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Running head: A TRADESPERSON'S TRANSITION TO TEACHING

A Tradesperson's Transition to Vocational Technical (VT) Teaching

A Dissertation Presented

By

Susan J. Sylvia

Submitted to the Graduate School of Education Lesley University in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

November 2017

Ph.D. Educational Studies Educational Leadership Specialization A tradesperson's transition to vocational technical (VT) teaching

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Graduate School of Education Lesley University

Ph.D. Educational Studies Educational Leadership Specialization

Approvals

In the judgment of the following signatories, this Dissertation meets the academic standards that have been established for the Doctor of Philosophy degree.

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ABSTRACT

This qualitative study examined survey and interview data collected from tradespeople who transitioned to vocational technical (VT) teaching in regional vocational technical schools in Massachusetts. This study included two research questions that inquired about how tradespeople's prior experiences, beliefs, and thoughts influenced or inspired them to pursue a transition to vocational technical (VT) teaching and about how their anticipated transitional experiences aligned with their actual transitional experiences. The survey phase included 170 respondents. Survey responses provided an overview of participants, which was integral in identifying four interview participants who were digitally recorded during one-to-one interview sessions. A multiple Case Study involving two of the interviewed VT teachers resulted, which compares their career-change experiences via vignettes and an analysis of themes across all data sets. The findings illuminate how their prior thoughts and experiences influenced their interest in teaching and their motivations for leaving their trade career to teach. In addition, findings reveal that previously acquired behaviors and trade skills did transfer to teaching, licensure requirements added tension to the transition, perceptions of teaching and school community experiences did not align with their actual experiences, and collegial interactions contributed to a smoother transition to the teaching profession. The findings reveal how a tradesperson's thoughts, motivations, and prior experiences influenced their transitional experiences and the implications of the study are relevant to tradespeople considering a transition to VT teaching, departments of education and school leaders who establish support for novice VT teachers, and career counselors who advise tradespeople about career options.

Key words: vocational technical teaching, career-change teacher, tradesperson to teacher

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they always ask about this work and I am grateful to remain in their thoughts. Finally, I appreciate the endless support that Joe and Cindy Botelho, who have treated me like a daughter, have given to me over the years.

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Last but not least, I want to thank the regional vocation technical schools who not only participated in my study, but who have demonstrated interest in the findings and implications. Included in this group is David Ferreira, Director of MAVA (Massachusetts Association of Vocational Administrators), who advocated for my study and who remains a steadfast supporter of vocational technical education.

DEDICATION

I would like to dedicate this work to the people who believed in me even when I did not believe in myself. Regardless of my pursuits—singing, yoga teacher certification, school administration, this Ph.D. journey—the people who matter most to me never doubted I would meet with success. This is for all of you.

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CHAPTER ONE

Introduction

Before I graduated from junior high school in 1983 my parents told me that I would not be attending the local vocational technical (VT) high school the following year. At that time it was not "the norm" to attend college after graduating from a high school VT program. Although I had been asking to enroll there for months, they decided that I would attend a comprehensive high school so I could matriculate to college, which no one in my family had done. During my junior year at the comprehensive high school, however, my parents agreed to let me enroll in the school's Office Technology VT program because of my continued insistence. I learned shorthand, filing, office management skills, and other requirements essential to being an administrative assistant during the two-year program; all of these skills were helpful to me when I began teaching.

After graduation I worked as a clerk/typist and then as an administrative assistant for a total of fourteen years in the local high school. During my ninth year of employment I enrolled in my first college course and at the age of thirty-three I graduated with a Bachelor's degree in English and began to teach English in the same comprehensive high school that I attended. Unfortunately, other than having an assigned mentor, I was left with no additional support, which, on hindsight, hindered my career transition. The school also did not have a reliable Induction/Mentoring Program, so many things that I needed to know, I learned gradually from experience. After five years of teaching at my alma mater I applied to teach English in a vocational technical (VT) school district. I was hired and felt instantly "at home" in the setting. Although I was not an Office Technology teacher, working in an environment that fostered both

vocational and academic education was reminiscent of my high school educational program; it was comfortable and familiar.

I have now been employed in a vocational technical (VT) high school for nine years. During this time I have worked with many people in the school community, including students, parents, and teachers. Although at the onset of my teaching career I was particularly interested in working with struggling students, since joining a (VT) community I have noticed that I have an increased curiosity about the VT teachers' transitional journey to teaching, which has prompted a scholarly interest about this topic.

I realize now that studying vocational technical (VT) career-change teachers is important to me for several reasons. Since my first career in office technology was a result of my high school VT education, I am aware of the importance of vocational training for high school students who do not have plans to attend college. Pairing this prior experience with my current work experience in a VT high school has also made me cognizant of the need for career development support for high school students who are entering the workforce and for the teachers who are entering the field to instruct them. In addition, the personal struggle that I experienced during my transition from an office technology career to a teaching career has made me mindful of the career-change teachers' transitional journey.

Although these aforementioned areas of my personal and professional life have been a driving force behind my interest in this area of study, I am also aware that these experiences contribute to the biases I have about these topics. Biases are an area of concern for any researcher, but they are a particular concern for people who conduct a Case Study because of the depth of understanding that is necessary to have about the topic prior to studying the issue (Yin, 2013). In light of this, it was important for the validity of my research to remain aware that my

experiences in these areas are not representative of anyone else's experiences; throughout the process I was also cognizant to "check" my opinions on these topics and remain neutral and open to what I was learning from the participating teachers' experiences. Ultimately, this study is important to me because I would like to increase the understanding about the struggles that career transition teachers may experience and illuminate how school-based support, which existing literature identifies as lacking (Anderson, Fry, & Hourcade, 2014; Anthony & Ord, 2008; Freidus, 1994), may contribute to the phenomena.

The remainder of this chapter will present the statement of the problem, the purpose of the study, and the significance of the study for my research. In addition, I will provide a definition of terms, a brief overview of the supportive literature, the delimitations of the units of analysis, and a truncated version of the design of the study. This chapter will conclude with an outline of the remaining chapters in this dissertation.

Statement of the Problem

As stated in the previous section of this chapter, my curiosity about this issue has contributed to the development of this study's "statement of the problem." Moreover, my interest in this topic has been supported by the literature that I have read that discusses how career-change teachers struggle with adapting to the expectations and requirements of the teaching profession (Anderson et al., 2014; Anthony & Ord, 2008; Berger & D'Ascoli, 2012; Freidus, 1994; Lee, 2011; Novak & Knowles, 1992; Schein & Van Maanen, 2013). Vocational technical (VT) teachers and the school systems that employ them would benefit from an in-depth illustration of an individual's career experience, as well as from an understanding of a person's transitional motivations, to allow school districts to plan individualized support for transitioning teachers. Additionally, career-changers' expectations for the professional community may be unrealistic if they do not participate in an induction or mentoring program that appreciates the motives and expectations of the teacher, as well as addresses the realisms of the professional environment and the personally-developed skills the tradesperson brings to teaching. A postponement in acquiring this information could result in a delay in the development of a teacher's professional identity (Braun, 2012; Chan, 2012; Freidus, 1994; Galles & Lenz, 2013).

Through readings and my own first-hand observations while working in a vocational technical (VT) school, I understand that tradespeople may not receive individualized support from school districts that is designed for and based on their career background when transitioning to VT teaching and that educators currently have little information about the motivations, attitudes, and expectations of individuals making this career transition. Because school leaders are largely unaware of a person's motivations for changing careers and about what his/her transferable skills are from a first/prior career, it is unlikely that the induction or mentoring program that a school offers will fully prepare a teacher to successfully transition without angst, issue, or tension. My experience suggests that career-change teachers who do not receive individualized transitional support may meet with job dissatisfaction when the imagined idealized setting is not the reality that they encounter (Anderson et al., 2014; Anthony & Ord, 2008; Bandyopadhyay, 2007; Chambers, 2002; Furnham, 2001; Holland, 1959, 1997; Taber, Hartung, & Borges, 2011; Tan & Quek, 2001).

Purpose of the Study

The purpose of this study is to illuminate what factors and conditions tradespeople consider when making the transition to teaching in a vocational technical (VT) area and what preconceptions they have about public education and school communities prior to entering the profession. The study will also reveal what supports or additional supports transitioning VT teachers would have liked to receive from the school district they work in and how all of these combined experiences contribute to the evolution of their professional identity. In order to fulfill these purposes, I had focused this study on the following guided research questions:

- 1. What are the prior experiences, beliefs, and thoughts that influence or inspire tradespeople to pursue a transition to vocational technical (VT) teaching?
- 2. How do the tradespersons' prior expectations for their transition into public education and a high school professional community align with their perception of the actual transition into vocational technical (VT) teaching?

Definition of Terms

The following terms are defined to add clarity to the study:

- Vocational Technical (VT) education Education received from a grade 9-12 school that requires students to participate in a grade 9 vocational exploratory program followed by 3.5 years of schooling in a career field for an approximate total of 50% of annual school hours.
- Individualized support School-based support provided to novice teachers based on an individual's career and educational background and his/her values, beliefs, and personality.
- Transition denotes the period of time from the moment an individual begins to pursue teaching as a career to the conclusion of his/her third year of teaching.
- Transitional journey denotes the timeline of events of a person's entire career trajectory that closes with vocational technical (VT) teaching.

 Career-change teacher – a person who elects to leave a career to enter into teaching. This study focusses on tradespeople who transition to teaching in a vocational technical (VT) area that aligns with their trade career area.

Significance of the Study

This study provides important information to state policy makers and Departments of Education who establish the criteria for both academic and vocational technical (VT) teacher educational programs and Induction/Mentoring Programs for teachers. It is also valuable to school leaders who design and conduct Induction/Mentoring Programs for teachers. Additionally, school leaders who employ second-career teachers and career counselors who advise people about career selection will find the study results important. Tradespeople seeking a career-change to teaching, current VT teachers, as well as second-career teachers, will find the study results relevant to their current or pending transitional career status.

Delimitations of the Study

The delimitations that I have set for this study are as follows:

- The focus will be on regional vocational technical (VT) schools in Massachusetts, not comprehensive, collaborative, independent, or agricultural high schools who employ vocational technical (VT) teachers
- Vocational technical (VT) teachers will be surveyed; academic teachers will not be surveyed
- Case study participant(s) will be selected based on the following criteria:
 - Minimum of five years in a career trade field prior to teaching
 - Employed as a vocational technical (VT) teacher in a comparable field to his/her prior/first-career field

• Employment as a vocational technical (VT) teacher for less than three years

Review of the Literature

Chapter 2 is a review of the relevant literature that supports my study; it begins with an overview of Career Choice and Career Development Theories and a brief discussion about the career stages that most people traverse. Included in this section is a review of Holland's (1959, 1997) Vocational Choice Theory and Schein's (1978, 1990) Career Anchor Theory. My interpretation of their theories is that they were written to help people identify a more satisfying career than the one they currently inhabit. This information is necessary to explain that people change careers for many reasons and that when people engage in a career that does not align with their person traits, values, and beliefs they may experience job dissatisfaction and the desire to change careers.

Immediately following Holland (1959, 1997) and Schein's (1978, 1990) theories is an overview of Super's (1957, 1964) Career Development Theory. His theory focused on how a person selects, enters, and progresses in one or more careers over a life time. Super's theory also posits that job satisfaction depends on the appropriate career selection but centers on how a person's experiences affect career selection. This theory was important to include in my review because it reflects the process that people engage in on the quest to find a career that aligns with their values and beliefs.

In the next section of Chapter 2, there is a review of the literature that discusses the elements of career changing, such as organizational movement and the stages involved in the career-change process. This information was important to include because it confirms the different avenues people traverse once they decide to change careers, which includes acknowledgement of job dissatisfaction and self-reflection about one's career, current happiness,

and future goals. Further, I included an overview on the discussion about people who specifically career change to teaching. This was important to the study because the literature discusses the specific tensions that career-change teachers face when entering the profession, such as acquiring mandatory credentials, income changes, and adapting to the new work environment.

Subsequent literature in this section focuses on career-change teachers' motivations for pursuing a change in career to teach, including extrinsic, altruistic, and intrinsic reasons to change, and the understanding that career-changers enter their new profession with specific transferable skills that may help in the new career. Since there is little existing literature that focused on the tradespersons' motivations for wanting to transition to teaching, this section is meager in comparison to the general review.

The final section of this review provides an overview about a teacher's professional identity acquisition. This literature is important to review because transitioning teachers' identity development may be influenced by the tensions they experience when entering the new profession. Particularly important to the process is self-reflection, which supports the notions embedded in Vocational Choice and Career Development Theories.

At the conclusion of this study, my findings will contribute to the "gap" in published literature about why tradespeople are motivated to enter the teaching profession and how their experiences and perceptions about their transition contributed to their professional teaching identity. This illumination will provide additional insight about tradespeople and career-change teachers that will support a need to modify existing teacher Induction/Mentoring Programs and individualized support for second-career teachers so that they are better prepared to successfully provide meaningful education to students.

Design of the Study

The design method I used in this study is Descriptive Case Study. The findings of this study will contribute to existing knowledge of individual, group, social, and organizational bodies of literature in order to understand a "complex social phenomena" (Yin, 2013, p. 4). While this research method provides a holistic view of occurrences, individual cases were analyzed first, followed by a cross-analysis of the data. Every Case Study is formed around a "conceptual structure" (Stake, 2008; p. 126) making the issue(s) the study will focus on key.

Data Collection

I designed a survey (Appendix A) that collected information about the tradesperson's journey into teaching. Vocational technical (VT) teachers from twenty-five Massachusetts regional VT schools were asked to participate in the online survey via an invitation sent to their school principal. The three areas that the survey inquired about were the teacher's demographics (gender and age), questions that categorize the tradespersons' thoughts prior to transitioning to teaching, and questions pertaining to the tradespersons' perceptions about their transitional journey. In an effort to collect this information, the survey inquired about the teachers' career and educational backgrounds, their motivations for changing careers, and the areas where they would have liked support/additional support as a transitioning teacher. A survey pilot was conducted prior to the survey's administration.

I also designed an interview and protocol (Appendix B) that was administered to four of the survey respondents who were selected to participate based on the delimitation that had been set for the study. The interview questions align with the purpose of the study and were designed to expound upon the questions asked during the online survey; topics, such as motivations for transitioning to teaching, perceptions of supports received, and the opportunity to create a timeline that marked transitional important events was created. An interview pilot was conducted prior to the interview sessions.

Finally, I designed a follow up interview and protocol (Appendix C). The second interview was conducted with two of the interview participants who best illuminated the tradespersons' transitional journey into teaching. These questions were created to focus on the teachers' professional identity development, which was the one area that was "missing" from the online survey and initial interview. These ten questions were designed to prompt the teachers' to reflect on their teaching experiences, the tensions they encountered during their transition, and thoughts about their continuous identity development.

Data Analysis

The first step in the data analysis process was to screen the online survey respondents to determine who met the delimitations set for the study: a minimum of five years in a career trade field prior to teaching, employment as a vocational technical (VT) teacher in a comparable field to his/her prior career field, and that he/she has been a vocational technical (VT) teacher for less than three years. Then I analyzed the survey responses for themes and patterns that were consistent with the study's purpose, which is to illuminate what factors and conditions tradespeople consider when making the transition to teaching in a VT area and what preconceptions they have about public education and school communities prior to entering the profession. In addition, the participants' availability, participation interest, and communicative ability were factors in selecting who I would interview. Ultimately, I selected four respondents to participate in the interview process.

Once I analyzed the survey data, the interview recordings were transcribed and I formulated initial ideas about topics that would represent the guided research questions, units of

analysis, and the propositions. I then reviewed and analyzed the interview transcripts to identify emerging themes and patterns. Since I interviewed four participants, I also cross-analyzed the transcript data to further identify the variances of the units of analysis. Ultimately, two vocational technical (VT) teachers were selected as case study participants.

Chapter Outline

The study consists of five chapters. The first chapter introduces the researcher and the study. It also covers the researcher's background and relationship to the topic, a statement of the problem, purpose of the study, and the significance of the study. In addition, the guiding questions and the definition of terms are included.

Chapter 2 reviews the literature; it begins with an introduction to the bodies of literature that are included in the review. Also, it includes the theoretical framework and a review of the research.

Chapters 3 begins with an introduction followed by the research design and research questions. Included are details about the study participants, setting, and sample size. It also reviews the data collection instruments, data collection method, data analysis, and delimitations. While Chapter 3 provides details with regard to research methods and procedures, Chapter 4 presents the results of the study. This includes an introduction, the findings of the data, and tables and figures used to display the data; this information is presented in a method that aligns with the research questions.

Finally, Chapter 5 is the conclusion. This chapter presents a discussion of the major implications of the findings and the suggested area(s) for further research. It concludes with a reflection on the data and the study as a whole.

CHAPTER TWO: REVIEW OF LITERATURE

Introduction

Most adults remember the angst they experienced in twelfth grade when their guidance counselor asked the question: "What do you want to do after high school?" For some people the answer was college and for others, work; but for many high school students, the answer did not rely on what they wanted to do, but rather on what their individual circumstances allowed them to do. Sometimes the ability to do what we want is reliant on "which education, socioeconomic origin, and family influences are major determinants" (Holland, 1959, p. 38) in our lives at the time we are making career choices. For some, the dream of college cannot be realized because the financial support to attend does not exist while for others a parent might demand that their child pursue the "family trade." An additional concern is the number of career options available, which offers the freedom of selection but also involves a complex decision, particularly for people who are unfamiliar with what certain occupations entail (Gati & Tal, 2008). The purpose of this chapter is to investigate the scholarship that informs an understanding of the motivations for tradespeople to leave their career field to pursue a career in teaching in the matching vocational technical (VT) area and to illuminate how the tradesperson's expectations prior to teaching align with their perceptions of the actual transition.

As people navigate the three general phases of life: *learning* (birth through formal schooling), *working* (basic job preparation), and *retirement* (Wille, DeFruyt, and Feys, 2010), they accumulate social, economic, and professional experiences that help guide them into forming/transforming their personal identity, or *habitus*, (Bourdieu and Passeron, 1990; Gee, 2000; Gray and Whitty, 2010). As this happens, some people may realize that their original

career selection has proven, over time, to align with the life conditions that were present at the time of their initial career choice and this career field no longer aligns with their current personality traits, values, and beliefs. According to some theorists, this misalignment may result in job dissatisfaction (Bandyopadhyay, 2007; Gati & Tal, 2008; Holland, 1959) that provokes the desire to change from the current occupation to one that better suits the person.

In order to provide the reader with an overview of the potential influences on a person's career trajectory, it is necessary to review the Career Choice and Career Development theories and, within them, the general career stages people traverse and the modern notion of career movement. A historical overview and comparison of two Vocational Choice Theories, Holland's Vocational Choice Theory (1959, 1997) and Schein's Career Anchor Theory (1978, 1990), are included in this chapter in order to inform the reader about the influence that career planning may have on a person's career selection. Both Vocational Choice Theories are long-standing and have been the subject of discussion and critique in both academic and popular spheres. The interpretation guiding the present review is that the intended purpose of both theories is to help people identify a career field where they may experience job satisfaction.

This chapter also includes an overview of Super's (1964, 1968, 1976, 1980, 1992) Career Development Theory, which proposes that people traverse specific career development stages that align with the discovery and establishment of career goals. His theory is important to career changers because it supports their pursuit of job satisfaction.

The chapter begins with a delineation of terms used synonymously with "career" and after the examination of career change and career change theories proceeds to literature about career-change teachers, concentrating primarily on research published in the 1990s (Crow, Levine, and Nager, 1990; Freidus and Krasnow, 1991; Freidus, 1994; Novak and Knowles, 1992). The latter section includes literature that identifies three motivational groupings-*altruistic, intrinsic,* and *extrinsic*—that categorize the reasons people enter into teaching as a second career (Anthony and Ord, 2008; Berger and D'Ascoli, 2012; Braun, 2012; Hof and Leiser, 2014; Kantamneni and Fouad, 2013; Lee, 2011; Williams and Forgasz, 2009). The chapter concludes with an overview of literature concerning an individual's transition to the complex professional identity of a teacher.

In review, this chapter focusses on an overview of two popular Vocational Choice Theories, one Career Development Theory, a review of existing literature on career-change teachers and their motivations for pursuing a career in teaching, and the professional identity transformation process that people undergo when they change careers to become teachers.

Definitions

The English language offers many synonyms for commonly used words. Often the connotation of each synonym differs despite the similarity between the definitions. For the purposes of this review, it is important to clarify the differences between occupation, job, profession, vocation, calling, and career, which are often used interchangeably, but are, in fact, distinct in their meanings. These delineations of meaning are pertinent to this chapter because career choice and development theories, career changes, and high school vocational technical education frequently use these terms. The definitions will provide clarity to the review.

Occupation

Occupation is commonly defined as the "designation of an employed or self-employed person" ("Occupation," 2016), such as carpenter, teacher, or welder. Kirkpatrick Johnson & Mortimer (2002) state that "occupation is a strong determinant of a person's status within the

community, earnings, wealth, and style of life" (p. 37). This paper employs this definition by referring to an occupation as the title assigned to a person's employment role.

Job

A *job* is a term for "the work that a person does regularly in order to earn money" ("Job," n.d.) and the implication is that it is "something that has to be done" ("Job," n.d.). This differs from an occupation because it is an action, not a role. Super (1976) acknowledged that a job "is a prime example of the confusion that exits both within and between specialties concerned with the same subject matter" (p. 11). This paper reflects the definition of a job as a required task and as the tasks associated with the job as being arduous.

Profession

Having a *profession* implies a "moral and ethical foundation within the practice of a specific and usually established expertise" ("Profession," n.d.). "Given today's fast-changing environment of knowledge and expertise, it's now generally understood that simply deriving an income from a particular task might make you an "expert" or "good at your job" – but if you're a "professional," this has a broader meaning" ("Profession," n.d.). This review identifies a profession, or being a *professional*, as an endeavor that requires the individual to be disciplined and to embody a specific level of expertise that is needed to fulfill the level of responsibility that his/her position requires, and has been obtained from a "widely recognized body of learning derived from research, education and training at a high level, and is recognized by the public as such" ("Profession," n.d.). A profession does not include hobbies, it does not imply arduous or undesirable tasks, and it implies that these specific skills will be used to best serve others.

Vocation

The simple definition for *vocation* is "a strong impulse or inclination to follow a particular activity or career" ("Vocation," 2017); this is the definition used in this review. **Calling**

A *calling* is defined as "a transcendent summons, experienced as originating beyond the self, to approach a particular life role in a manner oriented toward demonstrating or deriving a sense of purpose or meaningfulness and that holds other-oriented values and goals as primary sources of motivation" (Dik and Duffy, 2009 pg. 427). Duffy & Sedlacek (2007) conducted a study that found that "the presence of a calling positively correlated with decidedness, comfort, self-clarity, and choice-work salience and negatively correlated with indecisiveness and lack of educational information" (p. 595). It is a "multi-dimensional construct" (Hagmaier & Abele, 2014, p. 371) that links the complex idea of career development with having a calling (Dik & Duffy, 2009; Gregg, 2005) or a vocation. Although it often reflects a religious mission, it can extend to all types of work.

Although the connection between vocation and calling is crucial to career development, remembering that they are distinct is necessary since not every person has a calling (Dik & Duffy, 2009; Kaminsky & Behrend, 2015). Dik and Duffy note several important aspects about the combined meaning:

These constructs do not reflect something a person discovers once and for all but rather involves an ongoing process of evaluating the purpose and meaningfulness of activities within a job and their contribution to the common good or welfare of others. This view recasts calling and vocation as encompassing a process that can include the question of how a career, once chosen, might be pursued in a manner that connects work activities to one's overall sense of purpose and meaningfulness toward "other-oriented" or "pro-social ends." (p. 429).

When the terms vocation and calling are melded together, they imply a person's desire to do a certain type of work that is personally or socially significant (Dik & Duffy, 2009; Gregg, 2005) and those who approach their work in this manner "generally score high on measure of intrinsic work satisfaction" (Dik & Duffy, 2009, p. 435). This selection may not be a rational selection, however, because "people pick careers that they identify with and those that make them feel inspired" (Kaminsky & Behrend, 2015, p. 394); it also may not be easily accessible for people who lack the understanding of how to follow their calling (Duffy & Sedlacek, 2007). One qualification that Dik & Duffy (2009) made is that "calling and vocation are relevant across multiple cultural perspectives but that differences in the expression of these constructs may exist cross-culturally (e.g., greater emphasis on personal meaning in individualist cultures and greater emphasis on social contributions in collectivist cultures)" (p. 437).

Together these terms suggest that everyone does have a vocation (Dik & Duffy, 2009; Gregg, 2005) but Dik and Duffy offer one caveat: the concept does not seem relevant to those who enter a job for economic stability, so the "constructs apply more to the way individuals approach their work rather than to the actual content of the job choice" (p. 430). They state that this, therefore, means that some people may not consider these concepts in their approach to work. "For example, individuals who endorse values related to power, prestige, and wealth accumulation as most salient are probably disproportionately less likely to appraise their work as a calling or vocation" (p. 430).

"Calling may also be directly related to the development of strong outcome expectations. Unlike self-efficacy, which is a purely cognitive evaluation of ability, calling is an effective job attitude that relates to meaningfulness and identification with work (Kaminsky & Behrend, 2015, p. 388). Hagmaier & Abele (2014) found that those who are "living one's calling" (p. 371) are more likely to experience "life satisfaction, self-congruence, and engagement orientation" (p. 372), though their study does not indicate if this is long-lasting. They further state that when people are working in an area where they have been called, they seem to have reached a place where the "reality matches their ideal" (p. 373) and that those "people who realize their calling experience congruence between their actual self and their ideal self" (p. 378).

Career

Super (1964) stated that "a career is the sequence of occupations, jobs, and positions occupied during the course of a person's working life" (p. 3) and some are simultaneous (Super, 1957). He extended his definition to say that a person's work life also includes "pre-vocational and post-vocational positions" (p. 3), such as a student who is preparing to enter the workforce. Schein (1971) described a career in an early definition as "an individual's movement through an organization" (p. 401) but career theory is not limited to chronological work experience. Bird clarified that there is a difference between "20 years of experience and one year's experience repeated 20 times" (1994). Super (1976) explained that "a career is not necessarily the continuous and progressive pursuit of one occupation" (p. 26) and is, instead, "any sequence of jobs in the life of one person" (p. 13). Traditional career definitions do not recognize that a career evolves from the collection of chronological work experiences or work experiences that may occur within more than one organization (Bird, 1994). Instead, a career is formed by "the nature or quality" (Bird, 1994, p. 326) of information and knowledge that is "embodied in skills, expertise, and relationship networks acquired through an evolving sequence of work experiences over time" (p. 326). Young (2002) stated that "reference to context" (p. 213) is necessary. In

this context "work experiences constitute the primary mechanism by which careers occur, though they are not in themselves a career" (Bird, 1994, p. 326). Bird (1994) theorized that if a career is a storehouse of experiences, then "in addition to being accumulated, knowledge may also be removed, rearranged or replaced" (Bird, 1994, p. 326). Amundson, Borgen, Iaquinta, Butterfield, & Koert (2010) additionally stated that a career extends beyond the job title or work place to include leisure and personal activities, which differs from other theorists' perspectives that a career is limited to work experience.

Super stated that careers "evolve over the years--they emerge from a person's experience" (Freeman, 1993), which is the definition that this review employs.

Vocational Choice and Career Development Theory

Career choice and development is important because a person may spend over 80,000 waking hours engaged in work (MacAskill, 2014) and career choices affect several aspect of life, including the work environment, spousal relationships, social surroundings (Gati & Tal, 2008), lifestyle, friendships, and social activities (Leong & Barak, 2000). Time spent involved in a career can, therefore, determine if a person is happy or unhappy with his/her quality of life (Leong & Barak, 2001; MacAskill, 2014) and the consequences for selecting the "wrong" career can be both financial and psychological (Gati & Tal, 2008).

The major divide between Vocational Choice Theory and Career Development Theory is the viewpoint. Vocational Choice Theory is a psychologically derived idea that relies on the alignment of a person's interests, values, and beliefs with an occupation that is compatible with or conducive for similar characteristics. Career Development Theory has roots in sociology and is concerned with the ways in which location in the social structure, as defined by parental occupation, education, income, gender, race, or ethnicity, influence diverse orientations toward work. Moreover, sociologists are interested in the ways that social institutions affect occupational choices, work orientations, and attainments, as a person moves through the *life course* (Kirkpatrick Johnson & Mortimer, 2002, p. 40).

Kirkpatrick Johnson & Mortimer (2002) defined life course as "a sequence of occupations in the life of an individual" (p. 151). Because these two theories are grounded in different constructs, "there seems to be little convergence in theorizing in the area of career development and occupational choice" (Brown, 2002, p. 15). However, in 1992 Super stated that it is not possible to determine which theory is better; he found that "neither theory is sufficient without the other" (p. 59).

In an effort to orient the reader to the career choice—career development process, I will provide a brief synthesis of how the literature explains the typical career stages people traverse during their lifetime. This is followed by categorizing types of movement since this is the crux of "why" and "how" people change careers. Finally, I will discuss Holland's (1959, 1985, 1997) and Schein's (1971, 1978, 1990, 2007) Vocational Choice Theories and Super's (1957, 1964 1968, 1976, 1980, 1990, 1992, 1994) Career Development Theory.

Career Stages

It is common for individuals to traverse several career stages during a lifetime (Giannantonio & Hurley-Hanson, 2006; Schein & Van Maanen, 2013; Super, 1957, 1976, 1992; Wille, DeFruyt, & Feys, 2010), but Super (1976) asserts that "it is the individual who supplies the continuity in the career, even when the sequence of occupations is discontinuous ("unstable, multiple-trial and interrupted" p. 26), for the career belongs to the person, not to the occupation." (p. 26). He qualified careers as both discontinuous and continuous. The latter, which is "the conventional and stable" (1976, p. 26) is "most seen in the skilled, clerical, executive, and professional fields, or among the middle class" (Miller & Form, 1951 cited in Super, 1976) while the former are "most common among men and women at the lower socioeconomic levels, in the unskilled, semi-skilled, and to a lesser degree clerical and sales fields" (Super, 1976, p. 26). Super (1976) also acknowledged that workers who move between jobs in the same career field, such as those who are laid off from one company and then employed in another company, reflect another group of people who can be categorized as having an occupation that is discontinuous but "continuous in that the career is, in fact, a sequence of jobs, a work history, the course of a person's life" (p. 27).

Schein and Van Maanen (2013) identified an *external career* (a "natural progression through an occupation") (Schein, 2007; Schein and Van Maanen, 2013, p. 3) as the stage that most people negotiate when entering an initial career field, such as selecting a field pre-career; educational prep for career entry; formal education/training in chosen field; occupation entry; additional learning, apprenticeship, and socialization; using talent; job permanency; productive employment; branching into leadership roles; disengagement from work; and retirement. Wille, DeFruyt, & Feys (2010) clarify that the earliest fifteen years of a person's working life are viewed as one collective phase; it is during this time that crucial information is learned about the career, organization, and workplace expectations (Schein and Van Maanen, 2013). At any point in the career stage process people may realize that their external career does not align with their *internal career* ("a career that is 'anchored' by their self-image of their competencies, motives, and values" Schein, 2007; Schein and Van Maanen, 2013) desire igniting the need to search for a new profession. When a person chooses to change careers, then they will restart the career stage process (Schein and Van Maanen, 2013). However, since people acquire *transferable skills*, which are defined as "the most basic unit—the atoms—of whatever career you may choose" (Bolles, 2016, p. 145), during their first career that may be used in the second career (Anthony and Ord, 2008; Crow et al., 1990; Freidus, 1994; Mayotte, 2003; Novak et al., 1992), the second time through the career phases is often truncated (Schein and Van Maanen, 2013).

Vocational Choice Theory Overview

Seeking vocational or educational counseling to identify personality traits, values, and beliefs for career planning purposes is a way for people to select a career path that will be of interest to them (Furnham, 2001; Holland, 1959, 1985, 1997; Whitaker, 1998). Counseling gives "primary emphasis to the personality characteristics that predispose an individual to seek a career of a given type" (Kirkpatrick Johnson & Mortimer, 2002, p. 38). The closer a person's interests, needs, and personality align with a career, the greater job satisfaction that person will discover (Holland, 1959; 1997). To help with this alignment, *interest inventories*, which are assessments "used to match a person with a career by aligning their values, beliefs, and interests with the job's characteristics" ("Interest Inventory," 2016), are often used to make the match between personality and career. Holland developed his own interest inventory, which begins with a person identifying an interest level from a list of task-oriented statements. Each statement is aligned with a career theme. When finished with the assessment, the answers are tallied in each of the six themed areas and the person is assigned a multi-letter code that aligns their declared interests with career possibilities. Gottfredson & Holland (1996) published the Dictionary of Holland Occupational Codes with the full list of multi-letter codes available for matching.

In order to develop an accurate understanding of strengths and weaknesses people need feedback from others to avoid disillusionment about their own capabilities (Schein and Van Maanen, 2013). In addition, dysfunctional thinking should be addressed prior to using a career interest inventory or another similar assessment or selecting a career because this analysis could fortify an inaccurate self-identification (Galles and Lenz, 2013).

Despite the availability of an array of career planning tools and theories, "interest measures are generally ignored in employee-selection literature" and instead there is a focus on personality and cognitive ability as predictors of work performance (Nye, Su, Rounds, and Drasgow, 2012, p. 385). "It is likely that the reason these measures have not been used in the work context is the seemingly small relationship between interests and performance." (Nye et al., 2012, p. 385). Performance is defined as "behavior that is goal relevant and that can be evaluated in terms of its degree of contribution to relevant goals" (Campbell, Gasser, and Oswald, 1996 cited in Nye et al., 2012).

The following sections of this paper provide an overview of two vocational choice theories that career counselors and job-seeking individuals use to establish a match with a satisfactory career choice. Included in each theory's overview are supportive and opposing ideas from a sample of literature from the fields that discuss the theories. To conclude this section there is a comparison of the two theories.

Holland. Holland (1959; 1997), one of the most referred to theorists in career selection literature (Furnham, 2001; Leung, 2008; Reardon and Bertoch, 2011), constructed his original Theory of Career Choice because his understanding about career choice literature was that it was fraught with "serious deficiencies" because it was "too broad or too specialized" (Holland, 1959, p. 35). He found Ginzberg, Ginzberg, Axelrad and Herman (1951) and Super (Super, 1957) to be overly generalized and "of negligible value for integrating present knowledge or stimulating further research" (p.35) while he considered Bordin (1955), Hoppock (1957), and Roe (1956; 1957) "incomplete in that they are self-concept-centered, need-centered, or etiologicallyoriented" (p. 35).

Holland (1959; 1997) classified selected occupational fields and college academic majors that exemplified specific qualities and distinctive values and roles; he qualified their characteristics by examining the personality traits of the people who occupied those particular careers and majors. His intent was to identify the connection between personality traits and jobs in order to help people select a compatible career or college major where they could meet with success and experience job satisfaction. Brown (2002) identified a concern about Holland's theory because there is "little attention to why people develop certain personality types" (p. 9) included in the theory.

Holland (1959) reasoned that each person is a byproduct of prior experiences, including both internal and external factors (Freidus and Krasnow, 1991; Freidus, 1994; Novak and Knowles, 1992; Galles and Lenz, 2013); he labeled this process a person's *adjustive orientation* (p. 36). Holland stated that outside influences "including the range of potential environments, social pressures from family and peers, evaluations of employers and potential employers, and limitations—arbitrary in terms of the theory—imposed by socio-economic resources and the physical environment" might dictate career selections; he considered this a "blocking of the hierarchical choice" (p. 39). Duffy & Dik (2009) agree that a person's family can affect their "internal values, interests, and skills" because "although a family can be viewed as external to the individual, the values and expectations a family imposes are likely among the many factors in influencing the development of internal interests, values, and skills" (p. 32). In the case of single parent households, a person will likely base their career selection on the family's needs rather than on internal determinants. Consideration must also be made for people with physical or mental disabilities.

Holland theorized that because of developmental orientation, a person organically searches for a career that aligns with their predispositions while avoiding the occupations that contradict their preferences (Schein and Van Maanen, 2013). Through these individual influences, people learn to identify with ways to cope with situations, which results in a preferred habitual method for interacting and responding to future experiences (p. 35).

Holland's (1959) initial theory identified six categories that represented popular careers in America at the time of the publication and six corresponding *personal orientations* that "reveal information such as the person's values, attitudes, needs, self-concept, preferred activities, and sources of threat and dissatisfaction" (p. 36). The qualities of an occupational environment appeal to a person's adjustive orientation, thereby making certain occupational environments more appealing to those who possess the similar values and beliefs. According to Holland's theory, appropriate alignment between the occupational environments with a person's personal orientation provides a viable career path.

Holland (1959) acknowledged that individuals might find themselves inclined toward more than one environment, in which case the person's dominant qualities would indicate the most compatible environment. However, if two or more environments are identified equally as primary, a person can be suited to either environment. Participants must be aware of the careers listed in the occupational environments; otherwise, the options are limited to what the person is familiar with experiencing (p. 40).

An additional caveat to Holland's (1959) theory is that "those with inaccurate selfknowledge make inadequate choices more frequently than those with accurate self-appraisals" (p. 40) of their values and beliefs (Sverko, 1995). If a person is unable to accurately identify his/her actual competencies, then an inaccurate self-assessment results, which could lead to an alignment with an occupation that is an unrealistic match for the person, followed by job dissatisfaction. Sverko & Vizek-Vidovic (1995) noted that some people are dishonest when identifying their personal values because they are instead seeking social approval. "Furthermore, the subjects' reports about what is important to them (*declared values*) do not necessarily correspond to the value priorities that actually influence their behavior (*operative values*)" (p. 6). Owens, Motl, & Krieshok (2016) found that interest assessments can help career-seekers align with a career that will "reflect the environments toward which individuals eventually gravitate" (p. 607) but offered that there is no guarantee that a person will meet with success in the career.

Holland modified the 1959 theory several times but published his final version entitled, "A Theory of Vocational Personalities and Work Environments," in 1997. The "Preface" to this revision states that over the years he was in constant search of a "more satisfying theory of careers" that would provide a more "practical application" for use (p. v). The updates that he made to his theory include "revised formulations for the types and environmental models" and "some revisions and clarifications...to increase the explanatory power of the typology" (1997, p. 176). The revised theory attempted to qualify the characteristics of the occupational environments (prestige, income, level of talent required) rather than focus on the characteristics of the people in those occupations and on the kind of work a person performs (sales, clerical, scientific, mechanical, artistic, educational) (Holland, 1959, 1997; Reardon and Bertoch, 2011).

Table 1 outlines the six personality types in Holland's 1997 theory, examples of each type's occupations, and the traits associated with each occupation.

Table 1

Туре	Examples of Fields	Typical Traits
Realistic	computer engineering, forestry,	mechanical and athletic abilities,
	surveying, poultry science, mining	likes to work outdoors and with tools
	technology, computer	and machines; might be described as
	installation, heating/AC technician,	conforming, frank, hardheaded,
	animal training, pharmacy	honest, humble, materialistic,
	technician, massage, meat	natural, normal, persistent, practical,
	cutter, carpentry, turf management,	shy, thrifty
	furniture design	
Investigative	biology, chemistry, physics,	math and science abilities, likes to
	geology, anthropology, laboratory	work alone and to solve problems;
	assistant, medical technician, social	might be described as analytical,
	psychology, computer science,	complex, critical, curious,
	pharmacy, criminology, geography,	independent, intellectual, introverted,
	general studies, liberal arts,	pessimistic, precise, rational
	psychology	
Artistic	composer, music, stage director,	artistic skills, enjoys creating original
	dance, interior decoration, acting,	work, has a good imagination; may
	writing, drawing, languages,	be described as complicated,
	painting, speech, philosophy,	disorderly, emotional, idealistic,
	comparative literature, industrial	imaginative, impulsive, independent,
	design, landscape architecture,	introspective, nonconforming,
	historic preservation,	original
~	housing studies, journalism	
Social	education, speech therapy,	likes to help, teach, and counsel
	counseling, clinical psychology,	people; may be described as
	nursing, dental hygiene,	cooperative, friendly, generous,
	sports medicine, ministry/theology,	helpful, idealistic, kind, responsible,
	music therapy, special education,	sympathetic, tactful, understanding,
F	home health, food and nutrition	warm
Enterprising	marketing, television production,	leadership and public speaking
	business, sales, hospitality	abilities, is interested in money and
	management, sports	politics, likes to influence people;
	administration, urban planning,	described as acquisitive, agreeable,
	acting/directing, advertising,	ambitious, attention getting,
	entrepreneurship, educational	domineering, energetic, extroverted,
	administration, financial planning,	impulsive, optimistic, self-confident,
	pre-law, insurance, political	sociable
	science, real estate	1 · 1 1 /1 · 1 · 1 · 1 ·
Conventional	bookkeeping, accounting, office	clerical and math abilities, likes to
	management, court reporting,	work indoors and to organize things;
	desktop publishing, medical	described as conforming, careful,
	laboratory assisting, computer	efficient, obedient, orderly,

Sample of Holland's "Types" Related to Educational Fields

operator, hematology technology,	persistent, practical, thrifty,
business communications	unimaginative
(Reardon and Bertoch, 2011, table 1)	

While Holland maintained the basic premise of his 1959 theory in his 1997 revision that when a person's personality traits are paired with comparable career types he/she can meet with success—he elaborated further on the career theory. The expansion included the assumption that several principles are true: vocational choice is an expression of a person's personality, "satisfaction, stability, achievement depend on congruence between one's personality and the environment where they work," and that occupational members have "similar personalities and similar histories of personal development" (p. 2). Holland's (1997) continued intent was for the revised theory to inform people about the avenues to meet with "vocational satisfaction," high performance, and low stress in a chosen career (Furnham, 2001; 1997, p. 1). Reardon and Bertoch (2011) simplified the typology by stating that "if a person and an environment have the same or similar codes, e.g. an Investigative person in an Investigative environment, then the person will likely be satisfied and persist in that environment" (p. 113).

