of the modified van Kaam analysis provided sound evidence that the structure of the study could be replicated, albeit with differing results based on the fluidity of human nature (Bloomberg & Volpe, 2016; Merriam & Tisdell, 2015).

Transferability

In the last quarter of the 20th century, the discussion around procedural nuances that distinguished qualitative from quantitative camps became so contentious that the debate was coined the "paradigm wars" by American educational psychologist N. L. Gage (Gage, 1989; Given, 2017). The residue from these debates continues to provide the opportunity to define how qualitative research is unique in its methodology, and more importantly, how concepts and

ensuing terminology will provide research that is valuable, believable, and acceptable. For example, Lincoln and Guba (as cited in Merriam & Tisdell, 2016) provided the term *transferability* as a taxonomy to distinguish the paradigmatic nuance from its quantitative counterpart *external validity*. What is important is not the term but the philosophical assumption behind the meaning providing a quasi-generalizability of the study results for its reader (Creswell, 2013; Merriam, 1998).

An essential aspect of research is to fill a gap in the knowledge or provide an aspect of analysis that can help others make sense of their research questions. Regarding the terminology, external validity, it is accepted that quantitative results can be applied to various scenarios due to the predictable nature of data and analysis. For the qualitative study, and in this case a phenomenology, the rigidness of generalizability (in the quantitative sense) becomes a responsibility for the reader to apply the essence of lived experience to their similar circumstances (Patton, as cited in Merriam & Tisdell, 2016). For this particular study, the researcher developed a rich and thick textural-structural description to facilitate the study's relevance to other generalized situations, which will support the transferability of the research (Attia & Edge, 2017).

Confirmability

Although credibility is essentially a strategy for establishing dependability, the display of researcher objectivity creates a unique situation for the researcher to provide the basis for trustworthiness (Creswell, 2015). Confirmability was provided through the epoché or the suspension of bias on the part of the researcher (Bloomberg & Volpe, 2016). Evidence to support this claim exists in the form of a reflexive journal and memos detailing the process of epoché during the various steps of conducting a transcendental phenomenology.

Ethical Issues in Study

As this study involved human subjects, it was critical to protect their rights and maintain confidentiality to create a trusting relationship that allowed participants to be honest and unguarded in their responses (Bloomberg & Volpe, 2016; Yin, 2018). Before a participant was invited to participate in the study, an executive summary was provided along with the consent to participate form to establish transparency of the research mission and execution of the research methodology. It is not enough to establish parameters of participant protections; a consent form that provided adequate information to the subject was offered. While outlining details about confidentiality, the reason for the research, and information on participant rights and expectations, the consent form addressed the issue of risks and benefits. Ensuring volunteer participants protection from risks that might include an emotional response to interview questions or interpretations, participants were made aware they could stop at any time. Any benefits to the participant related to pedagogy or philosophical intent, for example, were identified as well. Issues of data confidentiality (i.e., transcripts and recordings) were also indicated in the consent form.

Conflict of Interest

According to Roberts and Hyatt (2018), when a researcher identifies a conflict of interest, transparency and trustworthiness are established with the reader of the study. As discussed earlier, using the process of epoché and TPh reduction, any bias, opinions, or feelings about the process of developing teacher professional identity were bracketed from data collection, analysis, reporting, and discussion (Giorgi, 2012; Moustakas, 1994; Peoples, 2020). To address bias limitation through bracketing, the researcher relied on a reflexive journal and memos to avoid deception and ensure scholarly integrity at all research points (Bloomberg & Volpe, 2016).

Conclusion and Summary

The researcher conducted his qualitative study using a transcendental phenomenological research design to describe the lived experience of CTE high school teachers as members of the secondary education teaching profession. A semi-structured interview was employed for individual data collection and the multi-step, modified van Kaam methodology to explicate the data to construct a composite description of the meaning and essences of the lived experience of teacher professional identity. Chapter 3 provides a qualitative phenomenology methodological framework to examine how rural CTE teachers develop a professional identity that spans membership in the workforce as an industry expert and professional teacher. The site was chosen based on geographic placement for ease of data collection, and the participant pool of six participants was recruited using purposive sampling (Merriam & Tisdell, 2015). The data collection method relied on the semi-structured long interview and follow-up. The philosophical assumptions surrounding the transcendental phenomenological methodology and its process of uncovering the meaning of lived experience, of which language is a crucial component, provided the boundary of experiential learning for the study. Furthermore, to establish credibility, dependability, transferability, and confirmability, the researcher used thick description and reflexive journaling strategies to build trust with my reader.

CHAPTER 4: FINDINGS

This transcendental phenomenology explored teacher professional identity in six rural high school Career and Technical Education (CTE) teachers through their lived experiences. The rationale of this study was to research how CTE teachers identify as a member of the wider secondary teaching profession. This chapter demonstrates the results of data explication, utilizing Moustakas' (1999) modified van Kaam approach to data analysis. The chapter provides individual textural, structural, and structural-textural descriptions along with composite textural and structural descriptions, offering a synopsis of how CTE teachers experience teacher professional identity.

Research Questions

The study focused on two central research questions:

RQ₁: How do rural CTE teachers describe their teacher professional identity?

RQ₂: How do rural CTE teachers characterize the role of vocational training in secondary education?

Interview Questions

The researcher used an interview protocol (Appendix A) to question each participant about their lived experience as a certified secondary education teacher. The following questions provided guidance during the semi-structured interview process:

- 1. What is your background in terms of years in industry and teaching at TCS?
- 2. What was your experience with gaining a secondary teaching certificate in your CTE field?
- 3. How do you describe the experience of developing your teacher professional identity?

4. How do you describe the position of vocational education in the broader secondary education institution?

Setting

Founded in 1972, TCS is a rural, regional CTE center for several communities that provides vocational learning pathways that allow the learner to earn an industry-recognized credential (IRC) and high school graduation credit awarded by their sending secondary school. The credit structure differs for each sending school regarding how CTE learning equates to awarded graduation credits necessary to earn a high school diploma. TCS is housed in a state-of-the-art facility designed to accommodate the needs of a diverse and growing learner population. The teachers involved in this study are members of their teacher association that provides contract negotiations and facilitates a professional and collaborative relationship with TCS administration. The TCS Board of Directors consists of officers drawn from sending-school boards and is responsible for fiscal and educational oversight.

Participant Demographics

Six participants volunteered for the study on a first-come, first-served basis. Each participant is a certified CTE teacher at the secondary education level. The range of teaching tenure for the sample group range from 4 to 25 years. Two participants attended TCS as students: one teacher is a certified middle school teacher who taught math for 14 years, and one teacher is a National Board-Certified Teacher in CTE. During the summer, several of the participants continued to work in industry as self-employed tradespeople. All the participants live in rural communities which are between 15–20 miles away from TCS. Table 2 provides participant demographics.

Table 2

Participant Demographics

Participant	CTE Experience	Non-CTE Teaching Experience	Industry Experience
Jack	11	None	4+
Leo	5	4 – School-to-Career Coordinator	5+
Eleanor	25	12 – School-to- Career Coordinator	25+
Liz	10	None	13
Barbara	16	3 – School-to-Career Coordinator	5
Marshall	4	14 years - grade 5	15+

Jack

Jack has been teaching for 11 years, exclusively at TCS. He holds a CTE endorsed teaching certificate in his field and continues to pursue further endorsements in graphic arts and design. In addition, Jack collaborates with colleagues from CTE and sending schools to develop program equity to provide relevance for graduation standards. Although Jack does not have any non-CTE experience, he makes a great effort to understand how his pedagogical skills could transfer to an academic setting.

Leo

Leo holds a CTE teaching certificate with endorsements in several content areas. His experience includes working in a general education secondary school as a School-to-Career Coordinator, and he is currently an Outdoor Education teacher in a CTE school. In addition, Leo has worked with colleagues from tech and traditional high schools to establish the CTE pathway

as an equal option for high school graduation. Leo has been teaching for six years, exclusively at TCS.

Eleanor

Eleanor is in her 25th year as a certified CTE teacher having taught in several different CTE schools and regional centers in the State before continuing her career at TCS. Her experience ranges from beginning her career as a CTE Educational Technician to her current role as a Master CTE teacher. In addition, Eleanor has extensive experience working in the culinary industry before and during her tenure as a high school CTE teacher, and she also discussed her desire to step into an administrative role as a high school principal.

Liz

After 13 successful years in industry, Liz entered the high school teaching profession as a certified CTE teacher with an endorsement in auto-collision. During her experience in the industry, Liz held several positions, each of which had various components of leadership responsibilities. Liz continues to attend college to gain the educational and professional requirements to earn a teaching certificate and endorsements in high school special education. Liz would like to become a high school special education teacher within CTE when granted a special education teaching certificate.

Barbara

Barbara is a certified CTE high school teacher with 16 years of experience, 13 years teaching Graphic Design and three years as a School-to-Career Coordinator in one of the sending schools. In addition, Barbara has five years of industry experience where she established herself as an industry leader who provided effective mentoring opportunities for her colleagues. In her

first CTE teaching role, Barbara created a Graphic Design program that continues to thrive and provide students with authentic industry experience.

Marshall

Growing up in a family of teachers, Marshall decided to pursue a career in education. When he graduated from high school, Marshall enrolled in a technical community college, graduating with an associate degree in Auto Repair. After working in industry for several years, Marshall decided to enroll in a teacher preparation program that allowed him to work in secondary CTE as a long-term substitute and program teacher. As a result of circumstances, Marshall enrolled in another teacher preparation program, resulting in teacher certification at the middle school level. After teaching 5th grade for 14 years, Marshall was presented with the opportunity to return to teaching secondary CTE at TCS.

Data Collection

Due to the conditions presented by the COVID-19 pandemic, participant interviews were required to be in a virtual environment. Therefore, each participant engaged in audio and video recorded semi-structured interviews using the Zoom cloud meeting software. The audio recording was professionally transcribed, and the resulting transcript was sanitized to protect participant identity. In addition, each transcript was read several times to identify data used in explication.

Individual Textural Description

As the outcome of conducting a phenomenology concerns the composite essence of the lived experience of an objective phenomenon, the individual textural description is the result of phenomenological reduction (Moustakas, 2011). During a phenomenological reduction, the

researcher entered the epoché to identify horizons of experience represented in transcript data. The outcome of this presupposition stance of bracketing researcher beliefs about the phenomenon established the invariant constituents necessary for understanding the objective experience [noema] of the lived experience of TPI in CTE high school teachers (Christensen et al., 2017; Husserl, 1931; Moustakas, 1994). Thus, the individual textural description explains what the participant experienced with their transcendental consciousness.

Jack

When discussing his experience in industry and teaching, Jack shared that he "didn't feel like a typical CTE" teacher because of his pathway towards gaining certification in CTE. He offered a backstory about his journey into CTE teaching when he was a student at Webster High School, one of the TCS sending schools. While at Webster, Jack was interested in attending TCS to learn design technology, which he was familiar with because his parents were both multimedia designers. The process for enrollment for TCS included a school visit to learn about the program a student is interested in, with a follow-up discussion with the sending-school guidance counselor about the decision to enroll at TCS. Jack shared the outcome of the conversation with his guidance counselor, who discouraged his attendance to TCS because the counselor believed Jack "wasn't that kind of student ... had solid grades and ... had no business going to Voc." As a result, for the remainder of his high school career, Jack decided "for better or worse" to pursue a different learning pathway. Furthermore, Jack mentioned he had a "certain opinion of what TCS was" because of the recommendation of his guidance counselor. Jack described this as "holding on to the CTE stigma."

Although Jack did not "have it in mind to be a CTE teacher," he "wanted to do teaching when I sort of retired." During a family visit in the area, Jack noticed an ad for a design

technology teacher at TCS; he subsequently applied out of curiosity about "what they were looking for" in an applicant. Jack was offered the job, and on his first day, "it clicked immediately" that teaching was his calling, the

incorrect image of what CTE was quickly faded away when I came to understand the merit in the way we do things here and frankly being confronted with how much more successful I would have been if I had come here as a student.

