5-1-2016

A Case Study Analysis of Career and Technical Instructors' Development of Multicultural Self-Awareness through a Transformative Learning Experience

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A CASE STUDY ANALYSIS OF CAREER AND TECHNICAL INSTRUCTORS’ DEVELOPMENT OF MULTICULTURAL SELF-AWARENESS THROUGH A TRANSFORMATIVE LEARNING EXPERIENCE

By

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A dissertation submitted in partial fulfillment of the requirements for the

Doctor of Philosophy – Curriculum & Instruction

Department of Teaching and Learning
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University of Nevada, Las Vegas
May 2016
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entitled

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is approved in partial fulfillment of the requirements for the degree of

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Abstract

As U.S. population becomes increasingly diverse, preparing 21st century educators to teach children of diverse racial, ethnic, social class, and language backgrounds is a critical issue in teacher education. This study focused on career and technical education instructors with a business and industry teaching license and minimal or no previous exposure to multicultural education. As career and technical education is at the front line of preparing youth and adults to succeed in today’s workforce it is imperative that career and technical education instructors meet the needs of the diverse student population. The purpose of this qualitative case study was to explore the ways that a change in perspective can create a better understanding of cultural identity. This study addressed: (1) How does a self-awareness transformative learning experience develop critical cultural competence in career and technical education instructors? (2) How does the practice of critical reflection construct career and technical education instructors’ ability to develop self-awareness of critical cultural competence? (3) How does involvement in critical discourse construct career and technical education instructors’ ability to develop self-awareness of critical cultural competence? A three phase professional development experience rooted in multicultural education provided key elements of transformative learning. The transformative learning theory framework provided an opportunity to closely examine perceptions, beliefs, and values in personal reflection notes, field notes during classroom discussions, and face-to-face interviews. Findings indicated changes in meaning perspectives after experiencing a transformative learning experience.

Keywords: career and technical education, transformative learning theory, multicultural education, identity development, career development, student achievement.
Acknowledgment

I am grateful for the guidance of my committee members, the support from my friends, and the love of my family. Without them I would have never been able to finish my dissertation.

I will begin with Dr. Clifford McClain as he has been with me on this journey since my undergraduate studies. I want to thank him for his patience as I struggled with selecting my dissertation topic, for always having the time to listen to my woes, and being there to celebrate in my achievements. I am deeply grateful to Dr. Christine Clark for opening my eyes so that I can appreciate all the colors in the world – the beauty beyond white is astonishing. I would like to thank Dr. Howard Gordon for my foundation in Career and Technical Education. I would also like to thank Dr. Chyllis Scott and Dr. Margareta Huerta for POWER and for being my cheerleaders (Gig’em). A special thanks to Dr. Carolee Dodge-Francis for guiding me through the rich and meaningful process of qualitative research.

I would like to thank Rachel Part who was always willing to help and give her best suggestions. My educational experience was enriched by her friendship. Many thanks to Heather, Piper, Allison, Shahla, Ravi, and Guoxiang. This journey would have been very lonely without their support, collaboration, and friendships.

I would like to thank all my friends beyond the campus for encouraging me to get my work done, to not lose my focus, and to never give up.

I want to thank my family – especially my Mom and my sons, William and Jeffrey. They have stood by me through the good times and the bad times. I would not have made it this far without their love and support.

Finally, I give glory and thanks to God for all His goodness.
Dedication

I dedicate my dissertation to the amazing men that played such significant roles in shaping me into the woman I am today. My father, Jim, who set the bar of excellence high and provided me with an unshakable work ethic. My stepfather, Le, who was an anchor of stability and a giver of unconditional love. My brother, Jeff, who was such a gentle spirit and will always be my best friend. I miss and love you all very much.
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Chapter I: Overview of the Study

“Becoming a teacher means (1) transforming an identity, (2) adapting personal understanding and ideals to institutional realities, and (3) deciding how to express one’s self in classroom activity” (Rodgers & Scott, 2008, p. 732).

Introduction

Between the years 1870 to 1920, America shifted from an agricultural to an industrial society. Industrial growth changed American society as it produced a new class of wealthy industrialists, an affluent middle class, and changed the labor force (Rise of Industrial America, 2015). This industrial growth also marked the beginning of the manual training movement. Manual training focuses on personal development as well as eye-hand coordination (Westerink, n.d.). It encompasses basic industrial skills and strives to develop well rounded students that do things instead of only thinking, talking, or writing about them (Westerink, n.d.). As the mindset of the purpose of education changed, the focus towards vocational education became the most logical way to advance students (Gordon, 2008).

Historically, Career and Technical Education (CTE) instructors have been responsible for preparing their students to enter and succeed in the workforce. The expectations for CTE instructors have drastically changed since the initial introduction of vocational education. The challenges that they face in the 21st century include: (a) accommodating career development needs and future employment opportunities; (b) meeting higher academic achievement standards in math, sciences, communication, and technology; (c) preparing students to demonstrate higher order skills in reasoning, problem-solving, and collaborative work; (d) being held to a demand of
greater accountability; (e) ongoing curriculum revisions; (f) and serving a more diverse student population (McCaslin & Parks, 2002).

One of the most critical challenges faced by CTE instructors today can be simply stated: if teachers are to successfully teach all students to high standards, then everyone who affects student learning must be continuously learning during their careers (Sparks, 2000). To be successful in the classroom for all students, CTE instructors, as adult learners, need to foster personal growth and development as well as focusing their attention on developing students (Cranton, 1996; Zeichner & Liston, 1996). For CTE instructors as adult learners, to have the ability to reflect on one’s own practice, to grow, and change professionally is to be an effective practitioner (Cranton, 1996; Mezirow, 1991; Sparks, 1999).

**Identifying the Problem**

Career and Technical Education is a viable pathway to a multitude of careers and educational opportunities for both youth and adult students. According to the National Association of State Directors of Career Technical Education Consortium (NASDCTEc, 2014), there are sixteen Career Clusters that provide structure for CTE programs and provide access to a large scope of high wage, high-skill, and high demand careers (NASDCTEc, 2014). The subject areas most commonly associated with CTE are: Agriculture (careers related to food and fiber production and agribusiness); Business (accounting, business administration, management, information technology and entrepreneurship); Family and Consumer Sciences (culinary arts, management and life skills); Health Occupations (nursing, dental, and medical technicians); Marketing (management, entrepreneurship, merchandising and retail); Technology (production, communication and transportation systems); and Trade and Industrial (skilled trades such as automotive technician, carpenter, computer numerical control technician) (ACTE, 2015).
Programs in CTE are offered in middle schools, high schools, career and technical centers, community and technical colleges, postsecondary institutions, and other higher education programs and adult education programs. The typical CTE instructor comes from business and industry where hands on, occupational work experience makes them an expert in their field (Ruhland & Bremer, 2002). Although this path into teaching is rich in work experience and is coupled with a minimum of university methods courses it lacks some aspects of the contemporary pedagogical journey of the degreed classroom teacher (McCaslin & Parks, 2002). This path lacks introduction to a true understanding of today’s classroom in terms of diversity and the needs of the diverse student. The gaps presented by this nontraditional entry into the educational field can be addressed by additional learning opportunities for the CTE instructor.

The anatomy of today’s classroom has changed and it is expected to continue changing (Hoy & Hoy, 2006). By the year 2020, it has been projected that 66 percent of the students in our classrooms will be children of color, many of which will speak a different language than that of their teacher (Hoy & Hoy, 2006). Other challenges teachers will face include working with students that have different racial, ethnic, and cultural backgrounds from their own. With this increase in diverse student population it has become a priority to help teachers acquire the attitudes, knowledge, skills, and dispositions that are needed to be effective in the diverse classroom (Cooper, He, & Levin, 2011; Chou, 2007; Gay, 2010; Grant, Elsbree, & Fondrie, 2004; Ladson-Billings, 1995).