Additional caveats to the use of the revised theory (Holland, 1997) are the assumption that people are seeking a career that they will enjoy instead of seeking alternative reasons for employment, such as financial security, and that people learn through prior experiences and external influences. There is also a concern that those with certain personalities or interest areas are less likely to engage in discussions around their search for the "perfect career" than others (Galles and Lenz, 2013). Finally, Gati & Tal (2008) found that "most people do not have a stable set of dispositions and personality styles, but rather a dynamic, variable system of preferences, interests, values, and beliefs, leading to changes in one's occupational aspirations at different stages of life" (p. 161), which indicates that an initial career selection may not be permanently harmonious as Holland suggested.

Schein and Van Maanen. Unlike Holland's (1997) theory that qualifies the characteristics of occupation environments (Nordvik, 1991; Reardon & Bertoch, 2011) in order to "match them with a person's abilities and interests" (Nordvik, 1991, p. 176) prior to entering a career field, Owens et al. (2015) maintained that people want to determine what they are good at, what they want to do, and what they value, as well as the converse of these ideas. To do this, people must gain experience in a career field first, which Schein and Van Maanen (2013) suggested might take ten years or more to do. People must also venture that this is critical because the development of career compatibility is flexible since "new challenges can reveal latent or hidden talents and introduce a motivation that simply had not had an opportunity to appear earlier (p. 8). Instead of the career supporting a persons' interests (Holland, 1959; Holland, 1985; Holland, 1997), "the function of work is to support a *career anchor*," (Nordvik, 1991, p. 176) which is defined as the "one thing a person would not give up if forced to make a choice" (Schein, 2007; Schein & Van Maanen, 2013, p. 50). Career anchors are based on a person's self-perceived talents, values, and beliefs with regard to a career field (Schein, 2007) and they serve as a stabilizing force. However, just as people may embody the values and beliefs of multiple career anchors, so may career fields, making it possible for people to honor more than one anchor in a single profession (Bandyopadhyay, 2007). Logically, then, "different sets of HR practices could be instrumental in meeting diverse internal career need of the individual" (Bandyopadbyay, 2007, p. 35). This could make it difficult for a person to identify which anchor is "at the top of his or her hierarchy," (Schein and Van Maanen, 2013, p. 50) and it could also make a successful career change a challenge.

Schein (1978) revised his theory after its initial publication. In his first version he qualified five career anchor categories but he identified an additional three several years later (Schein, 1990). The eight categories are listed below (Danziger, Rachman-Moore, and Valency, 2008, p. 8):

- Technical/functional competence: Primarily excited by the content of the work itself; prefers advancement only in his/her technical or functional area of competence; generally disdains and fears general management as too political.
- General managerial competence: Primarily excited by the opportunity to analyze and solve problems under conditions of incomplete information and uncertainty; likes harnessing people together to achieve common goals; stimulated (rather than exhausted) by crisis situations.
- Autonomy/independence: Primarily motivated to seek work situations which are maximally free of organizational constraints; wants to set own schedule and own pace of work; is willing to trade-off opportunities for promotion to have more freedom.
- 4. Security/stability: Primarily motivated by job security and long-term attachment to one organization; willing to conform and to be fully socialized into an organization's values and norms; tends to dislike travel and relocation.
- 5. Entrepreneurial creativity: Primarily motivated by the need to build or create something that is entirely their own project; easily bored and likes to move from project to project; more interested in initiating new enterprises than in managing established ones.
- 6. Service/dedication to a cause: Primarily motivated to improve the world in some fashion; wants to align work activities with personal values about helping society; more concerned with finding jobs which meet their values than their skills.

- 7. Pure challenge: Primarily motivated to overcome major obstacles, solve almost unsolvable problems, or to win out over extremely tough opponents; define their careers in terms of daily combat or competition in which winning is everything; very singleminded and intolerant of those without comparable aspirations.
- 8. Lifestyle: Primarily motivated to balance career with lifestyle; highly concerned with such issues as paternity/maternity leaves, day-care options, etc.; looks for organizations that have strong pro-family values and programs.

Over time a person encounters "adaptive, coping and developmental tasks in the labour market, the work situation, and the career, which may be more influenced and steered by situational and environmental requirements and considerations than the choice of a vocational area" (Nordvik, 1996, p. 273). This means that career goals may change, causing a hierarchical shift in a person's career anchor, resulting in a desire to change careers—to follow the "new" anchor. Bandyopadhyay (2007) suggests that organizations should provide many career anchors to their employees so changing careers is not always necessary and workplace turnover is not as frequent. For example, a person who is a teacher may find that if their career anchor shifts from "Service/dedication to a cause" to "Entrepreneurial/creativity" he/she could remain working for the same organization as a trainer, coach, or consultant instead of moving to another career field.

There are researchers who propose that a ninth career anchor should exist (Danziger et al., 2008; Marshal and Bonner, 2003). Marshal and Bonner state that the Entrepreneurial Creativity anchor should be divided into two separate anchors because "entrepreneurship has to do with setting up a business, whereas creativity is the use of imagination or original ideas in order to create something," which does not have to result in the establishment of a business (Danziger et al., 2008, p. 11). Because of their findings, Danziger et al. "tested the construct

validity of the measurement model of Schein's Career Orientation Inventory" (p. 7). As a result, they also support the idea that a ninth career anchor "yields a better fit than Schein's eightconstruct model; and the nine-construct model has convergent and discriminant validity and unidimensionality" (p. 7). Marshal and Bonner also propose a need to clarify several of the existing descriptions to make the Career Anchor Theory "a more valid and reliable instrument, both for theory building, as well as for practical and diagnostic use by career counselors" (p. 17).

There is speculation that Schein's (2007) Career Anchor Theory will need to undergo additional revisions in order to be considered a reliable career-planning tool for the 21st century (Baruch, 2004; Schein, 2007). Schein himself wrote an article musing on how modernizations might affect the career anchor categories. He acknowledged that the primary changes in the theory between the 1970s and 1980s were due to societal changes, such as increased interest in the effects of pollution and educational reform. He also speculated that future modifications might need to be made to the career anchors to account for the demise of the "organizational career" and because careers are becoming a series of jobs that are guided by peoples' internal careers instead of external careers as they are now. Further:

As technologies change, as organizations attempt to become more competitive, as information technology makes new organizational forms possible, and as social values shift priorities, it is becoming more and more difficult to discern what a given job should consist of and how one should hire and train people for the ambiguous and changing roles that will emerge (Schein, 2007, p. 32)

Finally, Baruch (2004) suggests additional anchors should be added, such as employability and spirituality, while Suutari and Taka (2004) offer that an international anchor will be necessary for "internationally oriented managers" (p. 18).

As with most theories, Schein's (1978; 2007) theory is not without limitations. As stated earlier, this theory assumes that most people will not be equipped to identify their career anchor until they have worked for a minimum of ten years; Gati & Tal (2008) state that "job preferences need to be stable and coherent to help pick the right career" (p. 161). Because people acquire additional skills the longer that they work, work experiences may inform, influence, and motivate the need for career counseling (Nordvik, 1996; Schein, 1978, 2007).

A Comparison of Theories. Holland's (1959, 1985, 1997) and Schein's (1978; Schein and Van Maanen, 2013) theories are both taxonomic approaches meant to encourage selfanalysis to uncover relationships between people and career fields. They also both acknowledge that "people tend to have differential preferences for certain modes of coping and developing, which they have to exercise in order to do well and feel well in their work and life situations" (Nordvik, 1996, p. 263). However, "Holland and Schein depart when it comes to procedures of empirical research and assessment methods derived from their concepts" (Nordvik, 1991, p. 166). While Holland deconstructs occupations and invites people to match their interest inventory results to those fields, Schein seeks to identify career goals that people can identify with wanting to accomplish. Nordvik (1991, 1996) states that "vocational personalities and career anchors are distinct concepts because deciding on the type of work activity you prefer is a task that can be distinguished from the task of deciding your career goal" (1991, p. 166) but interests cannot predict career goals and vice versa. However, in Nordvik's 1996 study, he acknowledges that "although Schein did not hypothesize relations between anchors and occupational groupings, these results indicate that the career anchor variables were reasonably related to the occupations of the participants," which does draw a parallel between theories.

The remaining difference between the theories stems from their practical applications. While Holland's (1959, 1985, 1997) theory is largely used by people entering their first career or selecting a college major, Schein's (Schein, 1978; Schein and Van Maanen, 2013) theory is most useful to people who are seeking to change careers or to those who are seeking advancement in their current organization.

Career Development Theory

Super (1964) stated, "The psychological or sociological study of careers focuses on the continuity or discontinuity in the lives of individuals and on the patterns of continuity in the lives of groups" (p. 3). He asserted that when the psychology of occupations was combined with a self-concept theory, a sound career development theory resulted. Self-concept theory in isolation "may provide only a segmental theory of vocational development" (1968, p. 12); he was clear in stating that time would determine if this is correct.

Super found that the term *career development* is "not just climbing, not just following a path. Careers evolve, they emerge: that is what development means when applied to lives" (1992). In light of this, his goal was to construct a dynamic vocational theory that articulated how a person selects, enters, and progresses in an occupation that would describe a person's life-span career (1964, 1980) because he found that existing theories at that time, such as Bordin, Nachmann, & Segal, 1963, Holland, 1973, and Roe, 1957 were lacking. Super indicated that "Holland's hypotheses have been tested largely by the use of preferences to predict preferences and choices of courses rather than sequences of occupational positions" (Super, 1980, p. 282). He (1964) was concerned that *vocational psychology* was simply a psychology of occupations where "the occupation was the subject and the persons in it were the source of data on the occupation" (p. 2). Instead of studying the person, the occupation was studied by observing the

people who held the position, which resulted in the ability to match people with jobs. He found that this process was not helpful in career discussions. Savickas (1997) did not interpret Super's theory development as an alternative to the person-trait theory, however; he viewed Super's theory as "additional perspectives from which to improve and elaborate on the way practitioners and researchers comprehend and intervene in occupational choice and career development" (p. 247).

Super's original Career Development Theory (1957) proposed that a person's satisfaction with life and work was reliant on whether or not an "individual finds adequate outlets for abilities, needs, values, interests, personality traits and self-concepts" (Super, 1990, p. 208). "These attitudes, bits of knowledge, and wisdom come with experience which is culturally as well as biologically associated with age" (Super, 1992). Duffy & Dik (2009) also found that people who have "high levels of control over their career paths" tend to demonstrate higher levels of career satisfaction" (p. 30).

The theory centers on the idea of *career maturity*, which is an "individual's readiness to cope with the developmental tasks with which they are confronted because of their biological and social developments and because of society's expectations of people who have reached that stage of development" (Super, 1990, p. 213). Simply stated, this is "a person's readiness to make career decisions" (Freeman, 1993, p. 261), where *readiness* is described as "being of both an affective (e.g. career exploration and planning) and cognitive (e.g. knowledge of careers and decision-making) nature" (Stead & Watson, 1998, p. 4). The former can be reflected in answers to questions such as, "Is he or she an explorer, somebody who asks questions and finds out about what's out there in the way of opportunities or obstacles?" and "Does this person have any perspective on time and think about what time will bring?" (Freeman, 1993, p. 261) while the

latter may be informed by using career planning tools and tests (Freeman, 1993). Gati & Tal (2008) stated "empowerment of individuals as autonomous decision-makers is necessary for their career development" (p. 18).

Super later revised his theory and called it the Developmental Self-Concept Theory, which articulated the process of the "formation, translation into occupational terms, and implementation of self concepts" (p. 7), "as well as how self-concept affects vocational behavior" (Savickas, 1997, p. 248). He introduced thirteen *metadimensions*, or self-assigned characteristics and traits, within the self-concept that include self-esteem, self-efficacy, clarity, certainty, stability, and realism. Super saw self-concepts as "the outcome of the interaction between inherited aptitudes and the perception of the extent to which one's activities meet with the approval of significant others" (Stead & Watson, 1998, p. 3).

Leung (2008) noted that "a relatively stable self-concept should emerge in late adolescence to serve as a guide to career choice and adjustment" (p. 120) but that self-concept is dynamic. If a person has an inadequate or unrealistic self-concept, then inappropriate career selections may be made (Savikas, 2002). Savikas (2002) agreed that Super was successful in "devising a scientific lexicon for vocational self-concepts [that] made his theory more useful because it identified different aspects of self-concepts and organized them into a taxonomy" (p. 163).

Super's (1990) final revision to his career theory, A Life-Span, Life-Space Theory, added a "contextual perspective that deals with social roles and broadens attention from concentration on the work role to highlighting the constellation of all life roles. Using constructs such as role salience and life structure, this theory segment deals with how individuals situate the work role among their other life roles, and then use the resulting life structure to fulfill their personal values" (Savickas, 1997, p. 248). His theory

attends to how individuals construct and negotiate their work lives and specifies predictable tasks and coping behavior that individuals encounter as they develop their careers. The developmental perspective of this theory segment augments the trait-andfactor concentration on differences among individuals and between occupations in calling attention to the individual's life course. Counselors who use this career development theory, in addition to matching people to positions, can help individuals anticipate developmental tasks, form critical decisional attitudes and competencies, and then engage in realistic vocational coping behaviors (Savickas, 1997, p. 248).

He proposed that a life-span vocational development theory must center on self-discovery via a person's reflection of his/her self, the ability to identify people who can serve as role models, and have the ability to consciously enact these roles; he deemed this the *formation process* (p. 7). Having the opportunity to relate to a role model in a particular occupation, being able to experience that occupational role, or identifying one's own traits and characteristics would allow a person to manifest self-concepts into occupational terms. "Ideally, an occupational role enables an individual to cooperate with and contribute to the community in ways that both substantiate and confirm that individual's self-concept. In this manner, an occupational role enables an individual to become the person he or she wants to be, and, in fact, likes" (Savikas, 2002, p. 166).

Following the formation process is the *implementation process*, which "involves action, as in obtaining the specialized education or training needed for the preferred occupation, or finding employment in it" (Super, 1964, p. 7). As a result, a person will adjust to their

interpretation of the occupation after performing the job and he/she will continue to adjust as they have more experiences with the occupation. In some cases "contextual factors seem to impact continuously on individuals and people regularly need to learn new skills to compete in regional and global economies, thus necessitating a continual return to earlier career developmental stages" (Stead & Watson, 1998, p. 3).

Freeman (1993) proposed, based on an international study he coordinated in twelve countries, that if a person does not consider work important, then that person will not likely be vocationally mature ("a psychosocial construct that denotes an individual's degree of vocational development along the continuum of career stages from growth through disengagement" Savikas, 2002, p. 156; Super, 1964). This idea is useful for educational planning and creating career goals (Super, 1968). Savikas (2002) stated that a person's vocational maturity could be pinpointed by comparing what he/she is encountering with what he/she is expecting to encounter; the closer that they align during a life stage, the more vocational maturity is being displayed.

Stead & Watson (1998) state that "an examination of career maturity in terms of Super's (1980) description of life roles may be more productive" (p. 5) than what exits. Additionally, they refer to the term, *role maturity*, as a replacement for career maturity. This replacement would allow the work role to vary as the other life roles do instead of being salient so varied cultures and individuals would self-identify the salient roles. Super (1980) confirmed that being simultaneously involved in various life roles would provide a more satisfying life-style but Leung (2008) noted that "role conflicts, role interference, and role confusions would likely happen when individuals are constrained in their ability to cope with the demands associated with their multiple roles" (p. 121).

Additionally, Savickas (1997, 2002) found that career maturity was not an accurate description for adults, so he proposed removing it from adult theory and replacing it with *career adaptability*, which he defined as "the readiness to cope with the predictable tasks of preparing for and participating in the work role and with the unpredictable adjustments prompted by changes in work and working conditions" (p. 254). This change "tightens the integration between the life-span, life space, and self-concept segments by focusing each on the individual's adaptation to environmental context and emphasizing a single source of motivation" (p. 254). Life space is defined as the collection of an individual's roles at any given time in different contexts, such as home, community, school, and workplace (Leung, 2008; Savikas, 2002).

The three major vantage points from which Super viewed careers and their life course can be called the developmental, self, and contextual perspectives. Eventually, "he loosely coalesced these perspectives into the life-span, life-space approach to careers" (Savickas, 1997, p. 247).

Super (1990; 1992; 1994) integrated the career maturity and life-span segments using self-concept in his final career development theory. Savickas (1997) specified that the final version of the theory "remains a viable model for organizing practice and research because it systematically isolates and classifies facts, identifies important variables, and synthesizes knowledge" (p. 250).

A person's career development starting point is dependent upon his/her parents' socioeconomic status, psychological traits, social characteristics (Amundson et al., 2010; Super, 1964; 1980), historical experiences (Amundson et al., 2010; Super, 1980), community, and geographic conditions (Super, 1980). This starting point provides the resources for a person to begin to climb "the educational ladder" (Amundson et al., 2010, p. 3). At some point, a person enters the workforce and may begin the process of *career predication*, which "is a sequence of

occupations, jobs, and positions which a given person is likely to occupy" (Amundson et al., 2010, p. 3). This may also be influenced by a person's parents' occupation (Amundson et al., 2010; Kirkpatrick Johnson & Mortimer, 2002) because if a person follows "the same or similar occupations as their parents, the inequalities linked to work will be perpetuated from one generation to the next" (p. 37) according to Kirkpatrick Johnson & Mortimer (2002).

Super (1964) noted that some people change careers frequently while others find one stable career. Based on this notion, Super (1964) identified "stable (direct entry into a lifework), conventional (trial leading to stability), unstable, and multiple-trial careers. The life stage process continues more or less throughout life, repeating them in the sequence: "initial-trialstable-decline" (p. 4). Those who have a career commitment may find challenges in the content of the work they are performing, others in working for a particular organization, and still others prefer to change occupations and/or organizations as new occupational challenges arise (Super, 1976). To reiterate, Super (1964, 1976) stated that there is a connection between socioeconomic levels and career patterns. He noted that higher socioeconomic status is associated with stable and conventional career patterns while lower socioeconomic status is associated with unstable, multiple-trial and interrupted career patterns. Manzoni, Harkonen, & Mayer (2014) added that women experience more career interruption due to marriage and childbearing than men experience and Ronzio (2012) suggests that women may struggle when returning to work after being home with their family: "women may face mental health issues upon returning to work, including depression, anxiety, and adjustment disorders" (p. 78). Kirkpatrick Johnson & Mortimer (2002) found that not only are women's careers affected by their family roles more than men, but some women may also follow the career trajectory of their spouse.

The stages of Super's (1957; 1976, 1992) theory about life-span, in brief, are:

A TRADESPERSON'S TRANSITION TO TEACHING

Table 2

Super's Career Stages

Stage	Description	
Growth	One of interaction between the child and the home, neighborhood, and school environment, resulting in the active development of some abilities, interests and values, and in the neglect and atrophy of other potentials which, given a certain glandular and neural make-up, might have become important. Relationships with people help or hinder development along certain lines; experiences with objects and then with ideas facilitate or discourage development along others. Occupational preferences in this stage tend to reflect emotional needs more than aptitude or genuine interest, and they tend to be fixated or to change fairly often.	
Exploratory	Begins with adolescence, although exploration itself begins in infancy and continues throughout life as changing people and situations require reconnoitering. It involves trying out a variety of activities, roles, and situations. It may not be planned or goal-directed, but it may be engaged in specificity in order to find out more about aptitude for or interest in an occupation, a course of study, or about career opportunities. Poor exploration may be more floundering, or even drifting, rather than systematic trial. But mere exploration confirms or contradicts the suitability of role models, of self concepts, and arenas of activity and it aids in their clarification and it eventually makes possible their translation into occupational preferences and their implementation in paid and unpaid employment.	
Establishment	Usually begins in the mid-twenties, although some people drift, flounder, or explore for as many as 10 years longer and some never achieve stable careers." "Although this life stage begins several years after leaving school, it should be of vital concern to career education. It is the stage into which school and college lead.	
Maintenance	Begins for most people at about age 45, although for many women in thirties involve re-Exploration and a second Establishment Stage. Having settled into an occupation and often into a particular job, the individual is concerned with holding his own against younger people, keeping up with new developments, forging ahead by breaking new ground in his present or in some related field, or getting reestablished in the labor force some understanding of how what happens in the earlier stages of a career effects what happens in later years can be assumed to be important to getting and keeping control of a career.	
Decline	One of changing and declining involvement in life in general and in occupations in particular. For most people there is a process of changing types of activities, pace of work, and hours or days of work. Thus the	

(Super, 1957, 1976, p. 23)

In 1990, Super noted that each stage included a "mini-cycle consisting of the same stages from growth to disengagement... particularly when a person makes transition from one stage to the next" (Leung, 2008, p. 121) or when they make a career change.

Super (1980) also stated that the "nonoccupational positions" (p. 286) that a person engages in prior to the "adult career" (p. 286) influence the occupational roles. Therefore, the amount of schooling one engages in and the first job a person has may influence what occupational position an individual secures later in life (Kirkpatrick Johnson & Mortimer, 2002; Super, 1980). He supposed that when a person secures a self-concept in him/herself and in others during these roles, that there will likely be more success and satisfaction in future or permanent positions. Additionally,

undesirable jobs may inspire thinking about the kind of work one would like to do and the credentials needed to obtain a satisfying job or career. Moreover, work experience can build human capital, enabling young people to command higher wages as they move from job to job, and may serve as a buffer against unemployment as they learn how to look for and keep jobs. Finally, adolescent work experience can influence career choice and development by affecting school performance and attainment. If time spent in paid work hinders adolescents'' school performance or draws them out of school entirely, occupational opportunities will diminish (Kirkpatrick Johnson & Mortimer, 2002, p. 54).

Each career stage has particular "importance of certain social expectations" (Super, 1957, p. 22) and "occupying any position means that one assumes and is given a role, expected to perform certain functions and to act in certain ways" (p. 25). However, Giannantonio & Hurley-

Hanson (2006) stated that as people navigate Super's (1957, 1976, 1992) career stages, that *image norms* ("the belief that individuals must present or possess a certain image, consistent with occupational, organizational, or industry standards, in order to achieve career success" (p. 318) play an important role in employment decisions. This is evident in three ways as people select a career: *occupational stereotypes* ("belief that presenting or possessing a certain image is a requirement for entry into an occupation" p. 319), *individual's self-image* ("individuals hold beliefs about their own image and degree of physical attractiveness" p. 319), and *organizational image*, which is a relationship between a persons' image and that of the organization. If a person experiences any of these instances of image norms when considering a career, then it may result in job avoidance due to the person's own perceived shortcomings.

In summary, "the simultaneous combination of life roles constitutes the life-style; their sequential combination structures the life space and constitutes the life cycle. The total structure is the *career pattern*" (Super, 1980, p. 288) and "it is the number and types of roles, and the stability of the width and depth of these roles, that constitute and portray a life-style" (290).

Super (1980) acknowledged that his theory had two flaws—it lacked acknowledgement of the number of decision options available to people and that it was "rigid in the uniformity" (p. 283). He realized that the topic was complex and had many facets. Super, Gati & Tal (2008) stated that career development theories focus on an individual's changing perceptions and experiences, but that they do not include the career-decision process. Chapman (2016) posits that Super's career anchor definitions "may be too limiting and may not adequately represent career orientations as they have developed in the 40 years since they were conceived by Schein and others" (p. 681). The latter conducted a study that identified "four underlying dimensions that govern career orientation" (p. 681) that could be used to describe a person's career orientation.

In an interview in 1991, Super acknowledged that his theory needed to be refined in order to be researchable; it was "too comprehensive to be testable" because "there were too many things to consider" (p. 255). Stead & Watson (1998) deem Super's model as "idealised rather than a real life decision-making process [because] an implicit assumption underlying this model is that the information necessary to make career decisions is relatively stable, manageable and available" (p. 6), which may not be true.

Additionally, since the conceptualization of career choice and development is subjective, varied cultural values and beliefs may render Super's theory less effective for certain groups of people (Leung, 2008; Stead & Watson, 1998). Since Super's theory was developed in North America and was based on white samples (Brown, 2002; Leung, 2008; Stead & Watson, 1998), it "does not adequately address racial and discrimination issues nor does it address culturally-based perceptions of work among black South Africans" (Stead & Watson, 1998, p. 6). Stead & Watson (1998) also found that the developmental stages (i.e., self-concept, career maturity, decision-making) are not inclusive of important career development points for black South Africans, such as ethnic identity, discrimination, unemployment and world view, and are, therefore, less relevant to black people.

Brown (2002) expressed the need for the theory to be inclusive of both males and females, all cultural groups, and those from varied socio-economic backgrounds while Leung (2008) noted that Super's (1990) notion of self-concept is not consistent among cultures; there are "cultural variations in the importance of self in decision-making, and in some cultures important life decisions such as career choices are also subjected to considerations that are familial and collective in nature" (p. 122). In addition, careers may not have the same meaning in different cultures (Young, 2002). In some cultures, career choice and development is reliant upon "negotiations and compromises in which both the self and one's environment have to be consulted" (p. 122).

Role of Vocational Choice and Career Development Theories

People who do not base their career selection on the result of career-planning tools, such as interest inventories or career counseling, will embark on a career via other means. In his 1997 revised theory Holland stated that a person's heritage has considerable influence on vocational interests because social learning leads children to develop preferences for certain activities and aversions to others, which evolve into interests then competencies. This process creates and continually recreates a personality type. Some people may have the opportunity to pursue these developed interests while others are forced to "to perform the activities and acquire the competencies of a different type" (20). This may include following a family tradition of becoming a doctor or having no financial means to pursue a desired career field in college.

Career planning tools may lead students toward careers that are aligned with their personal interests and can help those who find themselves unhappy in a career identify a more appropriate field to enter. As evidence, Holland (1959) found that people who are given the most information about career fields make more satisfactory career choices than those who do not have that information, that people who are presented with more career choices will exhibit greater occupational knowledge than those with fewer choices, and that more people make appropriate career choices after they have accumulated more learning opportunities; the latter was corroborated by Schein and Van Maanen (2013).

Career Changing

While Career Development and Vocational Choice Theories are still viewed as methods for career planning, Kim (2014) posits that "career development theories of the 20th century seem ill-suited to the 21st-century workforce characterized by a global economy, changing demographics, and a shift from manufacturing to a knowledge society permeated by communication technology" (p. 4). In the past "a career was likely to be characterized by an employee seeking to stay with a single company for the duration of one's working life" (Lee, 2011, p. 1). The concept of a "serendipitous or circuitous" route (Greenwood, 2015, p. 87) and "the 'boundaryless' career derives from a response to a more common view of careers as being bounded: bounded in organizations; bounded in well-defined roles, positions, or jobs" (Bird, 1994, p. 335).

Although "the patterns of career mobility vary across the life course, as a function of both the stage of the working career one finds oneself in and other (e.g., family- related) factors" (Manzoni, Harkonen, & Mayer, 2014, p. 1287), there are new patterns emerging. *Job hopping* (Barclay, Stolt, & Chung, 2011; Bird, 1994; Schein and Van Maanen, 2013) or *job changing* ("movement to a similar job or to a job that is part of a normal career path" Rhodes and Doering, 1983, p. 631) surpasses organizational turnover (Wille et al., 2010) and is anticipated to happen during most peoples' lifetime. Super (1980) called this phenomena a *multioccupational career* (p. 285). Super (1976) stated "most people change occupations several times during their careers, and that for many people occupational mobility is horizontal rather than vertical" (p. 26). This notion is popular with young adults who expect to job hop (Francis & Prosser, 2013).

According to Schein and Van Maanen (2013) there are three methods of organizational movement that a person may encounter during his/her career: lateral movement, internal advancement, and movement toward a leadership position. These three categories of movement

can be made either within one organization or across several places of employment (Schein and Van Maanen, 2013; Wille et al., 2010). Wille et al. (2010) and Kim (2014) agree with the first two of these methods (lateral movement and internal advancement), but Wille et al. state that the third type of organizational movement is to change "to a different type of job within a different organization" (p. 548). While other theorists (Kim, 2014; Peake & McDowall, 2012) agree with this reasoning, they expand on the notion to include working in a new organization in the same occupation. Additionally, a "transition from one occupation to a completely new role and set of tasks" (Peake & McDowall, 2012, p. 396; Tan, 2012) is deemed an *occupation change*. It is also possible to undergo a *task change*, which entails the same job with new assigned tasks (Peake & McDowall, 2012).

Boveda & Metz (2016) found that the context of career-changing or "recareering" (p. 157) has evolved since older workers are considering changes in career more often. "Encore careers seem to be a way to reenter the workforce, in some cases after additional education and training" (Boveda & Metz, 2016, p. 157). From this viewpoint, "employment trends and work lives" (Kim, 2014, p. 4) have changed, which indicate that more people may need to adapt to new and/or different careers voluntarily (Boveda & Metz, 2016; Rhodes and Doering, 1983; Super, 1976).

Conversely, career movement may be involuntary, as with organizational turnover, intraorganizational transfers (Rhodes and Doering, 1983), or economic and climatic conditions that change (Super, 1976). Giannantonio & Hurley-Hanson (2006) caution that a person's age, "layoffs, retirements, sickness, and even death may contribute to feelings of isolation, poor fit, and job dissatisfaction" (p. 324). The loss of work may "lead to a feeling of uselessness and a lack of calling for or need for one's contributions, [which] could also result in feeling isolated, cut off from the world, and worthless and/or not belonging" (Bluvshtein, Kruzic, & Massaglia, 2015, p. 150). "Just as there are different reasons for changing careers, there are also different results. Not all adults experience a seamless transition from one career to another, even if the second career is something that the career changer has always dreamed about doing" (Lee, 2011, p. 2).

Tan (2012) found that the level of positive or negative psychological effect on the career changer when leaving an occupation depends on whether or not the change was voluntary or involuntary. A career change that leads to lower status and pay, which is becoming more frequent, seems as though it may have a negative effect on the person but it does not when it is voluntary. "As such, the negative connotation of a "downward" career move may be problematic since the individuals making the changes likely see them as positive using criteria other than economic gain" (p. 89).

Theorists have identified the stages that people undergo during the career transition process (Barclay, Stolt, & Chung, 2011; Kim, 2014). Barclay et al. (2011) found that the stages "are augmented by the processes of change, levels of change, and the decisional balance" (p. 388). The processes of change "represent the cognitive, emotional, and behavioral aspects of engaging in a change process" (p. 388). The stages they identified are *contemplation/growth* (when people discover they are dissatisfied in relation to the career choice they have made), the *preparation/exploration* stage (when people consider new self-images and career choices), and the *action/establishment* stage (when a commitment to career transition materializes from the "reasons for career change, knowing environmental preferences and values, and exploring the pragmatics of career change" p. 394). The latter stage may carry enormous amounts of stress for the person transitioning and at this point the individual may be "disappointed in income and

responsibility levels, which may seem to indicate that prior work experience and accomplishments are not valued in the new career" (p. 395). Finally, during the *maintenance/maintenance* stage the education/training process is complete and the career-changer completes the career transition. Once the person acclimates to the new career skills and their confidence grows, a sense of accomplishment is reached. Peake & McDowall (2012) state that "linear, planned approaches are not necessary for job satisfaction and, in any case, are increasingly difficult to adopt in an era where change and uncertainty are becoming the norm" (p. 405).

Similarly, Kim's (2014) research identified a process for career transitioning during postretirement that includes four stages. The first stage is "experiencing disequilibrium in a previous career" (p. 9). Peake & McDowall (2012) found that a "period of disenchantment" (p. 405) precedes finding a satisfactory career. This process happens when a person encounters unexpected events or situations and their ability to tolerate the new circumstance is surpassed. Encountering this new experience is followed by a personal self-reflection that leads to change in the career path (Kim, 2014; Powers, 2002; Wilson, Wood, Solomonides, Dixon, & Good, 2014). In three subsequent stages, "reflecting on self and context, making new professional connections and changes, and committing to new careers" (Kim, 2014, p. 9) were equally important to the process. At times the process may involve a "complex array of push/pull factors, which may or may not involve a degree of uncertainty and excitement when crossing the respective geosymbolic boundaries" (Wilson et al., 2014, p. 8).

Instead of engaging in retirement, older workers "may choose to continue working for a sense of fulfillment, social belonging, identity, self-worth, or even to maintain daily structure (Boveda & Metz, 2016, p. 163). Those with higher levels of education and experience are more

likely to remain employed after retirement "to continue using their specialized knowledge and skills as well as contribute to their industry" (p. 163). For younger retirees finding a second career is important since some "may not want to downshift just yet and instead [want to] pursue work that is more interesting, challenging, and personally fulfilling" (p. 157).

Engaging in different careers provides the opportunity for career-changers to "confirm or reaffirm what they really wanted to do" (Kim, 2014, p. 12). In addition, learning experiences, such as "actions, experimentations, and reflection" (p. 14) offer an avenue that could help with selecting a career. Kim's study results indicate that a post-retirement work transition integrates "lifelong career journeys, experiences, and learning" (p. 15).

Once the career changer decides to tackle the change, it is important for the person to seek out "like-minded individuals for support, such as individuals who had similar career-changing aspirations, shared the individual's dream, or had already made similar career switches" (Tan, 2012, p. 96). Tan (2012) also indicates that it is important to avoid people who will discourage the change. Communicating the decision to change careers to others may cause the individual to contemplate three issues: timing the announcement, which may include waiting until the career transition is complete; framing the message; and strategizing the delivery. Framing the message, which focuses on the need for acceptance, may be delivered via a logical appeal, an emotional appeal, or involved framing "the announcement in terms of the audience's specific values" (p. 97).

Finally, it is important to clarify that the vocational technical (VT) teachers (also referred to as vocational educational and training (VET) teachers), referenced in this study are all second career teachers because the areas where they are from require prior experience in the career field that they will be teaching (Hof, Strupler, and Wolter, 2011; Hof and Leiser, 2014).

Switzerland's educational requirements are particularly stringent since VET teachers must obtain the highest educational qualification in their trade before entering a school system (Hof et al., 2011; Hof et al., 2014); this is true of Australian career-change teachers as well (Chan, 2012). Hof and Leiser explain that career change teachers in the Swiss educational system are an average age of 40 years old, the norm is to have several years of experience in the field and they have the option of maintaining a part-time teaching schedule, known as a sideline career, so they can continue to work in their field. Unlike Massachusetts, the Swiss and Australian educators can only begin their teacher training after they enter the profession (Chan, 2012; Hof and Leiser, 2014).

Career Changing to Teaching

Pursuing teaching as a second career has become a desirable choice for many people, particularly from "non traditional candidates from fields as diverse as business and law, hotel management and theater" (Freidus, 1994, p. 5). Wittkamper (1984) noted that 54.2% (*N*=35) of the midlife career changes who were moving from "business/industry into teaching secondary trade and industrial vocational education" (p. 49) that he interviewed "were actively seeking new or different employment; but they had not considered another job in industry related to their background or training" (p. 71). Some people are searching for a career that is more satisfying than their initial profession (Evans, 2011; Lee, 2011). Lortie (1975) identified several reasons that teaching was attractive to job seekers: interacting with children, interpersonal relationships, being service-oriented, and the material benefits of the profession (e.g., job security, health care, retirement). According to Evans (2011), "mid-career teachers acknowledged that the teacher shortage, the opportunity to try a new line of work, and their previous experiences, combined to

make teaching an attractive work option" (p. 625). Many perceive teaching to be "an interesting, complex and creative occupation" (Zuzovsky & Donitsa-Schmidt, 2014, p. 11).

Castro & Bauml (2009) indicate that a person's readiness to commit to the change is important to the transition, as well as a person's access to resources, such as finances and time to inform them about the career. Those who pursue the change need to be resilient, determined, and adaptable when faced with challenges, such as difficult certification tests, bureaucratic obstacles (Castro & Bauml, 2009), "time management, administrative paperwork, writing lesson plans and preparation" (Haggard, Slostad, & Winterton, 2006, p. 320). A common setback for those entering into a second career as a teacher is finding an available or convenient educational program (Castro & Bauml, 2009) that supports the teacher's needs (Izadinia, 2014) to fulfill the required educational preparation necessary for entering the teaching profession. Additionally challenging is that many candidates face drastic income changes and uncertainty about how to balance work with family time (Haggard, Slostad, & Winterton, 2006).

Although career changers bring a lifetime of knowledge to their new position that can "have a profound effect on themselves, their colleagues, and their students" (Lee, 2011, p. 2), a person may be lulled into a false sense of security with the new school environment. A persons' personal learning experiences (Castro & Bauml, 2009; Furlong, 2013; Stenberg, Karlsson, Pitkaniemi, & Maaranen, 2014; Tigchelaar, Vermunt, & Brouwer, 2014), work experiences (Tigchelaar, Vermunt, & Brouwer, 2014), experiences shared via relationships with teachers they know (Castro & Bauml, 2009), or teaching experience in their work field (Castro & Bauml, 2009; Powers, 2002) could be misrepresentative of the actual experience they encounter. They may expect to be familiar with the school culture and community (Sabar, 2004) and then be surprised by the difference between their expectation and the actual environment. Since many tradespeople are recruited to work in vocational technical (VT) education because of their industry knowledge and qualifications, they often first become familiar with the educator's role during their initial year teaching. "However, many have limited knowledge relating to theories of learning and strategies for teaching and can be pedagogically ill-equipped to embark on the demands of teaching and the complexity of this educational environment" (p. 261). Since the tradesperson's classroom environment often resembles that of their industry counterpart ("workshops, restaurants, salons, offices and construction sites" p. 261), the environmental and cultural cues embedded to support second career teachers may be lacking and, therefore, confusing (Maurice-Takerei & Anderson, 2013) to some. This results in "the transfer from discipline expert to successful teacher of the discipline is one which involves an understanding of both content, pedagogical principles and how those pedagogical principles apply to the content being taught. This requires a deep understanding of the content and how to make it understandable to others in a particular context" (Maurice-Takerei & Anderson, 2013, p. 262).

When career-change teachers enter the classroom, they are more likely to struggle than those who enter the profession as a first career, leaving some teachers to feel that they are on their own (Anderson, Fry, & Hourcade, 2014). "The conflicting need to adjust and adapt while at the same time being expected to introduce the most recent methods brought over from the teacher education institution into the school, makes their 'instrumental adaptation' more difficult" (Sabar, 2004, p. 147).

Social networking for those changing careers to teach can be challenging as well, particularly if work teams and collaborative projects are not part of the school environment (Lee, 2011, p. 4). This may be a result of schools having a social structure organized differently than many businesses. New routines and norms and administrators who did not take the time to "know them personally" (Powers, 2002, p. 311) can make the novice teacher feel isolated. This may be attributed, in part, to those who did not anticipate that the experience would be different than their previous employment (Sabar, 2004), the time commitment necessary to perform well (Backes & Burns, 2008), or did not realize that norms, codes, and rules in the field of teaching would differ from those in their previous career (Anderson, Fry, & Hourcade, 2014; Corcoran, 1981; Sabar, 2004; Wagner & Imanel-Noy, 2014). Novice teachers may be confused by the new expectations but reluctant to ask for help, fearful that the "environment will view them as being incapable, lacking control or, worst of all, unfit" (Sabar, 2004, p. 147). Consequently, some may elect to avoid social situations, which maintains their exclusion (Sabar, 2004).

Although some second-career teachers may face obstacles when entering the profession, many "negotiate with this reality and frame and define the problems they face through a dialectical-reflective and intuitive conversation with and in the situation" (Zuzovsky & Donitsa-Schmidt, 2014, p. 3), which may help them navigate the process. Crow et al. (1990) identified a three-part framework that clarifies how a career-change teacher transitions to the new career. First, people initiate the decision to enter into teaching, then their experiences help them to mediate the transition, and finally, they develop a commitment to the new profession.