Having a Bachelor of Fine Arts degree in his industry, Jack found "obtaining a CTE teaching certificate wasn't too much of an issue" and as certification requirements have shifted since he began teaching, "having a degree in the content area is ... considered to be even better than ... having a teaching degree." Additionally, Jack has earned several further CTE endorsements to expand his certification endorsements to include various skill sets within his trade. Regarding similar endorsements colleagues from sending schools hold, Jack has had trouble "to get regular high school endorsement," which he commented about as a "kind of division line that's kind of separating the conventional high school ... and CTE endorsements."

When discussing the minimum state testing and course requirements necessary to become a certified high school teacher, Jack believed his successful performance on the initial two Praxis® tests to be a "little more of a certification of me being able to take a standardized test than it was covering the [pedagogical] knowledge." About the final Praxis® test that measures professional knowledge of student diversity, exceptionalities, and differentiation, Jack shared that he considered the test "to kind of endorse maybe that I was on the right track." Jack mentioned he was required to complete one educational course, which "was hugely helpful." Jack did comment about his preference for the current teacher certification process: "there's a lot more courses that are required. I would have preferred to do it [gain certification] that way."

When discussing how the process of preparing students for postgraduate work and career "is so clear in terms of the model of preparing students for industry," Jack also shared the "model does, of course, include college." Although he admits the assessment vehicles do reflect any changes in industry standards, Jack mentioned, "a big part of my identity as a teacher is the idea that I just have to be constantly evolving." Responding to a question about how his program fits into general education graduation requirements, Jack shared that from the perspective of sending schools, it is "simply an elective, and we just kind of had to hope that students had cleared away enough of their requirements that they just had enough spare room in their schedule to take this unnecessary class from a graduation perspective." Although the interpretation of the relevance of his program is becoming more positive and "things are kind of opening up," Jack does make a point that "credit that our students receive isn't really from us. It is from the sending schools."

Concerning the position of vocational education in secondary education, Jack shared, "the strongest role that we provide is context," and students "may find that they're successful in our classes, they often find that they end up being successful in their sending-school programs." Furthermore, speaking to the impact curriculum outcomes have on teacher identity, Jack commented that when former students are "having success and traction in college ... [it] has generated a huge sense of pride in terms of me as a teacher but also just, I don't know, me as a person." Finally, when discussing the delimitation of expectations between industry and graduation standards, Jack often thinks, "how can I balance those forces" and "find a way that is functional for my style [of teaching] and experience." Jack also added, "it is sometimes difficult to find the balance between all that stuff."

In a discussion on the identity of how a CTE teacher relates to "being" a high school teacher, Jack admits, "I understand legally I'm a secondary teacher, but I think sometimes on a

day-to-day basis I don't totally feel like one." Relating his identity as a secondary CTE teacher when beginning his teaching career, Jack "had a notion that I was sort of in a subcategory as a secondary educator and ... my former teachers' kind of supported that" based on their bias towards CTE. Also, Jack was unsure if his "attitude in terms of CTE affected my perception of how other people were dealing with me, but there's certainly also differences from schools" in terms of "negative feelings about what vocational education is." In response to an inquiry to learn how Jack perceives interactions with sending schools, he "figured out ways to maybe minimize my interactions with folks at the sending schools" because of "those [negative] reactions and feelings when dealing with some of the feedback I would receive or just the way I was sort of dealt with." In response to this situation, Jack tried to "be around more folks that get the CTE thing."

In a discussion about how professional development impacts teacher identity, Jack mentioned the "professional development system is the instance with which I do have that different, less isolated sense of being a teacher." Jack was interested in continually refining his teaching abilities and found the "whole concept of pedagogy and improving practice does really appeal to" him. When asked about his views on being held accountable as a secondary teacher through the TCS Performance Evaluation and Professional Growth (PEPG) system, Jack shared that while he has "awareness of the system," he "never felt like it was a huge weight on my shoulders."

In Jack's response to a question about being a member of the wider group of high school teachers, he shared, "I would say at this moment, yes, but in fairness of who I've been as a teacher for eleven years, the answer to that question has bounced back and forth many times." He continued, "there's been times when I've felt detached from the system" because "we [CTE

teachers] have been so consistently demeaned." Jack indicated he would like to see more equity for his program and CTE pathways in general from the community, sending schools, and the educational establishment.

Leo

After teaching at one of the sending schools for several years as a CTE School-to-Career Coordinator (STCC), Leo made an internal career change to create and teach a new program at TCS. Leo changed because he needed more of a challenge with "something more to keep me engaged." His role as STCC was to act as liaison to TCS and provide cursory instruction on career development preparation at the sending school, which provided him with an intimate perspective on the role CTE plays in secondary education—"the job is super important." Leo was integrated into the learning environment at the sending school, where he "worked really closely recruiting [students for TCS] ... and with the vice-principal and principal concerning disciplinary actions ... and just logistics."

In his STCC liaison role, it was important for Leo to provide a connection to "get all the kids over here [TCS] that belonged over here and that would benefit from this." Working with the TCS administration and with STCC's from other sending schools, Leo made sure students had access to "everything that we could [do] for those students as far as dual enrollments and employment [internships]." Leo was resolute "to give all those students the opportunity to ... be successful."

When the opportunity to move into a position that required Leo to develop and teach a new program at TCS became available, he immediately applied and was offered the position.

Although Leo held a CTE endorsed teaching certificate replete with extensive industry experience applicable to his new position, his certificate endorsement was "conditional right now

because the DOE has some sort of new rule." The new certification structure required applicants to complete coursework equivalent to Leo's classroom teaching and management experience, prompting Leo to declare, "I'm not taking any of the classes until someone forces me to because I'm already doing this job and I have way more education than I need." Leo has earned two bachelor's degrees but does remark he "got off pretty easy" compared to a "teacher who went to school to be a teacher" because he "didn't have to get a degree to learn how to teach." Leo admits teaching is "definitely the hardest job I've ever had" and that he "is not a teacher on purpose." Leo's response was to embrace the profession and ask, "what direction do I want to take it, and what can I create?"

Beginning his CTE teaching career as an STCC and then moving into the role of developing a program of study from the ground up, Leo described his industry experience as spanning "40 some distinct fields that I had been in." When he began to develop the Outdoor Leadership program, Leo did extensive research on the type of qualifications and certificates students could earn that prompted him to enroll in courses that allowed him "to be able to grant most of the certifications ... through my profession." Leo mentioned that by completing this development, the certifications he awards "are based on my skill level and professional associations, not on a third party outside resource." Leo also discussed the importance of his previous industry experience related to his present responsibilities:

I would say this program is kind of the culmination of most of my previous industry [experiences]. I'm utilizing most of the skills and experiences that I've developed over my professional life and not necessarily by accident, which is because I got to create this program.

When Leo was asked how he evaluated the success of his students, he was not forthcoming in terms of specific skill sets, placing more emphasis on the ability of students to conduct themselves in a manner that shows "how they communicate with each other. When they are functioning semi-autonomously from me, I know they have succeeded." When his students work on a task or lesson, Leo is "managing the big picture and keeping an eye out for safety ... but I've given them all of the skills that they need in order to sort all of that for themselves." An important aspect of how Leo approached teaching relies on his ability to provide guidance and skills for a student to make an informed decision that allows them to "kind of start steering the ship."

When Leo was asked about the CTE position in secondary education, he shared his view that CTE is "on a line between the past and future." He explained there is a perception from sending schools that CTE is a dumping ground for "the kids who can't sit still in class ... are not good students, or the special needs students or whoever we want to get rid of also, like the troublemakers." Leo recounted this observation as first-hand experience when he was in the STCC roll and alluded to it in his new program, albeit less often due to the demanding entry requirements compared to other programs of study at TCS. Leo shared the deference to a "college-for-all" approach by sending schools, creating a lost opportunity by keeping students from attending TCS because courses delivered at the sending school are "the solution for [college attendance] and there's not a different way to look at it."

Leo noted that "some of the people [from sending schools] have gotten the message," helping dispel the stigma associated with vocational education. When discussing how sending schools identified students for TCS enrollment, Leo indicated guidance counselors communicated the attitude "we don't think you [student] have, you're not on a college pathway,

so based on your personal interest or our perceived levels of your ability and intelligence, we think this would be a good program for you." The program of *choice* is usually one that guidance counselors feel is a "program where we just put all the kids we don't know or that we don't know what to do with." Interestingly, while he is an advocate of the CTE pathway, Leo was transparent in that he "lean[s] towards more kids definitely need to come here [TCS], but it's also not for everyone."

Eleanor

Like many individuals who decide to become a CTE teacher, Eleanor spent many years in industry before entering the profession. Having been in education for over 25 years, she shared valuable generational experience related to the growth and perception of CTE in rural communities. Earning a degree as a registered dietician, Eleanor did have a minor in education—"When it came time for choosing a minor, I was like, humph, education? Why not?" When circumstances changed when she was living and working as a corporate dietician in the Southeast, Eleanor moved back to the Northeast and found employment as a special education para-professional at a rural CTE school. Working with students with learning differences who were involved with tech exploratory, service industry skill-building, and general trades, Eleanor shared her experience; it "was a blast. I'm not going to lie to you; it was so much fun."

Having to manage a change of personal circumstances, Eleanor left education to enter the foodservice sales industry, where she was successful and a trendsetter as the first outside sales professional in the region. With a positive outlook and enjoyment for the job, Eleanor described her role as an informal leader for the company where she would provide leadership and professional development training as a matter of course, "[I]t seemed like train the trainer, that

kind of thing of being put into a position where I was leading people, you know, teaching and working on professional development just always was the overarching theme."

After several years in the food sales industry, Eleanor was presented with an opportunity to apply for a job as a culinary teacher at a mid-state CTE school, and after three years, she applied and accepted a job at TCS, where she has been employed for the past 23 years. At TCS, Eleanor held two positions, Culinary Arts and STCC, at one of the sending schools.

In her first couple of years as a Hospitality teacher at TCS, Eleanor worked with a colleague to identify and implement a program review to gain American Culinary Federation certification. "It was a comprehensive program review ... you have to open up everything for display. Your entire curriculum, your assessments, your instruction, your everything." The primary motivation for this work was a response for CTE to provide outcome accountability by having "every program certified with some overarching" industry-recognized certification process. An important outcome of this work was not only the separation of the Hospitality program concentrations of Culinary Arts and Commercial Baking, but it allowed Eleanor and her colleague to develop an in-house Café to provide industry-specific opportunities for students. "We split the program in two ... and concentrate on the objectives for the culinary, center of the plate, I would do the baking and pastry, she would concentrate more on the back of the house, I would do the front of the house." Unfortunately, during COVID-19 health restrictions, the Café did not open, about which Eleanor shared, "I miss it so much. I miss the opportunity for these kids to learn."

One of the major themes present in Eleanor's interview relates to her experience with the professional value of teacher certification, pedagogical experience, and teacher solidarity. For example, the school where Eleanor worked prior to TCS practiced a hiring policy for CTE

teachers that calculated industry experience when setting a CTE teacher's salary. She recalled that

when the teacher's union found that out, they approached the superintendent to have that changed because it ticked them off completely. Because they felt that we [CTE teachers] should not be obtaining the master's level salary if we did not have a master's degree. And my opinion on that is—hey, I'm a certified executive chef. I have as much as a master's degree as you do, folks.

Furthermore, Eleanor shared that the school also "had a very strong mentorship program," which supported a robust teacher professional development approach with a concentration on cross-walking CTE outcomes with colleagues from sending schools. Within this mentoring process, Eleanor commented she had a "hugely [emphasis] strong support system between the director and the assistant director … the structure was excellent." During the conversation, Eleanor mentioned her experience becoming certified to teach versus being prepared to teach high school. "All I had to do, to be honest with you, I had to apply to the State for my certification. I had to take the Praxis1, and that was it." Part of the inquiry also related to pedagogical courses specific to CTE, and although she had a minor in Education, Eleanor "did take all of those courses because it felt like I'd never taught high school or in a CTE school before. So, I took all of those courses prior to … being a mandate."