Previous studies indicate a relationship between teachers’ attitudes and behaviors and achievement of students (Brophy & Good, 1984). Questions to ponder may be: If a CTE instructor’s race, ethnicity, social class, or culture differs from the students that they are teaching,
how are they to understand and effectively educate the racially, ethnically, and culturally diverse CTE student? How can our CTE instructors appropriately deal with stereotypes of racially, ethnically, and culturally diverse students as they prepare them to enter the workforce? How can these CTE instructors ensure each student is valued and treated respectfully in their classroom? These questions provide personal motivation for this study.

Nontraditional teacher preparation could benefit by the introduction of multicultural education (Darling-Hammond & Bransford, 2007; Villegas & Lucas, 2002). Multicultural education recognizes different points of views, provides ethnic minorities with a sense of belonging, and reduces stereotypes and prejudices that can hinder student achievement (Gay, 2010; Banks, 2004). Stereotyping and prejudice can especially create obstacles for students (Dev, 1992; Spencer-Rodgers & McGovern, 2002) by limiting career choices (Stroessner & Good, 2011). As CTE teachers “have always faced the challenge of educating students with diverse needs and abilities” (Reese, 2005, p. 15) and are at the helm of preparing future high-growth industry employees the need for multicultural educated teachers is crucial.

**Background of the Problem**

To fit the needs of the 21st century, the Association for Career and Technical Education (ACTE) created a report of how an updated education system should look (ACTE, 2006). The report proposed that CTE should be modified to do the following:

(a) support students in the acquisition of rigorous core knowledge, skills, habits and attitudes needed for success in postsecondary education and the high-skilled workplace,

(b) engage students in specific career-related learning experiences that equip them to make well-informed decisions about further education and training and employment opportunities, and (c) prepare students who may choose to enter the workforce directly
after high school with levels of skills and knowledge in a particular career area that will be valued in the marketplace (Stone, 2010, p. 1).

To be truly successful in today’s diverse classroom, a beyond-knowledge understanding of diversity by CTE instructors is necessary in the 21st century to improve student achievement (Cooper, He, & Levin, 2011; Darling-Hammond & Bransford, 2007). Cooper and colleagues define this beyond-knowledge understanding of diversity as critical cultural competence. Critical cultural competence is based on “critical reflection of self, students, families, and communities” (p. xv).

For this research study, the American Evaluation Association (AEA) definition of cultural competence will be used, and is as follows:

Cultural competence is not a state at which one arrives; rather, it is a process of learning, unlearning, and relearning. It is a sensibility cultivated throughout a lifetime. Cultural Competence requires awareness of self, reflection on one’s own cultural position, awareness of other’s positions, and the ability to interact genuinely and respectfully with others. (AEA, 2011, p. 3)

Research has indicated culturally competent educators can improve the success of diverse students (Gay, 2010; Grant, Elsbree, & Fondrie, 2004; Ladson-Billings, 1995). With a foundational understanding of critical cultural competence, educators can create fair and impartial classrooms that nurture academic achievement (Cooper, He, & Levin, 2011). Cooper and colleagues state that development of critical cultural competence can be best achieved through ongoing learning opportunities.

Career and Technical Education instructors must show expertise in their subject area, be successful in conveying their lessons, and continually show they are driven to improve their
professional practice (Kozleski, Pugach, & Yinger, 2002). Ongoing learning opportunities allow
CTE instructors to deepen their knowledge and learn new methods of instructional delivery
(Cranton, 1996; Mezirow, 1995).

Learning opportunities rooted in the transformative learning theory compliments the
definition of cultural competence used in this research study. Transformative learning can be
described as the action of closely inspecting ones beliefs, values, and assumptions in order to
gain understanding and develop new knowledge. (Mezirow, 1990, 2000).Transformative
learning theory is (a) uniquely adult, (b) abstract and idealized, and (c) grounded in the nature of
human communication (Taylor, 2007). It is a theory where “learning is understood as the process
of using prior interpretation to construe a new or revised interpretation of the meaning of one’s
experience in order to guide further action” (Mezirow, 1996, p. 162). It focuses on the ability of
the learner to interpret, verify, and then redefine their past experiences to change their current
opinions, perspectives, and responses (Imel, 1998).

**Purpose of the Study**

To be successful in the classroom for all students, CTE instructors need to foster personal
growth and development as well as focusing their attention on developing students (Cranton,
1996; Zeichner & Liston, 1996). Research has indicated culturally competent educators can
improve the success of diverse students (Gay, 2010; C. Grant, Elsbree, & Fondrie, 2004; Ladson-
Billings, 1995). However, little attention has been given to how development of multicultural
self-awareness may influence CTE instructors’ development of critical cultural competence. The
purpose of this research study was to examine transformative learning experiences of CTE
instructors, specifically focusing on the development of multicultural self-awareness. According
to Mezirow (1991), adult educators (this researcher included) have a responsibility to help their
students (CTE instructors) become more “imaginative, intuitive, and critically reflective of assumptions; to become more rational through effective participation in critical discourse; and to acquire meaning perspectives that are more inclusive, integrative, discriminating, and open to alternative points of view” (p. 224).

With this in mind, the primary research question that guided this research study was:

How does a self-awareness transformative learning experience develop critical cultural competence in CTE instructors?

There were two ancillary questions that were also considered: (1) How does the practice of critical reflection construct CTE instructors’ ability to develop self-awareness of critical cultural competence?; and (2) How does involvement in critical discourse construct CTE instructors’ ability to develop self-awareness of critical cultural competence?

Theoretical Framework and Brief Review of Topic Literature

Transformative Learning Theory will guide the research in this study. Additionally, Erikson’s Theory of Identity Development will be used to demonstrate the importance of identity and vocational development during adolescence. Aspects of Social Identity Theory will be used to shed light on the importance of belonging to a group and how it can affect ones’ identity. As an attempt to understand human behavior, the research will use the interpretative approach. Green and Thorogood (2014), state that an aspect to understanding human behavior is being able to view people’s interpretation of their world. The philosophical approach used in this research is that of phenomenology (Creswell, 2013; Merriam, 1998). This research will attempt to report the common meaning for several individuals as they experience the phenomena of a transformative learning experience (Creswell, 2013; Merriam, 1998).
Transformative Learning Theory

For the past 25 years, transformative learning theory has been a growing field in adult education (Taylor, 2007). Transformative learning theory is: (a) uniquely adult, (b) abstract and idealized, and (c) grounded in the nature of human communication (Taylor, 2007). It is a theory where “learning is understood as the process of using a prior interpretation to construe a new or revised interpretation of the meaning of one’s experience in order to guide future action” (Mezirow, 1996, p. 162). It focuses on the ability of the learner to interpret, verify, and then redefine their past experiences to change their current opinions, perspectives, and responses (Imel, 1998; Mezirow, 1996; Taylor, 2007).

Transformative learning offers a framework through which we can identify the essence and degree of a desired perspective transformation (Mezirow, 1990). Transformative learning theory is a well-liked adult learning theory that faculty in higher education can understand, design and even promote experiences in their classrooms. These experiences may challenge students to analyze their current perspectives in order to develop different perspectives that may guide new ways of acting (Mezirow, 1996). Teacher educators can design learning experiences that seek to transform their students’ knowledge, skills, and dispositions. Transformative learning theory offers a credible lens through which this process can be viewed.

Erikson’s Identity Development Theory

In the field of psychology, Erik Erikson is considered a foundational theorist. Erikson’s theory is presented in eight stages, beginning with infancy and ending with mature age. The fifth stage of Erikson’s theory has to do with identity development. Erikson (1963) defined identity as “the ability to experience one’s self as something that has continuity and sameness and to act accordingly” (p. 42). Erikson was instrumental in presenting vocational development as an
essential and critical part of adolescent development (Vondracek, Schulenberg, Skorikov, Gillespie, & Wahlheim, 1995). This is important to this research study as high school CTE instructors are working with students during adolescence.