Motivations to Career Change to Teaching

One area that has been a focus in career change literature is the motivation behind a person's decision to transition to teaching (Anthony and Ord, 2008; Berger and D'Ascoli, 2012; Crow et al., 1990; Freidus et al., 1991; Freidus, 1994; Lee, 2011; Novak and Knowles, 1992; Williams and Forgasz, 2009). However, "the line between what serves as a motivator or a constraint is not always clear, and a particular factor may serve as motivator, a constraint or both, depending on individual circumstances" (Duffy & Dik, 2009, p. 31). Many career changers in the study done by Backes & Burns (2008) identified multiple reasons as the catalyst for change. In order to investigate the types of motivational factors that influence career changers to change, researchers have identified three categorical motivators: extrinsic, altruistic, and intrinsic (Anthony and Ord, 2008; Williams et al., 2009). These three categorical identifiers can further be classified as either *push* or *pull* motivators because of the need or the enticement, respectively, to change (Anthony et al., 2008; Berger et al., 2012). Duffy & Dik (2009) argued "an individual who chooses to place weight on an external factor in making a career decision is doing so using internal mechanisms, thus confounding any attribution of an influence as external" (p. 31).

Push factors (extrinsic) are a result of external influences defined as "originating from someone or something outside the individual, whereby the satisfaction of some external factor or criteria represents the primary motivation" (Duffy & Dik, 2009, p. 31). They tend to focus on a person's career path and situational experiences. These reasons may include unsatisfactory work conditions, disillusionment with the first career choice, or retirement from the previous profession (Anthony et al., 2008; Berger et al., 2012; Novak et al., 1992).

The pull motivators (altruistic and intrinsic) are internal sources "defined as originating within the individual, whereby individual satisfaction represents the primary motivation" (Duffy & Dik, 2009, p. 31) and can also be viewed as developing from the person's "own initiative" (Chudzikowski et al., 2009, p. 837). They center on both the idealistic reasons that a person would like to teach and the internal reasons for the need to change careers, such as "lifestyle, satisfaction, and making a difference" (Lee, 2011, p. 9). Intrinsic influences may also focus on the longing to continue working with a preferred subject area (e.g. science or plumbing), on the

perception that teaching is a career that will "fit" into the person's life (Anthony et al., 2008; Berger et al., 2012; Crow et al., 1990; Lee, 2011; Maurice-Takerei and Jesson, 2010; Novak et al., 1992; Freidus et al., 1991), or on the "goal of contributing to the common good" (Duffy & Dik, 2009, p. 36). Career changers who are intrinsically driven will often rely on external support systems while transitioning to teaching, including "supportive family members, encouraging co-workers, flexible work schedules, monetary resources, and teacher friends" (Castro & Bauml, 2009, p. 123).

Although Anthony et al. (2008) and Williams et al. (2009) both conducted studies that identify altruistic reasons as the primary motivators for the career-change to teaching, the Anthony et al. study findings, which were a result of multiple interviews with 68 career-change participants who entered into teaching, also identified extrinsic reasons as a leading incentive to change careers. Their findings were grouped into three categories: "Looks Good" (extrinsic; n=42), "Time is Right" (altruistic; n=14), and "Teaching is Me" (intrinsic; n=12) (p. 368). The intrinsic motivators were only indicated as the predominant factor for change by 18% of the 68 participants.

In contrast to the Anthony et al. (2008) study, the Williams et al. (2009) mixed methods study indicates that altruistic and intrinsic reasons are the primary motivating factors for career-change teachers. Online surveys that were completed by 375 career-change students asked questions such as: "Please indicate the main reasons why you want to be a teacher" and "Of the above reasons for wanting to be a teacher, which one was *the most important* reason for you?" (p. 100). The most widely selected responses by participants to the latter question were: "I believe I have the necessary attributes to be a good teacher" (p. 104) (altruistic; n=306), "I believe teaching will give me high job satisfaction" (intrinsic; n=305), "I want to work with

children" (altruistic; n=263), and "I have enjoyed working with children in another capacity (e.g. as a parent, coach)" (intrinsic; n=239). The least selected answers to this question were: "The social status of teachers is high" (extrinsic; n=19) and "Teachers receive good pay" (extrinsic; n=51). The one extrinsic reward that respondents selected often (60.2% of the participants) was that "Teaching provides work with family-friendly hours" (p. 102).

Although the specific reasons for change vary among study participants, there are common denominators in this vein of literature that identify the general reasons for wanting to make a change: job dissatisfaction (Hof and Leiser, 2014; Lee, 2011) and health concerns (Maurice-Takerei and Jesson, 2010). Many participants in the study that Lee (2011) conducted mentioned the altruistic motivation of "realizing that they had chosen the wrong career upon graduating from college or the feeling that they were being led toward a career in teaching by way of a spiritual revelation, or *calling*" (p. 14).

Wagner & Imanel-Noy (2014) identified an additional means to categorize a person's motivations to change careers. They cataloged four "functional measures" (p. 49): psychological, socio-ideological, professional-career oriented, and practical. The most prominent measure, which is intrinsic in nature, was "psychological" because 74% of participants in their study "emphasized that the emotional aspect is most important for establishing the ability to influence students and offer them warm support" (p. 49).

Mitigating the positive motives for changing careers are the concerns reported by secondcareer teachers after they began their classroom tenure. The most common distresses were job stress, fatigue (Anthony et al., 2008; Bullough et al., 1990; Crow et al., 1990; Freidus, 1994; Mayotte, 2003), and low income, as compared to their previous profession (Anthony et al., 2008; Bullough et al., 1990; Crow et al., 1990; Freidus, 1994; Hof and Leiser, 2014; Mayotte, 2003; Mosenson and Mosenson, 2012; Tan, 2012). Also reported were difficulties with balancing the current job, family obligations, and an educational preparation program (Mosenson and Mosenson, 2012), feeling unsupported by the new supervisor (Butterfield, Borgen, Amundson, & Erleback, 2010), "concerns over the social perceptions of others relating to their identities in their new careers; and fear of the unknown (e.g., whether they would be successful)" (Tan, 2012, p. 94). The most troublesome experiences that second-career teachers reported, though, were having little experience with school-age children and being viewed as a veteran teacher because of their age/prior job-related experiences despite a more accurate "novice" label (Bullough et al., 1990; Mayotte, 2003; Novak et al., 1992).

In review, this section examined two methods used to categorize the motivations for career changers to transition to teaching. The most commonly used categories are altruistic, intrinsic, or extrinsic motivations, which is the terminology used in several identified studies. The second method, "functional measures," includes a "psychological" categorization since the emotional aspects of career changing are predominant, according to Wagner & Imanel-Moy (2014).

A Tradesperson's Motivation to Change Careers to Teach

To this point the literature I have reviewed demonstrates many aspects of the career change process, including the reasons that people transition to teaching from a professional career area (i.e. banking, marketing) into a core academic area of teaching (English, mathematics, science, social studies, and early childhood education). Less prominent is literature that addresses why tradespeople are motivated to enter into teaching. This section reviews the available literature that looks at the tradesperson's (i.e. metal craftsperson, welder) motivation to transition to teaching in a core academic area. Novak et al. (1992) conducted a case study that incorporated interviews, classroom observations, and journal writing. Two of the participants were Lilian, a thirty-eight-year-old school secretary who transitioned to teaching secondary school mathematics for altruistic reasons (idealism), and Michael, a metal craftsman who left the trade to teach secondary school geography and English for extrinsic reasons (economics). Since Lilian's reasons for transitioning to teaching were altruistic and Michael's reasons were extrinsic, Novak et al.'s findings "suggest that individuals entering teaching from a vocational career, such as Michael's, and those entering from more professional positions such as those held by Lillian ... may have different motivations for pursuing teaching after a trade career were seeking "upward mobility" in status (p. 8), which contrasts with how some professional workers reported receiving a pay reduction (Lee, 2011).

Berger and D'Ascoli (2011, 2012) conducted two studies about Swiss educators who entered into teaching as second careers to better inform the discussion regarding teacher shortages. The first study was conducted to "investigate motivations to become VET educators" (2011, p. 225) and involved 605 teachers. The data collected from the anonymous survey indicated that there is no single motivating factor for VET teachers to leave their trade to teach. The second study (2012) produced evidence that VET teachers (*N*=483) were predominantly motivated by their "past professional experiences" (2012, p. 330) to change careers to teach.

Backes and Burns (2008) identify the most popular motivation as religious or secular calling, which they clarified as being "led into the profession" (p. 104) (31% of respondents), better work hours (30% of respondents), and 28% of respondents said that they were seeking better pay and benefits. This is understandable since some trade fields, such as "construction

personnel, automotive technicians, and others in industry receive lucrative salaries, but do not receive retirement, insurance, and sick leave benefits at a level competitive with education" (p. 104). However, Hof et al. (2011) and Hof and Leiser (2014) note that extrinsic factors, such as the lack of financial success in the trade area, were not important. Some individuals also sought to have a social impact or were motivated "to choose teaching to provide for family and working time" (Berger and D'Ascoli, 2012, p. 331). Many study participants noted teaching as more rewarding and more demanding than working in their vocation (Berger and D'Ascoli, 2011).

One of the top motivating factors for these career changers was the ability to continue working in their subject area (Berger and D'Ascoli, 2011, 2012); this is particularly true when the teaching opportunity presented itself to the person (Berger and D'Ascoli, 2012), as via recruitment, rather than pursuant to their own efforts. However, Backes and Burns (2008) study only identified the "love of subject matter" as the motivational factor for 10% of study participants. "In contrast to traditional pre-service teachers, VET educators' career choice is defined as a transition in a professional field that can be qualified more as a continuation of their career development rather than a complete career change" (Berger and D'Ascoli, 2011, p. 231). This is true because a tradesperson can remain attached, in part, to the professional identity constructed during their trade career (Backes and Burns, 2008).

Transferring Skills to Teaching

This section discusses how work experiences are not attached to a single career; instead, they are accrued knowledge, skills, and competencies that may be transferable to new career settings (Mayotte, 2003). Second-career changers are often able to successfully transfer their previously-acquired competencies to teaching (Anthony et al., 2008; Freidus et al., 1991;

Freidus, 1994; Mayotte, 2003; Williams et al., 2009), which accounts for an easier transition to the profession.

Whitaker (1998) identified seventy-six transferable skills that are primarily managed by the individual instead of by an organization (Schein and Van Maanen, 2013). Whitaker's idea is that people must self-identify their skills by looking for patterns in their strengths and weaknesses. He categorized transferable skills into nine categories: Communication Skills, Research and Investigation Skills, Critical Thinking Skills, Personal and Career Developmental Skills, Information Management Skills, Human Relations and Interpersonal Skills, Design and Planning Skills, Management and Administrative Skills, and Valuing Skills (p. 47). In contrast, Bolles (2016) identifies three categories of transferable skills: data/information (i.e. synthesizing, analyzing, comparing), people (i.e. mentoring, instructing, speaking), and things (i.e. precision working, driving-operating, operating-controlling); each category embodies both simple and complex skills. Once a person identifies his/her transferable skill(s), he/she can identify career areas to pursue that align with these skills, which may lead to greater potential career success. Whitaker (1998) cautions that a person's skills may change over time.

Although skills are acquired during any career, all skills are not *boundaryless* ("beyond the boundaries of a single employment setting") (Mayotte, 2003, p. 683). There is no guarantee that pre-existing skills will transition to a second career (Crow et al., 1990; Mayotte, 2003). Michael, the metal craftsman from Novak et al.'s (1992) previously mentioned study, was observed by the researchers as having no transferable skills that would help him teach. He lacked experience with school-age students, was unorganized, preferred to work in isolation, and his time as a metal craftsman did not provide him with content knowledge that would be helpful in the classroom since he transitioned to teaching geography. Conversely, Lillian, the school

secretary from the same study, was versed in management strategies, how to appropriately discipline students, and organization, which did help her to successfully navigate her first year in teaching. Overall, the Novak et al. (1992) study findings indicate that many participants were unaware of what skills they possessed from their previous employment that would transfer to teaching.

Boundaryless skills are most often transferable to a new career, however, and studies have been conducted that demonstrate many skills are transferable to teaching in particular (Mayotte, 2003; Williams and Forgasz, 2009). The people that change careers to teach have an array of personal experiences and individual skills that they developed during their first or previous careers that set them apart from those seeking a career in teaching immediately after college (Bullough Jr and Knowles, 1990; Freidus and Krasnow, 1991; Freidus, 1994). The ability to transfer skills, therefore, gives a *boundary crosser* ("a person who brings new knowledge across communities and practice and thereby gives new meanings to their practices and cognition in both") (Williams, Linchevski, and Kutscher, 2008, p. 175 cited in Anthony et al., 2008) a distinct advantage over their first-career teaching peers who will bring a different set of skills to the career (Anthony and Ord, 2008; Crow et al., 1990; Freidus, 1994; Mayotte, 2003; Novak et al., 1992; Schein and Van Maanen, 2013).

Career-transition teachers have "authentic life experiences" (Williams et al., 2009, p. 98) that they can share with their students and greater maturity than their novice counterparts (Anthony and Ord, 2008; Bullough Jr and Knowles, 1990; Winstead Fry and Anderson, 2011) that are helpful in the vocational technical (VT) classroom setting. Having access to these prior experiences will greatly assist a teacher in the classroom because they lend credibility to their lessons (Anthony et al., 2008), such as enlivened discussions and real-world examples that support the curriculum. The Williams et al. (2009) study addressed transferable skills as well as motivations for pursuing a teaching career with its 375 career-change participants. Only three participants identified content knowledge as what they thought would help them during their second career yet 56.5% said that "broad life experiences," including "general life experiences" and "breadth of knowledge" (p. 104) were relevant. Additional skills mentioned by the participants in the Williams et al. study as transferable to teaching were ethical behaviors, imagination, compassion, and patience. Anthony and Ord's (2008) study also identified administrative work, working with teams, and presentation skills as highly transferable, while Bullough Jr and Knowles (1990) added that the second-career teachers are often better educated and more dedicated to teaching than their first-career counterparts. Additionally, previously acquired experiences may develop a person's trade-related perspectives and communication abilities, which could be an advantage in the classroom (Freidus et al., 1991; Mayotte, 2003; Novak et al., 1992). These skills will translate well when a teacher is interacting with diverse members of school populations.

The difficulty with reliance on transferable skills is that transitioning teachers need to understand and acknowledge these previously-acquired skills and how they are applicable to teaching in order to best capitalize on their usefulness (Crow et al., 1990; Mayotte, 2003). Another caution is that administrators tend to have higher expectations of second-career teachers because their age and experience lend to the appearance of being an experienced vs. being a novice teacher (Mayotte, 2003; Winstead Fry and Anderson, 2011).

A Teacher's Professional Identity

Identity development is a dynamic process that changes as people move through life, constructing and reconstructing "their story" (Beckale Nze & Ginestie, 2012; Furlong, 2013;

Stenberg, Karlsson, Pitkaniemi, & Maaranen, 2014; Winters et al., 2013; Zembylas, 2003). Identity, or habitus, embodies four basic assumptions: "identity is dependent upon and formed within multiple contexts which bring social, cultural, political, and historical forces to bear upon that formation; that identity is formed in relationship with others and involves emotions; that identity is shifting, unstable, and multiple; and that identity involves the construction and reconstruction of meaning through stories over time" (Rodgers & Scott, 2008, p. 733). In light of this, people must make a psychological shift in how they view themselves in relationship to each career. This indicates that self "might be thought of as the meaning maker and identity as the meaning made" (Rodgers & Scott, 2008, p. 739).

Rodgers & Scott (2008) also explain that awareness and voice are important to the transformation process for novice teachers. The notion of voice is evident in the internal and external dialogue that novice teachers have with themselves and others. These exchanges are as important to satisfying a "sense of autonomy and control" (Winters et al., 2013, p. 116) and being part of the group or community (Wilson et al., 2014; Winters et al., 2013). This process is referred to as a teacher's *story-line* (Beijaard, 1995). Zembylas (2003) notes:

Identity can be understood as a story with narrative constructs typically found in stories such as themes, plots, and characters. These stories are important both as means through which individuals understand themselves as well as tools for taking action. Social commentary and research are increasingly pointing to the narrative quality of lives, showing how the storying of the self is constantly being constructed. Narrative analysis, then, analyzes the discursive environments that effect the process by which experiences and meanings are assembled into identities (p. 215).

Story-lines that are progressive will demonstrate gradual growth into the career as seen in the evolution of a novice to an experienced teacher (Beijaard, 1995). As the teacher engages in dialogue he/she can adopt a position (Correa, Martinez-Arbelaiz, & Gutierrez, 2014). Ultimately, "what you are, your identity, is partially constituted by how you are positioned (self-positioned or positioned by others)" (Correa et al., 2014, p. 451). Lucas & Buzzanell (2004) identified the external component as an *occupational narrative*, which are the work stories that people share with each other and include "stories passed down from fathers and grandfathers, as well as stories passed up from sons, grandsons, and granddaughters" (p. 277).

Since career movement is not a linear path, people "develop and express various perspectives without becoming "married" to them from the outset" (Winters et al., 2013, p. 117). For those who elect to make "downward career changes, managing new identities involves the additional challenge of justifying voluntarily moving to lower status, lower-paying" position (Tan & Kramer, 2012, p. 88), particularly in cultures that value wealth. Tan & Kramer (2012) identified three strategies that people use to communicate their new status. The first, reframing, is done by "actively trying to change the way others perceived their new careers" (p. 98). This can be done by verbally attempting to frame the new profession in a positive way or by verbally aligning the new career with a more "socially desirable" (p. 99) one. Behavioral reframing (when "job changers enact certain behaviors to communicate to others that the career was of high status despite its pay" p. 99) was also a strategy used.

The second strategy, refocusing, is when career changers divert attention from themselves to others who are "materially worse off" (Tan & Kramer, 2012, p. 100). Additionally, an emphasis is placed on the career changer's ability to freely choose the new career. Finally, recalibrating is when people "redefine or recalibrate the markers used to validate their careers" (p. 100). In changing the focus of the "evaluation criterion to something other than salary, they enhanced their new careers' social identity" (p. 101).

A teacher's professional identity develops from exposure to the "perceptions, interpretations, and knowledge that encompass their personal and subjective domain and have a significant influence on their professional practice" (Correa et al., 2014, p. 449). Most careerchange teachers closely relate to their subject matter knowledge (Beijaard, 1995; Correa, Martinez-Arbelaiz, & Gutierrez, 2014; Day, Kington, Stobart, & Sammons, 2006; Colley, James, Tedder, & Diment, 2003) and prefer identification with their former trade rather than as an educator (Maurice-Takerei & Anderson, 2013). In fact, Maurice-Takerei & Anderson (2013) found that many teachers "have closer affiliations with their industry or profession and identify more closely with their particular discipline than they do with the field of education or teaching" (p. 260). They posit that it is necessary for career change teachers to acknowledge three things: "the importance of the role from which they have come," "the challenges of the role into which they are becoming acculturated," and "the complexities of the scenario for identity formation" (p. 260).

Colley et al. (2003) qualified the idea of *vocational habitus* as the "process of orientation to a particular identity, a sense of what makes 'the right person for the job'" (p. 488). It includes the dispositions of the career field that dictate "how one should properly feel, look and act, as well as the values, attitudes and beliefs that one should espouse" (p. 488). "How and with whom vocational educators entrust their work-life identity, what they call themselves and how this is recognized and developed within a work environment can determine how successful their work as educators will be" (Maurice-Takerei & Anderson, 2013, p. 261). Maurice-Takerei & Anderson (2013) suggested the "fostering of the development of a multifaceted teacher identity

based within a context beyond the simple deliverer of others' designs is essential" (p. 263) to their successful transformation. Colley et al. (2003) argued that two developments emerge from vocational habitus:

It "expresses the original sense of the term 'vocation' as a 'calling' and, therefore, helps to convey the 'pull' of a vocational culture to include (and therefore also to exclude) people from certain social groupings. It expresses 'the necessary' in the 'choice of the necessary'. It appears to offer a tool for thinking about the way in which practices are regulated within that culture, in ways that produce new identities, but also reproduce existing ones, such as gender stereotypes" (p. 492).

People who choose to career change to teaching must construct a new identity when they enter the profession (Lee, 2011; Tan & Kramer, 2012). This can be a time-consuming (Lee, 2011) and overwhelming process that is reliant on the teacher's personal narrative (Gee, 2000), familial influences, motivations for wanting to change careers (Shin & Kelly, 2013), personal history (Day et al., 2006; Haycock, 2009; Shin & Kelly, 2013; Stenberg et al., 2014; Zembylas, 2003), and cultural influences (Bourdieu and Passeron, 1990; Dik & Duffy, 2009; Freidus, 1994; Gray and Whitty, 2010; Leijen, 2013; Stenberg et al., 2014). Developing a new identity is a complex process that is "constructed, socially situated, and performed in interactions" (Winters et al., 2013, p. 116), which makes it unpredictable, and there is no guarantee that a teacher will find "success" with their new identity (Rodgers & Scott, 2008).

Career identity is an experiential and participative process in addition to being discursive (Trent, 2013) because teachers are "constructing and re-constructing their sense of professional self (the values, purposes and practices that make up their identities as teachers)" (Smethem, 2007, p. 467). This process makes them vulnerable. For this reason it is important to "explore

the resistance or conflict that individuals meet when they respond to marginalization in teacher identity construction and attempt to legitimate their own position within their prospective working communities" (Gu, 2015, p. 189).

Careers are also deeply grounded in *status identity* ("an individual's internal representation of his or her location among unequal social positions" Day et al., 2006; Savickas, 1997, p. 164), making career selection important to a person's identity. Bullough (1990) cautions that teachers who enter the profession with an embedded socialization related to a previous career may have some difficulty acclimating to the new setting and adapting to the different expectations of the new career (p. 102). For this reason, it is important that these teachers are able to maintain a connection to their previous-career professional identity (Backes & Burns, 2008). Second-career teachers, however, may find that they are able to develop a professional persona more easily than first-career teachers since they have prior experience with career entry and because they are cognizant of the need to deliberately adapt to new surroundings (Freidus et al., 1991).

Socio-cultural aspects of a person's life (Bourdieu and Passeron, 1990; Correa et al., 2014; Dik & Duffy, 2009; Freidus, 1994; Gray and Whitty, 2010; Leijen, 2013; Stenberg et al., 2014; Zembylas, 2003) and the professional context of the school may help or force a person to transform during their employment (Gray and Whitty, 2010). There may be a need to shed the culture of their previous career and of their own personal learning experiences (Haycock & Kelly, 2009; Sabar, 2004) in order to adopt the "essential components from the new culture, e.g., teaching crafts and survival skills that are relevant for the particular school context" (Sabar, 2004, p. 148). Therefore, reflecting on themselves (Beijaard, 1995; Stenberg et al., 2014), the values of the profession, the ultimate purpose of teaching, and the school community are

essential to a "teacher's everyday work, and teacher identity may be viewed as various positions interacting with them" (Stenberg et al., 2014, p. 206).

Most beginning teachers will experience "professional identity tensions" (Pillen, Beijaard, & Den Brok, 2013, p. 241) but encountering conflict and tension during the transition to teaching may result in a more salient experience (Correa et al., 2014; Hamman, 2013; Maurice-Takerei & Anderson, 2013). Trent (2013) found that intrapersonal and interpersonal identity conflicts may accentuate a "mismatch between the meanings of language learning and teaching as defined by school authorities" (p. 437) and the teacher's prior experiences before entering the profession. The latter circumstance is crucial in teacher identity development because a person's "inability to exercise teacher agency by claiming ownership of the meanings of teaching and learning that mattered to them suggested that their preferred professional identities were marginalized throughout their experience of the teaching practicum" (p. 437).

Some transitioning teachers may be "stuck" between two identities (Correa et al., 2014), such as tradesperson and teacher. Colley et al. (2003) observed that "stuck" teachers are learning to differentiate between the "idealized image of 'the right person for the job' to which they aspire" (p. 489) and the reality of the position. Student teachers who participated in Furlong's study (2013) indicated a struggle between traditional and progressive constructs of identity. "Student teachers on the surface espouse the progressive view fueled by their atypical experiences and apprenticeship of observation" (p. 79), but they "appeared pulled" (p. 79) to the more traditional teaching archetypes. Furlong explained:

If we were to construct a picture of the teacher the students wished to be (idealized identities) from their combined narratives one could argue that it would be: the caring, warm, approachable teacher who facilitates children's learning, but who is firm and in

control. A teacher, who commands respect, yet is remembered fondly. To say that there is a balance between the two perspectives within their constructs of their teaching identities would be inaccurate and belie the reality of a dominant progressive view. However, to ignore the more subliminal influence of the traditional lens would ensure that the data analysis is flawed. Their life histories, apprenticeship of observation, and atypical teaching experiences have contributed to their early socialization. This [idea] in itself is not problematic. What is problematic, however, is the tenacity and pervasive power of student teachers' lay theories and pre-service constructed teacher identities, formed in the absence of understanding of educational theories or pedagogical principles. This raises a significant concern for teacher educators. Student teachers enter pre-service education

with their lay theories of teaching and learning shaped by their life histories" (p. 79) The competing values and belief systems may be problematic for new teachers. This indicates that a teacher's participation in a practicum prior to teaching is important in helping perspective teachers "position themselves as particular types of teachers, not only within their placement schools, but also in relation to their understandings of what it means to be a language teacher" (p. 439).

Many teachers report that tensions that result from a person's inner dialogue are often negative in nature, such as feeling insecure, (Beijaard, 1995; Izadinia, 2014; Leijen, 2013; Pillen et al., 2013), feeling lonely (Izadinia, 2014), feeling helpless (Leijen, 2013; Pillen et al., 2013), being disappointed (Leijen, 2013), experiencing stress (Izadinia, 2014; Wilson et al., 2014), being aware of their shortcomings, and feeling angry (Pillen et al., 2013). During their study, Pillen et al. (2013) identified three main tensions experienced by novice teachers: "Wanting to care for students, versus being expected to be tough', 'Wanting to invest in a private life versus feeling pressured to spend time and energy on work' and 'Experiencing conflicts between one's own and others' orientations regarding learning to teach'" (p. 253). Additionally, tensions may derive from the type of students the teacher is working with, prior learning experiences, personal teaching, and learning beliefs (Pillen et al., 2013), the school where they are working (Beijaard, 1995; Pillen et al., 2013), or "external and real-world challenges" (Izadinia, 2014, p. 429). Wilson & Deaney (2010) suggest that "tensions related to becoming a teacher may actually be about fluctuations in agency over time" (p. 173) and that this is "the driving mechanism for changing identities and that feedback resulting in change is informed by a self-verification process which either goes to enhance or diminish self-esteem" (p. 174).

Teachers also experienced tensions that were positively influenced by "(1) the transition in schools from teacher-centered towards pupil-centered education; (2) schools' directedness towards pupil-counselling; (3) the co-operation between colleagues in general and between those who teach the same subject in particular; (4) the possibility of having additional jobs in but also outside the school; and (5) the opportunity to influence the development of school policy" (Beijaard, 199, p. 288). In essence, being a teacher involves managing strong emotions that "create reactions which are both rational and non-rational" (Day et al., 2006, p. 611) and that may contribute to identity transformation (Zembylas, 2003).

Izadinia (2014) reported that two types of activity influence a teacher's professional identity: self-support and community support. Self-support activities are "those which teacher educators use to make sense of their own professional identity and develop their skills and knowledge as teacher educators" (p. 432); this includes the self-study (reflection), which is "one of the methodologies frequently mentioned as a meaningful and useful way for teacher educators

to develop their professional identity" (p. 433). Community support allows novice teachers to be members of learning communities that share resources.

Familiarity with teaching may enable career changers to identify with the profession (Gu, 2015; Stenberg et al., 2014) and to envision themselves in the role of a teacher (Castro & Bauml, 2009; Gu, 2015), which is "an important precursor for pursuing a career change" (Castro & Bauml, 2009, p. 123). This focus tends to be on the "heuristic and non-didactic modes of teaching and learning" (Furlong, 2013, p. 77). Teachers may find that envisioning the kind of teacher they want to be, including the personal ethic they wish to employ (Stenberg et al., 2014), will inspire them to pursue that goal (Hamman et al., 2013). Technology (Correa et al., 2014) and media (Stenberg et al., 2014) may influence people to view teaching in a specific way as well.

This blend of reflection, motivation, and avoidance may help a novice teacher develop into a future self (Hamman et al., 2013; Rodgers & Scott, 2008). Additionally, Hamman et al. (2013) suggested that there are two "regulative functions in terms of (a) informational affordances (i.e., judging progress toward becoming a specific teacher self) and (b) motivational effects (i.e., incentive to become or avoid) of possible selves" (p. 321), which could help novice teachers identify behaviors they may want to enact or avoid in their evolution toward becoming the teacher they want to be in the future.

When a novice teacher begins to develop their new professional identity, "the selfverification process starts. Through confidently enacting their new roles and establishing credibility, they receive gradual acceptance of the group members" (Izadinia, 2014, p. 432). The professional relationships with colleagues may help new teachers establish their identity.

Conclusion

In conclusion, the literature reviewed in this chapter presents necessary information to orient the reader to the theories and ideas related to the process of changing careers. In particular, the chapter examines how people select careers, the available theories and tools that may help guide career selection, and the career stages that most people traverse over a lifetime. Additionally, literature that reports what motivations influence career change and the importance of professional identity development are present.

The literature presented here supports the study's research questions by providing the foundation of knowledge needed to poses questions about career change, a tradesperson's motivation to change careers to teach, and the evolution of a career-change teacher's professional identity. This line of inquiry also creates speculation about how a person interprets and reflects upon their transitional journey to teaching. While we know that there are a variety of reasons why people are motivated to teach, the key points presented in Chapter 1 are addressed and expanded upon in the following chapters.

CHAPTER THREE: METHOD

Introduction

The design method used in this study is the Descriptive Case Study because it is defined by the researcher's interest in a functioning, specific case (Stake, 1994; Yin, 2012) and also because it offers the means to study a social phenomenon (Stake, 1994, 2008; Yin, 2014) by examining "how" and "why" (Yin, 2013, p. 9) the phenomena is occurring. This method's exploratory approach and inclusivity of multiple sources of evidence, such as "the nature of the case," "its historical background," "the physical setting," "other contexts, including economic, political, legal, and aesthetic," "other cases through which this case is recognized," or "those informants through whom the case can be known" (Stake, 1994, p. 238, 2008), aligns well with my qualitative study objectives because the nature of a person's perceptions and experiences cannot be easily quantified.

Because of the nature of the study, the focus of the research questions, and the analysis of the interview data, a *multiple-case design* (Yin, 2012, 2013) or *collective case study* (the study of "a number of cases jointly in order to inquire into the phenomenon, population, or general condition" Stake, 1994, p. 237) was used. This method does not study a collective group of people, instead it covers two individual participants that demonstrate dissimilar trade backgrounds, pathways to career transition, school community experiences, and who have revealed their needs for individualized support during their transition into the teaching profession. The participants were selected because "it is believed that understanding them will lead to better understanding, perhaps better theorizing, about a still larger collection of case"

(Stake, 1994, p. 237). This method of Case Study is referred to as a *literal or direct replication* because similar results emerged (Yin, 2012, 2013) during the comparison of cases.

Since Case Study, unlike other research methods, does not have a "comprehensive catalog of research designs" (Yin, 2013, p. 27) and, therefore, has had its reliability questioned by some theorists (Stake, 1994; Yin, 2013), it was important to identify and follow specific steps to help navigate the path from research question development to study findings. The study is aligned with the five components Yin (2013) identifies as integral to a successful case study: "a case study's questions; its propositions, if any; its unit(s) of analysis; the logic linking the data to the propositions; and the criteria for interpreting the findings" (p. 29).

The Role of the Researcher

Conducting a Case Study can pose a challenge to the researcher because minimal structure and procedures have been established for the method. In fact, a researcher using this method of study must have "continuous interaction between the theoretical issues being studied and the data being collected" in order to demonstrate success (Yin, 2013, p. 72). In order to effectively engage in the Case Study process I studied the interview process, interview protocols, and interviewing techniques while taking the Qualitative Research Methods I and Qualitative Research Methods II courses at Lesley University. Topics in these courses included, expanding knowledge of creating, conducting, and analyzing interviews, evaluation of published interviews in qualitative research studies, and gaining experience in conducting interviews, particularly in an educational setting. Additionally, I reviewed existing literature about the Case Study method (Saldana, 2011; Stake, 1978, 1994, 2008; Weiss, 1994; Yin, 2012, 2013) and engaged in using Qualtrics, an online survey program. Extensive discussions with my senior advisor in

developing my proposal, creating the survey and interview tools, and developing the protocols used were informative and helped to nurture the reflective practice used to evaluate the process.

As a novice researcher, I tempered my excitement for hastily collecting data until I had created a thoughtful dissertation proposal, survey and interview questions and protocols, conducted survey and interview pilots, and took the time to develop my understanding of the Case Study method. Conducting the survey and interview pilots were integral to learning the process of being a good listener while participants were talking, carefully and fairly interpreting their answers, being adaptive, and understanding the depth of the topic (Yin, 2013). Some of these qualities, particularly "being a good listener," would have been impossible to perfect without the practice gained from conducting the pilots. Having the opportunity to evaluate and reflect upon my role as the interviewer was important to maintaining my role as a bystander during the participants' responses; for example, curbing the urge to partake in a discussion was initially difficult to do, but grew easier with practice.

Another area of concern for any researcher is avoiding biases, but this is a particular concern for someone conducting a Case Study because of the depth of understanding they have about this issue prior to the survey and interviews (Yin, 2013). My biases are derived from my personal experience of moving from a Vocational Technical (VT) Program into the workforce, my transition from a trade to teaching, and from my employment in a VT high school. It was important to my research to remain cognizant that my experiences in these areas were not representative of anyone else's experiences, so remembering to "check" my opinions about these topics and remain neutral and open to what I learned was key to disengaging from my personal orientations in these areas.

I also had an ethical responsibility to protect the rights of the human subjects (Stake, 2008; Yin, 2013) by ensuring that each person had a clear understanding about the study's purpose and their participation in it. I also maintained sensitivity about the subject matter and the participants' role in the transition process because those "whose lives and expressions are portrayed risk exposure and embarrassment, as well as loss of standing, employment, and self-esteem" (Stake, 2008, p. 140). In being sensitive to this, I afforded the participants the repeat opportunity to ask questions, refuse to answer survey or interview questions, or to withdraw from the study at any time without consequence. I provided the interview participants with a copy of their interview transcripts and asked each of them to review it and inform me if the contents did not meet with their approval for use. Additionally, the case study participants were asked to review their vignettes and inform me if there were any inaccuracies in the content.

Setting and Participants

Yin (2013) defines a unit of analysis as the identification of what individual or individuals will be studied. Since I work in a regional vocational technical (VT) high school in Massachusetts and I graduated from a VT high school program, VT teachers are of personal interest to me. In addition, little of the existing scholarly literature focuses specifically on VT teachers; more often the focus is on career change teachers, in general, or elementary and secondary academic teachers. These factors were instrumental in directing my attention toward VT teachers. In support, Yin (2013) states that the units of analysis should be similar to those in previous studies or they "should innovate in clear, operationally defined ways" (p. 34).

For these reasons, twenty-six regional vocational technical (VT) high schools in Massachusetts were targeted for inclusion in the study. I chose to focus on regional VT schools because this grouping constitutes a large population of VT teachers-approximately 1,220-as

demonstrated in Table 3.

Table 3

Regional Vocational Technical Schools in Massachusetts

No. Vocational Technical (VT) Teachers	School Name
()	
43	Assabet Valley Regional Vocational School District
58	Bay Path Regional Vocational Technical High School
42	Blackstone Valley Regional Vocational Technical High School
41	Blue Hills Regional Technical School
45	Bristol-Plymouth Regional Technical School District
33	Cape Cod Regional Technical High School
75	Diman Regional Vocational Technical High School
46	Essex North Shore Agricultural and Technical School District
28	Franklin County Technical School
61	Greater Lawrence Technical School
81	Greater Lowell Regional Vocational Technical School
83	Greater New Bedford Regional Vocational Technical High School
33	Minuteman Regional Technical Vocational High School
59	Montachusett Regional Vocational Technical School
30	Nashoba Valley Technical High School
57	Northeast Metropolitan Regional Vocational School
20	Northern Berkshire Vocational Regional School District
34	Old Colony Regional Vocational Technical High School
37	Pathfinder Regional Vocational Technical High School
70	Shawsheen Valley Technical High School
35	South Middlesex Regional Vocational Technical School
33	South Shore Vocational Technical High School
49	Southeastern Regional Vocational Technical School
45	Tri-County Regional Vocational Technical High School
41	Upper Cape Cod Regional Technical School
40	Whittier Regional Vocational Technical High School
1219	Total Number of Teachers

Although the state also proffers one independent vocational high school, twenty-eight vocational high schools, two agricultural high schools, and one collaborative school, many of

these schools are not stand-alone districts as the regional VT schools are; some are part of school districts that include elementary and middle schools, so the districts are organized and managed differently. In addition, although these schools offer a vocational program for students who are interested, for many it is not a mandatory part of the curriculum for all students. Although teachers in these schools are required to hold the same licensure as those in regional vocational technical settings, focusing on a group of schools with similar district patterns and budgets to maintain consistency was a priority.

Although many teachers are career changers, this study focusses on vocational technical (VT) teachers because there is an abundance of literature about why people generally change careers, some literature about why academic teachers change careers, but little literature published about why VT teachers change careers. Studying this group of teachers in isolation made it easier to analyze the group of people who "display what happens" (Weiss, 1994, p. 17) within the population of teachers who change careers to teach in a similar trade area that they worked in during their previous career.

Since the Massachusetts Department of Elementary and Secondary Education (DESE) provides a list of Chapter 74 Vocational Technical Education Programs that are approved to be taught in vocational technical (VT) schools and they require VT teachers to have prior experience in the career field that they teach, identifying people to participate in the interview phase and the case study who teach in a career area that aligns with their prior career field was important for the depth and scope of the study. Academic teachers tend to transition to teaching from a wider area of prior career fields and there are no mandates that require, for example, an English teacher to have prior work experience in the field of English.

It was also important to provide a timeframe in the unit(s) life cycle to be studied, known as *bounding the case* (Stake, 1978, 1994, 2008; Yin, 2012, 2013). For this study, the timeframe was established by the individuals' experiences because his/her designation of when they first began to contemplate the change to teaching indicates the start of the thought process that ignited the desire to change careers. The timeframe concludes for all participants, however, at the same time—at the close of the third year of teaching.

In an effort to avoid a conflict of interest, members of the regional vocational technical (VT) school where the researcher is employed were asked to participate in the survey and interview pilots; they were not asked to participate in the survey or interviews. Five VT teachers participated in the survey pilot—an automotive technology teacher, a criminal justice teacher, an office technology teacher, a programming and web development teacher, and an early childhood education teacher. The first four of these teachers were specifically targeted because I have worked with each of them and/or I know them personally; I trusted that they would participate with enthusiasm and that each would offer an honest response about the survey that I could use to modify the questions or survey experience for the extended audience. In addition, I surmised that each of these teachers offered a unique perspective that I hoped would reflect the wide-range of VT teachers who would have the opportunity to participate in the survey. Additionally, I knew that one of them was teaching in multiple career areas while another was not yet professionally licensed and that the remaining two people were knowledgeable in survey structuring and proofreading. I asked the fifth teacher to participate because, at the time, she had minimal teaching experience. Each of the five participants agreed to participate in the interview pilot as well, if needed.

The remaining twenty-five regional vocational technical (VT) school principals received an email (Appendix D) that asked them to share the online survey link with the VT teachers employed in their school. Since teachers did not receive the invitation directly from the researcher they would be more likely to participate in the online survey since their contact information remained anonymous. In an attempt to reassure the VT school principals and potential survey participants of the importance of the survey, the Executive Director of the Massachusetts Association of Vocational Administrators (MAVA) sent an email encouraging the VT school principals to forward the survey invitation to their VT teaching staff. Since MAVA is the cornerstone of support and advocacy for vocational education in Massachusetts, I accepted the Executive Director's offer in hopes that principals who had reservations about the authenticity or importance of the study would be reassured of its legitimacy.

According to the Massachusetts Department of Elementary and Secondary Education's (DESE) web site (profiles.doe.mass.edu), there are approximately 1,135 vocational technical (VT) teachers employed in the twenty-five regional VT schools; all of them were intended to receive the invitation to participate in the survey. There is no way to confirm how many of these teachers actually received the invitation to participate in the online survey because of the anonymity provided to the VT teachers to encourage them to participate; however, 170 people did take the survey in total. The survey concluded with the opportunity for the participants to supply their contact information if they wanted to be considered as a participant for the interview phase of the study; among the fifty-five people who provided their contact information, ten VT schools were identifiable by the participants' email address.

Interview participants were selected based on multiple criteria. The first was that they met the delimitations set for the study; ten teachers aligned with the delimitations. Following the application of this filter, the participants were selected to participate in the interview based on whether or not they had worked in a previous school district and on their answers to key three questions (questions 11, 14, and 17) in the survey that best reflect the intent of the research questions. At the end of this process, four teachers were identified to participate in the interview. Two of the interview participants were selected as case study participants because their collective survey and interview data indicated a heightened awareness regarding their career transitional experiences.