Coming from a school where teachers and administration cultivated a collaborative relationship based on equity, Eleanor shared that her experience when joining the TCS faculty was the exact opposite. Eleanor commented on how she "was appalled at the lack of agency for our [teachers]. It was horrifying." Because the administration was treating the CTE teachers unfairly, which Eleanor described as "so heartbreaking," she and a colleague created a teacher

association to support equitable treatment for all TCS teachers and staff. Although they [the association] were "being constantly marginalized" by the TCS administration and Board, Eleanor indicated she was able to gain support from the State teacher union by explaining what CTE is, how it differs, and "how it is the same."

Eleanor has accepted or sought out leadership opportunities to develop her teacher agency and help colleagues develop theirs on many occasions in her career. For example, when a group of stakeholders began to collaborate on developing a learning campus that would include a high school, a CTE school, and a community college satellite, Eleanor became involved and "just knowing that I was going to be a part of that. That was huge. That was huge, huge, huge." Likewise, when an invitation for National Board-Certified Teacher (NBCT) candidacy or being chosen as a Fellow for the Association of Career and Technical Education (ACTE) was presented, Eleanor invested her time and professional commitment. As a result, she was "one of the first CTE teachers" in the state to become board-certified and worked with colleagues and politicians on behalf of building CTE on the state and national levels.

In response to interview prompts about the station of CTE within the wider secondary education landscape, Eleanor shared

it's marginalized somewhat in that there's still some people that don't believe it's [CTE] for everyone. And you know, I liken it to a large cruise liner, trying to make a turn. I didn't think it would take this long for a cruise ship to turn, and I'm still waiting for it to completely do that 180; it's better, but we still have a ways to go.

When discussing how TCS sending schools provide CTE opportunities for students who are on the fringe and at risk of not graduating, Eleanor communicated to her colleagues "how important it can be to get that kid over to TCS. So, I'm constantly like the reminder, that kid

needs to go, that kid needs to go." As a high school CTE teacher who is considered a master teacher, Eleanor discusses instances where colleagues from sending schools hold a bias towards the vocational educational pathway because there is a stigma CTE teachers are less than, of which Eleanor counters with "I know what I am talking about, I am a professional, if not more. I'm on the same page as you guys [sending-school teachers]. There's no 'us and them.' We're all teachers."

Liz

After 13 years in the automotive collision and repair industry, Liz's transition to a career in education as a high school CTE teacher was a "pretty sudden shift ... I was fixing cars on a Friday and trying to teach high school students on a Monday." Growing up in a family of educators, Liz attended one of the sending high schools; her father was a high school CTE teacher at TCS. Liz described a feeling of uncertainty about life after high school and coming from a family who valued college attendance, it was recommended that Liz enroll in a post-grad year. She enrolled in the auto collision program at TCS, where she thrived. Upon graduation, Liz attended an elite post-secondary technical institute to further her education. She commented on how this experience inspired her to follow a pathway into industry, "I look at it as kind of what my pathway was and is. And that's what I like to think it [finding a pathway] will do for kids; it just put them on a pathway."

Liz worked at several automotive repair shops during a career in industry, where she "started at the bottom ... to pretty much running the show." Liz commented that her experience running a high-volume repair shop, especially as a woman in a traditionally male-dominated industry, provided her with the confidence to walk into a high school classroom and teach:

having that clarity when you've got to be on, so to speak, but being able to have that clarity under pressure is huge. It sounds crass, but dealing with boys, essentially, technicians, I mean, the maturity level is not that much different from the people that I worked with for all those years, to teenagers. It's just not. And so, I think being able to handle that and to not laugh at inappropriate things, just kind of being able to have that face of like, okay guys, really? I think that that's huge because especially being a woman and when I walked into that classroom on that Monday, they weren't expecting me.

Developing industry leadership experience, parents who were educators, and a lifelong learning approach to life, Liz indicated the move to teaching "seemed like the next natural transition" for her career.

During the interview, Liz made a point to mention her enrollment and subsequent graduation with an associate degree in business to broaden the diversity of her skill set. She shared going to school part-time and working full-time as a tech manager "helped [me] in moving into more of an education setting." When comparing running a shop with workers who are unreliable to teaching a high school CTE class, she described a part of her decision to teach "I look back at the people that I've worked with and if I can work with *that*, this [teaching] is nothing." When discussing her confidence in sharing her pathway with students, Liz described how she approached her own educational journey, which she considered relevant for a student's own high school journey because enrolling in her program at TCS, "it's just as much about finding what you like as what you don't like." Liz's investment in helping her students not only learn a skilled trade but to be prepared to make informed decisions about what they want to do, to "see the different sides of what they're doing ... so they can choose to ... leave, go see

something, do something for however long, a month, a year, whatever." Liz feels "it's really important for them [students] to see that. They've got to take that leap."

From the discussion about developing teacher agency, Liz connected her student success to her professional growth as a teacher. For example, when she created a new lesson resource that has the potential to make her a better teacher, Liz made that decision on how relevant "teaching them [students] those skills so they can handle that when they move into a workplace." Honoring a commitment to lifelong learning, Liz continues to enroll in programs to expand her professional capabilities; she is pursuing a bachelor's degree in special education. "The coursework isn't tailored to CTE; it's tailored to a regular education setting, so it kind of forces you to think about things differently."

When asked about how she perceived CTE in the wider secondary education environment, Liz recalled her own high school experience. "My dad was a teacher at TCS, and yet it still wasn't appropriate for me because nobody talked about it." Liz discussed how CTE bias continues "as much as we don't want it to be true anymore, it is." She continued,

it's really challenging to reach out to the academic—to the high schools, about students because you never know what their opinion is going to be—not their opinion, their mindset is going to be about CTE and how it relates

to sending-school courses. "It always feels like an "us versus them" from the sending school, and the relationship "never really moves into a collaboration." When asked how this type of relationship impacts her development as a teacher, Liz shared, "I don't feel that logic anymore, just because it is the way it is." To be proactive and provide insight to dispel the myth of CTE stigma, Liz integrates her experience of taking special education classes with non-CTE colleagues in her interactions with students. She commented that a student might be more

receptive to "hearing [about a learning strategy] from someone like me, or a CTE teacher, maybe it makes it a little bit different for" the student.

Barbara

When describing her early experience with CTE, Barbara indicated she grew up in a family that all worked in the trades:

My father was an electrician; my grandparents were dairy farmers; my mom was a baker. So those non-corporate, even self-employed positions are really what I was raised around. And that's what seemed normal, and really kind of celebrated ... you know, my husband is a self-employed fisherman.

This early experience with the trades left an impression on Barbara that provided her with the confidence to pursue CTE in high school against the advice of her teachers—"are you sure you want to do that" because "it was a big deal to have upper-level students involved in [CTE]." During her high school career, Barbara enacted leadership skills such as integrity, courage, and insight that became a foundation for the cultivation of her teacher agency, "well this [attending CTE] is an opportunity I'm not going to let go because you don't think it's appropriate. You know, I think for [my students] to see the value and really make that choice themselves is really important."

When Barbara graduated from high school, she enrolled in college to pursue a degree in Graphic Design and subsequently worked in the industry for several years. During her college and early professional experience, Barbara became aware she was called on by professors and supervisors to provide instruction and mentorships for complex processes in graphic design.

Barbara recalled, "even though I wasn't going to school for education, I was doing that

[teaching] through work-study ... and that kind of continued when I was working at the design firm."

Barbara used her passion for design technology and helping others to enter the teaching profession so she could help students "make that connection and figure out what they're passionate about." During her 13 years as a high school CTE teacher, Barbara established and taught a design technology program before moving into the role of STCC at TCS. For the latter position, Barbara needed to obtain a different CTE endorsement, and although she had been a CTE teacher for ten years, the State Department of Education required several foundational courses targeting pedagogical skills. Although she does hold a conditional certificate as an STCC, Barbara shared that the "process of trying to get that [credit for prior experience] so that I am fully certified" takes her time and energy away from teaching. Barbara shared that her success in these roles resulted when she "leaned back on my experience as a student in essentially, the same program."

Throughout her career as a high school teacher CTE teacher, Barbara was mindful to ensure equity in learning opportunities for her students through program delivery, student outcomes, and working with colleagues from sending schools. She shared her consistency with "aligning ... [herself] with the content area teachers at the sending schools" to help students apply CTE skills to their coursework at the sending school. She used opportunities like this to forge relationships with sending-school colleagues, practice her teaching skill set, and adjust to facilitate successful outcomes for her students. Also, through these relationships, her dedication for student growth was evident in her comment "that you really develop these relationships [with colleagues] and find out about what some of their [students] overall learning goals are." Another

outcome of these relationships provided context for sending schools to understand how CTE "kind of ignited something in them [students] to be successful."

Barbara described her experience as an educator in a manner that indicates a reflective and intentional process:

I feel like I take the responsibility of being a teacher very seriously, and so I feel like that's just working professionally, you have ... these are obligations, this [the job] is what you're being asked to do, and this is the part of what you need to do to make your students successful.

As a high school teacher who has a presence at both a sending school and at TCS,

Barbara makes the time to advocate for student success at TCS by developing her relationships with sending-school colleagues and the learning environment it offers. In addition, where both schools are members of the state educational foundation, Barbara is a team member for each school so she can "bring some continuity between ideas that are happening."

When describing her perception of the role CTE plays in the wider secondary education system, Barbara shared her beliefs that CTE has something for everyone, that "it really is such a resource and source of passion for a lot of students" and, "there still is a stigma there that I think hinders some students for taking the opportunity that they could have." Barbara shares that she also has "always known that there was a stigma there [against CTE]," which she makes a point to dispel by reminding students and her colleagues about the benefits of CTE as a pathway. As an STCC, Barbara experiences a range of equity related to the efficacy of CTE and academic programming, which competes for student engagement at TCS. For example, Barbara can act as a liaison between TCS and sending-school colleagues to facilitate developing equity for a student's comprehensive high school program. The equity, in this instance, relies on blending

complex CTE and academic learning outcomes. On the other hand, Barbara does experience situations where the sending school requires a student to complete "graduation requirements" at the sending school because "passing their English and math to graduate" is made out to be more important than attending their program at TCS. Barbara mentioned that when this happens, "students have to make hard choices."

Marshall

When discussing his journey to TCS, Marshall shared that he had prior CTE teaching experience [2.5 years] and 15 years' experience teaching middle school [5th grade]. During his teaching experience, Marshall was intent on making the point that he taught middle school out of necessity because he was supporting a family, and when the opportunity opened at TCS, he shared, "I love it, I feel like I'm back home. I always felt like a foreigner [working at a middle school]. I missed it [CTE]." While a middle school teacher, Marshall taught all content areas and indicated he "loved every minute ... and learned every day teaching 5th grade. It [content] wasn't necessarily stuff that really compelled me to feel complete." Therefore, when the opportunity to move to CTE was presented, Marshall accepted a position as a teacher at TCS that he described as "ahhh, this is what I've always thought about!"

When asked if he identifies as a teacher or a trade-tech, Marshall replied, "I'm most proud to say a CTE teacher teaching mechanics just because that was my passion as a kid and there are days that yeah, it's an educator and there are days that no, I'm a tech." Marshall also shared that he experienced a lot "of time hemorrhaged on who can get on board and let's do some brainstorming. Some of that stuff is good, but at the end of the day, let's make a decision, let's do it. That's how it works in industry." Marshall discussed one of the reasons he left general education for CTE was based on his opinion that education outcomes related to standardized test

results became too much of a focus, "it was some of the impetus for me saying I got to get out of here, they're making a game I can't win."