**Social Identity Theory**

Social identity theory claims that individuals develop self-concept largely by comparison (Tajfel, 1978). Although social identity theory acknowledges and includes both individual and group identities, it focuses on the part of the identity developed by group memberships, maintaining that membership in various social groups can contribute either positively or negatively to the individual’s self-definition and self-image (Tajfel, 1978). At the heart of social identity theory is the idea that individuals have a basic desire and are motivated by the need to attain and maintain a positive self-image (Ashforth & Mael, 1989; Tajfel, 1978). Social identity theory also supports that individuals form social identities based on occupation, race, nationality, religion, and sex (Grice, Jones, & Paulson, 2002).

**Topic Rationale**

The topic of this research study has unfolded as I have evolved on my personal, professional, and educational journey. As a result of my own transformative learning experiences, I have questioned processes and procedures surrounding the success and achievement of all students in today’s classroom. The significance of this process to this research study is that while I have been accomplished in this journey it did not follow a specific outline or order. In other words, it was not the traditional pedagogical road that one thinks of when dreaming of becoming a teacher. In reflection, it gives me hope that any instructor, no matter how they arrive in the front of the classroom, can learn the necessary attitudes, knowledge, skills, and dispositions that are needed to increase the achievement of all students.
My introduction to career and technical education began when I received my associate degree in Radiology in 1981. This pathway provided me with a secure, good paying job in the medical field. After a few years of working, I decided to return to higher education and work on my bachelor’s degree. It was during that time that I decided to start my family which resulted in putting a hold on my continuing education. Fast forward twenty years, after raising my children in a quiet rural community just south of a major metropolitan area located in the southern-west region of the United States, I found myself divorced. It was at that time that I decided to finish my bachelor’s degree. I continued moving forward and completed my master’s degree in Higher Education and Student Affairs and then was accepted into the doctorate program at the department where I received my bachelor’s degree.

One of the beauties of today’s educational path is access to hybrid and online opportunities for degree advancement. The Higher Education and Student Affairs master degree program I enrolled in is a hybrid, online program. This gave me the ability to work on my studies while being employed. I decided to work as a substitute teacher and eventually filled a spot as a long-term substitute at Title I Junior High School. There, I found myself teaching in a school where seventy percent of the student population identified as Hispanic. This is a drastically different ethnic distribution compared to other schools in the district, especially the schools that my own children had attended and where I had spent time as a teacher’s aide.

The long term substitute teaching experience provided me with an eye opening experience and one that I was not totally comfortable in. I struggled with the inability to connect with my students and was uncomfortable with how I saw students being treated. This created the notion of inequality and unfairness that information I was exposed to during my doctorate studies would sustain. Being employed as a long-term substitute was the beginning of my transformative
learning experience in the field of education. This is the point in which I began to “transform my taken-for-granted frames of reference to make them more inclusive, discriminating, open, changeable and reflective so that they may generate beliefs and opinions that will prove more true or justified to guide action” (Mezirow, 2000, p. 214). It was also at this time that during my master’s degree studies that I learned the art of engaging in self-reflection. Self-reflection allows the learner to become acutely mindful of past experiences and how those experiences can impede the way the learner views their new surroundings (Mezirow, 1996; Imel, 1998; Taylor, 2007). It can be used as a means to promote change and growth and can be instrumental in providing quality instruction and learning opportunities (Danielson, 2002) which is exactly what happened when I took a doctoral level multicultural education course at UNLV and was asked to create a culminating reflective journal.

I was given the opportunity to create a new knowledge base as several of my courses provided me with a transformative learning experience where. I learned that “multicultural or anti-racist education is fundamentally a perspective” (Au, 2009, p. 10). Changing ones perspective begins with taking a look at how you really view the world. Am I a racist? Do I come from a place of white privilege? Do I really treat everyone equal and embrace individual differences? Do I operate from the perspective that my beliefs are the only ones that are important? The new perspective I arrived at was that I do come from a white privilege perspective and that to best serve my students I need the “tools to combat racism and ethnic discrimination and to find ways to build a society that includes all people on an equal footing” (Au, 2009, p. 10). At this point in my journey, I made a commitment to find ways based on respect to equally meet the needs of all students.
The final piece to the rationale for the topic of this research study came when I participated in a required internship for my doctoral studies. This internship was served with mentoring professors during the time they worked on creating an Equity, Diversity, and Inclusion Plan for an out of state institute. This institute has been providing students with innovative, high-demand, workforce training options for more than 50 years. It falls under the category of a career and technical education facility and offers 100 professional and technical degree and certificate options and more than 40 programs.

During this time, my educational experiences gelled together and I finally had a small vision of how I could blend multicultural education with career and technical education that placed meeting the needs of the students at the core of my studies. Could it be possible that the pedagogical journey of career and technical education teachers lacked an introduction to multicultural education? I heard the instructors sharing the same concerns and questions that I had when teaching to a diverse classroom. I also heard frustration and concern as they struggled with concepts of equity, diversity, and inclusion. Could these concepts be frustrating because the CTE instructors had not been exposed to strategies that helped develop critical cultural competence? A deep, beyond- knowledge understandings (Cooper et al., 2011) of these concepts lead to achievement for all students. More importantly to the field of CTE, as we face a shortage of middle skill workers in the United States (Kochan, Finegold, & Osterman, 2012), every student needs to be given equal opportunity when it comes to education that leads to these jobs.

These questions, juxtaposed against the nontraditional pedagogical path of business and industry CTE instructors, have directed me to this research study. I want to examine how a transformative learning experience can help to develop multicultural self-awareness. Cooper et al. (2011), state that
to improve academic achievement for all students, it is vital that educators develop a
more nuanced understanding of themselves as cultural beings and the habit of critical
reflection regarding ways of knowing about themselves, their students, their families, and
the community they serve (p. xv).

To begin this development, I examined multicultural self-awareness through the lens of
transformative learning theory. Also, for this research study, I used Erikson’s theory of identity
development along with Tajfel’s social identity theory to examine identity and vocational
development as an essential and critical part of adolescent development.

**Methodological Rationale**

This qualitative research employed a case study approach. More specifically, this is a
qualitative, bounded, case study (Creswell, 2013; Merriam, 1988) that attempted to add to the
current knowledge base on CTE instructors’ development of multicultural self-awareness
through transformative learning experiences. According to Merriam (1998), the case study
method used in qualitative research is defined by the following characteristics: particularistic,
descriptive, and heuristic. This case study is focused on a particular group (business and industry
CTE instructors) it is particularistic in nature. It is descriptive as the end results will describe a
new understanding of the phenomenon (development of self-awareness through a transformative
learning experience) being studied. Finally, it is heuristic in nature as it will attempt to explain
what happened and why. Using an analysis of themes, this research study sought to identify
themes through which a deeper understanding of self-awareness transformative learning
experiences influence CTE instructors’ development of critical cultural competence. This
understanding can then be applied to improving CTE instructor preparation that could result in
academic achievement for all students.
Scope and Significance

An increase in diverse student population creates a need for career and technical education instructors to acquire the attitudes, knowledge, skills, and dispositions that are needed to be effective in the diverse classroom (Chou, 2007; Darling-Hammond, et al., 2000). The findings will help determine if professional development with activities that support transformative learning is a viable means to develop the necessary attitudes, knowledge, skills and dispositions for the 21st century classroom.

Assumptions

This research study is founded on several assumptions. First it assumes that business and industry licensed CTE instructors have had no exposure to multicultural education before entering the classroom. Another assumption is that business and industry licensed CTE instructors have stereotypes and biases that they are unaware of that can affect how they teach their diverse students (Banks, 1981). Finally, this research study assumes that teachers can acquire the attitudes, knowledge, skills, and dispositions that are needed to increase the achievement of all students by developing critical cultural competence (Chou, 2007; Darling-Hammond et al., 2000).