Data Collection

The field procedures for data collection when using the Case Study method are critical because collection is made from people in *"their* everyday situations, not within the controlled confines of a laboratory, the sanctity of a library, or the structured limitations of a survey questionnaire" (Yin, 2013, p. 88). This means that the researcher has less control over the environment than with other research methods but because it demonstrates how participants "construct reality and think about situations" (Yin, 2012, p. 12) it is invaluable. The study must also follow a design method for reliability.

In light of this, Yin's (2013) five-step process for research design, which includes the creation of case study questions that inquire about the topic; these research questions guide the study and are important because they pose the "how" and "why" (Yin, 2013, p. 29) about the topic to be addressed, was followed. There was some difficulty developing the study questions because capturing the study's inquiries with precision was integral. Since the study's focus is the tradespersons' thoughts prior to transitioning into vocational technical (VT) teaching, the motivations and experiences that prompted their career change to teaching, and how their actual experiences align with their preconceived ideas of the school community and teaching, it was

difficult to capture the full intent of the inquiry. Yin (p. 29) cautions that questions that are trivial or those that were previously addressed in existing literature can derail the research. To avoid this misstep Yin's (2013) three-step process in developing the questions was followed.

The first step in Yin's (2013) process is to research the current literature on the topic that the study is addressing, which was helpful in determining the area of career changing to teaching that was both relevant to vocational technical (VT) teachers but that had not yet been covered extensively. In doing this prior to attempting to create research questions I was able to consider the questions posed in similar studies, which is step two in Yin's process, and link these preexisting ideas with the specific direction I hoped to take—vocational technical (VT) teaching. Yin's final step in the process is to examine other studies on the same study topic (p. 30), which I attempted to do but because of the limited studies done on VT teachers, there was minimal information to consider.

The first goal in developing the study's instruments was to decide who should be interviewed for possible inclusion in the case study. The demographic questions included in the online survey would need to identify these target participants while also outlining the scope of all of the people participating in the survey. As answer to this, the criteria for interview participants would be:

- Minimum of five years in a career trade field prior to teaching
- Employment as a vocational technical (VT) teacher in a comparable field to his/her prior/first-career field
- o Employment as a vocational technical (VT) teacher for less than three years

The remainder of this section will review the two instruments created for use in this data collection—an online survey and interviews—while the second part focusses on the procedures used to administer the survey and to conduct the interviews.

Instruments

The second component that Yin (2013) identified as integral to a case study, *study propositions*, creates a focus on *what* should be studied within the scope of the topic. Although "how" and "why" questions are the lenses being used to propel the study, they do not provide substantial direction about what to study so the propositions are integral. In order to support the research questions, three instruments were developed for use in this research that would help gather the necessary information from the vocational technical (VT) teachers—an online survey, initial interview questions, and follow-up interview questions.

The survey was designed to gather baseline data from vocational technical (VT) teachers across Massachusetts. The participant responses helped to guide the identification of information that would help to illuminate the career change participants' experiences, the motivations for making the career change, and the support areas that survey participants identified as important to their transition. The language that respondents used when answering the open response question about their actual transitional experiences meeting their anticipated experiences contributed to my understanding as well.

The interview questions served a similar purpose--to gain an understanding of the vocational technical (VT) teachers' transitional experiences. Although Weiss (1994) admits that interviews "sacrifice uniformity of questioning" (Weiss, 1994, p. 17), they do provide the respondent the means to "achieve fuller development of information" (Weiss, 1994, p. 17); in this case, to elicit the VT teachers' personal account of their transition to teaching in order to

gain a deeper understanding of their experiences. Ultimately, the instruments worked together to shape and, subsequently, answer the study's guiding questions.

The first step taken toward creating the instruments was making a list of every question to have answered over the course of the study. The idea that people were motivated by altruistic, intrinsic, and/or extrinsic reasons to change careers was a key idea that drove the brainstorming activity. Once these ideas were formulated and noted, I looked for ways to categorize the questions; two areas surfaced—people's experiences before and during their transition and how their expectations for the transition ultimately materialized.

Once the two categories were developed, I worked to create a guiding question for each area. I was particular in ensuring that the guiding questions embodied all aspects of what was identified as important during brainstorming to avoid inadvertently omitting these ideas from the final products. The guiding questions that resulted were:

- 1. What are the prior experiences, beliefs, and thoughts that influence or inspire tradespeople to pursue a transition to vocational technical (VT) teaching?
- 2. How do the tradespersons' prior expectations for their transition into public education and a high school professional community align with their perception of the actual transition into vocational technical (VT) teaching?

Once the guiding questions were developed, work on developing the survey began.

Survey. Questions 3, 4, 5, and 8 of the online survey were created to address the study's delimitations and then they were formatted as multiple-choice questions, which limited the participants to selecting options that were confined to the provided language. This tactic was intentional so that answering the questions would be quick and so that the answers would be consistent amongst participants. However, respondents were provided with opportunities to

write in an "other" response to several questions in the event that the available answers did not resonate with them. One open-ended question was provided in the survey to offer participants the means to answer in their own words.

For questions 3 and 4, the vocational technical areas that the Massachusetts Department of Elementary and Secondary Education (DESE) developed were used as available options for students in career/vocational technical education. This was rational since vocational technical (VT) teachers participating in the study should be currently teaching in one or more of these areas. An "other" option was provided so participants could identify additional areas if necessary. In providing the selections available in VT schools, those who did not fit the delimitation for the study could be easily identified and excused from consideration for interviewing.

Although these delimiting questions were integral to identifying potential interview participants, I also wanted to include additional demographic questions that would help to qualify the group of participants. Questions were added that addressed gender, age group, the number of years the participants were employed in their previous career field, current Massachusetts state licensure area, and whether the person had participated in or was participating in an Induction/Mentoring Program. In a conscious effort to keep the survey completion time to less than fifteen minutes so participants would be more likely to remain engaged during the process, multiple-choice questions were used for these areas.

Once the demographic questions were complete, developing the multiple-choice questions that would support the study's guiding questions was next. This was more difficult because the information that needed to be elicited from the case study participants about their perceptions and experiences was meant to be personal recantations enlivened through discussion.

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The challenge became to develop selections in the multiple choice response areas that would accurately embody a person's individual experiences and thoughts.

Two multiple-choice questions were developed to address the first guiding question ("What are the prior experiences, beliefs, and thoughts that influence or inspire tradespeople to pursue a transition to vocational technical (VT) teaching?"). The first of these, question 10, asked when the participant began to think about changing careers (in years) while the other question, question 11, asked respondents to select up to three reasons from a provided list about why they were motivated to make the career change to teaching. The responses to the latter question included options that reflected altruistic, intrinsic, and extrinsic responses. The challenge with this question was to provide ample options that varied in nuance so participants would identify with them. An "other" response was also added in the event that anyone had a reply that was not provided.

Finally, questions to address the second guiding question ("How do the tradespersons' prior expectations for their transition into public education and a high school professional community align with their perception of the actual transition into vocational technical (VT) teaching?") were created. These questions were designed to provide insight to an individual's satisfaction with their transitional experience, so multiple choice questions about the transitional support he/she received, the current level of satisfaction with teaching, and an inquiry about whether or not they would likely continue to teach were included (questions 14, 15, and 16, respectively). In an effort to gain some insight about each participant's personal reflection about his/her transitional journey, one open response question (question 17) was included that asked if their expectations matched their experiences during the transition to teaching. Offering one open response question provide the opportunity for participants to have a "voice" during the survey

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while providing me with a personally developed reflection, though limited insight, about their experience.

Once the questions were developed, they were arranged in a consecutive manner—first the two basic demographic questions about their gender and age. Next the questions were ordered in a chronological career-transition manner. Participants were reminded at the start of the survey that they could skip any question(s) that they did not want to answer and/or that they could end the survey at any time without consequence.

The five vocational technical (VT) teachers who participated in the survey pilot offered several helpful ideas for modifying some of the questions' wording, answer selections, and question order. A notable change was putting the open response question at the end of the survey. Since this did not affect the chronological order, it was repositioned. The rationale was that as people engaged in the survey; they were able to track their progress via the "progress bar" at the bottom of the survey. Moving this question to the end provided the understanding to participants that they were almost finished with the survey by the time they reached this question. The hope was that people would be more inclined to answer fully if they knew they were engaging in an open response question at the end of the survey. Other suggestions included simplifying the language used in two questions, allowing teachers to select multiple areas that they are currently teaching instead of one, since that was the case with a pilot participant, and adding a question that allowed participants to identify an area where they would have liked support or additional support during their transition.

Interview. The initial interview questions were developed with two goals in mind. The first was to provide an outlet for participants to expand upon the answers they provided during the survey; the second intent was for participants to articulate their experiences and expectations

in their own words. Including interview data in the study contributed richer and more extensive material (Saldana, 2011; Yin, 2012) than working with the survey data alone. With these thoughts in mind, three sections were created in the interview; the first was a review of the survey responses that each participant provided. This recap was included to provide an opportunity for the interview participants to validate the information they disclosed during the survey. The subsequent sections were divided into questions that would first focus on the teacher's experiences and perceptions about the profession prior to becoming a teacher and then focus on the teacher's experiences and perceptions regarding the transition. These groupings were included so teachers would reflect on their prior experiences and to provide a pathway for discussing their perceptions about the career-change transition; the final question, which asked the participants if there was any additional information they wanted to offer about their transitional journey, was included as a "wrap up" to conclude the interview. All of the questions supported one or both of the study's guiding questions.

Since the interview session was intended to last approximately sixty minutes, but there were an overabundance of questions, the number of questions was reduced by transforming the questions that would only elicit one-word or limited answers; in addition, the remaining questions were combined and reworded until there were twelve in total. One of the first questions served as the gateway to the discussion by asking participants to develop a timeline of important moments during their transitional journey.

Two of the five vocational technical (VT) teachers who participated in the survey pilot were asked to participate in the interview pilot because they were already aware of the study and they had provided an abundance of useful feedback during the survey pilot. Although the two teachers did not have suggestions about how to modify the interview questions or ideas about additional question inclusion, a great deal was learned from the interview process that helped guide me toward fine-tuning the protocols.

The most noteworthy change made to the instrument was rearranging some of the questions to better align with the intended outcomes. For example, one general question ("Why did you select teaching as a career?") resulted in two distinct answers from the pilot participants so I added a clarifying question in support of it ("Can you discuss what aspects about teaching appealed to you when you were selecting it as a career"?) so respondent answers would be more comparable. Additionally, two questions from the first section were divided into two individual questions—one in the original section and one in the last section—to allow for qualifying the timeline of experiences.

The other significant change was to the instrument, which was derived from the realization that the interview pilot participants did not elaborate on the answers they provided on questions 11 and 14 in their survey responses. Since questions 11 and 14 had been previously identified as key questions to the transitional experience, it was important to ensure that the interview protocol afforded the teachers a way to expound on these ideas. Two questions were added to the instrument that specifically referenced the whole group answers from these two questions.

Since the average engagement time of the interview pilot participants was approximately fifty minutes, including a post-discussion, there was no concern that the added or modified questions would change the estimated length of time for the interview—sixty minutes. Ultimately, the modified instrument included sixteen questions.

Once the interview questions were adapted, the delimitations of the study were applied to the survey participants, which resulted in the identification of seven survey respondents who were potential interview candidates and possible case study participants. The seven delimited respondents are referred to as the "new teacher group" in this paper. As Yin (2013) indicates, having many qualified candidates is possible, so it was necessary to decide which of the seven respondents would participate in the interviews.

Three survey questions (questions 11, 14, and 17) were identified as the most likely to illuminate a rich transitional experience as well as address the study's research questions, and to help identify which participants in the "new teacher group" would participate in the interview. Based on the type of data collected in these three questions, four teachers were selected from the "new teacher group" to participate in the interview process, which was similar to that of the interview pilot except that the logistics of when and where to do the interviews was more complicated to arrange because of the proximity of the participants. It was crucial to cater to the interviewees' schedules and availability instead of to my own (Yin, 2013).

Both interview pilot participants agreed to meet at the close of school in the researcher's office, which was quiet, offered little distraction, and was convenient to all parties. The interview participants, however, work in regional vocational technical (VT) high schools that range from 15-110 miles from the researcher's home, which presented a challenge. Once the four teachers agreed to participate in the interview, every effort was made to cater to their schedules and availability. I agreed to meet two of them at their homes (one on the weekend and the other during a school vacation week) and the other two in their class space during or after-school hours. I became part of the participant's environment, which afforded the opportunity for the interviewee to control the responses, pace, and, to some extent, the direction of the questions (Yin, 2013).

A satchel of materials was organized to house what was needed for the interviews, which Yin (2013) indicates is necessary for the interview process: pens, paper, and a digital recorder and charger, in order to be most prepared for the meetings. Additionally a file folder for each participant was created that included the address and directions to the meeting place, their phone number, a copy of their actual survey responses, a summary of their survey responses, a prewritten copy of the interview questions that asked the participants to create a timeline of the most important aspects of their transitional journey, a consent form, the interview introduction protocol and questions, and paper for meta notes. Also included were extra copies of the paperwork in the event they were needed. Having the resources organized ahead of time ensured that the process was similar for all participants and it aided in keeping documents organized and individualized.

Each interview began by reviewing the consent form, which each of participant signed. The digital recorder was started and the interview began; first, an overview of the protocol was provided, then the introduction was read, survey results were reviewed, followed by the list of prepared questions. The researcher occasionally asked questions that were meant to prompt the participant into providing additional information on the topic. One participant offered copies of his two most recent "Classroom Walk Through" evaluations written by his supervisor. The interview process averaged sixty-five minutes per person. Interviews concluded with a reminder that there would be follow-up contact to provide each person with a copy of the signed consent form and the interview transcript for their review, which was sent along with a brief "thank you" for their participation. A friendly reminder was given that they might be contacted for additional information. As soon as I was home, I transferred then secured the digital recording on my computer and deleted the original file from the recorder. Once the transcriptions were complete, I emailed each participant to request that they review the transcript and notify me about any information they wished to disclude from the data source.

The next step was to create a spreadsheet that would help me track the themes that were evident in each interview so the themes present across all interviews could be determined. Each interview transcript was annotated individually with a phrase that encapsulated the speaker's meaning. Once two of the reviews were complete, five initial categories were identified-motivations, tensions, support, teaching outcomes, and external influences. Once these were established, two interviews were reread and sub-categorical phrases were created that would briefly describe what was being referred to within those categories. At that point, the spreadsheet was created and indications made next to each sub-category as each teacher discussed the topic. At the conclusion of this process, it was determined that two of the interviewees presented an alignment between the propositions and the overview of their transitional experience that would best fit the goals of the research questions. Several follow-up questions were developed to ask those two teachers to help complete the overview of their perceptions and experiences with regard to the five identified categories.

Once the four interview transcripts were analyzed for common themes, a brief follow-up meeting with the two teachers who would be case study participants was arranged. Although there was an abundance of information about their motivations for transitioning to teaching, about their perceptions of the career change, and examples of their experiences, having additional insight regarding their reflections on the professional identity would be instrumental in helping to understand how they felt about their transition on a more personal and self-reflective level. I was also curious to determine if either participant had thought about our first interview and identified additional incidents or information to offer (Weiss, 1994). In order to develop

questions of this nature, their transcripts were reviewed once again to identify what questions needed to be asked. Ten questions that largely focused on their reflections about their experiences and their evolving professional identity were developed.

Once these questions were prepared both case study participants were contacted to ask if they would meet at their convenience for a follow-up interview that would last approximately 35 minutes. They each agreed to meet during March 2017. Once again, the meeting was arranged to their convenience and in their preferred location--Teacher D and I met at a coffee shop and I returned to Teacher G's school setting for his follow-up interview. In order to prepare for these meetings, a satchel was organized to house the materials needed: pens, paper, and a digital recorder and charger. Additionally, the ten interview questions were included.

Both interviews began with a review of the original consent form and then the recorder was started and the interview began. Occasionally questions were asked that were meant to prompt the participant into providing more information that would qualify the answers provided. The interviews averaged twenty minutes and concluded with a reminder that they would receive an email or a telephone call if there were additional follow-up questions.

Once I arrived home, the digital recording was transferred to my computer, secured, and saved for transcribing. The original file was deleted from the recorder. Once the transcripts were complete and reviewed for accuracy, each participant was contacted to request their review of the transcript in the event that they wanted information redacted.

The next step was to review the transcripts to identify the themes present in the teachers' answers. Both transcripts were annotated and reviewed to identify the themes that were used while annotating the first interviews. The text was also analyzed for new emerging themes; however, none were identified. The work on the transcripts concluded by adding the information

to the existing spreadsheet indicating the themes for each of the four teachers who were interviewed.

Case Study. Each of the two case study participants was presented in a brief vignette to orient the reader to the participants. The survey and interview data for Teachers D and G were then cross-analyzed and comparative data for the two participants were organized by theme for the case study presentation.

Procedures

The survey, interviews, and interview follow-ups were conducted over a four-month period, as seen in Table 4.

Table 4

Data Collection Timeline		
Event	Date	
Survey Pilot	November 30-December 5, 2016	
Survey	December 7-December 17, 2016	
Interview Pilot	January 11-January 12, 2017	
Interview	January 28-February 20, 2017	
Interview Follow-up	March 22-March 30, 2017	

The data collection was conducted during a short period of time to keep the procedures consistent; if too much time passed in between each collection period then the procedure may waiver or differ. The survey pilot was conducted during November and December of 2016 and was immediately followed by the online survey administration, which took place over a ten-day period in December 2016. The interview pilots, interviews, and interview follow-ups were held during January, February, and March 2017.

A TRADESPERSON'S TRANSITION TO TEACHING

Survey. The survey pilot was conducted over three days in November and December 2016. Five vocational technical (VT) teachers were asked to participate individually in the study's online survey. I met with each participant in their classroom or my office during after-school hours to ensure privacy and an uninterrupted experience. Survey completion time averaged twelve minutes and participants averaged an additional thirty minutes immediately following the conclusion of the survey to discuss the survey's question clarity, question fluidity, the clarity of the survey's purpose, and their comfortability with the level of confidentiality. Participant responses were noted so they could be reviewed as a whole group.

Upon reviewing the survey pilot data collected, the pilot participant suggestions were categorized into three areas for fine tuning the survey: question clarity (questions 12 and 14), question content (questions 3, 4, 7, 8, and 11), and survey fluidity (question 14). Minor revisions were made with regard to question clarity and survey fluidity while question content included additional selection options for survey participants.

Once the survey was adjusted, the principals from the twenty-five regional vocational technical (VT) schools were emailed to ask them to share the survey link with the VT teachers in their school. The email informed the principals about the purpose of the study, the importance for first-hand transitional journey accounts, and reviewed survey participant confidentiality as well. In addition, contact information for my dissertation senior advisor, the IRB co-chairs, and me was provided in the event that participants wanted to ask questions.

Emailing the principals to ask for their help with distributing the survey on the researcher's behalf instead of requesting a list of vocational technical (VT) teachers to email directly was a conscious decision to offer survey participants an increased level of anonymity. As a result, the only participating schools and survey takers that were identifiable were the

people who voluntarily provided their contact information for potential interviewing at the close of the survey.

At the start of the survey participants were asked to indicate whether they consented to take the survey. Teachers who did not consent to participate exited the survey immediately. The survey was available to participants from December 7, 2016 through December 17, 2016, a tenday period.

Interview. Two vocational technical (VT) teachers from the regional vocational technical pilot school were asked to participate in the interview pilot during a week in January 2017. They were asked to participate in the interview pilot because they were candid in providing feedback during the survey pilot process and they indicated they were receptive to participating in an interview.

The meetings were scheduled in the researcher's office during after-school hours to minimize interruptions. Each interview was digitally recorded and the first ten-minutes of each interview was subsequently transcribed to clarify and practice the recording and transcription process. Interviews averaged fifty minutes, including post-discussion time. Although the interview pilot participants did not offer modification suggestions, the insight gained from the pilot provided a way to fine-tune the protocol.

Once the interview protocol and questions were modified, one of the seven teachers in the "new teacher group" was called to clarify an inconsistency in her survey data. Two other teachers were also emailed in search of clarification about their responses. Once this information was gathered, the process for selecting which teachers in the "new teacher group" would be invited to participate in the interview process began; this selection was based on the data collected in the survey, particularly in consideration of the answers to questions 11, 14, and 17. I was careful during this process to minimize the impact of my personal biases, which are derived from my own transitional journey to teaching.

Ultimately, four teachers from the "new teacher group" were selected for interviewing. Each of them was contacted to inquire about their interest in proceeding with an interview. When I spoke to each of them, I reminded them about the survey and that they provided their contact information for possible participation in the interview; all four teachers responded that they would participate. During the same conversation, arrangements were made to meet during one of the three subsequent weeks.

After meeting with the four teachers the collected data were reviewed with two goals in mind. The first was to identify the themes that surfaced in their answers to process the data and the second was to identify the case study participants, which resulted in two cases--Teachers D and G. In an effort to ensure that sufficient information had been gathered from both teachers regarding the tentatively identified themes, ten additional interview questions were developed that would provide the necessary information. Subsequent arrangements were made to meet with the two teachers to administer the follow-up interview.

Data Analysis

Once the case study participants were identified, the data was linked to the propositions, which is the fourth component in Yin's (2013) Case Study design. To do this many tools, strategies, and techniques were used to analyze the qualitative data "to determine whether any meaningful patterns are [were] emerging" (p. 134).

The process began with analyzing the 170 participant survey responses with two specific goals in mind--to illuminate the general thoughts about vocational technical (VT) teacher participants' motivations for changing careers to teach and to gain a brief glimpse into their

perceptions about their transitional experiences. This process was key to contributing to the identification of potential participants in the interview process and eventual Case Study. Before tackling this process, however, the number of participants who would meet the study's delimitations needed to be determined. The following section will detail that process.

Survey Delimitations. For this study the web-based analytical software, Qualtrics was used, to create and administer an online survey to regional vocational technical (VT) school teachers in Massachusetts; at the conclusion of the data collection period the statistical results were printed for each multiple-choice question asked in the survey. To begin the analysis, a report was created in Qualtrics that had one initial function—to identify which survey participants fit the study's delimitations. To do this, filters were added to the report that eliminated participants who selected the multiple-choice response that said that he/she has worked in their current school system for either "less than one year" or "1-3 years" (question 8) and those who left the final survey open-response question "empty," which equated to not providing their contact information consenting to participate in the interviews. This reduced the number of participants from 170 to 10 people who indicated that they have been teaching for 0-3 years and who were willing to participate in the interview process.

Yin (2013) suggests that *starting an analytic strategy* (p. 135), searching for "patterns, insights, or concepts that seem promising" (p. 135) in your data, is an important tool to use in a Case Study method. This strategy was incorporated. The data about the ten remaining participants were exported into an Excel spreadsheet and were rearranged in different ways to create data displays and to list items chronologically so different viewpoints were apparent (Yin, 2013). This technique was useful because the data were manipulated to gain insight about the survey participants' responses. The results were analyzed from questions 3 and 4 side-by-side to

determine how many of these ten respondents are teaching in a career field that is similar to the trade they are teaching; this second delimitation did not eliminate any participants from the pool of candidates, however. Finally, the participants' answers to question 5 were reviewed to determine if any of them indicated that they worked in their trade area for less than five years prior to teaching; this final delimitation did not eliminate any participants either.

With ten participants remaining, the data were reviewed to determine if any additional information provided via the survey responses would seem counterproductive to the study. Three respondents indicated they had worked in a previous school system; because these three participants had a transitional experience from two school systems, it was determined their data might be convoluted by this fact, so they were excluded from the potential interview pool as well, which left seven potential interview participants.

Survey Delimitation Analysis. Yin's (2012, 2013) strategy, *relying on theoretical proposition* (Yin, 2012, 2013), was used to reflect on the research questions and review of the literature to help shape a data collection plan to guide the analysis. After applying the study's delimitations to the 170 survey respondents, the seven remaining participants' data were examined to determine which people would be invited to participate in the interview process; these seven teachers are referred to as the "new teacher group." The intent was to determine who might best meet the study's goals about articulating the career-change teacher's transitional journey. Three key questions were identified that would provide specific information about the participants' motivations to change careers to teach, about the areas they identified as needing support/additional support, and the open response question that asked them to discuss the difference between their expectation for the career change and their actual experience (questions 11, 14, and 17, respectively).

The analysis began with evaluating the responses to question 11, which asked survey participants to select the top three reasons for changing careers to teach; 21 options were available for selection. The participants' available response options were categorized into three areas: altruistic, intrinsic, and extrinsic motivations. Nine options were motivations in the extrinsic category, seven were intrinsic, and the remaining five were altruistic in nature. Next, the answers to question 14 were analyzed, which asked participants to select areas where they would have wanted support/additional support during their transition; nine response options were are any number of answers that represented their need. The third key question, question 17, asked participants to articulate how their expectations for teaching in a vocational technical (VT) area matched with the actual experience of teaching. This question was open ended.

At this point in the analysis, two teachers were contacted to clarify answers they provided. Because their answers indicated that they were not optimal candidates for this study, they were excluded from consideration for interviewing.

Finally, I considered Yin's (2013) stance that the identification of "rival explanations" (p. 36) strengthens the Case Study; he states that the "more rivals that have been addressed and rejected" (p. 36) the stronger the study, so two cases were selected for inclusion, Teachers D and G.

Initial Interviews. Once the four initial interviews were complete, the interview transcripts were reviewed and annotated with one goal in mind—to identify and label any information that was relatable to the study's research questions. Yin's (2012, 2013) analytical tool, *cross-case synthesis*, was used while interpreting the interview findings to ensure that each case was considered separately. Once that was complete, they were evaluated comparatively;

this method contributed to developing an "intimate familiarity" (Saldana, 2011, p. 95) with the data collected that helped develop the insight needed to analyze the data.

As I annotated the first transcript (Teacher A), the segments were labeled with the codes that were previously developed; these areas were "motivations," "support," and "reality." Additional codes were necessary to represent data that was not anticipated, such as, "tensions," "outcomes," and "influences." This was not the only discovery made, however. Half way through reading the second transcript (Teacher B), the general codes that were developed needed additional clarification moving forward otherwise the categories would be too broad and inclusive of many sub-categories.

At the conclusion of reviewing the second transcript, a "word table" (Yin, 2013, p. 165) was created, which entailed developing a table of emerging themes from each of the four interviews. Because of the level of detail needed for identifying the topics being covered *themeing the data* (Saldana, 2011), which uses "extended phrases or sentences that summarize the manifest (apparent) and latent (underlying) meaning of data" (Auerback & Silverstein, 2003; Boyatzis, 1998 cited in Saldana, 2011, p. 108) was used instead of coding.

As the interview content was analyzed, new ideas were encountered within each topic area that were sub-categories for each theme. These areas were embedded as a new line for each theme under its heading. Since each theme was broad, this step was important for clarifying the participants' intended meaning. Along the side of the sub-categories, columns were created for each of the four teachers so when an area was addressed by a teacher, it was captured in the table. As a result, the array of sub-categories was apparent along with which teachers were making statements that aligned with them. Although it was a complex process, it helped to profile each individual case while illuminating "whether different cases appear to share similar profiles and deserve to be considered instances (replications) of the same "type" of general case" (Yin, 2013, p. 166). The table also helped clarify whether or not the cases were contrasting. Ultimately, this process helped to develop assertions and generalizations about the cases (Stake, 1994). Saldana (2011) identifies this procedure as *category construction* because it demonstrates "patterns of social action" where there is an attempt "to cluster the most seemingly alike things into the most seemingly appropriate groups" (p. 91). Saldana (2011) also identifies "interaction, interplay, and interrelationship" (p. 92) as important when attempting to identify the ways information aligns; he likens this to the quantitative equivalent of statistical correlation. As Teachers D and G's transcripts were annotated, the complex word table was developed and reorganized.

At the conclusion of the transcript reviews, many areas were reorganized and added and it concluded with the primary themes of motivations, tensions, support, teaching outcomes, and external influences. Since Teachers A and B's transcripts were not read with the same attention to detail, they were reread and the new, more detailed themes were added to the annotations so they would consistently align with Teachers D and G.

Selecting Case Study Participants. Upon reviewing all of the transcripts and the completed word table, it was decided that Teachers D and G provided the information that aligned best with the study's research questions. Additionally, during the interview process Teachers A and B acknowledged that this school year begins their fourth year in teaching, which means that they did not meet the delimitations of the study after all.

Second Interviews. Once the word table was complete and the case study participants were selected, the information in the table was reevaluated to determine if there were additional questions to ask of Teachers D and G. There proved to be a sufficient response from them about

their motivations to change careers to teach, about the tensions that they had encountered during their transition to teaching, and about the support they received before and during their transition to teaching. The element that was missing was a reflection about their personal response to their evolving professional identity. This area was not an idea that had been considered during the survey and initial interview construction; this notion developed because it was noticeably embedded in the respondents' survey and interview responses. Since this theme was recurrent, a second interview with the two case study participants was scheduled to address this topic.

Using the information gathered during the initial interviews to guide the question development, ten questions were created to focus on the teachers' reflections about their experiences in connection to the growth of their professional identity. Since both teachers had included some reflection already in their initial interviews, it was not necessary to develop questions that would take longer than thirty-five minutes to administer.

Once the follow-up interview questions and protocol were developed, both teachers were contacted to schedule a second meeting, the interviews were conducted, and then the transcripts were analyzed to identify the themes present in their answers. Several of the themes regarding professional identity and the tensions they encountered during their transition to teaching were evident but no new themes surfaced; they were added to the word table previously created. The thematic areas were then organized and presented as the cross-analyzed case studies.

Validity

Yin (2013) acknowledged that the Case Study method has met with some criticism for its subjective nature but Stake (1978) clarified that notion by saying, "when explanation, propositional knowledge, and the law are the aims of an inquiry, the case study will often be at a disadvantage. When the aims are understanding, extension of experience, and increase in

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conviction of that which is known, the disadvantage disappears" (p. 6). The Case Study "proliferates rather than narrows," "attends to the idiosyncratic more than to the pervasive," and is best used to add "to existing experience and humanistic understanding" (Stake, 1978, p. 7).

Yin (2013) proposed several ways to "establish the quality of any empirical social research" (p. 45). The first, *construct validity*, is strengthened when using multiple sources of information to develop "convergent lines of inquiry" (Yin, 2013, p. 47). When including only one means of data collection, such as interviews, there is no triangulation of evidence (Yin, 2013). This study incorporates surveys, interviews, and participant-developed timelines of the important points of their transition to teaching. The data collected, therefore, provides three distinct data sets that provide input into answering the research questions--the surveys tend to emphasize "verbal information but not the measurement or recording of individual behavior" (Yin, 2013, p. 119) and the interviews and timelines provide the means for interviewees to articulate their personal experiences. By including multiple sources of evidence, a "broader range of historical and behavioral issues" (Yin, 2013, p. 120) were studied.

During the survey and interview development, careful consideration was given to the development of "converging lines of inquiry" (Yin, 2013, p. 120). First, I identified two key questions on the survey that asked about why vocational technical (VT) teachers were motivated to change careers to teach and about what supports/additional supports each person would like to have received during their transition. Then I developed questions for the interview that would expound on the survey questions; these questions divulged the most popular response to the questions and asked the participants to respond to the information; this created cross-reference points. Additionally, collecting survey and interview data from multiple participants provided the means to identifying thematic recurrences in the data.

Finally, the study's procedures were documented in a methodical and detailed manner to provide other researchers and me with the means to replicate the study in the future; this is known as "reliability" (Yin, 2013, p. 48). The ability to review the study with the same components and have it yield similar results contributes to the study's reliability.

CHAPTER FOUR: ANALYSIS AND FINDINGS

Introduction

Stake (1994) stated that it is the researcher who decides how a study's findings are presented and that not all information learned during the research process will be reported. He also supposed that "the story a case tells of itself may or may not be useful" (Stake, 2008, p. 136), which means that it is important to consider how to answer the study's research questions, as well as how to best present the data to the reader without confusing or misrepresenting it. Therefore, Chapter 4 is organized in a manner that presents data and findings but simultaneously reveals the analytical process taken to consider the data. This chapter first communicates the online survey data analysis, which was used to collect general information about tradespeople who transition to vocational technical (VT) teaching and to identify participants who might be invited to take part in the interview process. The study outcomes are divided into the following sections: the participant overview, survey phase, interview phase, case study vignettes, data synthesis for the first research question with findings, and data synthesis for the second research question with findings. The final section of the chapter, the conclusion, delivers a chapter summary.

Participant Overview

At the close of the ten-day online survey window, 173 vocational technical (VT) teachers had participated in the survey. The survey data show that three of the 173 participants chose the "I do not consent to participate" option at the onset of the survey, therefore, from this point forward the survey results will reflect data collected from 170 participants who did consent to participate in the survey. However, since not all 170 participants responded to each question, the number of respondents who did answer each question will be referenced during the analysis.

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Gender and Age Groupings

The participant demographics, which began with questions 1 and 2 on the survey, report the gender and age grouping, respectively, of the respondents. These data provided a broad understanding about the vocational technical (VT) teachers who chose to participate in the study. Table 5 shows that 58% of the study participants (N=165) identified their gender as male, while 42% of participants identified as female.

Table 5

Gender (Whole Group)

Answer		Percent	
Male		58.2%	
Female		41.8%	
	Total	100.0%	

According to the "2015-2016 Race/Ethnicity and Gender Staffing Report" (Massachusetts Department of Elementary and Secondary Education [DESE], 2015-2016) that is available on the Massachusetts Department of Elementary and Secondary Education (DESE) web site, 51.9% of the 1,954 vocational technical (VT) teachers working in Massachusetts during the 2015-2016 school year were male and 48.1% were female. The 2016-2017 data was not yet available.

Based on the participants' (N=165) "age groupings" identification, 86% of participants were in the 35 to 63 age range. The age group selected by the largest number of participants was the "50-56" group (25.5%). The lowest percentage of participants was in the "21-27" age group (3%), followed by the "28-34" (6.1%) age group, and the "Over 63" (4.86%) group. Table 6 displays the percentage for each age grouping.

Answer	Percent
21-27	3.0%
28-34	6.1%
35-42	19.4%
43-49	23.0%
50-56	25.5%
57-63	18.2%
Over 63	4.9%
Total	100.0%

While this information was also not integral to the study's research questions, it was interesting to learn that the majority of the survey participants (86%) were between the ages of 34-63. The high percentage in this age range may be due to a combination of factors, such as Schein and Van Maanen's theory (2013) that posits that people must gain experience for a minimum of ten years before they can identify what they are good at doing and what they want to do. As a result, this accumulation of experience may explain, in part, delayed entry into teaching. Another factor may be the vocational technical (VT) teachers' late entry into teaching after the accumulation of the mandated minimum of 3-5 years in their trade area (ca. 2016).

Career and Educational Background

Survey participants were asked on question 5 (N=163) to specify the number of years that they worked in their career field prior to their transition to teaching; several selections were offered ranging from "1-6 years" (12.9%) to "Over 20 years" (29.5%). Table 7 shows that the number of vocational technical (VT) teachers who bring a combined total of seven years or more of experience to the classroom is notable (84.1%).

Answer		Percent	
1-6 years		12.9%	
7-10 years		14.1%	
11-15 years		24.5%	
16-20 years		19.0%	
Over 20 years		29.5%	
	Total	100.0%	

Years of Trade Experience (Whole Group)

On question 7 (*N*=163) of the online survey, participants were asked to select all of the types of training that they received in their vocational technical (VT) area from a provided list. Table 8 displays the total number of participants who selected each answer. "Work-based learning/On-the-job training" was selected by 93 of the 163 (57.1%) of participants while only 18/163 (11.0%) respondents selected that they were trained via a technical college program; however, 60/163 participants (38.8%) selected that they received training from a "career, vocational, and/or technical high school" program. Other answers that were selected often were "apprenticed in this field" (36.2%) and "graduated from a four-year college in this field" (34.8%).

Table 8

Trade Training ((Whole Group)

Answer	Percent	Total No.
Completed this program at a career, vocational, and/or technical high school	38.8%	60
Apprenticed in this field	36.2%	59
Work-based learning/On-the-job training	57.1%	93
Completed this program at a technical college	11.0%	18
Graduated from a two-year college in this field	17.2%	28

Graduated from a four-year college in this field	34.8%	57
Other	22.7%	37

Finally, Table 9 reflects the career fields that the survey participants (N=165) indicated that they were employed in prior to teaching. It is notable that several career areas are not represented by any of this study's participants: "fashion technology," "medical laboratory technology," "operating room technology," "painting and design technologies," and "stationary engineering." While these areas were underrepresented, "culinary arts" (8.5%), "electrical" (7.3%), "business/office technology" (6.7%), "carpentry" (6.7%), "engineering technology" (6.7%), "health assisting" (6.1%), "machine tool technology" (6.1%), "automotive technology" (5.5%), "criminal justice" (5.5%), and "drafting" (5.5%) were well represented with 9-14 participants choosing each of the selections as a response.

Table 9

Prior Trade Area (Whole Group)		
DESE Vocational Technical Areas	Career Field	
Agriculture	1.8%	
Animal Science	1.8%	
Automotive Collision Repair and Refinishing	2.4%	
Automotive Technology	5.5%	
Biotechnology	1.8%	
Building and Property Maintenance	4.9%	
Business/Office Technology	6.7%	
Cabinetmaking	2.4%	
Carpentry	6.7%	
Construction Craft Laborer	1.8%	
Cosmetology	3.0%	
Criminal Justice	5.5%	
Culinary Arts	8.5%	
Dental Assisting	0.6%	
Design and Visual Communications	3.0%	
Diesel Technology	0.6%	
Drafting	5.5%	

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Early Childhood Education	3.6%
Electrical	7.3%
Electronics	4.2%
Engineering Technology	6.7%
Environmental Science and Technology	1.2%
Fashion Technology	0.0%
Graphic Arts and Communications	3.6%
Health Assisting	6.1%
Heating-Air Conditioning-Ventilation-Refrigeration	4.9%
Horticulture	1.8%
Hospitality Management	3.0%
Information Support Services and Networking	3.0%
Machine Tool Technology	6.1%
Major Appliance Installation/Repair	1.2%
Marketing	1.8%
Marine Service Technology	1.8%
Masonry and Tile Setting	1.2%
Medical Assisting	1.2%
Medical Laboratory Technology	0.0%
Metal Fabrication & amp; Joining Technologies	3.6%
Operating Room Technology	0.0%
Painting and Design Technologies	0.0%
Plumbing	4.9%
Power Equipment Technology	0.6%
Practical Nursing	3.6%
Programming and Web Development	3.6%
Radio and Television Broadcasting	1.8%
Robotics and Automation Technology	0.6%
Sheet Metalworking	1.8%
Stationary Engineering	0.0%
Telecommunications-Fiber Optics	0.6%
Welding	4.2%
Other	15.2%
Total	100.0%

One additional notable point in Table 15 is that 15.2% of respondents indicated a previous career

field in the "Other" option provided; these responses included, "paramedic/police" and

"manufacturing technology." Four participants also identified "registered nurse" as their prior

career field.

Teaching Background

Survey participants were asked eleven questions on the survey about their teaching background and experience entering the field of teaching. The data collected are presented in two sections of this chapter. The first section, "Pre-Transitional Status," presents the data collected about when participants began to think about transitioning to teaching, what motivated them to change careers, what trade area they are currently teaching, how long they have been teaching, and whether they taught in a school system prior to their current teaching position. The second section, "Transitional Experiences," presents the data collected about the survey participants' Induction/Mentoring Program participation, the support/additional support transitioning teachers would have liked to receive, a brief reflection about the participants actual transitional experiences, and their responses to inquiry about job satisfaction.

Pre-Transitional Status. Question 10 (N=161) asked the participants when they began to think about changing careers to teach; the results are organized in Table 10. While 27.3% of the whole group indicated that they began to think about teaching only 1-2 years prior to making the transition and 19.3% said they began thinking about the change 3-5 years prior to teaching, 18.6% of participants indicated that they "always wanted to be a teacher."

Table 10

Answer	Percent
No more than a year before I began teaching	18.6%
1-2 years before I began teaching	27.3%
3-5 years before I began teaching	19.3%
More than 5 years before I began teaching	16.2%
I have always wanted to be a teacher	18.6%
Total	100.0%

Began to Think about Teaching (Whole Group)

The percentage of participants who indicated that they "always wanted to teach" (18.6%) on question 10, however, did not seem to align with the percentage of people who selected this reason as the motivation for transitioning to teaching (28.6%) on question 11; the latter are presented in Table 11. This discrepancy is attributable to the fixed number of selections provided in question 10 for participants to select vs. the request that teachers select three motivating reasons for transitioning in question 11.