Once he became settled at TCS, Marshall commented, "now I feel like I am winning" when he shares "finding success for students, and they're actually learning." At TCS, Marshall discusses his experience creating opportunities for students to learn terminology related to industry and understand the relationship between academics and learning a trade. "I've got kids speaking the language. They [students] want it. We are building curriculum; we're building investment pieces for earning industry-recognized credentials." Marshall commented on how as a CTE teacher, "he can be a little more direct with kids; I can kind of serve them a pretty hot supper of 'this is not the way its's gonna be, I'd fire you right now' "to show them what working in a trade shop might be like. He also added that as a high school CTE teacher, he could be more candid and "it's nice to be able to say that. That's just straight-up truth. Where it's hard, I think for a history or an algebra teacher to say that."

When asked to describe his perception of the position of vocational education and the role it plays in high schools, Marshall mentioned there was a stigma attached to CTE, but "it's changing. I think we [CTE] are second-class citizens and a dumping ground ... and that's what it feels like here [at TCS]." He is beginning to experience a change in the narrative which shows colleagues the value of high school CTE "because [industry] is headhunting my kids" and the sending-school teachers are starting to pay attention, "they're starting to look at us as allies." When describing the academic value of CTE to sending-school colleagues, Marshall shares

It is a science class, for crying out loud. There's no way we could be discussing this [small engine repair] without talking about the science of how it all works. You're right; this is a science class; I'm sorry I didn't say that this is science through the lens of a small engine.

Additionally, Marshall commented that there is more equity when sending-school teachers include him in individual education plan (IEP) meetings where connections are made to help a student cope with math and literacy in CTE classes. He said, "I would love to work together with you because we're putting kids forward, we the collective, the public schools of America."

At the end of the interview, Marshall shared that he was required to gain a further secondary education CTE teacher endorsement; several pedagogical courses were required for program area endorsement because of updated state certification processes. Marshall continued that he viewed the requirements as inequitable because of what he "brings to the table as far as my experience set, my coursework, my degrees." Marshall equated the certification to a battle that "feels like a fight with the government to be in a teaching job ... even though I have collected all this life experience."

The next step in the modified van Kaam method is constructing the individual structural description (Moustakas, 1994). In this step, the researcher returned to the interview transcription while considering the individual textural description to construct a description of how the essence is present in an individual's lived experience of the phenomenon (Alase, 2017). Also, while constructing an individual structural description, the researcher must remove himself by entering the epoché (Giovannini, 2018).

Individual Structural Description

As mentioned above, constructing the individual structural description of a participant's lived experience is a further step in the van Kaam phenomenological analysis method. The structural description highlights the noetic nature of how the presence of the phenomenon is described by a participant (Eddles-Hirsch, 2015), which, when considered alongside the

individual textural description during the subsequent step, the meaning and essences of the lived experience of the object are then described.

Jack

Pursuing a career in teaching was not Jack's primary career choice during his secondary and post-secondary education, although he did mention that he would have liked to enter the field of teaching as part of his long-range employment planning. As a result of his curiosity about the profession combined with the propensity towards a transactional relationship with opportunities and choices for professional consideration, Jack found his true calling as an educator. Jack's entry into the teaching profession was based on established criteria as well as his perception of his own non-traditional industry experience. Jack described a high level of confidence in his ability to earn passing scores on professional standardized testing, which he attributed to taking the exams not too far out from college graduation. Pedagogical knowledge was an area of concern for Jack when beginning an education career. He had the industry experience, albeit self-administered, but lacked the professional knowledge necessary for delivering a high school curriculum related to high school graduation standards. For Jack, beginning teaching without a solid foundation in pedagogy resulted in a sense of isolation from colleagues prompting him to complete professional development opportunities necessary for teacher growth; he approached required coursework from a position of backward planning.

In our discussion about developing teacher agency, Jack expressed feeling optimistic when he confronted gaps in his professional skill set; the mantra of continual improvement and progression as a teacher was apparent in his tone of voice and facial expression. Committed to his continual growth as a teacher, Jack came to the realization during the interview how he was not confident in advising other teachers but understood his experience and perception of CTE

was a valuable resource for the continual growth of his colleagues and the learning environment of TCS as a CTE high school. Conversely, Jack believed the effectiveness of CTE as a pathway relies on the contextual success that applies to immediate CTE programs and becomes relevant to achievement in academic outcomes at the sending school. While the role of contextual accomplishment in CTE continues to be a reality year after year for Jack, his facial expression and tone of voice became distressed because he could not understand why colleagues apart from TCS were reluctant to engage or collaborate with vocational opportunities; Jack felt he was in a silo built out of bias and stigma.

In general, Jack's approach to learning the craft of teaching provided opportunities to engage in instructional theory and application, and a propensity to collect knowledge supported his desire to become versed in both CTE and academic learning environments. Jack was interested in developing a level of professional knowledge that would cultivate his desire to provide students with an experience that fit their goal of earning a high school diploma but encountered an obstacle that prohibited him from gaining an endorsement in high school fine arts. His demeanor became one of frustration, disbelief, and sadness when recounting this experience of trying to pursue what he identified as a certification that would provide continuity between sending schools and his program. While Jack described the experience as an 'us and them' structure, his facial expression communicated a sense of marginalization that was more evident for the lost opportunities his students would experience, rather than how colleagues treated him with inequality. Though he tried to collaborate on several occasions with each sending school, he became aware of a glaring discrepancy in how each sending school perceived the graduation pathway CTE represents. All but one sending school was supportive and welcoming of Jack's inclusive gesture. Unfortunately, Jack's approach to becoming the best

version of his professional self continues to be met with resistance from colleagues outside of CTE, resulting in Jack making the reluctant choice to collaborate primarily with colleagues who value CTE.

Leo

A fundamental basis for Leo as a teacher is to identify and pursue opportunities that will allow him to grow as a professional while integrating his repertoire of industry skills gained through previous occupations. Leo's lived experience as a rural CTE high school teacher provides important insight from his dual perspective as an STCC and program teacher. In the former, he experienced how sending-school colleagues and administration viewed CTE, and in the latter, he was able to develop and teach a CTE program that suited his skill set at a specific time in his educational career. When discussing his early experience as a CTE teacher, Leo's tone of voice and facial expressions communicated an elevated level of frustration related to his certification process for a new program endorsement. After teaching for several years as an STCC, Leo expressed annoyance and resentment at having to complete certification courses he and TCS administrators thought to be unnecessary. Leo's declaration that "I'm not taking any of those classes until someone forces me to," while seemingly rooted in a negative perception, is more a statement of his confidence with his teacher agency as he is making the transition to a full-time presence at TCS as the Outdoor Leadership [OL] teacher.

Before making the transition to OL, Leo created a professional structure to cultivate opportunities to work with colleagues who could mentor and provide insight into varying approaches to teacher agency. As a CTE teacher at the sending school, Leo immersed himself in working with colleagues from different departments not just for the benefit of students but to ensure that his role and development as a teacher did not stagnate; he "worked really closely with

all of the special education folks, and very closely with the vice principals' and principals' concerning disciplinary actions and also scheduling and just logistics." So, that position [STCC] really has a lot of different responsibilities. The level of dedication to the skill of teaching was evident in the way Leo communicated to the researcher a strong sense of pride; as he stated, "I also stood out front every morning and was there with the principal as all the students entered the building."

Although Leo did not share the exact reason he entered the teaching profession, he did indicate, "it was sort of an accident, and then I found myself being a teacher." The diverse experience in at least 40 different industry-related career fields provided Leo with a sense of confidence in his ability to provide a diverse learning experience necessary for his current and previous teaching position. Furthermore, Leo also disclosed that "90% of my teaching is pretty much on the fly," the description of his approach to teaching reveals a level of humility when his students are successful in a lesson. When he meets community members identified for program collaboration, Leo ensures the expectations of learning outcomes are discussed before any collaboration between student and community organizations is undertaken. Leo has not only developed this skill for his own growth but has built the process into his course design to ensure continuity for the next teacher.

When he began to discuss his characterization of CTE within the wider secondary education system, Leo took a lengthy pause and seemed to struggle to formulate his discourse, where his body language seemed to indicate a conflicted attitude. Leo asked the researcher if the query was asking for what an ideal role looks like or what he believes "is actually true." From his perspective of working in two separate CTE roles, Leo believes "CTE is ... on a line between the past and the future." Leo described how students who are not considered college-going are

pushed into CTE programs to allow the sending school to choose "whoever [they] want to get rid of."

Eleanor

For Eleanor, preparedness is an important structural quality to cultivate effective outcomes for her employment in both industry and teaching, which provided the skills necessary for her to meet the demands of "teaching and working on professional development as an overarching theme." Making the time is an important component of having the skills and experience necessary for success in the workplace. In Eleanor's case, she dedicated time to earning a degree, accumulating industry experience, and completing professional development that ultimately provided opportunities and direction for developing her teacher agency. For example, starting a family and having a job that involved a lot of travel provided an impetus for making a difficult decision to leave industry for a teaching post. This decision placed Eleanor on a trajectory that brought her to TCS in 1998. In general, Eleanor embodies the passion for life and creating a balance between professional and personal roles, allowing her to make informed decisions that make her a more effective high school CTE teacher. One thing that has been a constant in Eleanor's secondary education career is her proactive attitude towards her development as a high school teacher. As a National Board-Certified Teacher (NBCT), Eleanor possesses the skills commensurate "to be nationally board-certified as an educator, not just a career and technical educator."

Teacher equity and leadership represent structural themes as evidence for Eleanor's dedication to intentionally developing teacher agency. Eleanor assumed leadership roles to promote equity for CTE high school teachers that was not only comprehensive for TCS faculty but relatable to her previous experiences in industry and education. When she began teaching at

TCS, Eleanor discovered a structure for hiring and contract negotiations did not exist, and as a result, she stepped into a leadership role "right away" to develop a professional employment structure that was equitable for TCS teachers. The outcome of this initiative was the creation of a teacher association [union], of which Eleanor was appointed vice-president. Eleanor observed a positive trend in her colleague's development of teacher agency because of improved administration support and teacher autonomy based on the "professionalism of our industry [CTE]."

A compelling reason Eleanor continues her career as a high school CTE teacher is her desire to provide a positive, engaging, and beneficial student CTE experience. Over the years, she has introduced several changes to curriculum design to reflect the industry's professionalism that a student is learning. For example, when she described her program as resembling a "school lunch feeder [rather than a] culinary arts and baking and pastry program," Eleanor advocated hiring a certified teacher to concentrate on the former. When describing this scenario, her tone of voice and posture supported her comment, "I'm very proud of that." When Eleanor's role as a high school CTE teacher changed to an STCC, the bias towards CTE as a pathway became more noticeable as she was based out of a sending school. When asked about her dreams for CTE in secondary education, her tone of voice was one of hopefulness that the pathway would grow to "100% equivalency and integrity, seen by every aspect" so that every student who wants or needs to attend TCS has the opportunity. When discussing how the institutional culture of CTE stigma is beginning to erode, Eleanor's demeanor indicated a level of humility that she alone was not responsible for a 50% increase in TCS enrollment, "it's the team, it's the perception out there that CTE is for me, it's for everybody." Additionally, it was a shift in approach to "building that

professional aspect in our instructors and our curriculum and our assessments ... they have all come together" to support a rigorous pathway for the CTE student.

Liz

Liz exhibits an empathetic understanding for her students that is relatable back to her own experience as a high school student at TCS. Her empathy is an important distinction for the development of her teacher agency, as much as it is a reflection of her teacher professional identity. When Liz was graduating from high school, she was at a crossroads and was "really unsure ... what I wanted to do as a graduating student here [rural town]." Acting on the recommendation by her parents to enroll in a post-grad year at TCS, Liz enrolled in the Auto Collision Repair program. When she realized learning a trade skill was her pathway for success, Liz enrolled at an elite post-secondary technical school to further her knowledge and pursue a career in the trade.