Limitations

This research study may be regarded as limited as it will focus only on a sample population of CTE instructors that have special business and industry licenses. Even with this obvious limitation, this research study is valuable as it can be a catalyst for future studies on CTE instructors’ development of critical cultural competence, transformative learning experiences, identity development, and integration of multicultural education into mandatory courses for business and industry CTE instructors. Important to note is that since this is a case study the
validity of this research is established by the development of themes that emerge from the data analysis and not from the sample size of the study. In true case study form, multiple data sources were used to ensure rich, robust, comprehensive and well developed results (Denzin, 1978; Patton, 1999). The use of these multiple data sources added credibility to the findings thus restricting the limitations and establishing significant implications.

**Significance**

It is not the change to the extent of an adult learner’s knowledge but rather the change in the condition or quality of an adult learner’s knowledge that describes transformational learning (Kegan, 2000). The usefulness of the data obtained from this research study is two-fold. First, it describes the deliberate application of transformative learning techniques to develop CTE instructors’ multicultural self-awareness. Second, the outcome of this research study contributes to the knowledge of how self-awareness contributes to the development of critical cultural competence. This research study has the potential of providing a framework to use in mandatory teacher preparation courses or professional development of CTE instructors so they can develop the necessary attitudes, knowledge, skills, and dispositions that are essential in our classroom today.

**Definition of Terms**

The following definitions are terms used within the context of this research study.

**Business and industry professionals.** For the purposes of this study, this refers to secondary CTE instructors that hold a special teaching license based on five years of full-time qualifying employment in an endorsement area.
**Critical/Self Reflection.** This is the core of transformative learning, meaningful look at current beliefs, values, and assumptions with the intent to change existing frames of reference (Cranton, 2006; Mezirow, 1994, 2000).

**Critical Discourse.** To exchange ideas or opinions with about current beliefs, feelings, and assumptions (Cranton, 2006; Mezirow, 1994, 2000).

**Cultural Competence.** A process of learning, unlearning, and relearning through self-awareness, reflection on one’s own cultural position, awareness of others’ position, and the ability to interact genuinely and respectfully with others. Culturally competent instructors refrain from assuming they fully understand the perspectives of students whose backgrounds differ from their own (American Evaluation Association, 2011).

**Emancipatory education.** A structured application of transformative learning in others (Mezirow, 1994, 2000).

**Emancipatory knowledge.** Gained through the process of questioning ourselves and our environment through critical reflection (Cranton, 2006; Mezirow, 2000)

**Meaning Perspective.** The organization of beliefs that one refers to for understanding of an experience (Mezirow, 1990).

**Mentor.** A facilitator that demonstrates knowledge and understanding of a subject area, demonstrates passion for the subject area, encourages collaboration, and is approachable and genuine (Cranton, 2006).

**Perspectives.** Perspectives include both the beliefs teachers have about their work (goals, purposes, conceptions of students, curriculum) and “the ways in which they [give] meaning to these beliefs by their behavior in the classroom” (Tabachnick & Zeichner, 1984, p. 28).
**Perspective transformations.** An ongoing process that can happen at different rates and in different ways in which adult learners examine new information, beliefs, and values against their old ones (Cranton, 2006; Mezirow, 1991).

**Transformative Learning.** The process of learning through critical self-reflection, that results in a change in ones beliefs, values, and assumptions. This change results in a reframing in perspective. With transformative learning it is possible to change problematic frames of reference to make them more “inclusive, discriminating, open, reflective, and emotionally able to change” (Mezirow, 2000, p. 8).

**Summary**

Chapter I served as an introduction to the research study. This chapter provided an introduction, identified and gave the background of the problem, the purpose of this research study, and the conceptual framework with a brief review of topic literature. Next, it outlined the topic rational from the researchers’ personal perspective and the methodological rationale. Chapter I concluded with the research study’s assumptions, limitations, significance and definitions.

Chapter II reviews the theoretical and empirical literature of career and technical education, social identity, Erikson’s identity theory, transformative learning theory, and multicultural education. The literature review addresses the gap that this proposed research study is attempting to fill. Chapter III will outline the methodological approach and design of this research study. Chapter IV will present the data and the analysis of the data collected from the research participants collected during this three phase research study. Chapter V discusses the findings, provides recommendations for further studies, shares a reflection by the researcher, and concludes the research project.
Chapter II: Review of Literature

Introduction

Chapter I provided premise and rationale for this research study. Chapter I also outlined the purpose of this research study, its conceptual framework, and the operational definitions that pertain to it. Chapter II provides a current review of literature that has provided the direction for this research study. This chapter reviews literature that pertains to the historical background of CTE, its role in the education of today’s students, and the professional organizations dedicated to that role. This chapter also reviews the literature on identity development, multicultural education, and transformative learning theory. Most importantly, this chapter will disclose the gaps in literature that this research study is aiming to fill.

Career and Technical Education

Originally known as vocational education, then subsequently workforce development or workforce preparation, career and technical education (CTE) has been around for centuries. (Gordon, 2008; Wonacott, 2003). It developed during the 19th century in Europe as a response to an increase in demand for skilled workers (Benavot, 1983). European families wanted their children to receive both an education as well an accreditation in vocational skills (Benavot, 1983). At the turn of the century, America was shifting from an agrarian to an industrial society that produced a new class of wealthy industrialists, an affluent middle class, and changed the labor force (Rise of industrial America, n.d.). This industrial growth marked the beginning of the manual training movement that called for an education that encompassed basic industrial skills and strived to develop well rounded students that did things instead of only thinking, talking, or writing about them (Westerink, n.d.). As the mindset of the purpose of education changed, the
focus towards vocational education became the most logical way to advance students (Gordon, 2008).

**Historical Background**

Benjamin Franklin, one of America’s oldest founding fathers, pushed higher education beyond the traditional studies when he suggested schooling that included useful or practical studies as well as useful vocational skills (McCormick, 2005). Franklin sought institutions that hosted a broader curriculum and a school where students would “learn those things that are likely to be most useful and most ornamental…might not a little gardening, planting, grafting, inoculation, etc. be taught and practiced” (Franklin, 1749, para. 14). In 1751, Franklin’s visions lead to the opening of the Academy of Philadelphia (Hioki, 2009; McCormick 2005) which we know of today as the University of Pennsylvania. Franklin’s vision was the catalyst for the Morrill Act of 1862. The Morrill Act of 1862 is thought of as one of the most significant legislature pieces passed by Congress advocating vocation and higher education. (Gordon, 2008; Thelin, 2004).

Senator Justin S. Morrill of Vermont was the main author of this bill that enabled federal government access to public policy dealings with the establishment of land-grant colleges (Gordon, 2008; Thelin, 2004). In 1857, Senator Morrill was met with disappointment as the first bill did not pass through the Senate and then in 1859 it was vetoed by President Buchanan (Gordon, 2008; Thelin, 2004). Finally, in 1862 and with the help of Ohio Senator Benjamin Wade, both houses passed the bill and President Lincoln signed the legislation (Gordon, 2008). The primary purpose of this act was to:

without excluding other scientific and classical studies, and including military tactic, to teach such branches of learning as related to agriculture and
mechanical arts, in such a manner as the legislature of the States may respectively
prescribe, in order to promote the liberal and practical educations of the industrialized
classes in the several pursuits and professions in life. (Morrill Act of 1862, Sec. 4, p. 504)
The Morrill Act of 1862, as well as the Morrill Act of 1890, provided each state with a publically
supported university. Publically supported universities provide services to a larger variety of
students and were able to offer courses in occupational subjects including agriculture and teacher
training (Cohen & Brawer, 2003; Gordon, 2008).

The next major legislature that impacted CTE was the Smith-Hughes Vocational Act. In
1914, President Woodrow Wilson appointed a commission to study national aid to vocational
education. The Commission on National Aid to Vocational Education was organized and used
figures from the 1910 Census Report to stress the need for vocational education (Smith, 1999).
The Smith-Hughes Act that was signed by President Wilson in 1917 provided “federal funding
for agricultural education, trades and industry, and home economics” (Cohen & Brawer, 2003;
Gordon, 2008; Hioki, 2009). States would receive funding if they established a state vocational
board of education.