Table 11

Motivations to Teach (Whole Group)

Altruistic	
Category	Percent of Survey Responses
I always wanted to teach	28.6%
I wanted to improve career vocational technical education	21.1%
I wanted to make a difference in students' lives	41.6%
I wanted to give back to my community	13.7%
I wanted to be a role model to those entering my career field	35.4%

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Category	Percent of Survey Responses
I never enjoyed working in my career field	1.9%
I wanted to do something more meaningful	34.2%
I was looking for a supportive work environment	3.7%
I wanted to work in my career field in a new way	32.3%
I wanted less job/career stress	5.6%
I was bored in my previous job/career	4.4%
I wanted a new challenge	26.7%

Extrinsic

Category	Percent of Survey Responses
I wanted to spend more time with my family	26.7%

A TRADESPERSON'S TRANSITION TO TEACHING

I wanted better work hours	18.6%
I needed/wanted health insurance	1.9%
My previous job/career position was eliminated	3.1%
I was fired from my previous job/career position	0.0%
I did not feel supported in my previous job/career field	1.9%
I wanted a job/career that was less physically demanding	8.7%
I was looking for a better/more stable salary	14.3%
I was encouraged by a colleague/family member	28.6%
Other (Specify)	6.2%

The responses to question 11 (N=161) clarify why tradespeople were ultimately motivated to change careers to teach. Respondents to this question were asked to select the "top three" reasons that motivated them to make the change; Table 17 captures the data for the whole group. The table is divided into the three motivating areas: "altruistic," "intrinsic," and "extrinsic" motivations. The available options for participants to select in answer to the question align with one of these areas as presented in the table. The largest category of options, the "altruistic" motivations, included five possible options while the "intrinsic" category totaled seven possible options, and the "extrinsic" category offered nine selections. The available selections were not labelled as "altruistic," "intrinsic," or "extrinsic" on the survey.

The largest numbers of answers selected by participants to question 11 were responses categorized as "altruistic" motivations (140.4%); they were selected more often than the intrinsic (108.8%), or extrinsic (103.8%) options. The options most often selected were from the altruistic and intrinsic categories: "I always wanted to teach" (28.6%), "I wanted to make a difference in students' lives" (41.6%), and "I wanted to do something more meaningful" (34.2%). Other popular selections were "I wanted to be a role model to those entering my career field" (35.4%) and "I wanted to work in my career field in a new way" (32.3%). The selections

that were picked least often by participants were "I never enjoyed working in my career field" (1.9%), "I needed/wanted health insurance" (1.9%), "I did not feel supported in my previous career/job field" (1.9%), and "I was fired from my previous job/career position" (0%).

Several of the survey participants (6.2%) opted to provide a response in the "Other" section of question 11. The "Other" responses included "a former teacher encouraged me," "I had something to offer the students," and comments indicating that the participants had a previous positive experience teaching in their trade.

At the time of the survey, the participants occupied vocational technical (VT) teaching positions in 36 of the 49 trade areas available in regional vocational technical (VT) schools in Massachusetts. Table 12 presents the data collected from question 4 (N=164). It indicates that the trade areas most often represented by participants are "health assisting" (9.2%), "culinary arts" (7.9%), "electrical" (6.7%), "carpentry" (6.1%), and "automotive technology" (5.5%).

Table 12

DESE Vocational Technical Areas	Teaching Area
Agriculture	0.6%
Animal Science	0.6%
Automotive Collision Repair and Refinishing	0.6%
Automotive Technology	5.5%
Biotechnology	1.2%
Building and Property Maintenance	0.0%
Business/Office Technology	4.9%
Cabinetmaking	0.6%
Carpentry	6.1%
Construction Craft Laborer	0.0%
Cosmetology	3.1%
Criminal Justice	1.8%
Culinary Arts	7.9%
Dental Assisting	0.6%
Design and Visual Communications	1.2%
Diesel Technology	0.0%

Teaching Trade Area (Whole Group)

Drafting	2.4%
Early Childhood Education	3.1%
Electrical	6.7%
Electronics	3.1%
Engineering Technology	1.8%
Environmental Science and Technology	0.6%
Fashion Technology	0.0%
Graphic Arts and Communications	3.1%
Health Assisting	9.2%
Heating-Air Conditioning-Ventilation-Refrigeration	3.7%
Horticulture	0.6%
Hospitality Management	1.2%
Information Support Services and Networking	1.8%
Machine Tool Technology	4.9%
Major Appliance Installation/Repair	0.0%
Marketing	0.0%
Marine Service Technology	1.2%
Masonry and Tile Setting	0.6%
Medical Assisting	0.6%
Medical Laboratory Technology	0.0%
Metal Fabrication & amp; Joining Technologies	3.1%
Operating Room Technology	0.0%
Painting and Design Technologies	0.0%
Plumbing	4.3%
Power Equipment Technology	0.0%
Practical Nursing	2.4%
Programming and Web Development	2.4%
Radio and Television Broadcasting	1.2%
Robotics and Automation Technology	0.0%
Sheet Metalworking	0.6%
Stationary Engineering	0.0%
Telecommunications-Fiber Optics	0.0%
Welding	1.8%
Total	100.0%

Question 8 (N=163) asked the survey participants to select the range of years that best represents the length of time they have been teaching in their current position; Table 13 presents this data. Of the five response options provided for this item, the option selected by the highest number of participants was the "4-10 years" (35.6%) response. While 23.9% of the survey participants reported that they have been teaching for a combined total of less than three years,

40.5% specified eleven years or more.

Table 13

Number of Years as Trade Teacher (Whole Group)

Answer		Percent	
Less than 1 year		10.4%	
1-3 years		13.5%	
4-10 years		35.6%	
11-15 years		19.0%	
More than 15 years		21.5%	
-	Total	100.0%	

Question 9 (*N*=163) inquired about the teacher's current Massachusetts state licensure status with regard to their current teaching assignment; the results are organized in Table 14. As evident, the predominant number of participants (71.8%) holds a professional teaching license in their trade area. Only 3.1% of participants are on a "waiver," and 1.2% of respondents reported that they "have a license in an area that I am not currently teaching." This is not unusual since the Massachusetts Department of Elementary and Secondary Education (DESE) does provide waivers for people to teach without licensure and state regulations allow teachers to teach in a subject area outside of their licensed teaching area for up to 20% of their teaching schedule (Department of Elementary and Secondary Education [DESE], 2011).

Answer	Percent
Waiver	3.1%
Preliminary License	20.9%
Initial License	2.5%
Initial Ex. License	0.6%
Professional License	71.8%
I have a license in an area that I am not currently teaching	1.2%
Total	100.0%

Massachusetts Teaching License (Whole Group)

The final question in this group, survey question 6 (N=164), asked participants if they

had taught the same trade area in another school system. Table 15 presents this data.

Table 15

Taught in Trade Thea in Thomes E	jstem (mate are	up)	
Answer		Percent	
Yes		25.0%	
No		75.0%	
	Total	100.0%	

Taught in Trade Area in Another System (Whole Group)

The responses from the whole group on question 6 indicate that 25% of the vocational technical (VT) teachers who participated in the online survey did teach in another school system prior to teaching in their current school system.

Transitional Experiences. Question 12 of the online survey asked respondents (N=155) what their experience has been with a school-based Teacher Induction/Mentoring Program. The majority of participants (65.2%) are either currently in a one- or two-year program or have completed a one- or two-year program while 17.4% of teachers indicated that they "have not

been approached" about being in a program. The results are presented in Table 16. Participants who selected the "Other" option (16.8%) for this survey question were not given the means to provide an explanatory answer so a participant's reason for selecting "Other" is not reported.

Table 16

Answer		Percent
I am in my first year of a school-based Teacher Induction/Mentoring Program		7.7%
I am in my second year of a school-based Teacher Induction/Mentoring Program		3.8%
I completed a one-year school-based Teacher Induction/Mentoring Program		29.0%
I completed a two-year school-based Teacher Induction/Mentoring Program		25.2%
I have not been approached about being in a Teacher Induction/Mentoring Program		17.4%
Other		16.8%
	Total	100.0%

Induction/Mentor Program (Whole Group)

The next survey question, question 13, asked the participants (N=157) if they had been assigned a mentor to work with during their transition to teaching; Table 17 organizes the data. This question was included in the survey to clarify whether the survey participants were assigned to work with a mentor while engaged in the Induction/Mentoring Program at their school.

Answer	Percent
A teacher in the same content area	16.6%
A teacher in a similar content area. Please specify what area.	11.5%
A teacher in an unrelated content area. Please specify what area.	46.5%
A teacher from outside of my school system	0.6%
An administrator	2.6%
I did not have a mentor	22.3%
Total	100.0%

Assigned Mentor (Whole Group)

Despite the increased emphasis on school districts to provide an Induction/Mentoring Program for its new teachers, 22.3% of respondents said they "did not have a mentor." Additionally, only 0.6% of participants indicated that their mentor was from outside of their own school system. This is a particularly viable option for teachers who are establishing a new vocational technical (VT) career area in their school or those who would like to maintain confidentiality while working with a mentor. Most often (46.5%) teachers were paired with a mentor from an unrelated content area, including teachers in other vocational technical (VT) areas as well as teachers from academic areas, such as math and English.

The data collected for survey participants on question 14 provided insight into what support/additional support the participants wished they had received during their transition to teaching. Table 18 shows that transitioning teachers were most interested in curriculum development (51.6%), classroom management (49%), and lesson planning (41.4%).

Category		Percent of Survey Responses
Classroom management		49.0%
Lesson planning		41.4%
Developing student-teacher relationships		13.4%
Developing relationships with other staff members		11.5%
Working with special education students		36.3%
Working with English language learners		12.7%
Working with advanced placement students		6.4%
Curriculum development		51.6%
Time management		28.7%
Other		12.1%
	Total	100.0%

Desired Support/Additional Support (Whole Group)

Nineteen (12.1%) of the participants selected the "Other" option for question 14 and mentioned supports such as, they would have liked "shared planning time with academic faculty," help with navigating "internal school paperwork," and assistance with licensure requirements.

Of the 170 survey participants, 129 teachers (76%) offered a response to question 17, which asked them to share their perspective on their anticipated transitional experience vs. their actual transitional experience. Tables 19 and 20 present a sampling of responses that are categorized into the two predominant themes that emerged during the initial analysis.

The first theme, "making sense of the unfamiliar," is presented in Table 19. This theme includes the survey participants' reflections that ongoing adjustments were necessary during the transition to teaching. Some of the areas mentioned were that teaching is more time-consuming than expected, it is a struggle dealing with unmotivated students, and that there is a significant difference between the school and occupational environment. Many survey participants also inferred that learning to teach is a complex process that evolves over time.

Making Sense of the Unfamiliar – Question 17 (Sample from Whole Group) Participant Responses

The hours of work needing to be done at home after teaching all day was too long. I needed to put in at least 3 to 4 hours a day and weekends at home to keep up with the demands of teaching. That is a 12-hour a day schedule. The career path was long hours but usually 8 to 10 hours a day, 6 days a week.

Well, the first year was extremely difficult, much more so than I had anticipated, since I had over 18 years in higher education and technical training for professionals. It was not the content but the red tape, high school child development issues, and social networking that were the most difficult. I found my energy spent at the end of every day. However, by the end of year three, I was very comfortable with the position, and at this point is where my creativity really took off as a teacher.

Teaching the children is a much smaller portion of the job than I had anticipated. The state's requirements are numerous and quite time consuming as well as the learning of technologies involved with modern day teaching.

A lot more work than expected especially beyond the school day. Nights and weekends spent doing schoolwork.

My expectations were accurately matched to what I've experienced throughout the years. I have found that the amount of time needed to teach CAD Drafting differs from what I had expected due to the level at which the students are in their learning (math skills, processing skills, problem solving abilities...etc.). Also, there is more administrative work (paperwork) involved than what I had originally expected.

My initial expectations for student achievement were way too high. I needed to reduce the pace and load of material being covered several times to reach a level that was consistently attainable by students.

I did not expect teaching to be as all-encompassing as it is; the hardest transition was honestly just being "on stage" all day. Also, I was unfamiliar with vocational technical education at the high school level and was impressed by the rigor of the curriculum. I am so happy that I transitioned to education; I love being able to use my education and experience in a new way.

When I first can into Vocational Teaching, I thought the students would be more motivated to work in the field of their choice. It is still the teachers that need to motivate in the classroom and shop. I also learned that I did not know anything about the field that I worked in for 30 + years and needed to hit the books to become a "GOOD" instructor and it's a lot more work to be "GREAT."

I thought that my charisma would be the most important weapon in teaching. I did not realize that there is science that needs to be utilized to effectively teach students.

Big transition in that I really realized how much of what I know I took for granted ---it was a big "Stepping back "in the realization that teaching a craft / trade from the "Bottom Up" is exactly what it is!

I was right in thinking there would be a large difference in motivation levels found in adults interested in motorcycling and high school aged students. As for being able to spend more time with family, I was wrong. The time a teacher has to invest is much more than that of a technician working in the field. There, once you lock your toolbox, you are done for the day, not so in teaching.

Teaching is a lot more challenging than I thought it would be but it is very rewarding.

I never imagined it to be so complex and time consuming, and a total lifestyle change - never easy to separate work and home. As rewarding as imagined, and sometimes more.

There was a more to it than I had thought; it is nothing like teaching someone something out in the field.

My teaching experience is an ongoing learning experience.

I came to realize quickly you teach the students so much more than just the trade content of your vocation.

I have generally worked with adults, so in that regard the atmosphere is completely different. Dealing with other teachers/administrators/ parents about one student; there are many opinions about how to handle certain circumstances. Trying to understand what makes certain students tick, and how many family structures affect these kids.

The second theme that emerged from the data collected in question 17 was "preparedness to teach." Many survey participants reflected that they experienced some tension with regard to their perception of a teacher's workload and licensure process. Many acknowledged that they were not prepared for the amount of paperwork teachers are required to do. This data is presented in Table 20.

Preparedness to Teach – Question 17 (Sample from Whole Group)

Participant Responses

Some anxiety working with a population that was very culturally different at first. Direction for curriculum instruction and development was almost non-existent. So many improvements since.

Learning to manage the classroom environment was challenging.

At the beginning, I wasn't aware of all of the additional responsibilities that are not directly related to teaching. For example; NEASC accreditation, CPR review, DDM development and implementation, curriculum documentation, office detention, after school meetings, open-house, evidence collection for evaluations... so many distractions and additions to teaching responsibilities and they just keep on piling on.

With all the changes in state requirements, I never thought I would have to do so much paperwork and less teaching.

I didn't think I would have to take so much time away from teaching and prep to deal with all the "paperwork."

My expectations for the amount of paperwork required of an educator that's not related to lessons and curriculum was a lot less than what really is required of an educator.

The one thing that no one who enters the field expects is how much time curriculum actually takes. Lesson planning to frameworks, rubrics, exemplars and grading are understood by all who make the change to teaching. Crafting "Enduring Understanding" and "Essential Questions" to bookmark a unit requires a new way of thinking and substantial time.

I anticipated a challenge to keep students engaged but I am finding that some in-class adjustments can only be learned through experience and trial/error.

The most difficult adjustments were working with special needs students and realizing that the pace of teaching new material needed to be much slower than I had expected.

The online survey concluded with reviewing the data collected on questions 15 and 16,

which asked the participants about their overall satisfaction with their transition to teaching and

whether they intended to continue teaching. This information was important in determining how

the transitional experiences influenced the teachers' current job satisfaction.

Table 21 displays the results from question 15, which asked survey participants (N=155)

how satisfied they are with their teaching position, their career change to teaching, the school where they work, and the support they received as a new teacher.

Table 21

Question	Satisfied	Neither Satisfied or Dissatisfied	Dissatisfied
Your current teaching position	88.6%	9.5%	1.9%
Your career change to teaching	91.8%	6.3%	1.9%
The high school where you work	84.0%	12.2%	3.8%
The support you received as a new teacher	56.1%	27.1%	16.8%

Job Satisfaction (Whole Group)

The results demonstrate that most survey participants are "satisfied" with the current teaching position (88.6%), the career change to teaching (91.8%), the school where they work (84.0%), and the support they received during their transition to teaching (56.1%); however, the latter category had a lower satisfaction rate than the three former categories. In fact, 16.8% of the participants indicated being "dissatisfied" with the support they received during their transition. These results indicate an overall satisfaction with the listed elements of the participants' transitional journey to teaching, which are also evident in the responses to question 16.

Table 22, which provides the responses (*N*=160) to survey question 16, reflects that 79.4% of vocational technical teachers who took the survey definitely will continue to teach. Additionally, 12.5% of teachers said that they would "probably" continue to teach. Only 1.9%

of survey participants indicated that they "probably" or "definitely" would not continue to teach in the future.

Table 22

Continue to Teach (Whole Group)

Answer		Percent	
Definitely yes		79.4%	
Probably yes		12.5%	
Might or might not		6.3%	
Probably not		1.3%	
Definitely not		0.6%	
	Total	100.0%	

Considering both the overall satisfaction that the survey participants have with their teaching experience and the 16.8% of teachers who indicated that they would have liked support/additional support during their transition to teaching, the results indicate that although additional support may be desired by transitioning teachers, the overall experience was positive.

Survey Phase

During the survey phase, several filters were applied to the responses from the 170 participants to determine how many teachers would meet the study's delimitations for interview consideration and ultimately, participation in the Case Study. Once the filtering process was complete, seven survey participants, referred to as the "new teacher group" in this section, met the delimitations. This section presents an analysis of the delimiting process followed by the "new teacher group's" survey data via the delimiting process and includes an explanation of how their collected data met with the study's research question inquiry.

Study Delimitations

Four questions were included on the survey to identify which survey participants would meet the study's delimitations. The first two delimitations, "the focus will be on regional vocational technical (VT) schools in Massachusetts, not comprehensive, collaborative, independent, or agricultural high schools who employ vocational technical (VT) teachers" and "vocational technical (VT) teachers will be surveyed; academic teachers will not be surveyed" were met prior to the survey analysis phase. The remaining delimitations required that participants be employed as a vocational technical (VT) teacher for less than three years (question 8), that they are currently employed as a vocational technical (VT) teacher in a comparable field to his/her prior trade career (questions 3 and 4), and that participants worked for a minimum of five years in a related career trade field prior to teaching (question 5).

The process for identifying the delimited participants began with applying a filter to the survey responses from question 8 (N=163), which asked participants how many years they have been teaching in their primary, current vocational technical (VT) teaching position. As a result of applying this filter, 39 teachers remained as potential interviewees. However, a second filter needed to be applied at this point to determine how many of the 39 teachers provided their contact information, indicating a willingness to participant in the interview process. The result of the two filters produced the data set seen in Table 23.

Table 23

Number of Years as Trade Teacher (Potential Interviewees)

Answer	Provided Contact Information		
Less than 1 year	5.0%		
1-3 years	21.0%		
Did not provide contact information	74.0%		
Total	100.0%		

Applying this filter reduced the number of potential interviewees who had been teaching for "Less than 1 year" and "1-3 years" from 39 potential interviewees to 10 survey respondents—2 people (5%) who have been teaching for "less than 1 year" and 8 participants (21%) who have been teaching for "1-3 years."

At this point another delimiting filter was applied to the ten respondents—now referred to as Teachers A-J. This filter was meant to determine how many of the ten remaining participants are employed as a vocational technical (VT) teacher in a field comparable to his/her prior trade career (questions 3 and 4 of the survey). The results are noted in a side-by-side examination in Table 24.

Table 24

Teacher	Question 3 Career Field	Question 4 Teaching Area		
Teacher A	Electrical	Electrical		
Teacher B	Heating-Air Conditioning- Ventilation-Refrigeration	Heating-Air Conditioning- Ventilation-Refrigeration		
Teacher C	Machine Tool Technology	Machine Tool Technology		
Teacher D	Electronics	Electronics		
Teacher E	Practical Nursing	Practical Nursing		
Teacher F	Practical Nursing	Practical Nursing		
Teacher G	Criminal Justice	Criminal Justice		
Teacher H	Engineering Technology	Engineering Technology		
Teacher I	Machine Tool Technology	Machine Tool Technology		
Teacher J	Metal Fabrication and Joining Technologies	Metal Fabrication and Joining Technologies		

Prior Trade Area (Potential Interviewees)

As a result, teachers A-J were not omitted from potentially interviewing since they all are teaching in an area similar to their previous career field; they, therefore, met this delimitation of the study. As evident, one teacher was from each of the following trade areas: heating-air conditioning-ventilation-refrigeration (HVAC), electronics, criminal justice, engineering technology and metal fabrication and joining technologies. Additionally, the practical nursing field and the machine tool technology field were each represented by two participants.

The final study delimitation was applied at this point to the ten teachers' responses to determine if any of the participants had been working in their trade area, prior to teaching, for over five years, which was question 5 of the online survey. This data set is organized in Table 25 to show the number of years of prior career service for the ten survey respondents.

Table 25

Answer	No. of Years in Career Field Prior to Teaching
Teacher A	Over 20 years
Teacher B	Over 20 years
Teacher C	Over 20 years
Teacher D	Over 20 years
Teacher E	1-6 years
Teacher F	Over 20 years
Teacher G	11-15 years
Teacher H	11-15 years
Teacher I	Did not respond
Teacher J	Over 20 years

Years of Trade Experience (Potential Interviewees)

Of the ten participants, 67% worked in their career field for "Over 20 years" before transitioning to teaching, while 22% worked for "11-15 years," and 11% worked for "1-6 years." One participant did not respond to the question. The whole group data, comparatively, demonstrates

that 29.5% of survey participants (*N*=170) worked in their career field for "Over 20 years," 24.5% for "11-15 years," and 12.9% for "1-6 years."

When reviewing the results of the this filter, it became obvious that question 5 was flawed in that one selection, "1-6 years" did not adequately align with the delimitation, which required the potential interview candidates to work in their field for five or more years. The option for selection should have read "1-5 years." Teacher E's answer needed clarification. Additionally, Teacher I's answer was not indicated so it also needed clarification.

Prior to contacting Teachers E and I to determine the exact number of years each of them worked in their career field, however, an additional filter was applied to the ten teachers' responses. Since the Massachusetts Department of Elementary and Secondary Education (DESE) requires that people entering into teaching for the first time and those entering into a new school system regardless of previous teaching experience (Department of Elementary and Secondary Education [DESE], 2002) enroll in the new school system's Induction/Mentoring Program, this response data needed to be considered. Responses by Teachers A-J to survey item number 6, presented in Table 26, identify whether each teacher had taught in the same trade area in a district other than where they currently teach.

Table 26

Answer	Taught in Another System
Teacher A	No
Teacher B	No
Teacher C	No
Teacher D	No
Teacher E	No
Teacher F	No
Teacher G	No

Taught in Trade Area in Another System (Potential Interviewees)

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Teacher H	Yes
Teacher I	Yes
Teacher J	Yes

The results indicate that 30% of the ten teachers taught in a school system prior to their current district; in the whole group (N=170), 25% of teachers indicated that they taught in another school system prior to their current teaching role. It was likely, then, that these three teachers engaged in a two Induction/Mentoring Programs. Since one of the goals of the study is to illuminate the experiences a person has during their transition into teaching, this information elicited concern that the teachers who navigated more than one Induction/Mentoring Program could complicate the data collection by presenting a dimension that the study did not consider. As a result, Teachers H, I, and J were omitted from consideration in the interview process. This finding eliminated the need to follow-up with Teacher I's years of service in the trade area prior to teaching.

Teacher E was contacted to clarify her years of service in the trade area; she acknowledged that she had worked for three years in her career field. This information, therefore, confirmed that seven teachers (Teachers A-G) remained as possible interviewees in the study; from this point forward these seven teachers are referred to as the "new teacher group."

Subsequent to applying the study's delimitations to the survey participants' responses, the remaining data were analyzed as applicable to the study's two research questions. Each of the following sections continues to examine the data as applicable to the "new teacher group;" it is divided into sections by research question.

First Research Question

The study's first research question asks, "What are the prior experiences, beliefs, and

thoughts that influence or inspire tradespeople to pursue a transition to vocational technical (VT)

teaching?" Questions 10 and 11 from the online survey provide insight to this question's

inquiry.

Survey question 10 asked the participants when they began to think about the transition to teaching. The results for the "new teacher group" are in Table 27.

Table 27

Degan to Think about Teaching (Trew Teacher Group)				
Answer	Percent			
Teacher A	More than 5 years before I began teaching			
Teacher B	More than 5 years before I began teaching			
Teacher C	More than 5 years before I began teaching			
Teacher D	No more than a year before I began teaching			

Began to Think about Teaching ("New Teacher Group")

Teacher E

Teacher F Teacher G

The data collected for this question demonstrate that most of the "new teacher group" (71.0%) thought about transitioning to teaching more than five years before making the transition, with two of the participants indicating that they "always wanted to be a teacher." Comparatively, 34.8% of the participants from the whole group (N=170) indicated that they began thinking about the transition to teaching more than five years before committing to the change. The contrast between these five potential interviewees (Teachers A, B, C, E, and G) and Teachers D and F, who indicated a newer interest in teaching, was necessary to consider when selecting to interview participants.

I have always wanted to be a teacher 1-2 years before I began teaching

I have always wanted to be a teacher

Survey question 11, which asked participants to select the top three reasons that

motivated them to change careers to teach, was key to understanding if members of the "new teacher group" transitioned to teaching for altruistic, intrinsic, or extrinsic reasons as well as to clarify if there were any common or contrasting answers amongst the participants. Table 28 shows the answers that the "new teacher group" selected alongside the whole group participant percentiles.

Table 28

Motivations to Teach ("New Teacher Group")

Altruistic	Teachers						Whole Group	
	Α	B	С	D	Ε	F	G	
I always wanted to teach	Х				Х			28.6%
I wanted to improve career vocational technical education		Х	Х					21.1%
I wanted to make a difference in students' lives	Х	Х			Х			41.6%
I wanted to give back to my community					Х			13.7%
I wanted to be a role model to those entering my career field			Х	Х		Х		35.4%
PERCENT ANSWERS IN CATEGORY	47.89	%						
	1710	, .						
			Т	eache	rs			Whole Group
	A	B	To C	eache D	rs E	F	G	Whole Group
Intrinsic						F	G	
Intrinsic I never enjoyed working in my career field						F	G X	Group
Intrinsic I never enjoyed working in my career field I wanted to do something more meaningful I was looking for a supportive work environment		B	С	D		F	-	Group 1.86%
Intrinsic I never enjoyed working in my career field I wanted to do something more meaningful I was looking for a supportive work environment I wanted to work in my career field in a new way		B	С	D	E	F	-	Group 1.86% 34.2%
Intrinsic I never enjoyed working in my career field I wanted to do something more meaningful I was looking for a supportive work environment I wanted to work in my career field in a new way		B	С	D	E	F	-	Group 1.86% 34.2% 3.7%
Intrinsic I never enjoyed working in my career field I wanted to do something more meaningful I was looking for a supportive work		B	С	D	E	F	-	Group 1.86% 34.2% 3.7% 32.3%

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Extrinsic	xtrinsic Teachers						Whole Group	
	Α	B	С	D	Ε	F	G	
I wanted to spend more time with my family						Х	Х	26.7%
I wanted better work hours					Х	Х		18.6%
I needed/wanted health insurance								1.9%
My previous job/career position was eliminated								3.1%
I was fired from my previous job/career position								0.0%
I did not feel supported in my previous job/career field								1.9%
I wanted a job/career that was less physically demanding								8.7%
I was looking for a better/more stable salary							Х	14.3%
I was encouraged by a colleague/family member						Х		28.6%
PERCENT ANSWERS IN CATEGORY	26.19	%						

PERCENT ANSWERS IN CATEGORY 26.1%

The selection that elicited the highest response among the "new teacher group" was the intrinsic selection, "I wanted to do something more meaningful" (57.0%). Two additional altruistic selections, "I wanted to make a difference in students' lives" and "I wanted to be a role model to those entering my career field" were selected by 43% of the "new teacher group." Also notable was that the altruistic selections were chosen more often (47.8%) than either the intrinsic (26.1%) or extrinsic (26.1%) selections overall. Two final points of interest were that only three of the teachers selected any extrinsic options and that none of Teacher G's selections were altruistic; Teacher G's selections that contrast with the other members of the "new teacher group" warranted that Teacher G be considered as an interviewee.

Second Research Question

The online survey questions that address the second research question, "How do the tradespersons' prior expectations for their transition into public education and a high school professional community align with their perception of the actual transition into vocational technical (VT) teaching?" were questions 13, 14, 15, 16, and 17. Questions 14 and 17 were particularly critical to identifying interview participants because they inquire about areas that the participants could expound upon during the interview phase that would qualify the transitional experiences they faced.

Question 13 asked members of the "new teacher group" if they had been assigned to work with a mentor during their transition to vocational technical (VT) teaching. Table 29 demonstrates the answers that they selected.

Table 29

Teacher	Teacher Trade Area	Mentor Description	Mentor Trade Area
Teacher A	Electrical	A teacher in an unrelated content area.	Did not specify
Teacher B	Heating-Air Conditioning- Ventilation-Refrigeration	A teacher in an unrelated content area.	Science
Teacher C	Machine Tool Technology	A teacher in an unrelated content area.	Graphics Technology
Teacher D	Electronics	A teacher in a similar content area.	Automotive
Teacher E	Practical Nursing	I did not have a mentor	N/A
Teacher F	Practical Nursing	I did not have a mentor	N/A
Teacher G	Criminal Justice	A teacher in an unrelated content area.	Culinary Arts

Assigned Mentor ("New Teacher Group")

The most notable responses to question 13 was that Teachers E and F, both from the practical nursing trade area, indicated that they did not have a mentor; comparatively, 22.3% of the survey whole group (N=170) indicated that they did not have a mentor as well. Since both of these teachers also specified on their survey that they did not take part in an Induction/Mentoring Program, that they hold a professional teaching license in their trade area, and that they have only been teaching for 1-3 years, they were omitted from interview consideration because this combination of experiences is not the normative transitioning teacher experience and was not a consideration in the study's inquiry.

Question 14 asked the survey participants to identify areas that they would have liked to receive support/additional support in during their transition to teaching. Teacher E did not select any areas; she did offer a written response in the "Other" selection, however, that stated, "None, I am fine." Table 30 shows the answers that the remaining six members of the "new teacher group" selected alongside the whole group's responses to the question.

Table 30

Category	"New Teacher Group" Responses	Whole Group Responses
Classroom management	71.4%	49.0%
Lesson planning	42.8%	41.4%
Developing student-teacher relationships	28.5%	13.4%
Developing relationships with other staff members	28.5%	11.5%
Working with special education students	42.8%	36.3%
Working with English language learners	28.5%	12.7%
Working with advanced placement students	0.0%	6.4%
Curriculum development	28.5%	51.6%
Time management	14.2%	28.7%

Desired Support/Additional Support ("New Teacher Group")

The selections made demonstrate that these transitioning teachers were most interested in receiving support/additional support in classroom management (71.4%), lesson planning (42.8%), and working with special education students (42.8%). This differs somewhat from the whole participant group who indicated that curriculum development (51.6%), classroom management (49.0%), and lesson planning (41.4%) were most important to them; those results are demonstrated in Table 7. The selections chosen less often by the "new teacher group" were "Working with English language learner" (28.5%) and advanced placement (0.0%) students and "Developing relationships with other staff members" (28.5%).

Table 31 demonstrates the results from question 15, which asked survey participants how satisfied they are with their teaching position, their career change to teaching, the school where they work, and the support they received as a new teacher. Survey participants were able to select "Satisfied," "Neither Satisfied or Dissatisfied," or "Dissatisfied" as options to each category inquiry.

Table 31

Question	Teaching Position	Career Change to Teaching	School Where You Work	Support Received
Teacher A	Satisfied	Satisfied	Neither Satisfied or Dissatisfied	Satisfied
Teacher B	Neither Satisfied or Dissatisfied	Neither Satisfied or Dissatisfied	Neither Satisfied or Dissatisfied	Neither Satisfied or Dissatisfied
Teacher C	Satisfied	Satisfied	Satisfied	Satisfied
Teacher D	Satisfied	Neither Satisfied or Dissatisfied	Satisfied	Satisfied
Teacher E	Satisfied	Satisfied	Satisfied	Satisfied

Job Satisfaction ("New Teacher Group")

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Teacher F	Satisfied	Satisfied	Satisfied	Satisfied
Teacher G	Satisfied	Satisfied	Satisfied	Satisfied

The teachers in the "new teacher group" indicated that they are predominantly "satisfied" with their current teaching position (85.7%), career change to teaching (71.4%), the school where they work (71.4%), and the support they received during their transition (85.7%). The survey participant whole group data, displayed in Table 26 (p. 150), shows that they are largely "satisfied" with their current teaching position (88.6%), career change to teaching (91.8%), and the school where they work (84.0%); however, only 56.1% of the whole group indicated satisfaction with the support they received during their transition to teaching.

Teachers C, E, F, and G selected being "satisfied" with all categories while Teachers A and D selected that they were "neither satisfied or dissatisfied" in one of the four categories. Teacher B's selections indicated that he is "neither satisfied or dissatisfied" with all four categories, which shows that he may offer a different perspective on the transition to teaching than other participants.

Table 32 presents the responses to survey question 16, which asked the survey participants if they want to continue teaching in the future. The responses from Teachers A, C, D, E, F, and G indicate that they will definitely continue to teach, while Teacher B indicated that he "might or might not" teach in the future. As with Teacher B's response to his overall satisfaction with his current teaching position, his career change to teaching, the school where he works, and the support he received, it is interesting that his response differs from the other members of the "new teacher group."

Table 32

Teacher	Response	
Teacher A	Definitely yes	
Teacher B	Might or might not	
Teacher C	Definitely yes	
Teacher D	Definitely yes	
Teacher E	Definitely yes	
Teacher F	Definitely yes	
Teacher G	Definitely yes	

Continue to Teach ("New Teacher Group")

Within the whole group of survey participants, 91.9% indicated that they will "definitely" or "probably" continue to teach while only 6.3% of teachers indicated that they "might or might not" continue to teach.

Question 17 also contributed to the data collection regarding the second research question. This question provided the means for survey participants to present their transitional experience in their own words. Table 33 presents the responses from the "new teacher group" for questions 17.

Table 33

Teacher	Text Entry		
Teacher A	Night and day from what I thought. I never would have stayed after my first year if I didn't like the kids. I understand why my fellow tradesmen complain about the students who come out of our voc. schools not knowing anything. I don't know if I could have switched over to teaching as a younger man.		
Teacher B	There is almost no time provided to shop teachers at my school. Many have no prep periods so all prep is done on my own time at home and on weekends.		
Teacher C	Teaching has been great! I thought it would be really exciting, but it exceeds my expectations.		

Expectations vs. Actual Experiences ("New Teacher Group")

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Big transition in that I really realized how much of what I know I took for
grantedit was a big "Stepping back " in the realization that teaching a
craft / trade from the "Bottom Up" is exactly what it is!

- Teacher E It's ok; I wish my students were more mature.
- Teacher F Exceeded my expectations

Teacher D

Teacher G I anticipated a challenge to keep students engaged but I am finding that some in-class adjustments can only be learned through experience and trial/error.

Teachers A, D, and G noted that there was a difference in their expectations for teaching as compared to the actual experiences while Teacher B implied that the reality that he is experiencing with regard to classroom planning and preparation is different from his expectations. Teachers C, E, and F offered statements that express a level of pleasure with teaching but they did not articulate if there were any differences between their expected and actual experience.

The statements made in response to questions 13, 14, 15, 16, and 17 on the survey were integral to selecting the interviewees. Those who appeared to offer the information that best aligned with the study's inquiry were Teachers A, B, D, and G. The data used to make the decision to interview these four teachers included the contrast between Teachers A, B, and G's indication that they had a long-standing interest in teaching with Teacher D's indication that his interest in the profession was newer. Another contributing factor was Teacher A's choice on question 15, which indicated he is "neither satisfied or dissatisfied" with the school where he works, and Teacher D's indication that he is "neither satisfied or dissatisfied" with his career change to teaching. Their answers revealed a level of awareness about these areas of their transitional experience, along with Teacher B who chose that he is "neither satisfied or

dissatisfied" in all four areas of the question (current teaching position, career change to teaching, school where you work, and support received during the transition).

Several other responses from Teachers A-G were fundamental to selecting Teachers A, B, D, and G for interviewing. Teacher E's indication that she did not need any additional support during her transition to teaching infers that her reflections about her transitional experience may not be as forthcoming as the other teachers', who indicated that additional support in classroom management and lesson planning were desired, reflections. Additionally, Teacher B was the only member of the "new teacher group" to indicate that he "might or might not" teach in the future, while the others indicated that they will "definitely" or "probably" continue to teach. Finally, when asked about his motivations for transitioning to teaching, Teacher G selected primarily extrinsic answers while the remaining teachers mainly chose altruistic or intrinsic selections; this difference in motivational factors to transition was potentially an area where contrasting experiences may unfold during their interview phase.

While all of the teachers in the "new teacher group" might have expounded on their transitional experiences during an interview, the researcher reasoned that Teachers A, B, D, and G best articulated an awareness of their transitional experiences in their survey answers. This analysis led to the belief that Teachers A, B, D, and G would be most forthcoming about their experiences during an interview.

Interview Selection

As a result of the data analysis completed of the online survey responses, as presented in this section, Teachers A, B, D, and G were selected to participate in the interview phase of the study. Teachers E and F presented stories that were an anomaly to most career-change novice teacher's entry into teaching and Teacher C did not provide responses that aligned with the study's inquiry as well as the remaining teachers' responses.

Interview Phase

Interviews were conducted with four survey participants (Teachers A, B, D, and G). The interviews lasted approximately one hour and were digitally recorded then transcribed. The interviewees were provided the opportunity to review the transcript of their interview to confirm that their perspectives were accurately captured. The researcher was given permission by each interviewee to use the information they shared for the purposes of the study.

Participant Demographics

The four vocational technical (VT) teachers who were asked to participate in the interview process range in age from 43-56 and identified as male. Their career trade areas are electronics, criminal justice, electrical, and heating-ventilation-air conditioning -refrigeration (HVAC), which are also the content areas that they currently teach. Combined, the participants have a minimum of eleven years of service in these career fields, with three of the vocational technical (VT) teachers indicating over twenty years of experience in their trade area.

Three of the vocational technical (VT) teachers hold a preliminary teaching license in their content area and the fourth teacher holds a state-approved waiver. The teachers have varied experience in a Teacher Induction/Mentoring Program (two teachers are currently enrolled in a two-year program, the third teacher completed a one-year program, and the last teacher completed a two-year program). All four teachers were assigned a mentor in their school but none of their mentors works in the same content area; three of the mentors are automotive, science, and culinary teachers. The fourth interview participant only indicated that his mentor worked in an "unrelated content area;" he did not disclose what area.

Emergent Themes

The data collected during the interviews provided valuable insight about the transitional experiences of tradespeople who become vocational technical (VT) teachers. This section identifies the themes that emerged from the interviews, briefly discusses which of the teachers presented evidence of the theme, and provides examples of them.

Influence of Prior Experiences. Data collected during the interview phase show that all four teachers regarded prior life experiences as having been vital to helping them prepare to teach. These reflections included personal educational experiences and connections with helping people, such as coaching, which Teacher G identified as important, and working with apprentices in their field, as Teachers A and D indicated. Working with apprentices and novice tradespeople taught them how to present their content-knowledge to those entering the trade area, which was helpful upon entering into teaching since this approach was needed when working with students. All of the teachers acknowledged that their prior trade knowledge and experience was what they were most confident with during their initial transition to teaching. Teacher B acknowledged this when stating, "The content. I didn't need a textbook. I've been doing this a long time and I did it at a pretty high level. I personally like to make my own stuff [tests] because it's better than the stuff they have. I have a deep understanding of some parts of our business and because of my relationship with the manufacturer I'm privy to things a lot of guys never even think about." Teacher A also stated that he was most comfortable with his "knowledge on electrical. And the fact that I knew the industry really well" upon entering the profession.

Motivating Factors. It emerged during the interview data analysis that all four of the career change teachers had only one common motivation for wanting to teach: they "wanted to

make a difference in students' lives." Table 34 provides examples of their comments that

demonstrate the altruistic motivation to continue to teach.

Table 34

Interviewees' Common Motivation ("I Wanted to Make a Difference in Students' Lives")

Interviewees' Commo	Interviewees' Common Motivation ("I Wanted to Make a Difference in Students' Lives")						
Teacher A	Teacher B	Teacher D	Teacher G				
As the year went by and the stuff that I was teaching got more and more difficult and they got lost, they needed me and I was there. I helped them out after school and whatnot and the key was I didn't make them feel like they couldn't understand it. I tried to empower them by saying, "Okay, that's fine but look at it this way." And I used their strengths to get them through.	Every once in a while you run into that kind of kid and they get very attached to you and a lot of times you like that kid a lot too You take a little bit of ownership at heart, and a lot more than that, of their future and everything else.	I want to be a role model for the people I live with, that I work with, that I meet in the community; that besides just my students absolutely, but also just I want to be a role model, you know period.	Wanting to be a guide is very much what I wanted to do that's why I'm here. That's why; to me it's still central because the question I ask myself every day is, "How can I make this a useful day for each student as they drive toward whatever goal their looking for?" And trying to keep them on pace to do that.				
I can reach that kid and I can make a difference, turn him around, get him focused, and really get him to love what he's doing, then I feel proud of what I've done with him.	I can't make the dramatic impact on their lives every day that I thought but it's the little ones that can be rewarding.	I want to have a home for them, right? A family kind of thing that they canthat's important. There are few enough times in your life when you can build that and have it happen.	My mission is to get these kids to believe in themselves, develop themselves, develop these skills and ultimately find a path that they want to go on. Find a job, do something that they are passionate about.				
I really enjoyed watching somebody come from not really knowing a heck of a lot about the field to	For the kids that you can reach, you can have a tremendous impact. You can take a kid that's at-risk for	If I get ownership from my students and have that back and forth with them; then they're going to want	The challenge to me about that [finding balance] is it so easy for me to get involved and				

the point where they were about ready to get their license and then go into business for themselves. That was very rewarding, so I always had a sense that later on in my career that I would eventually look into teaching and hopefully finish up strong that way. something or a kid that needs to do more work in something academically and you can really help them build their confidence.