Having experienced exponential leadership growth in her 13-year tenure in industry, Liz decided to accept an opportunity to teach at TCS because

even though I had been there [in her automotive tech career] for a long time, I kind of moved up the ladder, there wasn't really anywhere to for me to go in that [job]. So, it just seemed like—I had just graduated from my business degree—so I was just kind of ready for something new, and it [teaching]seemed like the natural, the next natural transition.

During the teacher certification process for her CTE endorsement, which consisted of taking the Praxis® tests, Liz shared, "the last one was kind of a kicker because it was the same Praxis® that teachers take leaving a 4-year college that says that they can be a teacher." In the first year of teaching at TCS, Liz used various resources to help navigate being a beginning teacher. Through her parents' experiences, Liz communicated her gratitude for mitigating the

frustration a lack of pedagogical acumen can cause a beginning teacher. What became apparent during this part of her interview were the structural qualities of tenacity and dedication that emerged from the resurgence of emotions of uncertainty and doubt she felt as a high school graduate. Also, Liz continues to use this momentum to support her journey to gain pedagogical skills associated with teaching high school students. For example, after several years of teaching high school and knowing teaching is her pathway, Liz enrolled in a special education bachelor's program to teach students with learning differences to self-advocate for their own success not only as a student but as an individual finding their way in life.

Liz disagrees with the stigmatic attitude towards CTE and consciously affirms that "it's good for people [sending-school colleagues] to have an understanding or you know, we're teachers too. We do all the same things, just differently." However, Liz shared her experience with "a real common misconception about what the expectations [for CTE programs] are" and how it triggered feelings of bewilderment, sadness, and apprehension about how others perceived secondary CTE. Additionally, Liz shared concern about CTE teacher prejudice where she seemed puzzled that even though she was a "high school teacher, [which is] definitely not the perception [among sending schools], and even with our students, it's not the perception." Although Liz explained that student perception of a CTE teacher is more of a differentiation of an adult who is "a knowledgeable person in this trade that they want to learn, but not necessarily a teacher ... it allows us [CTE teachers] to have different relationships with students" during their high school journey. Nonetheless, Liz does appear to accept and tolerate others' negative opinions of CTE, but she does communicate disappointment which manifests as an inverse effect on her own perception of CTE, "I don't work in a regular school" or "it always feels like us versus them, more so in the high schools [sending schools]."

Barbara

Throughout the interview, the structural theme of dedication emerged as a value upon which Barbara conducts herself in making the decisions necessary to be successful personally and professionally. When she decided to enroll in CTE as a high school student, Barbara demonstrated a level of self-confidence and determination, which can be seen as a reflection of her exposure to family members who worked in the skilled trades, "that's what seemed normal and really kind of celebrated." When she decided to attend college, "it was through that [high school CTE] experience I decided to pursue design when I went to college." When the opportunity to build a CTE design technology program became available, Barbara designed a program that was not only built around teaching industry-recognized skills but was mindful of the need to develop her pedagogy regarding a whole student approach.

Barbara considers her role as a teacher as an opportunity to guide students in the direction of success based on self-advocacy and self-fulfillment as a student in CTE. Her commitment to ensuring students have the support, information, and opportunity to integrate their CTE experience is evident through Barbara's tone of voice and body language expressing pride and humility. Barbara shared a sense of satisfaction when she observed how her students would apply their trade skills in their sending-school classes.

After Barbara shared her experiences as a high school and college student, as an employee in industry, and as a high school CTE teacher, the structural theme of consistency became evident. As discussed earlier, Barbara enrolled in CTE against the advice of her high school teachers and in doing so, she exhibited a level of courage that she continues to exhibit as a high school CTE teacher. Not only is she consistent in demonstrating situational adaptability, but it is also her steadfast attitude about finding and developing solutions for success that stands out.

For example, Barbara identified the need for collaboration with sending-school teachers on behalf of learner achievement, which she described as "it might be that you have to work with teachers or administration over at their sending school to help however you can get them [students] on that path [of success]." When Barbara described her experience with CTE stigma as a student and as a teacher, there was a noticeable tone of sadness in her voice, "I have always known there was a stigma there [against CTE]." Furthermore, Barbara presented as sad and frustrated because "there still is a stigma … whether it be from their parents or from a guidance counselor … it hinders some students from taking the opportunity" CTE presents.

Marshall

Marshall has an affinity towards the teaching profession because his father and grandfather provided context for pursuing a teaching career culminating in his return to CTE. Albeit his return to CTE teaching was delayed for more than a decade because he pursued a teaching post conducive to his raising a family, Marshall gained valuable experience in the pedagogical aspect of teaching. In addition to a structural foundation of becoming a teacher, Marshall described his experience with situations where he became disillusioned with how effective his role as a teacher was concerning student achievement.

His reflection is represented by a winning versus losing outlook where Marshall perceives losing as not supportive to a foundational character trait of helping others learn. For example, Marshall justified one of his reasons to move on from general education teaching:

they're making a game I can't win. You know it didn't feel like I was a winner. We'd be in meeting after meeting of 'well jeez this doesn't go well, this didn't go well, look at these graphs and MPS, don't be assigning any homework and you can't ask for this, and you can't make them stay in for recess and this' I'm like man, you're putting me in—I said it a

lot, and I loved the admins that I worked for dearly, I miss them, I love them. I said, 'you're just tying my hands behind my back, blindfolding me and throwing me in the ring to take punches if that's all I am just taking punches, I'm going to try to go back' [to CTE], and they knew it, they knew I was going as soon as I could. And I think they knew it the day they hired me, but they got 14 years out of me. And now, and I loved every minute [of teaching 5th grade].

Furthermore, a structural theme of situational adaptability emerges from this attitude, which provides insight into Marshall's pride in identifying as a teacher. From his experiences working in industry and education, Marshall evaluated the learning environment and then developed a plan to create the conditions necessary for student victories: much like a General preparing for battle.

Although Marshall communicated resentment for having to complete several CTE-specific teacher education courses, he understands "the benefits [in student success] that it pays" as an advantage of gaining further pedagogical knowledge.

Individual Textural-Structural Description

In preparation for developing a composite narrative of the meanings and essences of how rural CTE teachers experience their high school teacher professional identity, the researcher developed individual textural-structural descriptions for each participant (Giorgi, 2012; Høffding & Martiny, 2016). By applying the modifications Moustakas (1994) made to the van Kaam method of phenomenological data analysis, the meanings and essences of the individual experience provided commonalities across research participants that act as attributes of rich descriptions of the phenomenon. The individual descriptions are structured to illustrate how the participant experiences being a high school CTE teacher.

Jack

Teacher agency. During the first several years as a high school CTE teacher, Jack did not "feel like a typical CTE teacher" because of his experience gaining his teacher certification. He perceived the certification process as more validation of his trade skills than his ability to teach a high school CTE class. Since Jack entered the teaching profession, the certification process for high school CTE teachers is more comprehensive in terms of pedagogical competencies. Although Jack feels he benefited from having a contextual awareness from "being thrown into teaching" and then taking some educational courses, he would have preferred his certification pathway to have been more considerate of requiring a pedagogical knowledge base. After gaining several CTE certification endorsements and failing to obtain endorsements for general education certification, Jack perceived a "division line" between general and vocational education certifications. Despite gaining his high school CTE teacher certification based on a minimum of requirements, Jack felt it was essential to build his teacher agency because "to be constantly evolving" represents a foundation for his teacher professional identity.

Teacher professional identity. Jack reported that he does not feel like a secondary education teacher consistently. While he does "understand legally I am a secondary teacher," Jack perceives a marked difference between teaching to industry versus academic outcomes. When his program is reviewed for adherence to standards, Jack experiences frustration because he is forced to become "too procedural" when delivering lessons. A belief about what works for one teacher may not work for another forces Jack "to find a way [of teaching] that is functional for my style and my experience." Jack feels unqualified to evaluate the success of a student in a comprehensive manner, meaning he can measure a student's success as it relates to feedback

from industry but is confused about the wider high school pathway because "I wouldn't really understand how I would evaluate success."

A lack of collaboration with sending-school colleagues has influenced Jack's development of teacher professional identity. As Jack has made an effort to "insert myself" within sending schools, the experience of embarrassment related to CTE makes Jack feel like he is not an equal, "in a subcategory [less than] as a secondary educator." In response to this treatment by colleagues, Jack has experienced a growth of "confidence in the merit of CTE," which supports resisting the negativity of CTE stigma. Furthermore, Jack makes an effort to "be around more folks that get the CTE thing" to counteract CTE partiality so he can concentrate fully on professional development that provides him with a "less isolated sense of being a teacher."

Since Jack began teaching, he has experienced a continuum of variances in his identity as a high school teacher where his perception "has bounced back and forth" between the positive and negative "many times." He considers this to be a defensive reaction when colleagues at sending schools call into question his qualifications as a teacher, whereby Jack feels "detached from the system [high school] because [I] have been so consistently demeaned." Consequently, Jack is relieved to experience a shift towards a more positive perception of CTE when sending schools begin to recognize the CTE curriculum's rigor. As a result, Jack is experiencing more respect for providing a sound and effective CTE program, creating conditions for improved learner outcomes.

Positionality of CTE. When Jack was a student at one of the sending schools, he was not allowed to pursue an opportunity to enroll at TCS based on the perceptions of others regarding Jack's pathway for post-secondary college. This incident created a perception where Jack

accepted the bias towards CTE communicated to him by his teachers at the sending school. After Jack began teaching at TCS, the stigmatic perception he had been holding onto dissipated, which provided the opportunity to realize the benefits of CTE as a pathway for students to earn graduation credits along with earning an industry-recognized credential. However, Jack had difficulty understanding how credit for his program was counted towards graduation at the sending schools for several years. He understands the credit awarding process is not his responsibility, but he cannot help but feel inequity when sending schools are unwilling to award academic credit such as math for the academic learning outcomes of his students.

Leo

Teacher agency. When Leo began teaching, he explained how he made the commitment "to do the best thing for the student" by making sure he had the training to be the best possible teacher. While he does not "think [he] is a very good teacher," Leo's experience of humility in the classroom provides him with the courage to continue developing his teacher agency. Leo also says he is "always thinking about his students, how they're doing ... or how could I have served them better," which supports teacher identity development.

Teacher professional identity. Leo has unique experiences as a high school CTE teacher, including teaching at a sending school as a TCS high school-to-career coordinator (STCC) and as a high school CTE program teacher. In his role as an STCC, Leo explained he was part of the learning community at the sending school but working primarily with the administration on logistical and behavioral concerns. Although he collaborated with sending-school colleagues, his attitude came across as preferring to work in isolation with CTE-specific students because of the procedural difference of teaching career development skills compared to general education subjects. Leo shared that he was not "a teacher on purpose ... it was sort of an

accident" and explained he experienced a growth attitude to find out "what direction do I want to take it [teaching career] and what can I create?" Although Leo also explained he holds high esteem for his general education colleagues for teaching the same curriculum year after year, "there's no way that I would want to do that." In addition, Leo explained how seriously he takes his responsibility to create a high school CTE program that meets a student where they are academically and level of industry skills and provides a rigorous course that will complement other courses necessary for high school graduation.

Positionality of CTE. When Leo moved into a new position at TCS, he was required to obtain a new CTE endorsement that had the requisite pedagogical coursework for incoming teachers. Leo expressed annoyance and resentment that he was being asked to take courses that did not consider his previous teaching experience. Leo's attitude of having valuable pedagogical experience prior to a change of positions prompted him to share, "I'm already a certified CTE full certificate teacher, so I shouldn't have to do any of those courses." Leo also shared that the TCS administration was adamant about this issue and, in concert, agreed that Leo had a solid level of teacher agency to create and deliver the new CTE program.