Throughout the 20th century, Congress would continue to support vocational education
with millions of dollars through legislation such as the George-Deen Act of 1936 and the G.I.
Bill of Rights in 1944. In 1963, President Lyndon B. Johnson signed the Vocational Education
Act of 1963. The Vocational Education Acts of 1963 and 1968 is by far the most significant
contribution to the continuation of vocational education and has been supported by Presidents
Ronald Reagan, George H. Bush, Bill Clinton, and George W. Bush. The most recent
reenactment of the Vocational Education Act, renamed the Carl D. Perkins Career and Technical
Education Improvement Act (Perkins IV), was passed in 2006 (Hioki, 2009; ACTE, 2015).
Signed by George W. Bush, it provided $1.2 billion per year of federal support for CTE programs in all 50 states (Hioki, 2009; ACTE, 2015). The most noteworthy change to the act was changing the term vocational education with career and technical education (Hioki, 2009; Threeton, 2007). This name change stems from the perceived stigma attached to the term vocational and to the desire for CTE to be seen as a viable and legitimate educational path (Threeton, 2007). Another significant aspect to the 2006 revision was the accountability system that aligned with the No Child Left Behind Standards. This new accountability system established measurements for academic attainment and graduation rates of CTE students (U.S. Department of Education, 2009).

**Professional Organization**

As demands for vocational training in agriculture, trades and industry, and home economics continued to flourish, in 1926, the American Vocational Association (AVA) was established (Association for Career and Technical Education, 2015). In 2001, the AVA was renamed the Association for Career and Technical Education (ACTE) and remains committed to and supports career education that prepares youth and adults to enter the workforce (Gordon, 2008; Hioki, 2009; ACTE, 2015). ACTE is the nation’s largest association that is dedicated to the advancement of education that prepares youth and adults for careers.

The core of ACTE’s mission is providing educational leadership in developing a competitive workforce. ACTE is committed to:

(a) enhancing the job performance and satisfaction of its members; (b) to increasing public awareness and appreciation for CTE programs; (c) to assuring growth in local, state and federal funding for these programs by communicating and working with legislators and government leaders. (Hioki, 2009, p. 30)
ACTE is comprised of 25,000 professionals who are dedicated to the advancement of education that advances youth and adults in many successful careers (ACTE, 2015). Membership includes; (a) secondary and middle school CTE teachers and administrators; (b) postsecondary CTE instructors, faculty, administrators and deans; (c) guidance counselors; (d) students studying to become CTE educators; (e) federal and state government education professionals; (f) nonprofit organizations active in the advancement of CTE; and (g) corporations working with CTE programs and educators on workplace skills (ACTE, 2015).

**Role in the Education of Today’s Students**

The subject areas most commonly associated with career and technical education are the following: Agriculture (careers related to food and fiber production and agribusiness); Business (accounting, business administration, management, information technology and entrepreneurship); Family and Consumer Sciences (culinary arts, management and life skills); Health Occupations (nursing, dental, and medical technicians); Marketing (management, entrepreneurship, merchandising and retail); Technology (production, communication and transportation systems); and Trade and Industrial (skilled trades such as automotive technician, carpenter, computer numerical control technician). In order to create a nationally recognized framework for organizing and delivering quality CTE programs the U.S. Department of Education created a National Career Clusters Framework (Gordon, 2008). There are 16 career clusters in the framework that include more than 79 career pathways. It encompasses many aspects that act as guides to assist students in moving from secondary to postsecondary education as well as tools that ensure success in high school, college, and career.

As the U.S. public schools sought to redesign its educational system to meet the needs of the 21st century, the ACTE composed a report on how they viewed a remodeled education
system would look like (ACTE, 2006). The report proposed that Career and Technical Education should be modified to do the following:

(1) support students in the acquisition of rigorous core knowledge, skills, habits and attitudes needed for success in postsecondary education and the high-skilled workplace,
(2) Engage students in specific career-related learning experiences that equip them to make well-informed decisions about further education and training and employment opportunities, and (3) Prepare students who may choose to enter the workforce directly after high school with levels of skills and knowledge in a particular career area that will be valued in the marketplace. (Association for Career and Technical Education, 2006, p. 2)

Today, CTE educates youth and adults for many fast-growing, high-paid jobs in high-growth industries around the country. The Bureau of Labor Statistics Occupational Outlook Handbook reports that many of the fastest-growing jobs through 2022 will be in fields that are included in the 16 Career Clusters. These jobs include positions in careers such as health care, marketing, information technology, the skilled trades, and Science, Technology, Engineering, and Math (STEM). Important to note also is that the 2013 Manpower Talent Shortage Survey indicated that skilled trades workers was number one in positions that were experiencing a talent shortage in the United States. CTE prepares students to fill those talent shortages as well as to be college and career ready. CTE also prepares students for the growing occupational fields of middle-skill jobs. Middle skill jobs are those that require an education beyond high school but less than a bachelor degree. Middle skill jobs are a crucial part of the economy and are expected to increase 10.1 percent, adding 15.3 million jobs (U.S. Department of Labor, 2015).
Today’s statistics show us that CTE works on many levels. High school students involved in CTE are more engaged, perform better, and graduate at higher rates (ACTE, 2015). ACTE reports that the average high school graduation rate for CTE students is 93 percent compared to the national graduation rate of 80 percent (2015). Of the high school students who dropout, 81 percent reported that relevant and real world opportunities would have kept them in school (ACTE, 2015). The average high school graduation rate for students concentrating in CTE programs is 90.18 percent, compared to an average national freshman graduation rate of 74.9 percent (ACTE, 2015). More than 70 percent of secondary CTE concentrators pursued postsecondary education shortly after high school (ACTE, 2015; U.S. Department of Education, 2006).

**Connection to the Research Study**

There is a growing need to learn to teach to a variety of students from diverse cultural backgrounds. The Center of Public Education (2012) indicates that the “trends in immigration and birth rates will result in no majority racial or ethnic group in the United States – that is no one group will make up more than fifty percent of the total population” (Crouch, 2012). By the year 2020, it has been projected that 66 percent of the students in our classrooms will be children of color, many of which will speak a different language than that of their teacher (Hoy & Hoy, 2006). Other challenges teachers will face will be working with students that have different racial, ethnic, and cultural backgrounds from their own.

With this increase in diverse student population it has become a priority to help teachers acquire the attitudes, knowledge, skills, and dispositions that are needed to be effective in the diverse classroom (Chou, 2007; Darling-Hammond, et al., 2000).
As CTE is at the front line of preparing youth and adults to succeed in today’s middle-skill jobs it is imperative that CTE instructors meet the needs of the diverse student population. Today’s CTE instructors are expected to be knowledgeable of their profession, maintain high academic standards, teach all types of students, apply teaching strategies that create success, and be responsible for student’s academic progress. Recent research has shown that the United States is facing a shortage of middle-skilled workers (Whyte & Greene, n.d.). Through well designed multicultural education focusing on critical cultural competence, CTE instructors can be provided the training needed to educate each type of learner who enters their classroom.

**Multicultural Education**

Today’s diverse student population can experience educational equality through multicultural education. A significant purpose of multicultural education is reduction of stereotyping and prejudice (Banks, 1981), which is necessary for students to develop the knowledge, attitudes, and skills necessary to participate in the workforce and in society. Prejudice and stereotyping can be a catalyst to many of the problems that various cultural groups encounter (Banks, 1981). Prejudice can be defined as an unfair feeling of dislike for a person or group because of race, gender, or religion (Merriam Webster, n.d.). Stereotype is the result of an assumption that a person will behave in certain ways or posses certain abilities because of the group to which they belong to (Dev, 1992). An individual who only knows, participates in, and sees the world from their unique cultural and ethnic experiences could be denied important parts of the human experience and may be culturally and ethnically encapsulated (Banks, 1981).