I build on things that I've started them with and I bring them up to the point where I get them so that they build confidence and they're ready to take on the next thing. And that's really what impresses me the most about teaching, is watching somebody come from not knowing anything to the point where they can actually have a conversation with someone like myself and I'm interested in what they have to say because they understand it.

You can go home at night and say that you truly helped that kid. You can point to that and say, "That was a good day." And I'll be honest with you, people come and go from teaching and a lot of them don't last, but the other surprising thing to me about my coworkers is that to a man or a woman, they all care about kids like that. I don't think you could stay in this job like this. I don't think the outside world understands the commitment that people that stay in teaching make. And I didn't get it either until I started here.

to do better and I have a good relationship with them. I feel, and I think rightly so, that that helps makes me a better teacher and them better students Instead of just saying, "Here. You've got to do this and see you tomorrow." You know So, I really work at that. I really do. I think it's important to teach to the individual as much as I can.

And I like trying to figure out how I get into their mind to get them interested and make them feel like they've accomplished something and they're part of something greater that's worthwhile in life to really kind of... there is a greater, better things in life and that school isn't a bad thing you have to go and do. Learning's a good thing and its fun and I'm trying to make it that way so they feel like they're all doing something worthwhile.

committed and attached, to help these kids and to see that I have such an impact

I know I can make a difference on a daily basis to these kids. Seeing them every day for a week I can make a difference and every day they can get better a little bit and that's the way I see it and the great think is I don't have to wait until June to hear their feedback. There's an instant feedback. Sometimes it's hard, sometimes there's feedback that you don't want but I feel like it's correctable. Every day you make changes in the way I teach but also try to help them to address that. It's a daily affirmation.

Every one of them. I don't walk through this building and I have yet to really meet anybody that I thought was phoning it in and didn't care about these kids.

An additional motivation for Teachers A, D, and G was that they "always wanted to teach" and Teacher B, D, and G stated that they "wanted to do something more meaningful." Teacher B stated he finds teaching to be most meaningful when he can help his students become "good citizens and have successful careers" and when classroom "conversation turns to work ethic, [and] their future." Teacher D expressed that he is happy when students are excited about their work in electronics and that he enjoys helping them think critically while Teacher G confided that he felt like teaching has a much higher "impact" than the work he did in his trade area.

Licensure Tension. All interviewees identified that the hurdles and protracted processes required to attain the mandated teaching credentials were especially challenging during their transition. At the time of the interview, Teacher B had finished all of the required courses but he articulated the frustration that he and many of his colleagues with 30-40 years of trade experience, but no accumulated college credits, had when faced with the mandated licensure requirements. He stated:

I think the five years is too short a period [to complete the required courses]. The problem is that is if you're taking courses and all this other stuff for licensure, there's not enough time for the shop teacher to kind of breathe. I know where they're [the Department of Elementary and Secondary Education] coming from: they want you to know how to deal with the special needs kids, they want you to know how to manage kids safely, they want you to know how to develop curriculum, and everything like that. The problem is, when they heap it on you so quickly, to me what happens is I look back and I say, "Boy, I would have gotten a lot more out of that in year three than year one."

Teacher D referred to the teaching licensure process as a "juggernaut" that is "overwhelming." He also stated that he has worried about whether he could meet "the timeline and be able to get my license and do all this stuff" required of him. Finally, Teacher G stated that when he was informed about the courses he needed to take, he thought, "Really? You're going to make me take some courses? Do I need to show you how many hours I've spent inside the classroom [obtaining a law degree]?" He also acknowledged that taking the bulk of the courses after his first year in teaching would have lessened the pressure he felt about having to take them at the start of his teaching career.

Adapting to the Culture of Teaching and Schools. A prominent theme in the interview transcripts was the participants' recognition of the ways that they needed to adjust their school and classroom expectations upon entering the profession. Teacher A discussed the challenge of working without a department head to align the teachers in his department with common goals. He said that there is "no control" or alignment among the staff members, so it got "to the point where we're all islands amongst ourselves. We all do our thing and that's it." He also struggled with helping his students adapt to his style of teaching vs. his colleague's style. He added that "by not having a department head and not having somebody pull the whole thing together, there's no way to keep that together unless you have like-minded individuals and that's tough to do because everybody's different."

Teacher D offered that he needed to adjust by acquiring the techniques needed to monitor and account for student progress, such as creating and grading student assessments. Teacher G, who indicated that he needed to adjust to the students' classroom behavior, stated that once he started to teach, he realized that the students' challenging behavior was not always an indication of his success or failure in teaching the class.

Teacher B reflected that as a new teacher you must "learn what it's all about, how it is, and what it really is before you can get better" because "All the things that in your mind this is, it's nothing like that." He included that "the pace is intense." He added that the pacing is difficult because his teaching schedule does not have much planning/preparation time built in so adjusting to the workload presented a challenge. Teacher B also acknowledged that, "I thought I was really well prepared content-wise because I'm very knowledgeable at what I do. But then I found out that being knowledgeable wasn't really cutting it. There's an art to teaching kids to learn." Finally, he confided that the longer he teaches, the fewer days there are that he has to "weather." He elaborated by saying that, "You don't really have those kind of days anymore the longer you do this. The trick is to turn the corner" and to find the balance between "having good days and bad days, success and failure." He reflected, "I am getting better at it and I'm kind of turning that corner to be more on the positive side. I'm just starting to feel like I'm turning that corner."

School-Based Support. Teachers A, B, D, and G all indicated that the support they received during their transition to teaching and the social interactions they have with co-workers contributed to making the transition to teaching a pleasant experience. Teachers A, B, and D also confided that their initial relationships with their content-area colleagues were not what they envisioned; however, they each expressed that when the professional relationships became

existent and/or functional, their experience was much more pleasant. For example, Teacher B stated that he struggled with not wanting to go to work some days during his second year of teaching because he was not "getting along" with another teacher in his area, but when he eventually developed a satisfactory working relationship with the other teacher, his outlook changed. He also commented that this difficult relationship made him question continuing to teach but he added that his immediate supervisor is "the reason I'm still teaching" because he was "very helpful" and made Teacher B feel "comfortable" during that difficult time.

Teacher D also reported that initially his co-worker was absent long-term, which left him to work largely by himself. When his colleague returned to work, he built a professional working relationship with him, which helped him to adopt the school's preferred procedures with regard to curriculum building and lesson planning. He additionally expressed that the support he received from his co-worker helped him learn to pace the lessons and to design lesson that made content more meaningful for his students.

Teachers A and G reported that their supervisors provided them with the support that they needed during the transition. Teacher A stated, "I've thanked her for taking a chance with me." Teacher G also expressed that his colleagues were integral to helping him during his transition. He developed a "network of teachers" and was rewarded with the support of colleagues within the school.

The interview phase was important to identifying the ways in which the four interviewees engaged with the topic and articulated the personal experiences they met with during their transition to teaching. The themes that emerged from this stage of the research were the influence of prior experiences on their transition, the motivational factors that prompted the career change, the tension that emerged from the pressure to acquire the necessary components for teaching licensure, the adjustments that were needed to adapt to the teaching and school culture, and the value of school-based support.

Case Study Selection

Teachers D and G were selected to be case study participants. The selections were made based on analysis of the combined data collected from the survey and interviews. Although all four of the interview participants shared detailed transitional experiences and articulated their journey in a comprehensive and earnest manner, the data collected for Teachers D and G included more instances of their heightened awareness of their experiences that indicated a likelihood that they would respond to further probing in the next phase of the study. Additionally, Teachers D and G presented varied trade backgrounds and pathways to vocational technical (VT) teaching, yet the penchant for teaching is evident in both teachers. The contrasting pathways to teaching combined with their mutual fondness for teaching presented a strong and complimentary multiple case study.

Teacher G. Teacher G was selected as a case study participant because his responses in the early data collection indicated that he was mindful of and curious about the research study topics. He articulated social experiences, both in and out of the school setting, that he found integral to his transition to teaching and on several occasions he also demonstrated an awareness of his evolving professional teaching identity, which includes examples of personal growth. Teacher G provided reflections about his prior career choices suggesting that he had much to report about how his accumulated skill sets from these experiences helped him navigate his transition to teaching. His expression of his transitional journey encapsulated all of the soughtafter elements for a case study participant in this study. **Teacher D**. Teacher D also demonstrated that he was conversant on matters closely related to the questions integral to the study. He articulated a lifelong love for his trade and for working with his hands; he also shared that this appreciation began with his grandfather's influence. Teacher D disclosed that he was unaware of the opportunity to teach a trade in a high school setting until someone told him about a job opportunity teaching in his trade area. With his wife's encouragement, he pursued the position. His struggle with completing the required elements for teacher licensure is reflective of the interview group's experience and he commented on several occasions about his personal growth as a teacher and as a person.

Case Study Vignettes

After reviewing the survey and interview data from all four of the interview participants, Teachers D and G were selected to be case studies. They were selected because individually they demonstrate the strongest connection to the research question inquiry and together they demonstrate similarities and contrasts in their transitional journey from tradesperson to teacher. While Teacher G decided to transition to teaching when his trade career proved to be incongruent with his skill sets, Teacher D expressed a love for working with his hands from an early age and he was hopeful of making an impact through teaching as his mother did.

With this in mind, Yin's (2013) multiple-case study method was used to present the Case Study data. This method was selected because it incorporates a vignette about the teachers that orients the reader to the participants. It is important to include the narrative vignettes about each person to ensure that the reader has the knowledge to make their own connections about the material presented (Stake, 1994). The vignettes are followed by the cross-case analysis, which is organized by theme.

Jeff (Teacher G)

Teacher G, referred to as "Jeff" throughout the remainder of this chapter, is a licensed attorney who accumulated his trade knowledge during law school. Before assuming a position as a criminal justice teacher in a regional vocational technical (VT) high school in Massachusetts, Jeff worked in his trade area over ten years with a focus on providing work flow solutions for business development and for anti-fraud investigations; he also briefly served as a substitute math teacher, which helped inform his decision to become a permanent teacher in his field. Jeff holds a preliminary teaching license in his content area and was, at the time of the study, about to complete the first year of his Teacher Induction/Mentoring Program. Jeff was assigned a culinary arts teacher as his mentor, which he stated has been "fantastic" overall and has "been the right approach" despite their dissimilar content areas.

Although Jeff, 46, indicated in both his survey and initial interview that he "always wanted to teach," he just recently entered the profession after realizing that he was no longer satisfied with the role he played in connection to his trade. Jeff admitted that he continued to pursue a career in a similar occupational position to those he had held for nearly a decade instead of transitioning to teaching and following his primary interest to "help others achieve" because he was conflicted by the obligation he felt to continue earning the salary and pursuing a "status" and "level of management" that he presumed his family expected from him. When asked further about this conflict, Jeff confided that he and his wife spent time chasing the funds for what "could be," which they deemed the *empty ghost*, such as taking a trip or redoing the bathroom. Jeff acknowledged that this was the reason it took him "some number of years" to commit to making the transition to teaching. He admitted, though, that on hindsight he is relieved that he did not secure a new position in his trade area because he would "have continued doing that" despite understanding that he wanted to teach.

During the time that he considered making the transition to teaching, Jeff admitted to ruminating about potential employers' inquires as to why he was not actively pursuing a career as an attorney and receiving feedback from them that his "skill set was sort of misplaced." Jeff disclosed that in an effort to determine if the career change was an appropriate career step for him that he took additional steps to talk to several teachers and a school principal, who are family friends, about their perspective on the career change; he indicated that these conversations and his wife's comment that he should pursue a career that he "really wanted to do" provided the impetus he needed to initiate the change. Jeff also noted that his wife's encouragement was the "tipping point" toward making the change. He reflected that his outlook toward the close of his previous employment was "definitely more focused on different values," which he speculates may have evolved due to maturity. He revealed that if this teaching opportunity had "dropped" into his life twenty years ago, he would not have taken it.

Now that Jeff is teaching in his trade area, he admitted that the he is excited about the possibility of "doing pro bono work" and "getting more involved in the law" to help him "do my job in the classroom." He explained that, like many of his trade faculty colleagues, continuing work in his own trade on weekends or as a "side business," would provide him with the satisfaction of not having to say "I'm a *former* attorney;" instead he can say, "I'm actually a practicing attorney." Jeff believes that linking his trade career with his teaching career "would be really meaningful and just make my value in the classroom more." Not coincidentally, Jeff indicated in his survey responses that he transitioned to teaching because he "wanted to do something more meaningful," "wanted to spend more time with my family," and "was looking for a better/more stable salary."

During Jeff's reflection about his transition to teaching, he shared that he would have liked to receive support/additional support in classroom management, lesson planning, and curriculum development. However, his survey responses also indicated that he is "satisfied" with his current teaching position, his career change to teaching, the high school where he works, and the support he received as a new teacher. When asked about how his anticipated teaching experience aligned with his actual experience, he stated, "I anticipated a challenge to keep students engaged but I'm finding that some in-class adjustments can only be learned through experience and trial and error." Jeff noted during his interview that "twenty years ago if I was going to do this, I would be very self-conscious" but now he is "confident that I have the experience to be able to do this" and he admitted that he "needed to take my own winding path to get here." Jeff expressed his excitement about reaching new milestones in teaching, such as completing his first full-year as an educator and in the criminal justice program.

Richard (Teacher D)

Teacher D, referred to as "Richard" in the remainder of this chapter, is in his second year as an electronics teacher in a regional vocational technical (VT) school in Massachusetts. Richard's first year in this position was as a long-term substitute electronics teacher but he was hired as a permanent electronics teacher last year. He acknowledges that he is working diligently toward completing the requirements mandated by the Massachusetts Department of Secondary and Elementary Education (DESE) to obtain a preliminary teaching license in electronics; during this transitional process, he holds a state-approved waiver. Richard is in his second year of a Teacher Induction/Mentoring Program and is assigned to work with an automotive teacher as his mentor, who he confirmed has been helpful to him. Richard's extensive trade background spanned over twenty years with a primary focus in electronics. He also worked in several other trade areas, such as in criminal law as a police officer. He completed a high school vocational technical (VT) program and a one-year technical college program in the electronics field. In addition, Richard acquired various trade experiences via work-place learning and training in heating-ventilation-air condition-refrigeration (HVAC), machine tool technology, major appliance installation/repair, engineering technology, graphic arts and communication, power equipment technology, and robotics and automation technology; he also completed a two-year apprenticeship program in electronics, which resulted in a position as a nuclear electrician.

When asked about his trade career, Richard, 57, affirmed, "I just really like to work. I like to make things, build things ... I'm a trade craftsman. I know my job; I'm confident in that." Several times during his interviews Richard spoke about his grandfather who greatly influenced his love for working with his hands. When talking about his grandfather, he said, "He liked to work with his hands and I developed a liking for it ... that's what I did best." He recalled that as a child he struggled with academics, but he also reported that over time he has developed a love for writing. He professes to be a "lifelong learner" who unabashedly declares that learning is "fun."

Although Richard largely attributes his love of artisanry to his grandfather, he shared that working with electronics has always "felt so natural for me." He remembers, "Getting *Popular Electronics* magazine at the newsstand when I was a kid every month just to read it because I was always, like, 'How does this stuff work?" He also revealed the importance of working with a group of German machinists and electricians during his trade career who taught him "to be proud of what I do and to want to do it and to like it." Richard reflected on how much he learned

about many trade areas from his friends as well when they helped him build his house over a seven-year span. He confidently observed during his initial interview, "I like to work with my hands; it's good for me and I've discovered over the years that I really think well and I can work through things that have nothing to do with the job-at-hand, but it's a good way to work through a lot of things."

Richard indicated in his survey that he did not start thinking about a career in teaching until "no more than a year before" his transition. He elaborated on this during his initial interview by saying that despite an interest in teaching since he was young, he was unaware of the option to teach his trade in a vocational technical (VT) high school setting. He recalled hearing about the electronics teaching position and thinking, "Wow! I might be able to get my teaching license and do this!" He continued, "I had no idea that I would ever be able to do that ... [it is] a privilege to be able to do that." His survey responses indicate that his motivation to enter into teaching was because he "wanted to do something more meaningful," "wanted to be a role model to those entering my career field," and that "I was encouraged by my wife."

Although Richard repeatedly shared during his interview that he likes teaching, he did indicate on his survey that he would have liked to receive support/additional support in classroom management, lesson planning, and working with students with disabilities during his transition to teaching. When asked to articulate how his expectations for teaching in a vocational technical (VT) area match with his actual transitional experience, he stated that it has been a "big transition" and that he "realized how much of what I know I took for granted" because it was "a big 'stepping back' in the realization that teaching is a craft/trade" and aspiring teachers must realize that students cannot benefit from the depth of their trade knowledge until they have been taught the content basics. Despite this reflection, he indicated that he is "satisfied" with his current teaching position, the high school where he works, and the support he received as a new teacher; he selected being "neither satisfied or dissatisfied" with his career change to teaching and selected "definitely yes" when asked if he will continue to teach in his career field in the future. He stated during his interview that he now feels "more connected to myself and to other people. I mean, it [teaching] just changed my perspective a lot; it really has. One of things I started doing since I've been teaching that I never really did before or never appreciated so much is just valuing people."

Data Synthesis

The case study participant interview data is presented in this section. It is comprised of insights gathered from the participants' survey responses, including the timeline of important events/people that influenced their transition to teaching that they created during their initial interview to highlight the influence specific events or people had on their transitional journey; initial interviews; and follow-up interviews. These data were analyzed, synthesized, and then organized by theme in response to the study's two research questions. At the conclusion of each research question section, the findings are presented.

First Research Question

The first research question in the study asks, "What are the prior experiences, beliefs, and thoughts that influence or inspire tradespeople to pursue a transition to vocational technical (VT) teaching?" The case study participants offered many reasons for leaving their trade to pursue teaching; these areas largely include altruistic and intrinsic motivations, but extrinsic reasons were also identified. The motivations that most resonated with the participants include "doing something meaningful" and "wanting to make a difference in students' lives."

Influence of Prior Experiences. The case study participants were asked if there were any events or people during their prior trade career or during other encounters that influenced their decision to become a teacher. Jeff stated, "I definitely had entered the environment at certain points in my career." He detailed forays into coaching, tutoring, and substitute teaching. He also added, "throughout my professional career I found myself either in leadership positions or instructor positions where I was doing much of the same thing and really had that [teacher] identity of 'That's who I was.' and 'That's what I wanted to be doing.' regardless of where I was."

Richard offered several ways that his personal experiences and beliefs provoked thoughts about being a teacher. One example that he shared was when he created an apprenticeship program at a former place of employment. The program was designed to help enrollees become master pressmen by teaching them the trade "from the bottom up." His role as the chair of the program and president of the union was to work with others to set the criteria of skills to be learned, evaluate the enrollees time of service, and evaluate their quality of work. He appreciated the value of this coordinated training because it respected "everybody for their quality and time of service." Richard characterized his involvement with the apprenticeship program as "an early teaching experience" that was a lot of fun and that he "really loved doing."

Richard also mentioned three other chapters of his life that likely sparked his interest in teaching. The first was from a period when he served as a police officer and had made a commitment to community-oriented policing. Community-oriented policing, he explained, is "all about building community and that's what I'm doing; That's what I think informs my teaching for my students." Additionally, Richard cited his tenure on the local school board in his

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hometown and a period when he was instructing novice performers with "basic music skills." These instances of helping others contributed to Richard's thoughts about teaching.

Motivating Factors. The case study participants were motivated to leave their trade careers to pursue teaching for a variety of reasons. Among the reasons that they identified as key were the desire to do "something meaningful," "to make a difference in students' lives," to follow their calling, and to create a different lifestyle. Additionally, the teachers discussed what continues to motivate them now that they are teaching; these responses are also included in this section.

Lifestyle (Extrinsic Motivation). Jeff and Richard communicated that they were interested in the lifestyle change that accompanied teaching. Jeff has two young children and he stated that he was motivated by wanting to "spend as much time as I can with them." Teaching also offered him a more flexible schedule, although when factoring in his additional coaching schedule, which may include some evenings and weekends, he admits that it is often a struggle to find balance. Jeff also stated that "the stability of just knowing where this [teaching salary] is going and that I will make more next year than I do this year" was appealing since his previous career often threatened changes that "could be made at any point and it wasn't necessarily within my control." He did stipulate that the decrease in his salary when he assumed a teaching role was a difficult adjustment for his family.

Richard identified few extrinsic motivations for wanting to change careers. He did admit that, during the ten years that he owned a business, he became "tired of the long hours" and "just getting by making all the payments to workman's comp and having employees;" it was "just so hard." He said he periodically receives an invitation to return to his trade area in some capacity and that the offer is tempting since the "money is a lot better and I would just step into it. I wouldn't have this huge behemoth of an obstacle of all my schooling in front of me." He stated that it "would just be easier to do that" but he often had to travel long distances for work and now he enjoys the routine that enables him to return home to his wife every night.

Satisfaction (Intrinsic Motivation). Both case study participants identified the intrinsic motivation of deriving personal "satisfaction" from teaching. Jeff acknowledged that he likes to "nurture students at their own pace," guide them, and able to offer them "some expertise" in the trade area. While Jeff articulated the feeling that he gets from these interactions with his students, Richard provided an example of a classroom discussion with one of his students that encapsulates the same ideas. He shared:

Student: "How do I figure this out?"

Richard: "What's in front of you on the desk? Your book, right? It has all the stuff in it. Let's figure out where the answer is in the book. There's an index, use the index, try to figure out these formulas ... Let's find it in the book and use it." (Helps student locate the information in the index)

Student: "Oh, yeah."

Richard: "Do you still need me? Look at the book for a couple of minutes. Tell me if you need me in five minutes."

In explanation of the example, Richard said, "That's what you need to do. You need to get the kids engaged and let them make the decision or give them the tools to figure out how to get the answers so they can do it on their own. That's what we get to teach everybody and I feel good about it." He also wants them to "look at things, find the answers about something they have a question about, and know how to do that. " He finished by saying, "I think that's what it's all about."

Jeff additionally identified the satisfaction of watching his students "craft their own set of skills," which is what he admits he also did in his career trade. However, he also noted that teaching allows him "to actually make that my primary focus; that's really what I wanted." He stated that his "goal, my mission, is to watch his students find the thing that they want to be doing and go after it and get either into college or the next certification program, or get into a police academy." He acknowledged that the process is "so exciting" and that he is looking forward to when the first student confirms for him "many years down the road" that "Hey, I'm an FBI agent." He stated, "I look forward to all those firsts, all those milestones."

Finally, Jeff indicated that when he realized that the criminal justice teaching position he was offered involved developing the program for the school, he was excited. He admits that this was an especially appealing factor in his decision to change careers because it presented an additional challenge that would allow him to "tap into my own history, my own expertise." He admitted to believing that he could "go all in on this." Jeff also reflected on an important moment when he realized that teaching was a "better fit" for him than the work he did in his trade area. He stated, "This is better for me, this is better for my employer. It's just a better fit." He now realizes that "I'm maturing as a professional and that's where I should be" and he is "really proud" to say "I'm a teacher. I'm an educator."

Meaningfulness (Intrinsic Motivation). Both case study participants provided many ways that being a vocational technical (VT) teacher is meaningful for them. Jeff acknowledged that although he knew he had "some impact" in his previous career, "it didn't rise to that level of meaningful to me" as teaching does. He recalls "it being really lacking" when compared to teaching; he reflected, "It's meaningful almost every moment, so, to me, it's that immediate feedback that I feel in the classroom. That's important to me to be able to feel that

meaningfulness at any given moment." Jeff also recalled wondering, "Is that meaningfulness weighty enough for me to make a career out of it?" before the transition to teaching and still wondering now, "Am I making enough of an impact?"

The meaningfulness of teaching was also prominent in Richard's account. He stated that he likes getting the students "excited in a meaningful way so that things make sense to them, that the world comes together a little bit" for them. Part of his motivation derives from hoping to get students interested in school. He surmised, "A lot of kids aren't interested in anything. Because I don't think they know how or they haven't been exposed to electronics." He also shared that "Life is a journey. It's not about just, 'Okay, this is the way it is and you're going to go to work, you're going to come home, and there is nothing more to it.' So, if I can get them to think critically and want to be explorers in their lives a little bit, I think that that is not a bad thing." More than once Richard shared that "I want to light the fire in their bellies" about learning. He is looking forward to his students declaring, "Wow! I want to learn about electronics!"

In addition to working with his students in the classroom, Jeff also finds meaning in coaching and being a club advisor. He believes that bringing in "speakers for all the different career areas" so students can make connections with them will be meaningful to the students, the other vocational technical (VT) teachers, and himself. The latter is also important to Richard. He wants to help his students become "good citizens," which is the "most important thing I can do."

An additional area of meaningfulness for Jeff was his apparent interest in envisioning what the future may bring to his teaching career. Once he completes the required work for professional licensure in his content area, he hopes to collaborate more with other teachers, get involved with different organizations, such as the teacher's union, and build relationships with other high school criminal justice programs. He offered, "Those types of things would be hugely helpful" for him because it's "easy to keep your head down" instead of collaborating with others.

Finally, Richard was motivated to become a teacher because he hopes to help others find meaning in working with their hands. During the interview, he stated that too many kids would rather play video games or "pay money to be entertained" rather than work. He stated, "Making your own entertainment" and "working with your hands is so good and people don't understand that, you know?" Ultimately, he thought that working at a vocational school would allow him to "try to impart that to my students," which he believes is "a very valuable lesson."

Working with the Trade Area in a New Way (Intrinsic Motivation). Both Jeff and Richard noted that working with the content of their trade area in a new way was a motivating factor to teach because in addition to contributing to the education of students, they were able to maintain their connection to the trade area they hold in high regard and the prior work experiences they genuinely value. Jeff mentioned that since the criminal justice vocational technical (VT) program is in its infancy in the vocational technical (VT) school systems in Massachusetts that he feels like he is "part of a movement helping high school students really start to think about these issues." Jeff's approach to teaching the curriculum in this new VT area is that it is more than just "learning some skills," it's about "how our government works; how the constitution works; how cities, towns, states; and the nation work." Teaching these areas of good citizenship allows him to "feel like parts of what I'm doing could help every student in the school," which resonates with his desire to develop students' "greater awareness."

An additional component Jeff enjoys about teaching the criminal justice curriculum is that the content area helps students plan their career path earlier in life instead of years down the road. During one interview session he proudly pointed out the "career tree," a large poster of legal and protective services career paths, posted on the wall in his classroom that he references during daily discussions with his students. He tells them that each branch of the tree indicates a trade-related career path available to them and that although their career goals may "change over time," he will help them navigate the selection process. He stated during one interview that this dialogue has proven "really meaningful" to Jeff and his students, particularly when he announces during class, "Today we're going to take another step toward that goal." This career planning excites the students and he enjoys supporting their hopes. He summarized the message that he provides to his students as, "I'm going to be the one that shows you that this is what you need to learn, these are the steps you need to take, and let's make sure that's the right fit for you." He finished this topic discussion by saying, "So, to me that's really meaningful to help push kids in that direction" and "That said, the trade is going to excite these kids in a way they they've never been excited or mentally challenged, so that's great."

Richard expressed thoughts similar to Jeff's. He stated that "being able to get it so that they [the students] can get the connection about our trade and what I'm teaching them is so important." Richard hopes to help students "decide to stick with the field" because "the jobs are there." He estimates that his students "can be very valuable assets on a lot of levels for a lot of companies, not just at repairing things but designing, engineering, and also as citizens of the culture for the company." He further stated that if students join the "right company--a company with a soul that's a good fit---they will just be such a benefit to that company."

One of his goals for working with the students, beyond the electronics curriculum, is for students to become

conscientious, caring people that can be critical thinkers; they're not just going to come in, punch in and punch out and go home. They're going to be able to contribute a lot, think about work at night and say, 'Hey, I have a better way to do this. Here's an idea. I'm going to make this work.' That's what companies need; they need people that are willing to take the ball and run with it a little bit. Come up with their own, do higher-level thinking. They need that, if we can give them ... the tools that they get with vocational education. I think it's very important.

A final contribution that Richard discussed during his interview is teaching his students to have "better insight" about the trade tasks they are mastering, which will give them an advantage in the career field. For example, Richard shared that the school had purchased electronic clocks from China that came with the directions written in Chinese. When the students wanted to use Google translate to decipher the directions, he, instead, had the students use the clock's wiring diagram to recreate the assembly steps and create their own manual on how to assemble them; each step was graded. He concluded the story by stating that it was "a great experience for those kids" because "technical writing is so important" to the field and "You need to respect the manual and how are you going to respect the manual unless maybe you've written one?" Ultimately, Richard found this exercise a meaningful way for his students to understand the importance of completing a task with little direction.

Calling (Altruistic Motivation). Jeff compared the "obligation" that he felt in some ways in prior professional positions to the obligations of teaching when he stated that he "always had that feeling that that's what I always wanted to be doing." He admits that his primary obligation to his prior career was "because of money" and because he has "always been a motivated person to climb the ladder or achieve a certain status or level of management." Upon reflection, he realized that the focus on money and status "really took away from what I think that I really

wanted to do, which was to help others achieve." He acknowledged that three of his best friends, who are also teachers, said to him, "You're going to be a teacher at some point."

Richard also shared that his family and friends thought he should be a teacher, including his grandfather who was very influential in Richard's love for craftsmanship. He admits, though, that he "never had a way" to become a teacher. His approach to teaching is that "it's not about a mission;" rather, "It's just something I like to do. I like to swim, I like to ride my motorcycle, I like to play my guitar, I like to do it [teach]." Richard qualifies teaching as part of what is valuable in his every-day life; he specified during his interview that he did not want to set "grandiose objectives," such as "to save the world;" instead, he would "rather take each lesson, each class, each day as it comes and do the best I can and let my kids know I want to do that."

Making a Difference in Students' Lives (Altruistic Motivation). Jeff stated during his interview that he asks himself one question every day: "How can I make this a useful day for each student as they drive toward whatever goal they're looking for?" He wants to "keep them on pace to do that" by being a guide for them, but he admits that he is still "trying to figure out" how to best do that. He also acknowledged that trying "to get involved and committed and attached to help these kids and to see that I have such an impact" is difficult to balance with his family commitments. He admits that when he is unable to attend an event for the team he coaches, that "it hurts; it doesn't feel good," but he is determined to find a balance between his student and family commitments.

Despite the challenge of balancing the time commitment between his students and his family, Jeff does "feel like there are a handful of moments every day where I'm like, 'this is right.'" He stated during his interview that he knows he "can make a difference on a daily basis to these kids," and then, "I do want to make a difference in their lives." He further declared,

Seeing them every day for a week, I can make a difference and every day they can get better ... that's the way I see it and the great thing is, I don't have to wait until June to hear their feedback. Sometimes it's hard, sometimes there's feedback that you don't want but I feel like it's correctable. Every day you make changes in the way I teach but also try to help them to address that. It's a daily affirmation.

Jeff also mentioned during his interview that he has learned a great deal during his coursework about teaching students with disabilities. He now contemplates whether his students are anxious and what "shuts them down," for example, because "even a moment in a classroom, to me, can change a kid's life, but it can change that moment, which changes that class, which changes the day. So, I see it as all connected." He wants to continue to evolve his pedagogical skills because "being able to deal with those things does, to me, change their lives."

Finally, Jeff offered that his personal mission with regard to his role as a teacher is "to develop this curriculum, develop this program, develop these students" and "to get these kids to believe in themselves, develop themselves, develop these skills and, ultimately, find a path that they want to go on." He strives to help them "find a job, do something that they are passionate about." To conclude, he reflected on his statement and elaborated that, "There's a lot there, but I would say that's my mission."

Richard commented during his interview that his mother was a teacher and that he "really liked what she did" and that "during my life I had different people come up to me that said, 'Your mom was a really great teacher. I really liked having her for a teacher' and I would think that, "I'd like to be able to do that for somebody, to make a difference for them, you know? I wanted to do that, so that helped me get there." He decided that "I wanted to be a role model for the people I live with, that I meet in the community; that, besides my students." When asked about making a difference in his students' lives, Richard shared that when he gets "ownership from my students and have that back and forth with them, then they're going to want to do better and I have a good relationship with them. I feel, and I think rightly so, that that helps make me a better teacher and them better students." He continued by saying that he does not want to be the type of teacher who simply says, "You've got to do this and see you tomorrow;" because he thinks "it's important to teach to the individual as much as I can." To him it's important to help his students feel "like they've accomplished something and [that] they're part of something greater that's worthwhile in life" and he wants them to realize that "school isn't a bad thing you have to go and do; learning's a good thing and its fun." He also admits that the more he works with his students in this manner, the "more committed to them" he becomes.

Richard also discussed the important of having patience "a mile long" and "kindness" when working with students, as well as the need "to like people" and "want to be there for people" when you are a teacher. He believes that he has built an environment that is "a home for them [his students]" and has a "family" feel to it, which he finds favorably motivates their behavior. He concluded his reflection on making a difference in his students' lives by saying that he thinks, "the responsibilities of a teacher are a lot different than I really think that they were when my mom was a teacher thirty years ago."

Findings. The findings with regard to the study's first research question are presented in Figure 1.1. They are relevant to the tradesperson's professional development and motivations for seeking a career in teaching.

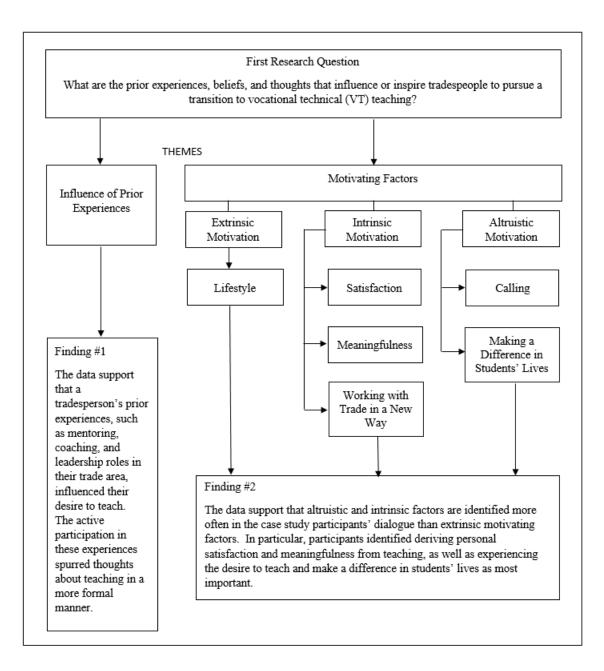


FIGURE 1. THEMES AND FINDING FOR FIRST RESEARCH QUESTION

The findings for the first research question are also listed below.

1. The data support that a tradesperson's prior experiences, such as mentoring, coaching,

and leadership roles in their trade area, influenced their desire to teach. The active

participation in these experiences spurred thoughts about teaching in a more formal manner.

2. The data support that altruistic and intrinsic factors are identified more often in the case study participants' dialogue than extrinsic motivating factors. In particular, participants identified deriving personal satisfaction and meaningfulness from teaching, as well as experiencing the desire to teach and make a difference in students' lives as most important.

Second Research Question

The second research question, "How do the tradespersons' prior expectations for their transition into public education and a high school professional community align with their perception of the actual transition into vocational technical (VT) teaching?" is reflected in several themes that resulted from the analysis of the data. Both teachers identified values, attributes, and skill sets developed during their trade career that helped them to transition to teaching. They also identified tensions with regard to completing the requirements of statemandated teacher licensure. Additionally, they reflected on assimilating to the school community, teaching being about the students, and their expectations for school-based support. These areas are discussed below.

Preparedness to Teach. While Jeff completed many college courses to receive his law degree, Richard spent his life acquiring hands-on skills in a variety of trade fields. Despite having different prior careers and pathways to trade knowledge, the Case Study participants agree that some of the skill sets they developed during their work and educational experiences were valuable to their transition to teaching.

Transferable Skills. Tradespeople who change careers to teach bring a set of previously acquired skills with them to the school setting that expands beyond their knowledge of the trade. In some instances, the skills that career-changers acquire while working in their trade area are suitable to the new career setting.

Jeff acknowledged that "just being a social person," in general, is helpful. In particular, he finds that communicating with other people is most useful. Engaging with the school community, or any work environment, via a "networking approach" is a key skill that he learned during his prior career. He stated that he has always been able to "communicate with others" about what he is trying to say but his prior trade career expounded on this ability. In fact, his prior work experience involved the need to "sell them [his clients] ideas," which he has parleyed into a strategy that he uses to teach his students. This skill, combined with his ability to manage large groups of people, is useful when teaching his students because he knows how "to work the room with some way of making it relevant for them." He considers this "knowing your audience." Jeff also admitted that it took him years to develop these skills, which have directly helped him manage the classroom and teach the legal and protective services curriculum to his students.

Richard shared that he likes to exchange information with people because that "creates a dialogue." He also finds that being direct, looking people "in the eye," and giving them respect "no matter who they are" has been integral to his transition to teaching. Demonstrating these skills regularly with his students helps them feel valued during the learning process and it creates an environment where "everybody has equal value."

Licensure Requirements. An important component of a tradesperson's transition to teaching is the training that they are required to complete for licensure. Since a career-change

teacher already enters into teaching their trade with experience in their field (i.e. on-the-job training, an apprenticeship, a college degree), the focus of this state-mandated training is to prepare vocational technical (VT) teachers to assume a teaching role that focusses on acquiring the necessary credentials through courses that focus on adjustments to teaching and to the school community. Jeff and Richard both agree that one of the areas that elicits tension for them are licensure requirements.

Jeff completed the requirements for a preliminary teaching license in his trade area during his first fall as a criminal justice teacher; the requirements are a minimum of an Associate degree related to his content area, four years of recent employment experience in the field, and a passing score on either the Vocational Technical Literacy Skills Test (VTLST) or the Communication and Literacy Skills Test (ca. 2016). In order to obtain his professional license, he will also need to complete 39 college credits in courses designed for vocational technical (VT) teachers, a one-year induction program with a trained mentor, and either three full years of teaching in the criminal justice or similar field (ca. 2015) within five years of receiving the preliminary license. Jeff elected to begin taking the required courses to receive professional licensure "as soon as possible," which was in the fall of his first full year of teaching. He admitted that when he was first informed about the required courses that he thought, "You're going to make me take some courses? Do I need to show you how many hours I've spent inside the classroom [to acquire my degree as an attorney] in my career?" However, after attending the first class, which focused on students with disabilities, he "found it immediately helpful in the classroom;" in addition, he said that it's "so valuable to listen to other teachers," to go "through different strategies and just understanding teaching," and most helpful has been "collaborating with other teachers." Upon realizing the value of the material he was learning, he confessed,

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"I'm still in learning mode and I guess I should always keep that switch on, that I should always be learning, and that I can learn from other people." He continued his reflection by saying that he understands that most people entering into teaching in an academic area "have been studying their subject and also studying what it means to be a teacher and how to do those things" but that he is not sure he would have wanted the training prior to teaching. He thinks that the courses "would be helpful" but he was not sure that he would "want those things first." He likes to learn "as I go."

While Jeff has adapted to the challenges faced with pursuing a teaching license in his trade area, Richard stated that the process is "very overwhelming" for him. He shared that the "daunting part of it is the DESE [Massachusetts Department of Elementary and Secondary Education] and all the stuff I have to do for all the requirements." Richard is currently on a one-year waiver, which is provided by the DESE to persons that "demonstrate that they are making continuous progress toward meeting the requirements for licensure in the field in which they are employed" ("Waiver," 2017).

In order to obtain a preliminary vocational technical (VT) license in electronics, Richard must earn an Associate degree in a related-subject area, have four years of recent employment experience in the field, and receive a passing score on either the Vocational Technical Literacy Skills Test (VTLST) or the Communication and Literacy Skills Test (ca. 2016). The process of pursuing these requirements is proving to be the "hardest thing" about Richard's transition to teaching. He admits that he did not think "the licensing process is going to be as onerous" as it has been for him but when he talks about the challenge, he stated that he is going to keep "working as hard as I can" because he wants "to be going to school, taking my classes and getting there; it's a matter of hanging in there and doing it."

Adapting to the Culture of Teaching and Schools. Both Case Study participants acknowledged that there were elements of being a teacher that they had not anticipated. The primary challenges they faced included class management, planning, adjustments to teaching, and adjustments to school-based support.

Making Sense of the Unfamiliar. When Jeff realized that he would be teaching, his friends told him that he would "need to figure out how to manage the classroom." He recalls thinking, "That's just not for me." He anticipated that it would be the easiest part of teaching but now he reports that, "it's not easy."