Leo emphasized his disappointment with regards to the bias sending schools have towards CTE. He explained how guidance counselors recommend certain CTE programs because they feel the student will not succeed at the sending school and the CTE course chosen is easy. Leo explained he experiences great disappointment about this practice because he knows the rigorous curriculum these courses represent, and it makes him feel discounted as a high school teacher, almost a feeling of being less than.

Eleanor

Teacher agency. Eleanor's teaching career has provided many opportunities to develop and refine her teacher agency. Like many of her colleagues, Eleanor entered the teaching profession after a successful career in industry. Eleanor described how she learned valuable leadership skills in industry which, when applied to her role as a high school teacher, transferred into a positive sense of courage to teach high school. Describing her experience entering the teaching profession, Eleanor exhibited a level of humility when she shared, "because it felt like I'd never taught in high school or in a CTE school before," she enrolled in several courses that taught pedagogical skills. The coursework was not mandated as it is now, and in retrospect, Eleanor explained this experience prompted her to continue developing a teacher agency which led to reaching the master teacher level, "I was one of the first CTE teachers in the state ... to get national board certification."

Teacher professional identity. Eleanor says student outcomes in CTE are important to her success as a high school teacher, and working with TCS colleagues to build program capacity contributed to student achievement and promoted her teacher professional identity. Regarding equity between high school CTE and general education teachers, Eleanor described her experience of developing a structure to ensure TCS teachers were treated with respect and provided equal opportunities as colleagues from sending schools. Identifying the need for TCS teachers to become unified, Eleanor worked to establish a teacher's union. For example, along with a colleague who was part of the culinary program, a dual structure was created to provide a comprehensive learning experience in Baking and the Culinary Arts, which was a great "opportunity for these kids to learn." Eleanor explained her experience of having a minor in education as an important aspect of her high school teaching journey based on her observation of

CTE colleagues who are "exceptional" in industry but "don't even have a fathom of a clue" about teaching. Additionally, Eleanor shared, "I really think you need an education [teacher preparation] for classroom management, lab management, and writing curriculum."

Positionality of CTE. Eleanor explained that the experience developing a teacher union at TCS made her feel disregarded because a school board member was not supportive of teacher issues. Although she continued to create a teacher union, Eleanor was also left in disbelief when she was informed the state teacher union did not understand CTE, and she had to spend much time helping "them understand what it is we [CTE] do and how it is we differ [from general education], but how it is the same." Eleanor's perception of CTE has changed in step with its perception as a viable pathway for high school graduation. For example, she described how CTE was marginalized for so many years and through her and colleagues' efforts, CTE perception began to improve in the state. However, Eleanor did add in a frustrated tone that "it [CTE perception] is better, but we have a ways to go."

Liz

Teacher agency. As a child of educators, Liz explained how advice and support from her parents helped her decide to enter the teaching profession, and more importantly, to stay in the profession. For example, "having both my parents [as] educators," Liz says, "gave me and still gives me a broader sense of education and how it works." By entering the education profession, Liz combined her commitment to lifelong learning and an affinity to help high school students find their pathway to provide a framework for her to develop her skills as a teacher. Liz identifies as a high school CTE educator who teaches auto collision and repair and provides high school students with instruction related to socio-emotional skills necessary for making informed life decisions. The dedication to improving pedagogical skills to address both academic and socio-

emotional learning provides an example of how Liz makes a concerted effort to provide equity for the CTE students she teaches.

Teacher professional identity. During a 13-year career in industry, Liz shaped a teacher professional identity around the professional and socio-cultural aspects of occupational practice resulting in many opportunities to take on increasingly more complex leadership positions. The life experience of "I kind of started at the bottom" of a small shop to "pretty much running the show at a really high production shop" provides a lens into the competency Liz developed in the auto collision and repair industry. The professionalism and tenacity Liz demonstrated in a successful vocational career provided a foundation for a sudden change of career as she explained, "I was fixing cars on a Friday and trying to teach high school students on a Monday."

Positionality of CTE. Liz is aware of a bias towards CTE which she relates to a misunderstanding of what CTE is and how it works. When she encounters bias from colleagues who communicate CTE as a sub-standard learning pathway, Liz relies on her educational experiences outside of CTE to provide evidence to support the efficacy of CTE when compared to general education. Although Liz communicates her disappointment that CTE is treated negatively, she continues to improve her pedagogical skill set, representing the continual development of teacher agency that supports her overall teacher professional identity.

Barbara

Teacher agency. Barbara's positive perception of CTE is grounded in the experience of being raised in a family working in a trade, and "that's what seemed normal." Barbara explained that her family enjoyed working in the trades "doing what they really want to do," which translated into a value of respect for making decisions to follow a specific career path. The self-confidence to decide to enroll in a CTE high school is an example of how Barbara honored her

self-image as a learner rather than a role assigned by her teachers. Barbara also explained how she was interested in taking advantage of the opportunity of enrolling in CTE because it supported her value of making her own choices.

Teacher professional identity. When she became a CTE teacher, Barbara worked half-time developing and teaching a CTE program and working in industry the other half of the day. She explained, this "was great, because it kept me relevant" in the trade. Although this arrangement was challenging for a first-year teacher, Barbara described the support network of mentors who coached her in the pedagogical nature of teaching practice. She stated that having a strong support network, along with a "strong sense of culture," gave her further opportunities to become involved in professional development and committees tasked with enriching student experience.

Positionality of CTE. Barbara explained she "firmly believes that CTE has something for everybody," and from her position as a CTE School-to-Career Coordinator, Barbara continually reached out to sending-school colleagues to collaborate on behalf of students. The dedication to facilitating student success in CTE was important to Barbara because it supported her value of teaching self-advocacy. Barbara explained she is aware of a level of stigma against CTE and that treatment of CTE improved over the years, but it made her frustrated when "it hinders some students from taking [the CTE] opportunity." Her response to the outside perception of CTE was to become a strong advocate for CTE as a pathway, invite sending-school colleagues to collaborate and continue improving her skills to facilitate student success.

Marshall

Teacher agency. Marshall approached teaching with the practical necessity of having a career that allows his family to be provided for and also to fulfill his desire to help others gain

knowledge and experience. Having experience as a middle school teacher provided Marshall with an insider view of the demands and expectations presented to learners at a young age. In addition, Marshall's experience in developing and delivering a middle school curriculum that met state and local educational standards provides the necessary attitude that continued pedagogical development is necessary even though it seems redundant. Being required to complete coursework that addresses knowledge and skills he learned while teaching middle school creates a feeling of inequity for Marshall as a CTE teacher, but on the other hand, his dedication to improving his agency supports his identity as a teacher.

Teacher professional identity. With Marshall's diverse experience Marshall in CTE and general education over the years, a common principle for his approach has been understanding the relevance of what he was teaching. A vital teaching outcome for Marshall was to provide equity and opportunity for his students and his efforts to build a teaching career. Circumstances that led to Marshall leaving general education for CTE were precipitated by the view that he was losing because his students were not winning. This attitude was counter to how he identified as a teacher, as someone who could get students excited to learn about "mummifying bananas." Making the switch to CTE and completing the further certifications necessary for this career shift illustrates Marshall's integrity and professionalism to his teacher professional identity.

Positionality of CTE. Marshall identified an inequality attached to CTE, but he mentioned that those from "outside of CTE" are beginning to understand and celebrate the benefits of learning a trade. What was once a narrative of sending schools treating CTE as a dumping ground for students considered not academically inclined, Marshall described how the story is changing because his students are getting jobs in their industry before they even graduate. The change in attitude is slow, but Marshall commented on how colleagues from

sending schools are interested in becoming involved in helping CTE students continue to build on their success, and they also collaborate between academic and technical outcomes on a more regular basis.

Data Synthesis

Data collected from semi-structured interviews were read several times individually and considered collectively in response to the research questions for this study. For Research Question 1, How do rural CTE teachers describe their teacher professional identity?, data were reflected by themes related to teacher agency. Furthermore, the ecological model of agency developed by Biesta et al. (2015) underscores how teacher professional identity is impacted by the teacher agency's temporal and relational properties. The components of this model include (a) iterational, (b) projective, and (c) practical-evaluative. The thematic generalizations of teacher professional identity, when viewed through the analytic lens of Gee's (2020) four ways to identify identity, uncovered similar language when participants described their lived experience of teacher professional identity. The four perspectives include: (a) nature, (b) discourse, (c) institutional, and (d) affinity. For Research Question 2, How do rural CTE teachers characterize the role of vocational training in secondary education?, data was reflected by the consideration the research participants formulated about CTE concerning sending-school learning environments.

Teacher Agency

According to Priestly et al. (2015), teacher agency has not been researched to the extent of the theoretical aspect of agency. Moreover, to this end, they offer an ecological model of teacher agency to identify tasks and postures enacted by teachers in their practice. While all the participants described experiences that can be aligned with various aspects of the ecological

model of teacher agency, the degree of occurrence differed across the group (Priestly et al., 2015). Furthermore, what they experienced (in several instances) can be affiliated with their lived experience of the how.

Iterational. All the participants described experiences where they reflected on past experiences to assist in developing a frame of reference to become socialized as a high school CTE teacher. Calling upon their experiences and responsibilities working in the trade before entering the teaching profession, most participants engaged in professional development opportunities to become more effective high school teachers. These development opportunities occurred regularly and facilitated the participant's personal capacity to build on past experiences in industry and in the classroom.

Projective. Each participant shared their experience of becoming a teacher, where the common theme was the desire to teach high school students to be successful in and out of the classroom. Projective teacher agency provides a lens to understand how teachers apply their professional aspirations to be effective educators (Priestly et al., 2015). Along with considering how their curriculum complements the complete high school learning experience, developing a rigorous CTE program is a prime example of how the participants looked for opportunities to improve achievement at the student and institutional levels. Many participants described experiences where colleagues from sending schools seemed invested in perpetuating individual efforts to provide authentic learning opportunities for short- and long-term outcomes. Moreover, individual experiences included commonalities related to being accepted as equal high school teachers by sending-school teachers.

Practical-evaluative. Within this node lies the considerations of how cultural, structural, and material aspects of teacher agency can be identified as being enacted in an institutional

situation. All the participants described experiences where they called upon their internal values, beliefs, and ideals to provide effective learning opportunities in their program to develop student skills, such as critical thinking or executive functioning, necessary for all disciplines engaged in by high school students. The participants also experienced varying degrees of developing teacher agency when using relationships, perceived roles, and resources to provide a strategy of adaptability when making decisions within the context of real-time situationally.

Teacher Professional Identity

From the four perspectives that Gee (2001) established to discuss the multifaceted nature of teacher professional identity, each participant described experiences that exemplify the range of perspectives. What is interesting to note is how each participant described different experiences with similar language, and the essences that were discovered are consistent with global traits of high school teachers in the United States.

Nature. Every participant described an experience of their teacher professional identity as being positively affected by their previous employment in the trades. The level of confidence in abilities, leadership, and collaborative attitude was identified as paramount considerations to leave the trade and enter the teaching profession. For the participants who did not have comprehensive pedagogical knowledge, previous experiences as a tradesperson provided a foundational process to navigate the assumption of a new professional identity. Although all but two of the participants grew up in a family of teachers, all identified as high school teachers and experienced the job as a natural transition from their previous careers.

Institutional. The responsibilities of a high school teacher were described as experiences of knowing expectations of curriculum delivery and outcomes related to preparing students for high school graduation. Many teachers experienced membership as teachers in their immediate

working environment at TCS but did not feel accepted as equal by sending-school colleagues even though their CTE program was rigorous at the technical and academic level. However, many participants used this experience to either insulate themselves from the wider high school teaching corps or develop other opportunities to meet institutional goals through collaboration on program development.

Discourse. All the participants described experiences of being satisfied with their job as high school teachers. However, many participants shared their experience developing confidence in their ability to teach in terms of pedagogical structure; two described how they did not know the degree of their effectiveness in the classroom until being told by a sending-school colleague. During the interviews, each participant described the experience of transitioning from being a skilled tradesperson to becoming a teacher to having confidence in their ability to have a positive impact on helping their students graduate high school.