**Definitions and Approaches**

As educators, we look to multicultural education to provide a path of creating an instructional practice that provides equal opportunities for all students in the classroom.
Multicultural education is a way of teaching and learning that is founded on democratic values that create cultural oneness (Bennett, 1998). The major goal of multicultural education is to recreate the practices of educational institutions so that all students have an equal opportunity at achieving academic excellence (Banks, 2004). The theories and practices of multicultural education manifest in the promotion of social change. Multicultural theorists are very interested in the interaction between race, class, and gender and how those interactions impact education (Banks, 1998; Grant & Sleeter, 1991).

Multicultural education has been defined as a framework of practices and concepts that is in a constant process of change (Banks, 2004; Grant & Sleeter, 1988; Nieto, 1992). An objective of multicultural education is to study power and how it influences the practices and interactions of teachers in the classroom (Banks, 2004: Gay, 2004; Nieto & Bode, 2008). To meet this objective it is important to remember it was built on events cumulated during the civil rights movement (Banks, 2004: Gay, 2004; Nieto & Bode, 2008). It is an instructional and teaching model that fuses the “history, cultural traditions, social norms, life experiences, and learned contributions that members of nondominant groups have made to all aspects of society” (Clark, 2013, p. 1502).

Many educators agree that there is a need for multicultural education in the United States. A review of literature indicates that defining, teaching, and implementing multicultural education is complicated and sometimes hard to agree upon (Banks, 2002; Bennett, 1998; Nieto, 1992; Sleeter & Grant, 1999). The literature also reveals an assortment of approaches and definitions to multicultural education. Three major definitions are reviewed below.

As a leading scholar James A. Banks (1998) advanced the definition of multicultural education as a comprehensive concept based on five dimensions: “(a) content integration; (b)
knowledge construction process; (c) prejudice reduction; (d) equity pedagogy; and (e) empowering school culture and social structure” (p. 5). *Content integration* fuses into the curriculum a representation of a variety of cultures, ethnicities, and other identities (Banks, 1998). The *knowledge construct process* involves students in analyzing the social placement of groups as knowledge is delivered (Banks, 1998). *Prejudice reduction* provides lessons and activities that establish positive perceptions of ethnic groups and creates better relationships between those groups (Banks, 1998). *Equity pedagogy* focuses on student achievement through modification of teaching styles and approaches (Banks, 1998). *Empowering school culture* is the process that is put in place by institutions to bring about an exclusive school environment (Banks, 1998).

Nieto (2008) provided a definition of multicultural education that results in a dynamic understanding of multicultural education in a “sociopolitical context” (p. 7). She focuses on seven characteristics: “antiracist, basic, important for all students, pervasive, education for social justice, a process and critical pedagogy” (Nieto & Bode, 2008, p. 44). *Antiracist* education gives students the tools to fight racism and oppression through a clearly stated anti-discriminating curriculum (Nieto & Bode, 2008). *Basic education* promotes the right of all students to participate in core academics and arts (Nieto & Bode, 2008). As all students deserve and need an inclusive and thorough education and multicultural education is *important to all students* (Nieto & Bode, 2008). As multicultural education is *pervasive* in nature, it encompasses educational aspects such as school climate, physical environment, curriculum and relationships (Nieto & Bode, 2008). As a *process*, multicultural education accentuates the continuing development of individuals and educational institutions (Nieto & Bode, 2008).
Finally, implementing critical pedagogy encompasses cultural, linguistic, family, scholarly, artistic, and other kinds of knowledge unique to the student (Nieto & Bode, 2008).

Critical pedagogy is rooted in the work of Freire (2000), as it elevates students to a place where they can look beyond their own experiences by understanding ideas and beliefs that they may not agree with. This nurtures the ability to think critically about multiple viewpoints that leads to practicing the art of reflection combined with action (Friere, 2000).

Carl Grant and Christian Sleeter (2006) provided five approaches to multicultural education. The first approach, *Teaching the Exceptional and Culturally Different*, provides students with the skills and knowledge to operate in American society and culture. The second approach, *Human Relations*, presents a basis for developing positive relationships among diverse groups and individuals that may decrease stereotyping and foster unity among the groups (Sleeter & Grant, 2006). The third approach, *Single-Group Studies*, elevates marginalized groups by studying their history that discloses their experiences with oppression and how they fought that oppression (Sleeter & Grant, 2006). The fourth approach, *Multicultural Education*, promotes a range of goals; “the value of cultural diversity, human rights, respect for differences, alternative life choices, social justice, equal opportunity, and equitable distribution of power” (Sleeter & Grant, 2006, p. 38). The fifth approach supports a total redesign of educational programs and one which Sleeter and Grant advocate is *Education that is Multicultural and Social Reconstructionist* (Sleeter & Grant, 2006).

While these theorists have presented different approaches and models of multicultural education (Banks, 1998; Nieto & Bode, 2008; Sleeter and Grant, 2006) they all also stress the importance for educators to: (a) participate in critical self-reflection about their assumptions and cultural beliefs, (b) cultivate a rich and meaningful understanding of student diversity and assets,
and (c) look upon the funds of knowledge brought with the students from their community culture and heritage as pertinent to their educational path (Cooper et al., 2011). Cooper and colleagues (2011) combined these concepts to develop a foundation for developing critical cultural competence. The goal for developing or enhancing educators’ critical cultural competence is to “impact instructional practices and to promote the achievement of students, especially those who are culturally, ethnically, and linguistically diverse” (Cooper et al., 2011, p. 6) (see Figure 1).
Figure 1. Goal of Teacher Critical Competence. Adapted from “Teacher Critical Competence” by Cooper et al., 2011, *Developing Critical Cultural Competence*, p. 7. Copyright 2011 by Corwin. Note: this research study focused on educator-self development.
Critical Cultural Competence

Culture can be described as the way humans act or interact and may include a combination of thought, communication, actions, customs, beliefs, and values (Catoe, 2010). Competence is possessing the required skill, knowledge, qualification, or capacity to function within a certain circumstance (Dictionary.com, n.d.). The development of critical cultural competence is when behaviors, attitudes, and policies come together in a system, agency, or profession and enable that system, agency, or profession to effectively participate in cross-cultural situations (Cross, Bazron, Dennis, & Issacs, 1989). The five essentials elements of a culturally competent system are “(1) valuing diversity; (2) having the capacity for cultural self-assessment; (3) being conscious of the dynamics inherent when cultures interact; (4) institutionalizing cultural knowledge; and (5) creating new ways to deliver an understanding of the differences between and within cultures” (Cross, et al., 1989). There is an extensive difference between a group that proclaims diversity and a group that lives it (Sutton, 2000; Woods, 2004). Cultural competence is a development process that happens over a period of time and that evolves from a commitment and dedication to provide a service so that all can experience educational equality.

Self-Awareness. University campuses have the responsibility to teach cultural, racial, and ethnic knowledge about self and others (Gay & Howard, 2000). Spindler and Spindler (1993) state that to acquire cultural knowledge of self is part of developing culturally appropriate pedagogical techniques in the classroom. To further expound on development of self-knowledge, Howard (1999) states that success comes with personal reflection during transformation. Howard (1999) suggested that by understanding our past and how it has shaped certain racial myths, we can rectify our thoughts, emotions, and behaviors as they relate to
human diversity. Howard states that “We must ... transform both ourselves and the social conditions of injustice that continue to stifle the potential of too many of our students from all racial and cultural groups” (1999, p. 6).