During his first few months as a teacher, Jeff recited the mantra: "It's not personal. It's not personal." because the student behavior in the classroom, such as students putting their heads down or being "checked out," made him feel like he was being "attacked personally." He stated that he "constantly" had to remind himself that it had "nothing to do with me." Jeff also stated that he is trying to "gain their respect" and convince them that, "Hey, I'm here to stay." What proved to be an adjustment for him was that not every student responded to his "normal social cues." He explained that when he previously worked with a room full of adults, "I could get them back just with a look or call them out or call them by name, change the subject, use my voice in different ways, tell a joke, right? And when kids don't respond to that, I'm like, "Whoa!" He admits that he "may have overestimated my ability to connect with everyone" because he did not appreciate the time that would be needed to connect with some students.

One management technique that Jeff acknowledges working is "being consistent and being somebody that they know." He also recognizes that keeping students "on task or keeping activities rolling fast enough that it kept their attention" is important. He has decided that it is his responsibility to engage them but that this notion "is more than I expected it to be." He also accepts that the anxiety he feels about "how to keep a class going is something that I'm constantly thinking about" but that he never contemplated it prior to making the transition to teaching.

Richard's primary adjustment has been makings sense of the standards of measurement used by classroom teachers. He admits that he had "no idea about how to prepare a lesson plan," or prepare curriculum despite having organized an apprenticeship program for a company he worked for during his trade employment; there is more paperwork "than I thought there was going to be." Also, despite having taught OSHA (Occupational Safety and Health Association) classes during his trade career, he did not know how to create a test or evaluate its success because the OSHA exams were included with prescribed materials. He clarified this statement by saying that "I can't just make a test and everybody gets '100' every week. There has to be a high, a mid, a low." He also questioned how he is expected to know if he is "doing a good job." He stated that he is writing his own tests now and that he is "getting better at it and better at it" but that "all the adjustments I have to make based on one class over another and how it all fits together" is different than he thought it would be because "it's not consistent all the way through." He said that he has many questions about this process that "never even occurred to me until I started teaching."

Richard acknowledges that patience is important in the classroom. He discussed a parallel between when he built his house and teaching because he needed to "follow those little roadways and know how to get from point A to point B and how to figure what roads and paths you have to take to find out where the problems are." He equates this level of patience with the experience of working with his hands. He also noted that staying "calm" and not becoming "flustered and upset" in the classroom is necessary. *Teaching is about Students*. Both Jeff and Richard noted the importance of making students the focal point of the classroom experience, including how to help students access the curriculum and understand the content delivery. Jeff admitted "the thing that makes me most nervous—if I am up in front of the class and I'm sort of stumped." In order to assuage this feeling, he re-familiarized himself with the fundamentals of criminal justice to be certain that he could answer the students' questions or show them where to find the answers to their own questions. He also discussed how a lesson "unfolds based on who's in the classroom, based on good days, bad days" and that he is always "trying to improve" on keeping this in focus. Finally, Jeff reminisced about his own struggles as a student, specifically with the subjects that he "didn't want to do." He pointed out that his own experience "has made me the teacher that I am or that I'm trying to be; trying to remember that perspective of students."

Richard likes to tailor his class instruction to be interesting and fun for the students. In one instance, he had the students fix guitar amps because some of his students like to play guitar and in another example, he talked about turning his students into "soldering ninjas" who acquire different colored "belts" for completing soldering tasks; the lesson finishes with a ceremony where students receive certificates. When discussing the latter example he stated that "those things are important to the kids" and that he is taking on more and more "ownership" of his teaching. Richard also acknowledged that meeting the needs of all of his students, particularly students with disabilities, is something that he had not experienced but that he is "figuring it out" because he is "learning and I like it."

Collegial Interaction. When Jeff entered into teaching, he decided to develop a "network of teachers within the school," much as he did during his prior career. He tried to "get to know as many people within the school" by "getting along" with them. He was surprised to

find that people began coming to him and saying, "Hey, I want to help you." He admitted to speculating about their motives; when he asked one person, he/she responded by saying, "I can tell that you're somebody that is going to do good things at this school and I want you to succeed." He was pleased at the unexpected response because "in the business world I'd never experienced that;" there was always "some other alternative, ulterior motive." Jeff concluded by saying that "working with administration, working with other instructors across the state, working with other instructors within the school, academic and CVE (career vocational educators) is the collaboration he was looking for in a career. He also stated that he feels like he is part of the "community" of teachers in his school because he takes part in the "lead teacher" discussions that happen. He feels like "even though I'm brand new, I'm part of that community; I'm one of them. I don't feel like an outsider; I just feel new."

Unlike Jeff, Richard has not yet created the same kind of network of colleagues at work. He stated that he feels "that since I don't have my license, I'm still not "in;" I'm just working there;" although he did qualify this by saying that he works in a "very supportive school" and that the staff there "are fabulous." Additionally, he feels that as a teacher "in the trades," he is well respected.

Richard began his vocational technical (VT) teaching career as a substitute teacher in his trade area expecting to be working with a veteran teacher; instead, he was disappointed when due to unforeseen circumstances, he was working with a substitute teacher. This arrangement lasted for several months. Once his co-worker returned to campus in late spring, however, he found him to be a "very talented craftsperson" and they quickly built a relationship where, according to Richard, "he has confidence in me; I have confidence in him." He credits his co-worker with helping him "figure out" a lot about teaching, including "how to pace and try to get things

through to the kids so they learn it;" he also helped him with lesson planning and the "nuts and bolts" that have to be done as "part of my responsibilities and documentation" for teaching. Although he admits that they have different views on a lot of things and even disagreements at times, he explained, "It's such a good way to be" because they have "good discussions." During Richard's reflection on his relationship with his co-worker, he revealed that "having a good peer" has helped him a lot and he appreciates this because he wants "to be better." He concluded by stating that part of teaching is "to be humble [and], listen to people because they might know things that they can teach you;" he acknowledged that this is a "good lesson I [have] learned.

Findings. The findings that are a result of analyzing the study data through the lens of the second research question center on adjusting to the teaching and school environment, social supports, and teacher identity development are presented next. The results are presented in Figure 2.1.

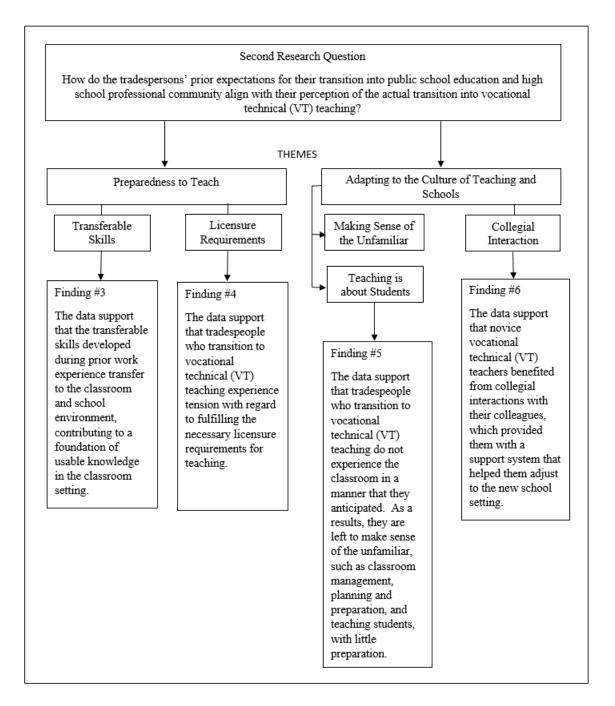


FIGURE 2. THEMES AND FINDINGS FOR SECOND RESEARCH QUESTION

The findings for the second research question are also listed below.

- The data support that the transferable skills developed during prior work experience transfer to the classroom and school environment, contributing to a foundation of usable knowledge in the classroom setting.
- The data support that tradespeople who transition to vocational technical (VT) teaching experience tension with regard to fulfilling the necessary licensure requirements for teaching.
- 5. The data support that tradespeople who transition to vocational technical (VT) teaching do not experience the classroom in a manner that they anticipated. As a result, they are left to make sense of the unfamiliar, such as classroom management, planning and preparation, and teaching students, with little preparation.
- 6. The data support that novice vocational technical (VT) teachers benefited from collegial interactions with their colleagues, which provided them with a support system that helped them adjust to the new school setting.

Conclusion

In this study of the tradesperson's transition to vocational technical (VT) teaching, the data were gathered via an online survey and one-to-one interviews regarding the tradesperson's prior experiences, beliefs, and thoughts about pursuing a career-change to VT teaching as well as their pre-conceived perceptions and actual transitional experiences during their transitional journey. Survey data were initially presented by gender and age grouping and teaching background and was followed by an analysis of the data with regard to the study's delimitations, the first research question, and the second research question. Interview data were presented in themes, including the influence of prior experiences, motivating factors, licensure requirements, adapting to the culture of teaching and schools, and collegial interaction. Additionally, two case

studies were presented for cross-analysis by research question and theme (influence of prior experiences, motivating factors, preparedness to teach, adapting to the culture of teaching and schools). Vignettes about the case study participants were also included. This data resulted in six findings; the implications for which are presented in Chapter 5.

CHAPTER FIVE: SUMMARY, IMPLICATIONS, RECOMMENDATIONS, CONCLUSIONS

Introduction

Chapter 1 provided a brief overview of the researcher's personal interest in the topic, tradespeople who transition to vocational technical (VT) teaching, which is a direct result of several life experiences that include graduation from a high school VT program in office technology, entry into the workforce in this trade area, and a subsequent career-change to teaching. Although the career change to teaching did not include movement from a trade area into teaching in a similar trade area, the transitional experiences combined with nine years of academic teaching and administrative work in a VT high school contributed to the researcher's scholarly interest in VT teaching, which motivated this study.

This study emerged as a result of the researcher's interest in the topic, her experiences in public school education, a review of pertinent literature on the topic, and the researcher's interest in learning more about career-change teachers' struggles with adapting to the expectations and requirements of the teaching profession, which is not discussed fully in existing scholarly literature. The researcher's personal experiences, which were supported by the literature reviewed, indicate that career-change teachers' expectations for the professional community may be unrealistic if they do not participate in an Induction/Mentoring Program during their transition that addresses the realisms of classrooms and school communities. Additionally, school leaders who are unaware of tradespeople's transitional motivations, transferable skills, and personal transitional expectations, may not provide support that is responsive to the varied backgrounds and individual needs of transitioning vocational technical (VT) teachers, which could result in a delay in the development of a teacher's professional identity and ultimate job satisfaction.

Following an introduction to the topic, the study's purpose and significance were presented. The purpose was to identify the prior experiences, beliefs, and thoughts that influenced or inspired tradespeople to consider a transition to vocational technical (VT) teaching and to illuminate what expectations they had about public education and school communities prior to entering into teaching and how these expectations met with the teacher's actual experience. Understanding the motivations and expectations that tradespeople had prior to their transition to VT teaching is significant to the study because it will inform other tradespeople who are contemplating a transition to teaching. Additionally, it will inform policy makers and departments of education who establish the criteria for licensure, the school leaders who design and conduct school-based Induction/Mentoring Programs for teachers, school leaders who employ career-change teachers, and career counselors who advise people considering a career change to teaching.

Chapter 1 also introduced the study's two research questions ("What are the prior experiences, beliefs, and thoughts that influence or inspire tradespeople to pursue a transition to vocational technical (VT) teaching?" and "How do the tradespersons' prior expectations for their transition into public education and a high school professional community align with their perception of the actual transition into vocational technical (VT) teaching?"), the definition of terms, and the delimitations of the study. The delimitations were set to focus the study on regional vocational technical (VT) schools in Massachusetts, not comprehensive, collaborative, independent, or agricultural high schools who employ vocational technical (VT) teachers, to survey vocational technical (VT) teachers who are employed in this setting, and to select Case Study participant(s) based on three criteria: a minimum of five years in a trade field prior to teaching, employment as a vocational technical (VT) teacher in a comparable field to his/her prior/first-career field, and employment as a vocational technical (VT) teacher for less than three years. The presentation of the study's delimitations was followed by a brief overview of the literature reviewed and the study's design; these elements were then discussed in greater detail in Chapters 2 and 3, respectively, and are discussed briefly next.

Prior to reviewing the literature related to the study's topic, Chapter 2 presented key definitions to distinguish the meaning of pertinent terms used in this study: occupation, job, profession, vocation, calling, and career. Particularly important are the definitions of *calling*, and *career* since "the changing of careers" is the foundation of the study.

Following the pertinent definitions, Chapter 2 reviewed the career stages people traverse during their lifetime, followed by a review of Holland (1959, 1985, 1997) and Schein's (1971, 1978, 1990, 2007) Vocational Choice Theories, which are taxonomic approaches used to identify connections between people and career fields. The theories are followed by a review of Super's (1964) Career Development Theory, which posits that a person's career interests develop over time—as people develop a self-concept—so it may take years of work experience for a person to identify a compatible career. The section finishes with a brief overview about the role of Vocational Choice and Career Development Theories in the career selection process.

The next section of Chapter 2 was dedicated to the review of literature on career changing. It began by clarifying the notion of *job hopping* and its importance to understanding 21st century career structure. Additionally included are the types of organizational movement that qualify the movement made when a person changes careers. The literature demonstrates that those who transitions from tradesperson to vocational technical (VT) teacher are the third "type" of organizational movement, which is to change "to a different type of job within a different organization" (Wille, DeFruyt, & Feys, 2010, p. 548). Peake & McDowall (2012) and Tan

(2012) agree, and further clarify, that when a career change results in movement from "one occupation to a completely new role and set of tasks" (Peake & McDowall, 2012, p. 396) that it is deemed an occupational change.

Along with a review about career movement, an examination of how career stages may be influenced by different types of career movement was covered in Chapter 2. The literature indicates that career-change vocational technical (VT) teachers enter into the contemplation/growth stage upon realization that they are dissatisfied with their career, the preparation/exploration stage when they begin to consider trade teaching, the action/establishment stage when they commit to transitioning to teaching, and the maintenance/maintenance stage when the transitional experience is complete. Barclay et al. (2011) acknowledge that this process may be stressful for those who career change.

The literature that specifically addresses people who career-change to teaching was also included in Chapter 2, which led to a review of the career-change teachers' motivations to change professions and the tradespersons' motivations to enter into teaching. Several studies were reviewed that present connections to the push (extrinsic) and pull (altruistic, intrinsic) factors that are the categorical motivations for people entering into teaching. The studies demonstrate varied findings, but largely point to altruistic motivations for changing careers to teach. Additionally noted is that tradespeople may enter into teaching without an accurate depiction of educational theories of learning and strategies for teaching and that they may be lacking the understanding of educational environments and cultural cues (Maurice-Takerei & Anderson, 2013). Anderson, Fry, & Hourcase (2014) state that career-change teachers may struggle more with the adjustment to the classroom and school setting than first-career teachers.

This section concluded with a review of Whitaker's (1998) idea that skills that are acquired during career experiences may be transferable to new career settings.

Chapter 2 concluded with a review of the literature about teachers' professional identities. This section affirmed that identity development is a dynamic process that results from social, cultural, political, and historical influences over time. Integral to this section was a review of the literature on evolving professional identity, which states that people adapt to their professional surroundings through awareness and voice, meaning that people who engage in external and internal dialogue adopt a position (Correa, Martinez-Arbelaiz, & Gutierrez, 2014) in the new occupation over time. Ultimately, career-change teachers must construct a new career identity that aligns with the new profession's social status and occupational situation encountered during the transition to teaching.

Chapter 3 discussed the design of the study, which followed the guidelines set forth by Yin (2012, 2013, 2014) and Stake (1994, 2008) for a multiple Case Study that examines "complex social phenomena" (Yin, 2013, p. 4). The chapter also discussed the role of the researcher, which was to gain familiarity with the elements of the Case Study design, instrument processes and protocols, and to acknowledge and avoid personal bias through all stages of the study.

The details regarding the study were presented next in the chapter, including the study's setting and participants. The study targeted over 1,200 vocational technical (VT) teachers employed in the twenty-six regional vocational technical (VT) high schools in Massachusetts. Teachers in twenty-five of these schools (the twenty-sixth school served as the pilot school) were asked to participate in an online survey via an invitation sent to their school principal. At the close of the ten-day survey window, 170 VT teachers had responded to the survey; of these

respondents, 55 teachers provided their contact information as acknowledgment of their willingness to be interviewed.

Chapter 3 also detailed data collection, including the instruments used, protocols followed, and procedures used during the study. Following the overview of these areas, this chapter discussed data analysis. The two steps used to analyze the online survey responses were included to identify whole group trends and potential interview participants. The latter were identified based on questions (3, 4, 5, 8) included in the survey to ascertain what participants met the delimitations of the study and on answers to key survey questions (10, 11, 14, 15, 16, 17) meant to gather insight about the participant's transitional journey to teaching.

In addition, the procedural aspects used to organize the data gathered from the survey and interview transcripts were provided in the chapter. The interview transcript analysis produced five preliminary themes: motivations, tensions, support, teaching outcomes, and external influences, that categorized the responses provided by the four participants. The themes were created as a means to develop the "interaction, interplay, and interrelationship" (Saldana, 2011, p. 92) between the qualitative data gathered. As additional analysis was conducted on the two follow-up interviews; no additional themes emerged.

Finally, in brief, Chapter 4 analyzed the data collected from the 170 online survey respondents and four interview participants in order to answer the study's inquiry that was posed in the form of two research questions. This was followed by the Case Study participant data synthesis, which was presented via participant vignettes and themed results that were crossanalyzed to demonstrate the similarities and differences amongst the two participants. Several summative observations were noted about the Case Study participants. While Jeff struggled to maintain a meaningful connection to his trade career before his transition to teaching, Richard demonstrated an unwavering association with his trade area and working with his hands, in general. The developing relationships they demonstrate with teaching, however, appear to be opposite—Jeff has acclimated well to the tensions associated with the licensing process and he has created strong and immediate social relationships in the school community, which have contributed to a successful transition to teaching. Richard, however, has struggled with the licensure processes and procedures and has not yet developed an extended network of relationships throughout the school building that extend beyond his immediate colleagues. Although these summative observations are evident in the data synthesis, both of the Case Study participants' transitions to teaching are in their infancy and both vocational technical (VT) teachers acknowledge that they enjoy teaching, the students, and their evolution to VT teacher.

Chapter 4 concludes with a presentation of six findings that emerged from the data analysis. Each finding holds implications for educational leaders, practitioners, educational policy, and/or scholarship. The implications are detailed in the next section of this chapter.

Findings and Implications

This section of Chapter 5 is organized to present the study's findings relevant to each research question. A brief review of each finding is presented followed by the finding's implications with regard to one or more of the following categories: educational leaders, practitioners, policy, and/or scholarship.

First Research Question

The study's first research question is "What are the prior experiences, beliefs, and thoughts that influence or inspire tradespeople to pursue a transition to vocational technical (VT) teaching?" Ultimately, the study produced two findings with regard to this question, which are

relevant to the tradesperson's prior experiences and their motivations for seeking a career in teaching.

Finding #1. *The data support that a tradesperson's prior experiences, such as mentoring, coaching, and leadership roles in their trade area, influenced their desire to teach. The active participation in these experiences spurred thoughts about teaching in a more formal manner*. Transitioning vocational technical (VT) teachers reported that their prior experiences, such as mentoring, coaching, and leadership roles in their trade area, influenced their desire to teach. Also, their involvement during those times when they did assume a quasi-teaching role sparked thoughts about teaching their trade to others and spurred the general desire to guide others in the learning process.

Implications for Educational Leaders. In an effort to promote a valuable connection for tradespeople who want to continue to work with their trade area in a new way, vocational technical (VT) school leaders should continue to foster connections and communications between their schools and the tradespeople in their community and surrounding communities so they can promote employment opportunities that connect VT teaching and tradespeople. While Advisory Committees already exist to "advise, assist, and support school/college personnel in order to enhance planning and operation of programs" ("Advisory," 2009, p. 1), they largely focus on the elements of the workforce that influence the quality of VT programs, such as job trends and trade-related technological developments. Additionally, the committees' focus is primarily on the impact that VT programs have on students' educational experiences. While this may include suggestions on professional development activities for teachers and advising teachers on instructional methods, an additional element should be to inform committee members and the community-at-large about the nuances of VT teaching and the tradespersons'

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transition to VT teaching. Should community-based businesses have a better understanding of the licensure requirements, teaching obligations, and commitments of VT teachers, the information may stimulate the flow of talent between the two sectors resulting in more tradespeople considering VT teaching or other methods of teaching, such as mentoring and coaching, that may lead to the consideration of transitioning to VT teaching in the future.

Finding #2. The data support that altruistic and intrinsic factors are identified more often in the case study participants' dialogue than extrinsic motivating factors. In particular, participants identified deriving personal satisfaction and meaningfulness from teaching, as well as experiencing the desire to teach and make a difference in students' lives as most important. Online survey and interview participants indicated that altruistic and intrinsic factors are the primary motivators for changing careers to teach. Participants identified personal satisfaction, the meaningfulness of teaching, the desire to teach and continue to teach, and making a difference in students' lives as the most influential motivators. This finding aligns with the Williams et al. (2009) mixed methods study (N=375), which also found that altruistic and intrinsic factors. Hof et al. (2011) and Hof and Leiser (2014) also conducted studies that revealed that extrinsic motivations were not integral to participants motivation to career change to teaching.

Implications for Educational Leaders. School leaders who have a comprehensive understanding and appreciation of variations in the tradesperson's individual journey to teaching and the motivations for tradespeople to change careers to teach would be better able to support transitioning teachers. By engaging in this dialogue, school leaders can reflect on the teacher's story-line (Beijaard, 1995), which is important to the transformational process for novice teachers (Rodgers & Scott, 2008). Additional to providing the school leader the narrative of how

the tradesperson came to teach, it also offers the school leader and novice teacher a method to co-construct a means to move forward in the transitional process. This understanding arguably aids in achieving two positive outcomes. First, the progressive dialogue will help the tradesperson grow "into the career" (Beijaard, 1995) and toward being an experienced teacher and, second, such insights orient school leaders to the need to customize support programs to match the individual tradesperson's prior education, experiences, attributes, and transferable skills. Since many Induction/Mentoring Programs are generalized to meet the needs of all novice teachers, this dialogue challenges the notion that all novice teachers are "blank slates." Instead, the existing foundation of experiences, competence, and characteristics of each individual career-change VT teacher can be considered as part of the state-mandated Induction/Mentoring Program or as an addition to school-based programs.

Implications for Scholarship. Future scholarly research should be conducted with varied groups of vocational technical (VT) teachers. This includes additional surveys and interviews with VT teachers in regional vocational technical schools, as well as with, in the case of Massachusetts, VT teachers in the state's one independent vocational high school, twenty-eight vocational high schools, two agricultural high schools, and one collaborative school. Furthermore, ethnographic studies that embed observation in the data collection should be pursued in an effort to understand VT teachers in different settings, such as those listed. Expanding contact with additional teachers may provide valuable insight to VT teachers' thoughts and motivations about changing careers to teach. Further studies would contribute to creating a more comprehensive view about this group of teachers than currently exists in scholarly literature.

Additionally, in support of the need to better understand the motivations for tradespeople to change careers to teach, there is good reason for studies that contrast the motivations of firstand second-career teachers. Understanding the differences in their motivations, paired with the knowledge that first-career teachers enter the profession with markedly different prior educational and work experiences and thoughts regarding teaching, may inform departments of education and school leaders about whether Induction/Mentoring Programs should be designed to continue pairing the two categories of teachers together in the one program, separating the two categories of teacher into programs tailored to meet the specific needs of first- or second-career teachers, or developing a hybrid program that blends segments tailored to each category of teacher while simultaneously offering a means for first- and second-career teachers to collaborate, share dialogue, and learn from each other's experiences.

Second Research Question

The study's second research question is "How do the tradespersons' prior expectations for their transition into public education and a high school professional community align with their perceptions of the actual transition into vocational technical (VT) teaching?" The data analysis produced four findings with regard to this question, which center on a tradesperson's prior skills that are applicable to teaching, tensions with regard to licensure requirements, adapting to the classroom and school community, and transitional support from collegial interactions.

Finding #3. The data support that the transferable skills developed during prior work experience transfer to the classroom and school environment, contributing to a foundation of usable knowledge in the classroom setting. Tradespeople who transitioned to vocational technical (VT) teaching reported during data collection that skills they developed during their prior work experience transferred to the classroom setting and school environment, contributing to a foundation of usable knowledge in the new career setting. This finding supports the scholarship that states that when people self-identify their skills by looking for patterns in their strengths and weaknesses, they can come to understand and acknowledge that these skills may transfer to a new career setting (Whitaker, 1998).

Implications for Practitioners. Teachers who undertake Whitaker's process for identifying their transferable skills can begin the inner dialogue that may lead to acknowledging the skill(s) and how the skill(s) may apply to teaching in order to capitalize on their usefulness (Crow et al., 1990; Mayotte, 2003). Transferable skills also offer career-change teachers confidence in their new role because they can rely on this accumulated and familiar knowledge, much like students who experience greater levels of learning when teachers build on their prior knowledge about a topic.

Implications for Scholarship. Additional studies conducted to inquire about vocational technical (VT) teachers' skill sets prior to entering the teaching profession might offer valuable information to current scholarship. Whitaker (1998) identified 76 transferable skills that are organized into nine categories: Communication Skills, Research and Investigation Skills, Critical Thinking Skills, Personal and Career Developmental Skills, Information Management Skills, Human Relations and Interpersonal Skills, Design and Planning Skills, Management and Administrative Skills, and Valuing Skills. Embedded in Whitaker's categories is the tradesperson's content-area competence, including potentially transferable pedagogical and collaborative skills. Further research should include participant interviews that focus on VT teacher's self-reflection with regard to acquired skills and observations of teachers in the school

setting to illuminate how and in what manner these self-identified skills transferred to the school setting.

Finding #4. The data support that tradespeople who transition to vocational technical (VT) teaching experience tension with regard to fulfilling the necessary licensure requirements for teaching. Online survey and interview participants indicated that they have experienced a variety of tensions with regard to fulfilling the necessary licensure requirements to continue as teachers. Although the scope of the teachers' concerns covered the cost of taking the required courses, time needed to complete the courses, and navigating the procedural aspects of licensing, most participants who identified this as an "issue" said that they felt overwhelmed with negotiating the process and procedure.

Implications for Practitioners. Tradespeople who decide to change careers to teach may gain a deeper understanding from the information presented in this study about what is to be expected from the licensing process and find reassurance that other vocational technical (VT) teachers are similarly struggling. This may open avenues for dialogue between novice and veteran teachers and school leaders about the procedural steps as well as about the worries, insecurities, obstacles, time constraints, and the uncertainties about licensure that arise over time for transitioning teachers.

Implications for Policy. Although tradespeople who transition to vocational technical (VT) teaching are expected to complete an elaborate licensure process, additional support to help individual tradespeople navigate the avenues available to them would be helpful for those struggling with the transition. Although the Massachusetts Department of Elementary and Secondary Education (DESE) provides telephone and web site support to the public about licensure procedures, the information is cumbersome with limited available call hours for

questions and a complex interactive online tool that suggests multiple "pathways" to licensure for educators. A more personalized discussion, one considerate of the individual circumstances and humanistic concerns that may not align with the mechanics of the licensing process, would provide another means to help alleviate the angst and tension transitioning tradespeople feel while engaged in the licensure process. One option would be for the DESE to train school-based mentors who work with transitioning teachers about the various pathways to licensure so together they could navigate the options through in-person dialogue. Embedding this discussion into the Induction/Mentoring Program would offer transitioning teachers personalized support to help them during the licensure process.

Finding #5. *The data support that tradespeople who transition to vocational technical* (*VT*) *teaching do not experience the classroom in a manner that they anticipated. As a result, they are left to make sense of the unfamiliar, such as classroom management, planning and preparation, and teaching students, with little preparation.* Tradespeople who transitioned to vocational technical (VT) teaching indicated during the online survey and interviews that they did not experience the classroom and school community in a manner that they anticipated. These data aligned with the scholarship reviewed in Chapter 2 that found that a variety of factors construct a person's pre-conceived ideas of teaching, including prior learning experiences (Castro & Bauml, 2009; Furlong, 2013; Stenberg, Karlsson, Pitkaniemi, & Maaranen, 2014; Tigchelaar, Vermunt, & Brouwer, 2014), prior work experiences (Tigchelaar, Vermunt, & Bouwer, 2014), prior work experiences (Castro & Bauml, 2009), and prior teaching experience in the work field (Castro & Bauml, 2009; Powers, 2002), which may contribute to the pre-conceived ideas about teaching, resulting in an unexpected school culture and community (Sabar, 2004).

Implications for Practitioners. Tradespeople who read this study will be informed about the personal transitional experiences conveyed in thematic categories resulting from the analysis and in the vignettes about the case study participants. One area that surfaced during the study was that the school setting differs from the work setting. This materialized in several ways, such as when students need to be taught the trade basics, which is content that some highly qualified tradespeople had not anticipated needing to teach, and that despite similar content and technology used in both the classroom setting and the workforce, the classroom is not managed the way a work or job site is managed. Ultimately, a parallel was shown between learning to be a tradesperson and learning to be a teacher. One interview participant also acknowledged that the school setting is less competitive than his experience in the workplace, which he did not expect. Exposure to some of the ways that a school setting may differ from the work setting may better prepare transitioning VT teachers to successfully engage in the school and classroom setting from the onset.

This finding also supports Super's (1990) Vocational Development Theory, which posits that vocational development must center on self-discovery and result, in part, from personal reflection and conscious enactment of the person's interpretation of the occupation after performing the job and making continued adjustments. It also supports that a person's job satisfaction relies on whether an "individual finds adequate outlets for abilities, needs values, interests, personality traits and self-concepts" (1990. p. 208). People with "high levels of control over their career paths tend to demonstrate higher levels of career satisfaction" (p. 30). Ultimately, the data presented in this study may inform future career-change VT teachers' positions or platforms to support the ideas about agency and self-advocacy. *Implications for Educational Leaders*. School leaders would benefit from the knowledge that vocational technical (VT) teachers who engaged in the study's online survey (*N*=170) indicated that they would have liked to receive support/additional support in curriculum development (51.6%), classroom management (49%), and lesson planning (41.4%). Addressing these topics during school-based training and professional development opportunities in an ongoing fashion throughout a novice VT teacher's first three years of teaching may better prepare transitioning VT teachers for the professional demands they may experience.

Finding #6. *The data support that novice vocational technical (VT) teachers benefited from collegial interactions with their colleagues, which provided them with a support system that helped them adjust to the new school setting*. Transitioning vocational technical (VT) teachers indicated during the online survey and interviews that they benefited from several types of collegial relationships that were formed during their transition to teaching. These relationships were comprised of interactions and collaborations with colleagues as well as through dialogue with their assigned mentor, resulting in reflective practices.

Implications for Educational Leaders. If educational leaders were to provide planned social interactions for career-change teachers that extend beyond the day-to-day obligatory interactions, such as shared duties or staff meetings, novice teachers might develop supportive relationships with their colleagues more quickly. For instance, one vocational technical (VT) teacher indicated that she did not interact with her colleagues socially because she could not find time during the school day to do so; an interview participant also stated that he did not feel like a "real" teacher because he had not completed the licensure requirements. Although the study participants indicated that collegial interactions helped them during their transition, those who did not actively seek these relationships did not readily find them. While mentor-mentee

relationships are beneficial to novice teachers, additional interactions with other colleagues and supervisors, such as weekly socials and collaborative consultations to review and discuss experiences, practices, and school-setting expectations, may build a larger network of support for the career-change teacher during their transitional years instead of when "they have more to time seek them out."

Implications for Policy. One policy recommendation is for Teacher Induction/Mentoring Programs for novice transitioning vocational technical (VT) teachers to include additional collaborative engagement time during the course of the school year for teachers to work with mentors so mentees could rely on these one-to-one sessions as a time to address their concerns. Although Induction/Mentoring Programs require a specific number of meeting hours to be cataloged as a licensure requirement, schools are able to determine the frequency of the meetings and the topics to be covered. By extending mentor-mentee meetings past the minimum required hours, as well as past the two-year minimum mentor-mentee relationship, a longer-lasting collegial relationship might develop that would more fully support the novice teacher over a longer period of time. As stated in earlier findings, topics of concern, such as licensure procedures and adjustments to the school and classroom setting can be added to the topics the mentor-mentee teams discuss and mentees would also have more availability to inquire about topics, situations, and concerns that they encounter. This would promote reflection as well as offer the sought after topic coverage and interactive dialogue that the study participants indicated they would like support/additional support in during the survey.

Limitations of the Study

This study was conducted to explore the thoughts and motivations that vocational technical (VT) teachers considered before transitioning to teaching as well as the teachers'

perceptions of the actual experiences they encountered during their transition. Although the online survey invitation was sent to twenty-five regional vocational technical schools in Massachusetts, which the Department of Elementary and Secondary Education (DESE) indicates employ approximately 1,135 VT teachers, only 15% (n=170) of VT teachers in these schools participated in the survey. While this is a large sample size by survey standards, collecting data from a larger number of VT teachers might demonstrate additional viewpoints and experiences not evident from the 170 responses collected in this survey. Additionally, because of the researcher's efforts to keep the survey participants and their schools anonymous, it was impossible to determine how many of the twenty-five schools participated in the survey; it was, however, determinable that at least ten schools participated.

Another limitation of the study is with regard to the "new teacher group," which is the label given to the seven teachers who met the study's delimitations and who provided their contact information indicating they were willing to be interviewed. It is not reasonable to expect that this delimited group represents the thoughts, motivations, and experiences of all vocational technical (VT) teachers who work in regional vocational technical schools in Massachusetts. Although this is likely true, it should be noted that VT teachers naturally have a varied set of experiences due to their educational background, trade area, work experience, and transitional experiences, which may also be influenced by the school system where they work, the mentor they were assigned to work with, and the students they work with during their transitional years, amongst other variables.

The final limitation of this study is with regard to the transitioning teachers' motivations for changing careers to teach. Although online survey participants were provided 21 motivational options for changing careers to teach, additional options or variances of the options

provided may have prompted survey participants to provide alternative answers. While this study's results are sound based on the procedures and protocols for data collection and data analysis, it is also possible that if more than 15% of the vocational technical (VT) teachers in regional vocational technical schools in Massachusetts participated in the survey that results may have demonstrated additional motivations for changing careers to teach.

Personal Reflection

While conducting this study about the thoughts, motivations, and experiences of tradespeople who transition to vocational technical (VT) teaching in a regional vocational technical school in Massachusetts, I learned that the motivations for this study's participants to become a VT teacher are largely altruistic or intrinsic in nature but that additional studies must be conducted with this population in order to illuminate additional transitional motivations and perspectives of transitional experiences. Although extrinsic motivating factors surfaced as important in other scholarship (Anthony et al., 2008; Backes and Burns, 2008; Novak et al., 1992), and I have heard people in my own school setting speculate that some trade teachers enter into teaching for a less physically demanding career, shorter work hours, or less expensive healthcare coverage, there was no evidence in these self-reported accounts that these circumstances were what predominantly motivated tradespeople in this study to transition to teaching. It was also apparent that the motivating factors for VT teachers to transition were similar to those indicated in studies reviewed in Chapter 2 that evaluated academic teachers' motivations to change careers to teach (Lee, 2011; Williams et al, 2009). With such varied scholarship, I found that conducting this study has not quelled my desire to understand these phenomena; instead, this study has fueled my desire to continue to study this population as I move forward with my own scholarly pursuits.

Through this process I also realized how complex each person's narrative is with regard to career, self-discovery, and professional identity. I learned that people who are able to identify their values, beliefs, personal traits and attributes, and skill sets, whether through career counselling or self-identification, and who invest time in honest reflection about their education, work, and personal experiences, may be more apt to engage in a career that aligns with their personal interests and skill sets. I am not convinced that any one of these listed elements controls a person's ultimate job satisfaction. I do, however, believe that when a person is able to identify these elements that they are more likely to realize why they are not meeting with job satisfaction and, therefore, more likely to engage in the career-change process.

As I conclude my personal reflections about this process, I also want to express that I have gained an increased level of respect for tradespeople, their talents, and their earnestness to become role models for the students entering into a trade beyond my expectations. This was surprising considering I am a career-change teacher and I already have enormous respect for all teachers and vocational technical (VT) education. In explanation, the vocational technical (VT) teachers that I interacted with during this study were all compelled to share their commitment to the students they work with and the content area that they teach. Most study participants indicated that teaching is a profession that they are fully committed to and that they intend to continue with as a career. Teacher D, "Richard," remarked that it is a "privilege" to be able to teach. I agree. I also consider it a privilege to have heard about the experiences and listened to the stories that these VT teachers shared with me.

Chapter Summary

This study's inquiry into the thoughts and motivations for tradespeople to transition to teaching and the illumination of the similarities and differences among their anticipated and

actual transitional experiences has provided a wealth of information about trade teachers that has not been presented in full in existing scholarly literature. The focus of existing literature, to date, has centered on elementary and secondary academic teachers or vocational educational and training (VET) teachers in other countries. This inquiry contributes to the literature about a specific group of tradespeople and teachers to provide a glimpse of the complex career-change process that they undergo when transitioning to teaching. The number of findings and implications that impact vocational technical (VT) teachers, school leaders, policymakers, and scholars indicates that additional focus should be spent on understanding the stories of these tradespeople and teachers to better meet their needs and the ultimate needs of the students that they work with in classrooms across the state, country, and world. Finally, this study revealed that the tradesperson's transition to teaching cannot simply be categorized as a "career change." It is a complex journey paved with personal reflection, social interactions, and occasional tensions that result in personal fulfillment, professional growth, and job satisfaction, which amounts to much more than mere markers or milestones along their career pathway.

APPENDIX A

Survey: Tradespersons' Career Change to Teaching

Hello!

My name is Susan Sylvia and I am a doctoral candidate at Lesley University in Cambridge, MA. The purpose of my dissertation study is to gain an understanding of the tradesperson's perspective about changing careers to teaching in a vocational technical area. I am inviting you to participate in this research study because your first-hand perspective as a career-change teacher is critical to my research. Vocational technical teachers from twenty-five regional vocational technical schools in Massachusetts are being asked to participate in this online survey.

The following questionnaire will require approximately 10-15 minutes to complete. There is no compensation for responding nor is there any known risk. Your responses to this survey will remain confidential and will be analyzed as a group.

Individual participation in the survey is voluntary and participants may refuse to answer any question(s) or terminate the survey at any time without consequence.

Thank you for taking the time to assist me in my educational endeavors. The data collected will provide useful information regarding the tradesperson's transition to teaching in a vocational technical area and it provides a way for you to contribute to the inquiry about career vocational technical education.

If you have questions or comments regarding this study, please feel free to contact Susan J. Sylvia at (508) 264-2542 or ssylvia2@lesley.edu. You may also contact Dr. Paul Naso, Dissertation Senior Advisor (617) 349-8284 or pnaso@lesley.edu and/or IRB co-chairs, Robyn Cruz (rcruz@lesley.edu) or Terry Keeney (tkeeney@lesley.edu). There is a Standing Committee for Human Subjects in Research at Lesley University to which complaints or problems concerning any research project may, and should, be reported if they arise. Contact the Committee Chairperson at irb@lesley.edu. Do you consent to participate in this survey?

O I consent to participate

O I do not consent to participate

- Q1 Select your gender
- O Male
- O Female

Q2 Select your age group

- **O** 21-27
- **O** 28-34
- **O** 35-42
- **O** 43-49
- **O** 50-56
- **O** 57-63
- **O** Over 63

Q3 What career field(s) were you employed in prior to teaching but after high school? Select as many as apply.

- □ Agriculture
- □ Animal Science
- □ Automotive Collision Repair and Refinishing
- □ Automotive Technology
- Biotechnology
- □ Building and Property Maintenance
- □ Business/Office Technology
- Cabinetmaking
- □ Carpentry
- □ Construction Craft Laborer
- □ Cosmetology
- □ Criminal Justice
- **Culinary Arts**
- Dental Assisting
- Design and Visual Communications
- Diesel Technology
- □ Drafting
- Early Childhood Education
- □ Electrical
- □ Electronics
- □ Engineering Technology
- □ Environmental Science and Technology
- □ Fashion Technology
- **Graphic Arts and Communications**
- □ Health Assisting

- □ Heating-Air Conditioning-Ventilation-Refrigeration
- □ Horticulture
- Hospitality Management
- □ Information Support Services and Networking
- □ Machine Tool Technology
- □ Major Appliance Installation/Repair
- □ Marketing
- □ Marine Service Technology
- □ Masonry and Tile Setting
- Medical Assisting
- □ Medical Laboratory Technology
- □ Metal Fabrication & Joining Technologies
- Operating Room Technology
- □ Painting and Design Technologies
- □ Plumbing
- D Power Equipment Technology
- Practical Nursing
- □ Programming and Web Development
- **General Relation Broadcasting**
- □ Robotics and Automation Technology
- □ Sheet Metalworking
- □ Stationary Engineering
- □ Telecommunications-Fiber Optics
- □ Welding
- □ Other _____

Q4 Select the primary career area that you currently teach?