Affinity. Every participant described the experience of becoming a teacher as the right choice for a career change along with a dual kinship for the skilled trades and their membership in the secondary high school teacher corps. A direct result of identifying with colleagues in the wider secondary school system provided the participants with a desire to provide an effective curriculum and continually work towards improving the occupation of all teachers. Many of the participants described experiences where their affinity for working with a group of like-minded people helped them with their career change, but more importantly, it gave them a feeling of acceptance and validity among high school teachers from sending schools.

Positionality of CTE

The way participants identified the role of CTE in secondary schools in the United States and how they described the presence of bias towards vocational education provides insight into

conditions CTE teachers must navigate as high school teachers. While it would be simple to call the conditions *stigma*, this label does not consider how individual teachers interpret different degrees of obstacles that may or may not infringe on their effectiveness in the classroom. However, what did emerge is a consistent theme of bias towards CTE as an equitable pathway for graduating high school.

Most participants commented that they experienced general education colleagues considering CTE programming to be less rigorous than academic programming. This negative experience was exacerbated by how sending schools applied CTE credit inequitably to high school graduation standards. Many of the participants experienced an 'us and them' mentality which made dispelling the silo of stigma and development of high school teacher equity a problematic task. A glaring experience that each participant shared was a sense of frustration at not being accepted as a high school teacher but instead as an instructor who teaches a skilled trade. When discussing the efficacy of CTE as a high school graduation pathway, participants shared the experience of sending schools treating CTE as a second-tier choice for graduation requirements. However, academic rigor and outcomes are complementary between TCS and the sending schools. Most of the participants communicated being sad that due to how CTE was perceived, they were more concerned with the lost opportunity to integrate learning a trade into a student's high school journey.

Chapter 5: CONCLUSION

This qualitative transcendental phenomenological study observed how rural CTE teachers described their teacher professional identity and asked how the participants viewed the role of vocational education in the regional sending high schools. The research was undertaken to understand how a rural CTE teacher identified as a teacher and a member of the wider secondary teacher group. Also, by asking how a CTE teacher viewed the role of high school vocational education, the study discovered how CTE teachers observed the relationship of vocational education as a high school graduation pathway. The study used six participants who held stateissued teaching certificates with CTE endorsements and taught CTE for a minimum of three years. To obtain a CTE endorsed teaching certificate, individuals passed a battery of comprehensive exams and provided evidence of a minimum hour-count of experience in the industry that the endorsement covered. Each participant was interviewed using a semi-structured interview protocol. Interviews were recorded using audio and video via the Zoom virtual meeting platform, an IRB condition resultant from the Covid-19 pandemic. Audio interview data were transcribed verbatim using a professional transcriptionist, and each transcript was reviewed against the video file by the researcher for accuracy. Member checking of the interview transcripts was also conducted to ensure accuracy. Using the modified van Kaam method of phenomenological analysis developed by Moustakas (1994), the researcher applied the eight steps to explicate interview data. Although the researcher contemplated using qualitative analysis software (MAXQDA) to code data, he settled on hand-coding to ensure mastery of the phenomenological methodology. Using Saldaña's The Coding Manual for Qualitative Researchers, 3rd edition (2016) as a guide for coding, the researcher conducted in vivo coding cycles and theming the data. As a result of the coding process, the researcher used note cards to

create a dynamic linkage of themes where the note cards were easily manipulated to consider and establish thematic corridors.

The purpose of the study was to use the phenomenon of teacher professional identity to describe the lived experience of rural CTE teachers' membership in the high school teaching profession in the United States. From the literature review, a disparity between the vocational and academic education pathways was presented as a segue to consider how CTE teachers identified as high school teachers who provided a pathway towards earning a high school diploma. The transcendental phenomenological method provided the framework to consider essences of teacher professional identity that are globally associated with the teacher professional identity of high school teachers in the United States.

Employing a methodology that allows a phenomenon to be understood through the lived experience of its essence in a subjective manner and provides substance for comprehensive application of essence to the whole, this study used six research subjects from a CTE school located in rural New England. The literature represented many studies about the value of CTE, the development of teacher agency, and how teacher professional identity is established. The study provided insight into a gap in the literature that addresses the teacher professional identity of CTE high school teachers.

Interpretation of Findings

In this chapter, an interpretation of the meanings and essences derived from the explication of interview data provided an insight into the lived experience of rural CTE teachers when they describe their teacher professional identity as a high school teacher. Findings from explicating the data exposed similarities of the lived experience from individual CTE teachers; results of looking at the phenomenon from different points of view to develop the composite

experience of how CTE high school teachers experience the phenomenon of teacher professional identity. Although a literature review represents how teachers experience and build teacher professional identity, the lived experience of CTE teachers as a sub-group of high school teachers is underrepresented. The study further provided insight into conversations of equity establishing composite meanings and essences from individual lived experiences of teacher professional identity when considering CTE teachers as members of the wider secondary teacher group. The study provides vital research using multifaceted lenses embedded in teacher professional identity and teacher agency to understand how the equity of CTE programs and its teachers are approached on cultural and societal levels.

Research Questions

The study included two research questions to understand how research participants described their lived experience of being a high school teacher in a CTE school. The first question was specific about how a participant described their teacher professional identity, while the second question asked for the participants' views of vocational education in their community's high school environment. The research questions posited:

RQ₁: How do rural CTE teachers describe their teacher professional identity?

RQ₂: How do rural CTE teachers characterize the role of vocational training in secondary education?

The interpretation of transcript data against the research questions uncovered the lived experience of CTE teacher professional identity and the positionality of CTE. In addition, it provided insight into how the participants developed their teacher professional identity through efforts to establish their teacher agency. Along with the four perspectives of TPI offered by Gee

(2001), Priestly et al. (2015) relate teacher agency temporally, providing three aspects of teacher agency that can inform how an individual identifies as a teacher.

Teacher Agency

Identifying each participant's experience of cultivating teacher agency by engaging in intentional professional development opportunities provided the framework for a composite description of agency. This process of identifying the essence of teacher agency supports the investigation of the study and provides insight to address the study's research questions. How teacher agency is developed provides context for the lived experience in CTE high school teachers.

Iterational. Each participant described circumstances that have historical value in past personal and professional existences. These past opportunities to develop agency transform into present traits of agency that rely on an individual teachers' values, capacity to learn, and belief systems. For all the participants, prior experience in industry presented a set of circumstances to foster improvement in their work. For example, Marshall made the conscious decision to engage with the education establishment on many levels to strengthen and broaden his teaching posture, reflecting how Barbara, Jack and Liz relied upon their professional values to establish learning opportunities related to their specialized industry training. As examples of how participants all selected specific opportunities to improve teacher agency, Leo moved horizontally into a new position at TCS that would offer him a greater challenge as a teacher and in Eleanor's case, she saw value in the profession in teaching and minored in education in college to provide more choice in her professional life.

Projective. A common trait of teachers is a belief that all students can learn. Some individuals learn quickly, while others may struggle. Projective teacher agency is related to the

short- and long-term qualities of being a teacher and teaching students to succeed. Each participant described experiences where they developed plans to improve their teaching agency to ensure student success. These plans could be the engagement of short-term professional development demonstrated by Liz's commitment to complete professional development to help struggling learners develop executive functioning skills or Eleanor's long-term goal of becoming a National Board Certified Teacher. Other ways the participants use long- and short-term objectives to facilitate student success include how Barbara made an effort to develop an organically rigorous over time or how Marshall changed obstacles into opportunities to help his students learn.

Practical-evaluative. An important aspect of teacher agency that the participants described was their capacity to enact leadership in a contemporary manner. Jack's desire to access many opportunities to broaden his pedagogical knowledge is an example of how the material aspect of teacher agency is facilitated. Leo's aptitude for developing collaborative relationships with industry illustrates structural agency. Finally, Eleanor enacts leadership through her values and discourse, providing an example of cultural agency.

Teacher Professional Identity

Understanding the multifaceted perspectives used to identify TPI provided a lens to view what a teacher identifies as. The development of individual lived experiences of four perspectives of TPI (Gee, 2001) was used to develop a composite description of TPI. Furthermore, the essence of TPI for the group of participants in this study provides further insight when addressing the study's research questions.

Nature. Some of the participants grew up in families of educators, which they described as a factor for becoming a high school teacher, adding that because they had substantial industry

experience, entering the profession as a CTE teacher made the most sense. All the participants described their teacher professional identity as a natural state of confidence that emanated predominately from their industry expertise and provided the opportunity to transfer various professional skills to the classroom. Each participant shared their experience of considering and deciding to leave industry which was communicated as a positive impact on their professional adaptability in the classroom.

Institutional. All participants described the school's expectations to teach industry-recognized standards and work within the framework of continually improving student academic achievement. For example, Marshall described his experience of feeling like a competent middle school teacher because he respected the institution's position to educate his students to a certain level of achievement. When he made the switch to CTE, this belief and trust in the goals of the educational institution had a positive impact on his teacher professional identity. Similarly, Eleanor had extensive experience with informal leadership roles in industry, permitting her to transfer to the educational environment where she could assume teacher-leader roles that helped her and colleagues execute the educational goals of their school.

Discourse. Having extensive industry experience was a common trait of the participants. While colleagues at TCS and the sending schools recognized this trait, participants described experiences where their effective pedagogical skills were questioned. For example, Leo is seen as a teacher who strives to create authentic learning opportunities, Jack is respected for his desire to integrate the value of industry into academic aspects of his lessons, and Eleanor is respected for her continual improvement as a master teacher.

Affinity. When each participant described their experience working in industry and working as a teacher, a common theme of respect for the profession was apparent. In Eleanor's

case, she identified her need to collaborate with her colleagues to strengthen her identity and role as a teacher. For Jack, respect for the teaching profession was communicated as his desire to have exemplary pedagogical and theoretical teaching knowledge.

Positionality of CTE

When asked to describe how they would characterize the role of CTE in secondary education, the participants had shared experiences of inequity and stigma. For Eleanor, she described how sending-school colleagues perceived CTE teachers as ineffective practitioners.

Jack mentioned how sending schools did not accept his CTE program in calculating academic credit for graduation. Liz described several experiences where sending-school colleagues did not accept her as a high school teacher and that her CTE program was inferior to traditional academic classes. Interestingly, Marshall described a feeling of inequity related to the treatment of CTE by state teacher certification processes where he experienced an official not honoring his extensive general education tenure when he was seeking CTE teacher certification.

Implications

The motivation of this transcendental phenomenology was to understand how rural CTE teachers described their teacher professional identity. The study used the phenomenological method to describe the lived experience of how rural CTE teachers identified as a member of the wider secondary school teacher community. Conclusions from this study provide insight into how rural high school teachers view their position in the secondary education teaching profession.

An implication of this study provides evidence that the CTE pathway to high school graduation is taught by competent, experienced, and certified high school teachers. Thus, individuals who choose to enter the education profession not only have the prerequisite industry

experience necessary for a CTE teaching certificate endorsement, but they are also subject to the same caliber of professional entrance exams as their colleagues in general education. Moreover, CTE high school teachers are also held to the same formal process of professional teacher performance and effectiveness as their colleagues in general education.

Another implication of this study is that although CTE teachers described a lived experience that reflects their industry experience and rigorous preparation for becoming a high school teacher, they indicated sadness about being perceived as a second-class educational professional. Stemming from a cultural and institutional stigma attached to vocational education, CTE teachers described a situation where they must spend their time and energy working against bias. One result which many participants experienced was to position their professional network to include predominantly other CTE colleagues.

A further implication relates to a negative positionality of CTE within pathways for high school graduation. In this study, participants described how their CTE programs were considered secondary to academic growth and attainment embodied by the college-for-all mentality.