**Connection to the Research Study**

There is agreement among scholars and researchers that for multicultural education to executed favorability there needs to be many institutional changes put in to action. This research study is most interested in the necessary changes in attitudes, perceptions, and behaviors of teachers (Banks, 1998; Bennett, 1990; Sleeter & Grant, 1988). According to Judith Warren Little (1994) a model of teacher professional development that is primarily focused on expanding well-defined and skillful classroom practice is not adequate to the demanding vision of today’s teaching and schooling. The teacher of the 21st century needs to have the skills that serve diverse learners effectively (Darling-Hammond, 2006). The practice and research of teacher development, Hargreaves (1995) argues, should address the “technical competence of teaching, the place of moral purpose in teaching, political awareness, acuity, and adeptness among teachers, and teachers’ emotional attachments and engagements with their work” (p. 26)

Preparing today’s teachers for diversity, equity, and social justice is perhaps the most demanding and taxing job facing the field of higher education (Milner, 2010). Ladson-Billings (2001) provided a picture of the diversity teachers will encounter in their 21st century classroom stating that:

Not only will teachers encounter multiracial or multiethnic students but the students are likely to be diverse along linguistic, religious, ability, and economic lines. Today teachers walk into urban classrooms with children who represent an incredible range of diversity. Not only are students of different races and ethnicities, but there are students whose
parents have never held a steady job, whose parents are themselves children (at least chronologically), and who are bounced from one foster home to the next. And there are children who have no homes or parents. (p. 14)

**Identity Development**

CTE instructors are dealing with students during adolescence, when identity and vocational development is important (Erikson, 1968). In fact, development of the various aspects of identity is one of the primary tasks one undertakes during adolescence (Gushue, Scanlan, Pantzer, & Clarke, 2006; Porfeli, Lee, Vondracek, & Weigold, 2011). It is during this important developmental period that career theorist believe one makes paramount career decisions such as finishing high school, seeking employment out of high school or continuing on to college (McWhirter, Rasheed, & Crothers, 2000). These important decisions will influence ones career choices and shape future plans and goals (McWhirter et al., 2000). Developmental theorist Erikson (1968) believed that vocational development was part of the larger undertaking of identity development. In fact, he states:

> The young person, in order to experience wholeness, must feel a progressive continuity between that which he has to be during the long years of childhood and that which he promises to become in the anticipated future; between that which he conceives himself to be and that which he perceives others to see in him and to expect of him. (1968, p. 87)

**Eric Erikson and Identity Development**

In the past there has been much attention given to the importance of understanding the developmental nature of how and why individuals pick and adjust to their chosen occupations (Crites, 1971; Super, 1953; Tiedeman & O’Hara, 1963). A significant developmental theory regarding the importance and understanding of vocational behavior comes from Erikson
Among developmental theorists Erikson (1968) has been the most influential in identifying vocational development as a vital and important part of adolescent development (Munley, 1975; Vondracek et al., 1995).

According to Erikson’s psychosocial theory of human development there are eight stages of development that an individual goes through beginning with infancy and ending with mature age. During each of the stages that an individual goes through they face and cope with a central psychosocial problem or crisis (Erikson, 1963, 1968). The eight crises outlined by Erikson are: (a) basic trust versus mistrust; (b) autonomy versus shame and doubt; (c) initiative versus guilt; (d) industry versus inferiority; (e) identity versus identity confusion; (f) intimacy versus isolation; (g) generatively verses stagnation; and (h) ego integrity versus despair (Erikson, 1963, 1968) (see Table 1). How an individual deals with each of the crises is demonstrated in an attitude change that contributes to an individual’s psychosocial success and future personality development (Munley, 1975, 1977; Vondracek, et al., 1995). According to Erikson (1963), how one solves a crisis stage will eventually affect the outcome of the solutions during other crises stages (Munley, 1975, 1977). In effect, the resolutions of crisis stages are interdependent. For example, if an individual does not make career and ideological commitments at adolescence that attain a sense of ego identity, they may develop difficulties in interpersonal commitments in young adulthood that could lead to a feeling of isolation (Munley, 1975, 1977).
Table 1

Erikson’s Theory of Identity Development

<table>
<thead>
<tr>
<th>Stage</th>
<th>Period</th>
<th>Crisis</th>
<th>Positive Resolution</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>First year</td>
<td>Trust vs. mistrust</td>
<td>Sense of security</td>
</tr>
<tr>
<td>2</td>
<td>Second year</td>
<td>Autonomy vs. shame/doubt</td>
<td>Sense of independence</td>
</tr>
<tr>
<td>3</td>
<td>3 – 5 years</td>
<td>Initiative vs. guilt</td>
<td>Balance between spontaneity and restraint</td>
</tr>
<tr>
<td>4</td>
<td>6 years to puberty</td>
<td>Industry vs. inferiority</td>
<td>Sense of self-confidence</td>
</tr>
<tr>
<td>5</td>
<td>Adolescence</td>
<td>Identity vs. role confusion</td>
<td>Unified sense of self</td>
</tr>
<tr>
<td>6</td>
<td>Young adulthood</td>
<td>Intimacy vs. isolation</td>
<td>Form close personal relationships</td>
</tr>
<tr>
<td>7</td>
<td>Middle adulthood</td>
<td>Generativity vs. stagnation</td>
<td>Promote well-being of others</td>
</tr>
<tr>
<td>8</td>
<td>Late adulthood</td>
<td>Integrity vs. despair</td>
<td>Sense of satisfaction with life well lived</td>
</tr>
</tbody>
</table>


Erikson’s theory has made several contributions on the views of career development (Munley, 1975, 1977). First, the theory produces an overarching look at human development that can serve as a frame of reference for the task of career development (Munley, 1975, 1977). Basically, Erikson’s theory provides a framework for blending career development with human development. Second, Erikson’s theory sheds light on the importance of social and cultural roles as they relate to the human life cycle while providing a theoretical framework for blending research findings on the sociology of career behavior (Munley, 1975, 1977). Research has indicated that social class and cultural membership are important guiding factors in career development and behavior (Lyon, 1965; Osipow; 1973). Erikson describes a process of
development as one that takes places between a person and his social environment and contributes to his basic ego which then influences his career development (Erikson, 1963; Munley, 1975). Finally, the third contribution is one that Erikson is probably best known for – identity crisis and ego identity. Ego identity refers to an individual’s feeling of knowing who he is and where he is going. As an individual moves from adolescence to adulthood, making a career choice is one of the first major decisions that they make. Understanding “who you are” is an important factor when choosing a career as eventually this career becomes “what you are” (Munley, 1977). If an individual lacks a sense of identity or is uncertain how they fit into society it becomes difficult to pick a career path (Erikson, 1968; Munley, 1977). Erikson (1968) recognizes that the inability to pick a career is a disturbing position for young people.

**Social Identity Theory**

Tajfel developed the concept of social identity theory out of a scientific and personal interest to understand social perceptions, social categorizations, and social comparisons and prejudices, discriminations, and intergroup conflicts (Hogg, 2006). Tajfel (1978) defined social identity as “that part of an individual’s self-concept that derives from his knowledge of his membership in a social group (or groups) together with the value and emotional significance attached to that membership” (p. 63). At the core of social identity theory is that individuals have an aspiration for and are driven by the desire to achieve and maintain a positive self-image (Ashforth & Mael, 1989; Tajfel, 1978) (see Figure 2).

Human beings are constantly classifying and evaluating where they “fit” (Tajfel, 1978). This helps them develop a sense of self. This process is called social categorization and is defined as “the taking on of the categories that defines one’s group and using them to construct one’s self-image” (Tyler & Blader, 2001, p. 353-354). Occupation, race, nationality, religion, and gender are just a few categories that people use to form social identities (Grice, Jones,&
Paulsen, 2002). Social categorization provides individuals with an organized way of defining others. It also provides individuals the means to position, define, and recognize themselves in a social environment (Tyler & Blader, 2001).