- **O** Agriculture
- **O** Animal Science
- **O** Automotive Collision Repair and Refinishing
- **O** Automotive Technology
- **O** Biotechnology
- **O** Building and Property Maintenance
- **O** Business/Office Technology
- **O** Cabinetmaking
- **O** Carpentry
- **O** Construction Craft Laborer
- **O** Cosmetology
- **O** Criminal Justice
- O Culinary Arts

- **O** Dental Assisting
- **O** Design and Visual Communications
- **O** Diesel Technology
- **O** Drafting
- O Early Childhood Education
- **O** Electrical
- **O** Electronics
- **O** Engineering Technology
- **O** Environmental Science and Technology
- **O** Fashion Technology
- **O** Graphic Arts and Communications
- **O** Health Assisting
- O Heating-Air Conditioning-Ventilation-Refrigeration
- **O** Horticulture
- **O** Hospitality Management
- **O** Information Support Services and Networking
- **O** Machine Tool Technology
- O Major Appliance Installation/Repair
- **O** Marketing
- **O** Marine Service Technology
- **O** Masonry and Tile Setting
- **O** Medical Assisting
- **O** Medical Laboratory Technology
- **O** Metal Fabrication & Joining Technologies
- **O** Operating Room Technology
- **O** Painting and Design Technologies
- **O** Plumbing
- **O** Power Equipment Technology
- **O** Practical Nursing
- **O** Programming and Web Development
- **O** Radio and Television Broadcasting
- **O** Robotics and Automation Technology
- **O** Sheet Metalworking
- **O** Stationary Engineering
- **O** Telecommunications-Fiber Optics
- **O** Welding
- O Other _____

A TRADESPERSON'S TRANSITION TO TEACHING

Q5 How many years did you work in the career field that you are currently teaching?

- **O** 1-6 years
- **O** 7-10 years
- **O** 11-15 years
- **O** 16-20 years
- O Over 20 years

Q6 Have you taught this career area in another high school?

- O Yes
- O No

Q7 What type of training did you receive specifically for the vocational technical area that you are currently teaching? Select all that apply.

- □ Completed this program at a career, vocational, and/or technical high school
- □ Apprenticed in this field
- □ Work-based learning/On-the-job training
- □ Completed this program at a technical college
- Graduated from a two-year college in this field
- Graduated from a four-year college in this field
- □ Other _____

Q8 How long have you been teaching in your current position in this current school system?

- **O** Less than 1 year
- **O** 1-3 years
- **O** 4-10 years
- **O** 11-15 years
- More than 15 years

Q9 What Massachusetts-issued teaching license do you hold for the primary area that you are currently teaching?

- O Waiver
- **O** Preliminary License
- O Initial License
- O Initial Ex. License
- **O** Professional License
- **O** I have a license in an area that I am not currently teaching

A TRADESPERSON'S TRANSITION TO TEACHING

Q10 What answer best describes when you began to think about starting a career in teaching?

- No more than a year before I began teaching
- **O** 1-2 years before I began teaching
- 3-5 years before I began teaching
- O More than 5 years before I began teaching
- I have always wanted to be a teacher

Q11 Select the top three reasons that motivated you to change careers to teaching.

- □ I always wanted to teach
- □ I never enjoyed working in my career field
- □ I wanted to do something more meaningful
- □ I wanted to improve career vocational technical education
- □ I wanted to make a difference in student's lives
- □ I wanted to give back to my community
- □ I was looking for a supportive work environment
- □ I wanted to work in my career field in a new way
- □ I wanted less job/career stress
- □ I was bored in my previous job/career
- □ I wanted a new challenge
- \Box I wanted to be a role model to those entering my career field
- □ I wanted to spend more time with my family
- □ I wanted better work hours
- □ I needed/wanted health insurance
- □ My previous job/career position was eliminated
- □ I was fired from my previous job/career position
- □ I did not feel supported in my previous job/career field
- □ I wanted a job/career that was less physically demanding
- □ I was looking for a better/more stable salary
- □ I was encouraged by a colleague/family member
- □ Other (Specify) _____

Q12 Are you currently participating in a Teacher Induction/Mentoring Program as a mentee (not as a mentor)?

- **O** I am in my first year of a school-based Teacher Induction/Mentoring Program
- **O** I am in my second year of a school-based Teacher Induction/Mentoring Program
- I completed a one-year school-based Teacher Induction/Mentoring Program
- O I completed a two-year school-based Teacher Induction/Mentoring Program
- I have not been approached about being in a Teacher Induction/Mentoring Program
- Other

Q13 New teachers are often assigned to work with a mentor. Please select the best description of your mentor.

- **O** A teacher in the same content area
- A teacher in a similar content area. Please specify what area.
- A teacher in an unrelated content area. Please specify what area.
- **O** A teacher from outside of my school system
- **O** An administrator
- **O** I did not have a mentor

Q14 Select the areas that you wish you would have received support or additional support in when you were a new teacher.

- Classroom Management
- □ Lesson Planning
- Developing student-teacher relationships
- Developing relationships with other staff members
- □ Working with special education students
- □ Working with English language learners
- □ Working with advanced placement students
- □ Curriculum development
- □ Time management
- Other _____

Q15 How satisfied are you with the following?

	Satisfied	Neither Satisfied or Dissatisfied	Dissatisfied
Your current teaching position	0	0	О
Your career change to teaching	0	0	О
The high school where you work	0	0	0
The support you received as a new teacher	Ο	Ο	0

A TRADESPERSON'S TRANSITION TO TEACHING

Q16 Do you plan to continue teaching in this career field?

- **O** Definitely yes
- Probably yes
- **O** Might or might not
- **O** Probably not
- **O** Definitely not

Q17 How did your expectations for teaching in a vocational technical area match with the actual experiences that you have had during your transition to teaching?

The next stage of my research will be to interpret the data that survey participants have provided and to proceed with interviews with selected participants. If you would like to be considered to participate in an interview, please provide me with your name, phone number and email address.

I will be preparing a summary of the non-open ended survey questions; if you would like a copy of this summary, please send me an email (ssylvia2@lesley.edu) with this request. This report will contain no personal or identifying information. Thank you for your time!

APPENDIX B

"A Tradesperson's Transition to Vocational Technical (VT) Teaching" Interview Questions

Online Survey Information Review

[Brief overview of survey answers]. Is this interpretation accurate?

Prior Experiences and Thoughts

My first questions are about your prior experiences and thoughts before you entered into teaching.

- 1. Why did you select teaching as a career? Can you discuss what aspects about teaching appealed to you when you were selecting it as a career?
- 2. Please create a timeline for me that includes the most influential or important moments in your life that were involved in your transitional journey from tradesperson to vocational technical teacher. Feel free to include events, people, or any other encounter that resonates with you.
 - a. Are there one or two points on your timeline that are especially important to you? Please tell me about them.
 - b. Identify the reason(s) that you did not or were not able to change careers to becoming a vocational technical teacher sooner. Where does this align with your timeline?
- 3. What initial concerns did you have about the career change to teaching?
- 4. How did you explain to your family members/friends that you wanted to (or were going to) change careers to teaching? What reasons did you give them?
- 5. What things did you do to prepare for your transition to teaching?

Transition to Teaching: Perceptions

The remainder of my questions will be about your time as a teacher.

- 1. Earlier you identified the aspects of teaching that attracted you to the profession. Do these qualities about teaching still appeal to you now that you are a teacher? Please explain.
- 2. Earlier you also identified what initial concerns you had about changing careers to teach, have these concerns changed over the course of your first year(s) in the profession?
- 3. Do you think your previous work experience helped you develop professional relationships with your new colleagues and administrators in the schools? Did your previous experience help you in the classroom and working with students?
- 4. Please share one example about something that someone helped you with during your transition to teaching? Do you have other examples?
- 5. In your response to question 14 on the survey you said that you would have liked support/more support in [input answers from question 14] during your transition to teaching. Can you explain your thinking when you selected these specific areas?

- 6. Were there any other areas that could have been done to further support your transition to teaching?
- 7. What are some of the ways that you regularly interact with your colleagues?
- 8. What aspects of being a teacher did you feel the most prepared to do successfully when you began teaching? How did you become prepared? Least prepared?
- 9. Of the 170 respondents to the survey, the highest motivation selected for changing careers to teaching (41.6%) was "I wanted to make a difference in students' lives." You [input did/did not} select this answer. Now that you are a teacher, what does this statement mean to you?
- 10. Another popular answer to the question about why survey respondents transitioned from their trade to teaching was "I wanted to do something more meaningful" (34.2% of respondents). Now that you are a teacher, are there ways that teaching has become meaningful to you?
- 11. Is there anything else that you would like to share that I haven't asked about that is important for me to know about your experience?

APPENDIX C

"A Tradesperson's Transition to Vocational Technical (VT) Teaching" Interview Questions

Follow Up Interview Introduction

Thank you for meeting with me once again about your transition from tradesperson to teacher. I appreciate the additional time to hear about your perceptions and expectations; this follow up interview should take about 35 minutes to complete.

Follow Up Questions

- 1. Now that you have had some time since our first meeting to reflect on the questions I asked you, is there anything you would like to tell me about your transitional experiences to teaching?
- 2. Please contrast your vision of teaching prior to transitioning to the profession with how you view teaching now.
- 3. What do you think may have been different if you had made your transition to teaching at an earlier point in your career?
- 4. Some people talk about teachers having a "personal mission." What is your "personal mission?"
- 5. Have you experienced a moment or a period in time when you realized that teaching is a "good fit" for you? Can you tell me about it?
- 6. There are many important things to know about teaching. Now that you have been teaching, what do you regard as the most important thing to know?
- 7. If you met or knew someone who was transitioning from a trade area to teaching, what advice would you give to him or her? (reflection on tensions) What would you tell him or about the differences between working in the trade and teaching the trade?
- 8. Now that you are at this stage in teaching, what contribution do you feel teaching in your trade area is making to vocational technical (VT) education or to your career field?
- 9. What do you see as milestones in this profession that you have not yet reached? What do you think you need to reach this/these milestone(s)?
- 10. What do you think could most influence your continued development as a teacher?

APPENDIX D

Subject: A Tradesperson's Transition to Vocational Technical Teaching (CONSENT FOR VOLUNTARY PARTICIPATION)

Hello!

My name is Susan J. Sylvia and I am a doctoral candidate at Lesley University in Cambridge, MA. I am requesting your assistance in inviting the vocational technical (VT) teachers in your school to participate in a brief online survey that will support my study. I am asking that you forward the information after the line break at the end of this email to the VT teachers in your school. Although a response to this email is not required, I would appreciate your informing me if you will be sharing this request with your vocational technical teachers.

The purpose of my dissertation study is to illuminate what factors and conditions tradespeople consider when making the transition to teaching in a vocational technical area and what perceptions they have about public education and school communities prior to entering the profession. It is imperative that vocational technical teachers' first-hand perspectives as a career-change teachers are included in my research. Vocational technical teachers in twenty-five regional vocational technical schools in Massachusetts will be asked to participate in this survey.

Vocational technical teachers, the school systems that employ them, colleges that develop teacher preparation programs, and the Department of Education, who establishes the guidelines for teacher preparation programs and induction/mentoring programs, will benefit from this indepth illustration of an individual's career experience, as well as from an understanding of a person's transitional motivations, to allow school districts to plan individualized support for transitioning teachers.

No participant or the name of the school where he/she works will be identified by name in the study. Individual participation in the survey is voluntary and participants may refuse to answer any question(s) or terminate the survey at any time without consequence.

If you have questions or comments regarding this study, please feel free to contact Susan J. Sylvia at (508) 264-2542 or <u>ssylvia2@lesley.edu</u>. You may also contact Dr. Paul Naso, Dissertation Senior Advisor (617) 349-8284 or <u>pnaso@lesley.edu</u> and/or IRB co-chairs, Robyn Cruz (<u>rcruz@lesley.edu</u>) or Terry Keeney (<u>tkeeney@lesley.edu</u>). *There is a Standing Committee* for Human Subjects in Research at Lesley University to which complaints or problems concerning any research project may, and should, be reported if they arise. Contact the Committee Chairperson at <u>irb@lesley.edu</u>.

Thank you for taking the time to assist me in my educational endeavors. The data collected will provide useful information regarding the tradesperson's transition to teaching in a vocational technical area and it provides a way for you to contribute to the inquiry about career vocational technical education.

Hello, Vocational Technical Teacher!

My name is Susan J. Sylvia and I am a doctoral candidate at Lesley University in Cambridge, MA. I am inviting you to participate in a qualitative research study because your first-hand perspective as a career-change teacher is critical to my research.

The link to the online survey is:

https://lesley.co1.qualtrics.com/SE/?SID=SV_9uUOEDPcHuDeqkR

If you have questions or comments regarding this study, please feel free to contact Susan J. Sylvia at (508) 264-2542 or <u>ssylvia2@lesley.edu</u>. You may also contact Dr. Paul Naso, Dissertation Senior Advisor (617) 349-8284 or <u>pnaso@lesley.edu</u> and/or IRB co-chairs, Robyn Cruz (<u>rcruz@lesley.edu</u>) or Terry Keeney (<u>tkeeney@lesley.edu</u>). *There is a Standing Committee* for Human Subjects in Research at Lesley University to which complaints or problems concerning any research project may, and should, be reported if they arise. Contact the Committee Chairperson at <u>irb@lesley.edu</u>.

Thank you for taking the time to assist me in my educational endeavors. The data collected will provide useful information regarding the tradesperson's transition to teaching in a vocational technical area and it provides a way for you to contribute to the inquiry about career vocational technical education.

References

- [?]. [ca. 2015]. Chapter 74 guide for professional vocational technical teacher licensure.
 Massachusetts Department of Elementary and Secondary Education Teacher Licensure, Malden, MA.
- [?]. [ca. 2016]. Chapter 74 guide for preliminary vocational technical teacher licensure.
 Massachusetts Department of Elementary and Secondary Education Licensure
 Requirements, Malden, MA.

Advisory Committee/Council. (2009). Retrieved from http://www.mass.doe.edu

- Amundson, N. E., Borgen, W. A., Iaquinta, M., Butterfield, L. D., & Koert, E. (2010, June).
 Career decisions form the decider's perspective. *The Career Development Quarterly*, 58, 336-351.
- Anderson, H., Fry, S., & Hourcade, J. J. (2014). Career changers as first-year high school teachers. *Clearing House*, 87, 149-154.
- Anthony, G., and Ord, K. (2008, November). Change-of-career secondary teachers: Motivations, expectations and intentions. *Asia-Pacific Journal of Teacher Education*, *36*(4), 359-376.
- Auerback, C., & Silverstein, L. (2003). *Qualitative data: An introduction to coding and analysis*. New York, NY: New York University Press.
- Backes, C., and Burns, J. Z. (2008). New career-technical teachers--What gets them, and why is it important to know? *Journal of Industrial Teacher Education*, *45*(1), 100-112.

Bandyopadhyay, P. (2007, August). Career anchors based HR practices. *National HRD*, *1*(4), 34-37. Barclay, S. R., Stolt, K. B., & Chung, Y. B. (2011, September). Voluntary midlife career change: Integrating the transtheoretical model and the life-span, life-space approach. *Career Development Quarterly*, *59*, 386-399.

Baruch, Y. (2004). Managing careers: Theory and practice. Harlow, England: FT Prentice-Hall.

- Beckale Nze, J. S., & Ginestie, J. (2012). Technical and vocational teaching and training inGabon: How future teachers build their vocational identity? *International Journal of Des Education*, 22, 399-416.
- Beijaard, D. (1995). Teachers' prior experiences and actual perceptions of professional identity. *Teachers and Teaching: Theory and Practice*, 1(2), 281-294.
- Berger, J., and D'Ascoli, Y. (2011, March). Motivations to become vocational education and training educators: A person-oriented approach. *Vocations and Learning*, 225-249.
- Berger, J., and D'Ascoli, Y. (2012, August). Becoming a VET teacher as a second career: Investigating the determinants of career choice and their relation to perceptions about prior occupation. *Asia-Pacific Journal of Teacher Education*, 40(3), 317-341.
- Bird, A. (1994). Careers as repositories of knowledge: a new perspective on boundaryless careers. *Journal of Organizational Behavior*, *15*, 325-344.
- Bluvshtein, M., Kruzic, M., & Massaglia, V. (2015, Summer). From netthinking to networking to netfeeling: Using social media to help people in job transition. *Journal of Individual Psychology*, 71(2), 144-154.
- Bolles, R. M. (2016). You need to understand more fully who you are. In *What color is your parachute?* (2016 ed., pp. 111-189). New York, NY: Ten Speed Press.
- Bordin, E. S. (1955). A theory of vocational interests as dynamic phenomena. *Education psychology*, 49-65.

- Bordin, E. S., Nachmann, B., & Segal, S. J. (1963). An articulated framework for vocational development. *Journal of Counseling Psychology*, 10, 531-543.
- Bourdieu, P., and Passeron, J. C. (1990). *Reproduction in education, society and culture*. London: Sage.
- Boveda, I., & Metz, A. J. (2016, June). Predicting end-of-career transitions for baby boomers nearing retirement age. *National Career Development Association*, *64*, 153-168.

Boyatzis, R. (1998). Transforming qualitative information. Thousand Oaks, CA: Sage.

- Braun, A. (2012, April). Trainee teachers, gender and becoming the 'right' person for the job:Care and authority in the vocational habitus of teaching. *Oxford Review of Education*, 38(2), 231-246.
- Brown, D. (2002). Introduction to theories of career development and choice. In D. Brown (Ed.), *Career choice and development* (pp. 3-23). San Francisco, CA: Jossey-Boss.
- Bullough Jr, R. V., and Knowles, J. G. (1990). Becoming a teacher: Struggles of a second-career beginning teacher. *International Journal of Qualitative Studies in Education*, 3(2), 101-112.
- Butterfield, L. D., Borgen, W. A., Amundson, N. E., & Erleback, A. C. (2010, December). What helps and hinders workers in managing change. *Journal of Employment Counseling*, 47, 146-156.
- Campbell, J. P., Gasser, M. B., and Oswald, F. L. (1996). The substantive nature of job performance variability. In K. R. Murphy (Ed.), *Individual differences and behavior in organizations* (pp. 258-299). Hillsdale, NJ: Erlbaum.

- Castro, A. J., & Bauml, M. (2009, Summer). Why now? Factors associated with choosing teaching as a second career and their implications for teacher education programs. *Teacher Education Quarterly*, 113-126.
- Chan, S. (2012, November). Perspectives of new trades tutors: Boundary crossing between vocational identities. *Asia-Pacific Journal of Teacher Education*, 40(4), 409-421.
- Chapman, J. R. (2016). An empirically derived framework for conceptualizing Schein's career orientation theory. *Journal of Career Assessment*, 24(4), 669-684.
- Chudzikowski, K., Demel, B., Mayrhofer, W., Briscoe, J. P., Unite, J., Bogicevic Milikic, B., ...
 Zikic, J. (2009). Career transitions and their causes: A country-comparative perspective.
 Journal of Occupational Psychology, 82, 825-849. http://dx.doi.org/Retrieved from
- Colley, H., James, D., Tedder, M., & Diment, K. (2003). Learning as becoming in vocational education and training: Class, gender, and the role of vocational habitus. *Journal of Vocational Education and Training*, 55(4), 471-496.
- Corcoran, E. (1981, May-June). Transition Shock: The beginning teacher's paradox. *Journal of Teacher Education*, *32*(3), 19-23.
- Correa, J. M., Martinez-Arbelaiz, A., & Gutierrez, L. P. (2014). Between the real school and the ideal school: Another step in building a teaching identity. *Educational Review*, 66(4), 447-464. http://dx.doi.org/Retrieved from
- Crow, G. M., Levine, L., and Nager, N. (1990, May). No more business as usual: Career changers who become teachers. *American Journal of Education*, 197-223.
- Danziger, N., Rachman-Moore, D., and Valency, R. (2008). The construct validity of Schein's career anchors orientations inventory. *Career Development International*, *13*(1), 7-19.

- Day, C., Kington, A., Stobart, G., & Sammons, P. (2006, August). The personal and professional selves of teachers: Stable and unstable identities. *British Educational Research Journal*, 32(4), 601-616.
- Department of Elementary and Secondary Education. (2002). Induction for Beginning Educators. Retrieved from www.doe.mass.edu/educators/mentor/teachers.html
- Department of Elementary and Secondary Education. (2011). Preparing, training, and recruiting high quality teachers and principals. Retrieved from www.doe.mass.edu/
- Dik, B. J., & Duffy, R. D. (2009, April). Calling and vocation at work. *Counselling Psychology*, *37*(3), 424-450.
- Duffy, R. D., & Dik, B. J. (2009, September). Beyond the self: External influences in the career development process. *Career Development Quarterly*, 58, 29-43.
- Duffy, R. D., & Sedlacek, W. E. (2007, April). The presence of and search for a calling: Connections to career development. *Journal of Vocational Behavior*, *70*, 590-601.
- Evans, L. (2011). The motivations to enter teaching by age related career stage and certification path. *Taylor and Francis Group*, *31*, 606-633.
- Francis, V., & Prosser, A. (2013, January). Career counselor's perceptions of construction as an occupational choice. *Journal of Professional Issues in Engineering Education and Practice*, 59-71.
- Freeman, S. C. (1993, Summer). Donald Super: A perspective on career development. Journal of Career Development, 19(4), 255-264.
- Freidus, H. (1994, April). *Supervision of second career teachers: What's our line?* Paper presented at the American Educational Research Association, New Orleans, LA.

- Freidus, H., and Krasnow, M. (1991, April). *Second career teachers: Themes and variations*. Paper presented at the American Educational Research Association, Chicago, IL.
- Furlong, C. (2013). The teacher I wish to be: Exploring the influence of life histories on student teacher idealised identities. *European Journal of Teacher Education*, *36*(1), 68-83.
- Furnham, A. (2001). Vocational preference and P-O Fit: Reflections on Holland's theory of vocational choice. *Applied Psychology: An International Review*, 50(1), 5-29.
- Galles, J. A., and Lenz, J. G. (2013, September). Relationships among career thoughts, vocational identity, and calling: Implications for practice. *The Career Development Quarterly*, 61, 240-248.
- Gati, I., & Tal, S. (2008). Decision-making models and career guidance. In J. A. Athanasou & R.
 Van Esbroeck (Eds.), *International handbook of career guidance* (pp. 157-185). Sydney,
 Australia: Springer.
- Gee, J. P. (2000). Identity as an analytic lens for research in education. *American Educational Research Association*, 25(), 99-125.
- Giannantonio, C. M., & Hurley-Hanson, A. E. (2006, June). Applying image norms across Super's career development stages. *The Career Development Quarterly*, *54*, 318-330.
- Ginzberg, E., Ginzberg, S. W., Axelrad, S., & Herman, J. L. (1951). *Occupational choice: An approach to a general theory*. New York, NY: Columbia University Press.
- Gottfredson, G. D., & Holland, J. L. (1996). Dictionary of Holland Occupational Codes. Lutz, FL: Psychological Assessment Resources.
- Gray, S. L., and Whitty, G. (2010, March). Social trajectories or disrupted identities? Changing and competing models of teacher professionalism under New Labour. *Cambridge Journal of Education*, 40(1), 5-23.

- Greenwood, A. (2015, Winter). Unanticipated career change. *Reference and User Services Quarterly*, 55(2), 87-90.
- Gregg, C. M. (2005). Discover "vocation": An essay on the concept of vocation. *Journal of College and Character*, 6(1).
- Gu, M. (2015). The formation of English teacher identities: A cross-cultural investigation. Language Teaching Research, 19(2), 187-206.
- Haggard, C., Slostad, F., & Winterton, S. (2006, December). Transition to the school as workplace: Challenges of second career teachers. *Teaching Education*, 17(4), 317-327.
- Hagmaier, T., & Abele, A. (2014). When reality meets ideal: Investigating the relation between calling and life satisfaction. *Journal of Career Assessment*, *23*(3), 367-382.
- Hamman, D., Coward, F., Johnson, L., Lambert, M., Zhou, L., & Indiatsi, J. (2013). Teacher possible selves: How thinking about the future contributes to the formation of professional identity. *Self and Identity*, *12*(3), 307-336.
- Haycock, J., & Kelly, D. (2009). From 'trade teacher' to 'critically reflective practitioner': The relationship between theory and occupational identity formation in TAFE teachers. Paper presented at the 12th Australian Vocational Education and Training Research Association Conference, Chishold Institute. Abstract retrieved from
- Hof, S., and Leiser, M. S. (2014). Teaching in vocational education as a second career. *Empirical Research in Vocational Education and Training*, 1-13.
- Hof, S., Strupler, M., and Wolter, S. C. (2011, June). *Career changers in teaching jobs: A case study based on the Swiss vocational education system*. Paper presented at the Swiss Coordination Centre for Research in Education

- Holland, J. L. (1959). A theory of vocational choice. *Journal of Counseling Psychology*, 6(1), 35-45.
- Holland, J. L. (1973). *Making vocational choices: A theory of careers*. Englewood Cliffs, NJ: Prentice-Hall.
- Holland, J. L. (1985). *Making vocational choices: A theory of vocational personalities and work environments*. Englewood Cliffs, NJ: Prentice Hall.
- Holland, J. L. (1997). *Making vocational choices: A theory of vocational personalities and work environments* (3rd ed.). Odessa, FL: Psychological Assessment Resources, Inc.

Hoppock, R. (1957). Occupational information. New York, NY: McGraw-Hill.

- Induction programs for teachers, 603 CMR Massachusetts Department of Elementary and Secondary Education § 7.12 (2016).
- Interest inventory. (2016). In *Cambridge Business English Dictionary*. Retrieved from http://www.dictionary.cambridge.org/us/dictionary/English/interest-inventory
- Izadinia, M. (2014). Teacher educators' identity: A review of literature. *European Journal of Teacher Education*, 37(4), 426-441.
- Job. (n.d.). In Job. Retrieved from http://www.merriam-webster.com/dictionary/job
- Kaminsky, S. E., & Behrend, T. S. (2015). Career choice and calling: Integrating calling and social cognitive career theory. *Journal of Career Assessment*, *23*(3), 383-398.
- Kantamneni, N., and Fouad, N. (2013). Contextual factors and vocational interests in South Asian Americans' vocational development. *Journal of Career Assessment*, *21*(1), 57-72.
- Kim, S. (2014). Career transition process: A qualitative exploration of Korean middle-aged workers in postretirement employment. *Adult Education Quarterly*, *64*(1), 3-19.

- Kirkpatrick Johnson, M., & Mortimer, J. T. (2002). Career choice and development from a sociological perspective. In D. Brown (Ed.), *Career choice and development* (pp. 37-81).San Francisco, CA: Jossey-Bass.
- Lee, D. (2011, May, 27). Changing course: Reflections of second-career teachers. *Current Issues in Education*, 14(2), 1-17.
- Leijen, A. (2013). All roads lead to Rome: Developmental trajectories of student teachers' professional and personal identity development. *Journal of Constructivist Psychology*, 26(2), 104-114.
- Leong, F. T., & Barak, A. (2000). The PIC model for career decision making: Prescreening, indepth exploration, and choice. In *Contemporary models in vocational psychology* (pp. 7-54). Mahwah, NJ: Lawrence Erlbaum Associates.
- Leung, S. A. (2008). The big five career theories. In J. A. Athanasou and R. Van Esbroeck (Eds.), *International handbook of career guidance* (pp. 115-132). : Springer.
- Lortie, D. C. (1975). Schoolteacher (2nd ed.). Chicago: University of Chicago Press.
- Lucas, K., & Buzzanell, P. M. (2004, November). Blue-collar work, career, and success: Occupational narratives of Sisu. *Journal of Applied Communication Research*, *32*(4), 273-292.
- MacAskill, W. (2014). Replaceability, career choice, and making a difference. *Ethical Theory and Moral Practice*, *17*, 269-283.
- Manzoni, A., Harkonen, J., & Mayer, K. U. (2014, June). Moving on? A growth-curve analysis of occupational attainment and career progression in West Germany. *Occupational Attainment and Career Progression*, 92(4), 1285-1312.

- Marshal, V., and Bonner, D. (2003). Career anchors and the effects of downsizing. Implications for generations and cultures at work. *Journal of European Industrial Training*, 27(6), 281-291.
- Massachusetts Department of Elementary and Secondary Education. (2015-2016). *Race/Ethnicity and Gender Staffing Report (SCHOOL)* [Gender Reports]. Retrieved from www.mass.doe.edu
- Massachusetts Department of Elementary and Secondary Education. (2015-2016). *Teacher by Program Area Report* [Number of Teachers in VTE]. Retrieved from www.doe.mass.edu
- Maurice-Takerei, L., and Jesson, J. (2010). Nailing down an identity--The voices of six carpentry educators. *New Zealand Journal of Teachers' Work*, 7(2), 156-169.
- Maurice-Takerei, L., & Anderson, H. (2013). Discipline-based teaching and identity expansion-Teacher education and the tertiary vocational educator in New Zealand. *New Zealand Journal of Teachers' Work*, 10(2), 260-272.
- Mayotte, G. A. (2003). Stepping stones to success: Previously developed career competencies and their benefits to career switchers transitioning to teaching. *Teaching and Teacher Education*, *19*, 681-695.
- Miller, D., & Form, W. H. (1951). *Industrial sociology*. New York, NY: Harper.
- Mosenson, J., and Mosenson, A. (2012, March). Career changers' journey into education. Association for Career and Technical Education, 8-9.
- Nordvik, H. (1991). Work activity and career goals in Holland's and Schein's theories of vocational personalities and career anchors. *Journal of Vocational Behavior*, *38*(2), 165-178.

- Nordvik, H. (1996). Relationships between Holland's vocational typology, Schein's career anchors and Myers-Briggs' types. *Journal of Occupational and Organizational Psychology*, 69, 263-275.
- Novak, D., and Knowles, G. J. (1992, April). *Life histories and the transition to teaching as a second career*. Paper presented at the American Educational Research Association, San Francisco, CA.
- Nye, C. D., Su, R., Rounds, J., and Drasgow, F. (2012). Vocational interests and performance: A quantitative summary of over 60 years of research. *Association for Psychological Science*, *74*(4), 384-403.
- Occupation. (2016). In *BusinessDictionary.com*. Retrieved from http://www.businessdictionary.com
- Occupational science & therapy. A definition. (2014). Retrieved October 8, 2016, from http://www.gvsu.edu/ot/a-definition-35.htm
- Owens, R. L., Motl, T. C., & Krieshok, T. S. (2016). A comparison of strengths and interests protocols in career assessment and counseling. *Journal of Career Assessment*, 24(4), 605-622.
- Peake, S., & McDowall, A. (2012, August). Chaotic careers: A narrative analysis of career transition themes and outcomes using chaos theory as a guiding metaphor. *British Journal of Guidance and Counselling*, 40(4), 395-410.
- Pillen, M., Beijaard, D., & Den Brok, P. (2013). Tensions in beginning teachers' professional identity development, accompanying feelings and coping strategies. *European Journal of Teacher Education*, 36(3), 240-260.

- Powers, F. W. (2002). Second-career teachers: Perceptions and mission in their new careers. *International Studies in Sociology of Education*, *12*(3), 303-317.
- Preparing, training, and recruiting high quality teachers and principals. (2017). Retrieved from www.doe.mass.edu
- Preparing, training, and recruiting high quality teachers and principals, Title II-A Massachusetts Department of Elementary and Secondary Education § (2017).
- Reardon, R. C., and Bertoch, S. C. (2011, April). Revitalizing educational counseling: How career theory can inform a forgotten practice. *The Professional Counselor: Research and Practice*, 1(2), 109-121.
- Rhodes, S. R., and Doering, M. (1983). An integrated model of career change. Academy of Management Review, 8(4), 631-639.
- Rodgers, C. R., & Scott, K. H. (2008). The development of the personal self and professional identity in learning to teach. In M. Cochran-Smith & S. Feiman-Nemser (Eds.), *Handbook of research in teacher education* (pp. 732-755). Mahway, NJ: Lawrence Earlbaum.
- Roe, A. (1956). The psychology of occupations. New York, NY: Wiley.
- Roe, A. (1957). Early determinants of vocational choice. *Journal of counseling psychology*, *4*, 212-217.
- Ronzio, C. R. (2012, June). Counseling issues for adult women in career transition. *American Counseling Association*, 49, 74-84.
- Sabar, N. (2004). From heaven to reality through crisis: Novice teachers as migrants. *Teaching* and Teacher Education, 145-161.

- Saldana, J. (2011). A survey of qualitative data analytic methods. In P. Leavy (Ed.), *Fundamentals of qualitative research* (pp. 89-138). Oxford, NY: Oxford University Press.
- Savickas, M. L. (1997, March). Career adaptability: An integrative construct for life-span, lifespace theory. *The Career Development Quarterly*, *45*, 247.
- Savikas, M. L. (2002). Career construction: A developmental theory of vocational behavior. InD. Brown (Ed.), *Career choice and development* (4th ed., pp. 149-205). San Francisco,CA: Jossey-Bass.
- Schein, E. (1978). Career dynamics: Matching individual and organizational needs. Reading, MA: Addison-Wesley.
- Schein, E. (2007). Career anchors revisited: Implications for career development in the 21st century. *National HRD*, *1*(4), 27-33.
- Schein, E. H. (1971). The individual, the organization, and the career: A conceptual scheme. *The Journal of Applied Behavioral Science*, 7(4), 491-426.
- Schein, E. H. (1990). Career Anchors (2nd ed.). San Diego, CA: Pfeiffer, Inc.
- Schein, E. H., and Van Maanen, J. (2013). *Career anchors: The changing nature of work and careers* (4th ed.). San Francisco, CA: Wiley and Sons.

Set-up to request a waiver for educator licensure. (2017). Retrieved from www.mass.gov

- Shin, Y., & Kelly, K. R. (2013, June). Cross-cultural comparison of the effects of optimism, intrinsic motivation, and family relationships on vocational identity. *Career Development Quarterly*, 61, 141-160.
- Smethem, L. (2007, October). Retention and intention in teaching careers: Will the new generation stay? *Teachers and Teaching Theory and Practice*, *13*(5), 465-480.

- Stake, R. E. (1978, February). The case study method in social inquiry. American Educational Research Association, 7(2), 5-8.
- Stake, R. E. (1994). Case Studies. In N. K. Denzin & Y. S. Lincoln (Eds.), Handbook of *Qualitative Research* (pp. 236-247). Thousand Oaks, CA: Sage.
- Stake, R. E. (2008). Qualitative Case Studies. In *Strategies of qualitative inquiry* (pp. 119-149).Los Angeles, CA: Sage.
- Stead, G. B., & Watson, M. B. (1998). The appropriateness of Super's career theory among black South Africans. South African Journal of Psychology, 28(1), 40-43. http://dx.doi.org/10.1177/008124639802800107
- Stenberg, K., Karlsson, L., Pitkaniemi, H., & Maaranen, K. (2014). Beginning student teachers' teacher identities based on their practical theories. *European Journal of Teacher Education*, 37(2), 204-219.

Super, D. E. (1957). The psychology of careers. New York, NY: Harper.

- Super, D. E. (1964). Vocational development theory: Persons, positions, and processes. *Vocational Guidance Quarterly*, 2-9.
- Super, D. E. (1968, July). Vocational development theory in 1988. In , . Symposium conducted at the Washington University, St. Louisa, MO.
- Super, D. E. (1976). *Career Education and the Meanings of Work*. Washington, D.C.: U.S. Government Printing Office.
- Super, D. E. (1980). A life-span, life-space approach to career development. *Journal of Vocational Behavior*, (16), 282-298.

- Super, D. E. (1990). A life-span, life-space approach to career development. In D. Brown & L. Brooks (Eds.), *Career choice and development*. *Applying contemporary theories to practice* (2nd ed. (pp. 197-261). San Francisco, CA: Jossey-Bass.
- Super, D. E. (1991). Donald Super: A Perspective on Career Development/Interviewer: SuzanneC. Freeman. University of North Carolina at Greensboro, Hickory, NC.
- Super, D. E. (1992). Toward a comprehensive theory of career development. In D. H. Montross & C. J. Shinkman (Eds.), *Career development: Theory and practice* (pp. 35-64).
 Springfield, IL: Thomas.
- Super, D. E. (1994). A life-span, life-space perspective on convergence. In M. L. Savickas & R.W. Lent (Eds.), *Convergence in career development theories* (pp. 63-76). Palo Alto, CA: CPP Books.
- Super, D. E., Starishevsky, R., & Matlin, N. (1963). Career development: A self-concept theory. New York, NY: College Entrance Examination Board.
- Suutari, V., and Taka, M. (2004). Career anchors of managers with global careers. *Journal of Management Development*, 23(9), 833-847.
- Sverko, B., & Vizek-Vidovic, V. (1995). Studies of the meaning of work: Approaches, models, and some of the findings. In D. E. Super, B. Sverko, & C. M. Super (Eds.), *Life roles, values, and careers* (pp. 3-21). San Francisco, CA: Jossey-Bass.
- Taber, B. J., Hartung, P. J., and Borges, N. J. (2011). Personality and values as predictors of medical specialty choice. *Journal of Vocational Behavior*, 78, 202-209.
- Tan, C. L., & Kramer, M. W. (2012, February). Communication and voluntary downward career changes. *Journal of Applied Communication Research*, 40(1), 87-106.

- Tan, J. P. (2012). Second career teachers: Perceptions of self-efficacy in the first year of teaching. New Horizons in Education, 60(2), 21-35.
- Tigchelaar, A., Vermunt, J. D., & Brouwer, N. (2014). Patterns of development in second-career teachers' conceptions of teaching and learning. *Teaching and Teacher Education*, 41, 111-120.
- Trent, J. (2013). From learner to teacher: practice, language, and identity in a teaching practicum. *Asia-Pacific Journal of Teacher Education*, *41*(4), 426-440.

Vocation. (2017). In Vocation. Retrieved from http://www.dictionary.com

- Vocational training. (2016). In Vocational training. Retrieved from http://www.businessdictionary.com/definitions/vocational-training.html
- Wagner, T., & Imanel-Noy, D. (2014, July). Are they genuinely novice teachers? Motivations and self-efficacy of those who choose teaching as a second career. *Australian Journal of Teacher Education*, 39, 31-57.
- Weiss, R. S. (1994). *Learning from strangers: The art and method of qualitative interview studies*. New York, NY: Free Press.
- What is a profession? (n.d.). In *Professional standards council*. Retrieved from http://www.psc.gov.au/what-is-a-profession

What is organizational commitment? (2016). Retrieved from Psychology Dictionary

- Whitaker, U. (1998). *Five steps to career success: The essential guide for students, job seekers and lifelong learners* (2nd ed.). San Francisco, CA: The Learning Center.
- Wille, B., DeFruyt, F., and Feys, M. (2010). Vocational interests and big five traits as predictors of job instability. *Journal of Vocational Behavior*, *76*, 547-558.

- Williams, J., and Forgasz, H. (2009, February). The motivations of career change students in teacher education. Asia-Pacific Journal of Teacher Education, 37(1), 95-108.
- Williams, J., Linchevski, L., and Kutscher, B. (2008). Situated intuition and activity theory fill the gap. In A. Watson and P. Winbourne (Eds.), *New directions for situated cognition in mathematics education* (pp. 153-197). New York, NY: Springer.
- Wilson, E., & Deaney, R. (2010). Changing career and changing identity: How do teacher career changers exercise agency in identity construction? *Sociology Psychology Education*, 13, 169-183.
- Wilson, M. J., Wood, L., Solomonides, I., Dixon, P., & Good, M. (2014, February). Navigating the career transition from industry to academia. *Industry and Higher Education*, 28(1), 5-13.
- Winstead Fry, S., and Anderson, H. (2011). Career changers as first-year teachers in rural schools. *Journal of Research in Rural Education*, 26(12), 1-15.
- Winters, A., Meijers, F., Harlaar, M., Strik, A., Baert, H., & Kuijpers, M. (2013). The narrative quality of career conversations in vocational education. *Journal of Constructivist Psychology*, 26(2), 115-126.
- Wittkamper, J. R. (1984). Factors influencing tradesmen to become secondary vocational education teachers in Indiana (Doctoral dissertation). Available from Ebsco.
- Yin, R. K. (2012). A (very) brief refresher on the case study method. In *Applications of case study research* (pp. 3-20). Thousand Oaks, CA: Sage.
- Yin, R. K. (2014). Case Study Research (5th ed.). Thousand Oaks, CA: Sage.
- Young, R. A. (2002). A contextualist explanation of career. In *Career choice and development* (4th ed. (pp. 206-254). San Francisco, CA: Jossey-Bass.

Zembylas, M. (2003, August). Emotions and teacher identity: A poststructural perspective. *Teachers and Teaching: Theory and Practice*, 9(3), 213-238.

Zuzovsky, R., & Donitsa-Schmidt, S. (2014). Turning to teaching: Second career student teachers' intentions, motivations, and perceptions about the teaching profession. *International Education Research*, 2(3), 1-17.