Although this implication is related to stigmatic perceptions of CTE, the disparity between attending college or learning a trade becomes more apparent.

Recommendations for Action

Although the study was narrowly focused on six rural CTE teachers' lived experience of teacher professional identity as a high school teacher, the findings provide insights into bias attached to CTE as a high school graduation pathway. In addition, discussions at the local, state, and federal levels can inform stakeholders in their appreciation of the efficacy of CTE, its curriculum, and its teachers in developing high school graduates who are college and career-ready.

Recommendations at the Local Level

- 1. Ensure all school board members, community members, educational professionals, and students are provided with the opportunity to visit their local CTE school.
- 2. Create a panel of local educational stakeholders (administrators, academic teachers, CTE teachers, business leaders, parents, school board members, and students) to investigate the role pathways to high school graduation play in creating post-secondary career and college opportunities.
- 3. Create a forum of CTE and academic teachers charged with establishing a collegial atmosphere to afford high school teachers the opportunity to understand how various educational disciplines provide valuable opportunities, which are factors for high school graduation.
- 4. Provide opportunities for high school teachers from CTE to shadow their colleagues in sending schools and vice-versa.

Recommendations at the State Level

- 1. Ensure all branches of the State government (executive, legislative, and judicial) are provided the opportunity to visit a CTE school.
- 2. Conduct open discussions between CTE administrators and State Boards of Education about equitable certification practices for CTE teachers.
- 3. Ensure equitable funding mechanisms for CTE.
- 4. Encourage all elected State officials who hold Federal Congressional seats to be members of the House and Senate CTE caucuses.

Recommendations at the Federal State Level

- Continue to establish equitable funding for CTE education and workforce development.
- 2. Conduct research on the historical roots of apprenticeships and vocational education in the United States, focusing on bias towards the trades.

Recommendations for Further Study

Considering how the world has changed due to the COVID-19 pandemic and how, in the researcher's opinion, individuals with skills in the trades were integral in safeguarding the integrity of social and economic systems in the US, further research into CTE on several levels is needed. Understanding how CTE can complement other graduation pathways can provide stimulating conversations between stakeholders as a pathway towards high school graduation and preparation for postsecondary career and college. These conversations have the potential to impact CTE perception and policy development.

Conducting research using the design of this study but including CTE teachers from different regions in the United States can provide insight into how CTE teachers identify as high school teachers. A larger sample can provide a demographic analysis of how CTE teachers in the US describe their teacher professional identity within a secondary school learning environment. While the semi-structured interview would stay intact, including surveys or other data-gathering instruments would provide the opportunity for the triangulation of data to interrogate outcomes to develop a more comprehensive view of the research problem.

Further research using a case study analysis of a CTE teacher's journey to becoming a certified teacher will provide an opportunity to make comparisons of individual experiences.

Using the case study methodology would also provide detailed and rich qualitative data to

support the complex research of many participants. The case study of the singular unit of CTE teacher certification can improve the generalizability of the findings.

Further research on the origins of stigma attached to CTE could provide the opportunity for researchers to develop studies to understand why many consider CTE to be a second-class learning pathway. For example, the research could trace the history of apprenticeships and learning a trade to identify when and why bias against vocational learning happened.

Furthermore, this research can inform how to develop strategies to fuel a paradigmatic shift to consider buttressing the equity of CTE in the cultural views of all stakeholders.

Developing research on the attitudes and perceptions of CTE can provide insight into how learning a trade is approached when developing high school graduation pathways. Using various stakeholder groups from general education administrators and teachers to state representatives and parents can impact how perceptions of CTE may impact student opportunities for equitable opportunities for high school graduation.

Conclusion

This transcendental phenomenology studied the phenomenon of how rural CTE teachers described their teacher professional identity and how they characterized the role of vocational training in secondary education. The findings in Chapter 4 represented a descriptive narrative of individual participants used to construct a composite description of the essences and meanings of rural CTE teacher professional identity. The conceptual framework found in Chapter 2 [Literature Review] provided a structure to explicate data and apply conclusions found in Chapter 5.

The lived experience of how a rural CTE teacher described their teacher professional identity was established within similar dynamics as their general education colleagues. An

essential aspect of this finding supports a belief that CTE high school teachers are equitable to academic high school teachers for the simple reason each sub-group of secondary teachers have the same goal of providing a rigorous curriculum to students on their journey to earn a high school diploma. In addition, the study discovered that CTE programming is taught by individuals who are competent, effective, and state-certified teachers.

This study exposed the accumulation of stigma and bias from a teacher's point of view and how they persistently developed their effectiveness as a teacher to dispel the bias.

Understanding how CTE high school teachers describe how bias impacts their lived experience of teacher professional identity can focus on a discussion about the efficacy of CTE in secondary education. Knowing that CTE high school teachers are equitably trained strengthens the belief in the efficacy of CTE as a viable pathway for college and career success.

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APPENDIX A. INTERVIEW PROTOCOL

My name is Matthew Speno, and I want to thank you for making the time to discuss your experience as a rural CTE teacher. Our discussion will provide data for my doctoral dissertation entitled *The Lived Experience of Rural CTE Teachers as Members of the Secondary Teaching Corps in the United States*. The goal of my study is to understand how you describe your lived experience as a CTE teacher at TCS. I am also interested in hearing you describe the development of your self-identity as a secondary teacher not only of vocational education in tandem with district sending schools but as a member of a corps of professionals who are responsible for providing young people with comprehensive secondary education for college and career success. The transcript and video of our conversation will be used to identify themes that relate to the essence of your lived experience, in concert with your colleagues who are also involved in this study.

You were selected for this study on a first-come, first-served basis based upon your response to the informational letter sent to the larger group of teachers TCS. The final group of participants for this study will be three to six rural CTE teachers from TCS.

You were sent a letter of consent and a form for you to sign, do you have it with you today? [if yes, say thank you, if no, offer a blank consent form to sign]. This interview will take approximately 60 minutes and will be recorded via audio and video. Do you have any questions? If you have no further questions, let's get on with the interview.

^{1.} As a starting point, could you provide me with a brief background of your professional industry and teaching careers. Information such as how many years were spent in industry, how

many years you have been teaching in general, and how many of those years have been conducted at TCS.

2. What was your experience with gaining a secondary teaching certificate in your CTE field?

Possible Probes: Why did you decide to become a CTE teacher? Describe your hopes and dreams for CTE. What type of preparation have you had to become a teacher? Describe your first year as a CTE teacher at TCS. What type of mentoring or support have you received as a new teacher? How did you develop classroom management, teaching exceptional students, and assessment methods separate from industry-recognized milestones? What is the teacher evaluation process TCS uses?

3. Describe how you address providing comprehensive learning opportunities related to academic content in your lessons.

How do you integrate industry standards into your curriculum? Do they apply to High School [sending school] graduation credits?

4. How do you describe the position of vocational education in secondary education?

Depending upon the direction of how this is approached, I want to find the essence of the experience of vocational education in its place within the wider secondary education: The difference between how CTE and academic teaching is treated has been a topic of discussion for many years. Many CTE teachers comment on what they see as different expectations for the outcomes of CTE from school administrators, parents, colleges, and industry. Can you provide any examples that support this statement? What is the basis of your opinion? How do you know your understanding is valid? How is the place of vocational education made conscious to you through your experience as a secondary education teacher?

5. How do you describe, as a rural CTE teacher, the experience of developing your teacher identity? Considering your work experiences in industry, what are the differences and similarities related to your role as a secondary CTE teacher?

How do you ...? What do you ...? What do you do to ...? How do you know that ...?

6. What is the process of how a student chooses a specific program of study at TCS? How do you present your program to students from different sending schools? What are the enrollment numbers in your program for the past several years? What do you see as the cause of this?

How do you know this? What is your reaction to this? How could you show me/guide me to appreciate the experience?

APPENDIX B. IRB APPROVAL



Institutional Review Board Mary DeSilva, Chair

Biddeford Campus

11 Hills Beach Road Biddeford, ME 04005 (207)602-2244 T (207)602-5905 F

Portland Campus

716 Stevens Avenue Portland, ME 04103

To: Matthew Speno, M.S.Ed.

Cc: Michelle Collay, Ph.D.

From: Brian Lynn, J.D.

Director of Research Integrity

Date: February 2, 2021

IRB Project # & Title: 020221-06; THE LIVED EXPERIENCE OF RURAL CTE TEACHERS AS MEMBERS OF THE

SECONDARY EDUCATION TEACHING CORPS IN THE UNITED STATES

The Institutional Review Board (IRB) for the Protection of Human Subjects has reviewed the materials submitted in connection with the above captioned project and has determined that the proposed research is exempt from IRB review and oversight as defined by 45 CFR 46.104(d)(2).

Additional IRB review and approval is not required for this protocol as submitted. <u>If you wish to change your protocol at any time, including after any subsequent review by any other IRB, you must first submit the changes for review.</u>

Best of luck with your research, please contact me at (207) 602-2244 or irb@une.edu with any questions or concerns.

Sincerely,

Brian Lynn, J.D.

Director of Research Integrity

APPENDIX C. PERMISSION FOR SITE STUDY

Subject: Re: Tentative Site Approval

Date: Friday, January 8, 2021 at 12:00:55 PM Eastern

From: Standard Time Robert Deetjen

To: Matthew Speno

Hello Matt,

I am excited the project is moving forward and I fully support your research efforts at Mid-Coast School of

Best,

Bobby Deetjen, Director Mid-Coast School of Technology 1 Main St. Rockland, ME 04841 (207) 594-2161 ext. 148 rdeetjen@mcst8.org / www.mcst8.org



On Thu, Jan 7, 2021 at 9:00 AM Matthew Speno <mspeno@une.edu> wrote:

Hi Bobby

Happy New Year!

I wanted to touch base with you to let you know where I am in my research process. When we spoke before holiday break, I was excited to let you know how my study is shaping up in terms of direction and that my proposal defense was successful. The title of my study is:

THE LIVED EXPERIENCE OF RURAL CTE TEACHERS AS MEMBERS OF THE SECONDARY EDUCATION TEACHING CORPS IN THE UNITED STATES

The feedback I received from my dissertation committee provided me with insight on aspects of my study such as the sample and the interview protocol. The primary data collection tool for my qualitative study will be the interview process and I have developed an interview protocol that will provide the structure to

Page 1 of 2

APPENDIX D. E-MAIL RECRUITMENT SCRIPT

Dear Colleague,

For the past 3 and ½ years, I have been working on my doctorate in education leadership at the University of New England. With my coursework and research for my dissertation complete, I am ready for the data collection phase. Will you consider helping me out?

The title of my dissertation is The Lived Experience of Rural CTE Teachers as Members of the Secondary Teaching Corps in the United States.

The study is designed to understand the phenomenon of teacher professional identity and its development by CTE teachers. I am also interested in understanding your perception of the role CTE plays in the wider secondary education environment in the United States.

My data collection instrument is a semi-structured interview protocol that will last approximately 60 minutes and a further follow-up interview lasting no more than 30 minutes. Although my original plan was to conduct face-to-face interviews, current Covid-19 safety protocols make the virtual interview via Zoom or other digital meeting platform the order of the day. Your participation in the study is voluntary and poses no risk.

Although your identity will be known to only me, your name will be replaced with a pseudonym, and any other identifying information will be removed from the data. The interviews will be recorded and transcribed. Digital files will be safely stored in cloud-based storage facility (Dropbox) with added a level of encryption used for governmental top-secret documents. Physical copies of your transcript will be kept secure in a locked cabinet in my home; only I will have access. When the study is complete, and a successful defense is awarded, data will be destroyed by shredding and conducting a purge of digital files.

It is my hope to have at least 3 to 6 research participants for my study. When you decide to participate, I will forward further information regarding informed consent. In the meantime, I am available to answer any questions to assist in your decision-making. Please contact me at 207-542-6375 or email: mspeno@une.edu.

Sincerely,

Matthew Speno