Social identity theory places importance on categorization and social identity in intergroup relationships (Billig, 1991). The basic premise is that there are learned ideas and values that create a favoritism of the in-group and discriminate against the out-group (Billig, 1991; Tajfel, 1978). This favoritism or discrimination happens after one categorizes oneself as a member of a specific group (Billig, 1991; Tajfel, 1978). The driving factor to classify oneself in a specific group is related to the desire of a positive social identity (Billig, 1991). Basically, social identity theory outlines certain characteristics and defines categories that make an individual a member of a group (Hogg, Terry, & White, 1995). It defines what one should think, how one should feel, and how one should behave.

As an individual becomes rooted in a certain social identity, especially in a particular situation, self-perception and behavior becomes in-group member stereotypical and normal while out-group members become stereotypical and not normal (Hogg et al., 1995). This stereotypical perception can heighten depending on the nature of the relationship between groups. The stronger one feels attached to the in-group they are driven to adopt behavioral characteristics that favor the in-group thus excluding the out-group (Hogg et al., 1995). These characteristics can manifest themselves in competitive and discriminatory behaviors as one becomes more attached to their social category (Hogg et al., 1995).

There are two distinct processes at the core of social identity theory: categorization and self-enhancement (Hogg & Abrams, 1993; Hogg et al., 1995; Tajfel, 1978). Categorization is responsible for providing strong intergroup boundaries that create stereotypical and normal
group consciousness (Hogg & Abrams, 1993; Hogg et al., 1995). Categorization brings to the forefront what a group processes as normal behaviors, beliefs, and actions of that group. It includes both perceived similarities and perceived differences that belong to the varying categories defining a group (Hogg et al., 1993). Self-enhancement actually directs the categorization process so that the in-group norms and stereotypes are actually more favorable to the in-group. This fulfills the basic need to identity positively with other members of the group and often nurtures the ability to only see good aspects or characteristics of the in-group (Hogg et al., 1993). Self-enhancement transpires through comparisons of groups and manifests in one seeing themselves in a positive light in relation to others (Hogg et al., 1993).

An important aspect of social identity theory is that it drives the behavior of group members and supports the sociocognitive processes of categorization and self-enhancement with “subjective belief structures” (Hogg et al. 1993 p. 260). In other words, it is founded on a person’s belief system that defines and guides the development of relationships between their own group (the in-group) and the other group (the out-group). These belief systems are often built on a person’s ideology and are often not a true reflection of reality (Hogg et al. 1993). This way of thinking creates boundaries and barriers between groups that prevent out-group members from gaining access or entry to the in-group.

**Connection to the Research Study**

As previously noted, to be successful in the classroom, CTE instructors need to foster personal growth and development as well as focusing their attention on developing students (Cranton, 1996; Zeichner & Liston, 1996). Furthermore, research has indicated that social class and cultural membership are important guiding factors in career development and behavior (Lyon, 1965; Osipow; 1973). Since human beings are constantly classifying and evaluating
where they “fit” it is fundamental to the success of students that CTE instructors accept them as part of the in-group. As an individual becomes rooted in a certain social identity, especially in a particular situation, self-perception and behavior becomes in-group member stereotypical and normal while out-group members become stereotypical and not normal (Hogg et al., 1995). Because CTE instructors are dealing with students during adolescence, when vocational development is important (Erikson, 1968), awareness of their own perceptions and identity is vital to student success.

**Transformative Learning Theory**

Transformative learning can be described as the action of closely inspecting ones beliefs, values, and assumptions in order to gain understanding and develop new knowledge (Mezirow, 1990, 2000). Changing the way one looks at current and past events can spark the beginning of personal and social growth that then materializes into transformation (Mezirow, 1990). It has been agreed on that transformative learning is a series of actions that changes our present way of looking at matters that effect how we maneuver through everyday life (Brookfield, 1986; Cranton, 1996; Mezirow, 1994, 1995).

In 1978, Mezirow studied women who re-entered higher education and recognized a process that they had in common. He found that these women did more than just adapt to their present circumstances. Rather, they re-examined their old ways of understanding and actively learned and then applied new ways that provided a more complete understanding of the changing events (Mezirow, 1978) (see Table 2).
Table 2

Mezirow’s Ten Phases of Transformative Learning

<table>
<thead>
<tr>
<th>Step</th>
<th>Transforming Dimension</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A disorienting dilemma</td>
</tr>
<tr>
<td>2</td>
<td>A self-examination with feelings of fear, anger, guilt, or shame</td>
</tr>
<tr>
<td>3</td>
<td>A critical assessment of assumptions</td>
</tr>
<tr>
<td>4</td>
<td>Recognition that one’s discontent and the process of transformation are shared</td>
</tr>
<tr>
<td>5</td>
<td>Exploration of options for new roles, relationships, and actions</td>
</tr>
<tr>
<td>6</td>
<td>Planning a course of action</td>
</tr>
<tr>
<td>7</td>
<td>Acquiring knowledge and skills for implementing one’s plan</td>
</tr>
<tr>
<td>8</td>
<td>Provisionally trying new roles</td>
</tr>
<tr>
<td>9</td>
<td>Building competence and self-confidence in new roles and relationships</td>
</tr>
<tr>
<td>10</td>
<td>A reintegration into one’s life on the basis of conditions dictated by one’s perspective</td>
</tr>
</tbody>
</table>


Mezirow’s Transformative Learning Theory

Mezirow (2000) stated that a person’s internal belief system that creates interpretations or opinions can change in adulthood. As a person matures and develops, they become critically aware of the unquestioned assumptions and expectations that were compiled during childhood, so they consciously reform and reframe their understandings in ways that are more acceptable and certain (Mezirow, 2000). According to Mezirow (2009):

Transformative learning involves experiencing a deep structural shift in the basic premises of thought, feeling and action. It is a shift of consciousness that dramatically and permanently alters our being in the world. Such a shift involves our understanding of
ourselves and our self-locations; our relationships with other humans and the natural world; our understanding of the relations of power in interlocking structures of class, race and gender; our body awareness; our visions of alternative approaches to living; and our sense of the possibilities for social justice and peace and personal joy. (p. 98)

Transformative learning is “learning through action” (Mezirow, 2000, p. 6). At the beginning of this learning process is accepting a different meaning perspective (Mezirow, 2000). Mezirow (2000) explained that perspective transformation starts when the adult learner begins to critically understand experiences, stemming from that understanding is an examination of assumptions and beliefs that have shaped the understanding of those experiences, and then a revision of assumptions that could result in transformation. Perspective transformation is a way of changing assumptions to allow a more inclusive and discriminating means in which to make decisions (Mezirow, 2000).

Jurgen Habermas. Jurgen Habermas provided the intellectual origin of transformation theory. Habermas, a German philosopher, is one of the best-known contemporary proponents of critical theory, a social theory with Marxist roots developed in the 1930’s (Guess, 1981; Jay, 1973). Habermas’ transformation theory is defined as a process of transforming frames of reference through critical reflection (Kitchenham, 2008). A frame of reference is the structure of assumptions or unquestioned assumptions that are taken for granted beliefs about reality (Cranton, 1994; Mezirow, 1994).

Habermas’ (1971), Knowledge and Human Interests provided the initial concept of Mezirow’s (1978) transformative learning theory by providing an explanation for change in meaning structures, which are brought about in two domains of learning. Habermas’ (1971) ideas on transformation learning impacted the development of Mezirow’s (1981) theory of
perspectives transformation with the basic understanding that two major domains of learning have different purposes, modes of examining, standards of rationality, and approaches to confirming beliefs (Connelly, 1996). In his seminal article, Mezirow (1981) states:

First is instrumental learning, which focuses on learning through task-oriented problem solving and determination of cause and effect relationships-learning to do, based on empirical-analytical discovery. Second is communicative learning, which is learning involved in meaning of what others communicate concerning values, ideals, feelings, moral decisions and such concepts as freedom, justice, love, labor autonomy, commitment and democracy. (p.8)

**Humanist and Constructivist Orientations.** Mezirow’s transformative learning theory adopts humanistic and constructivist orientations within educational philosophy (Baumgartner, 2012; Cranton, 1998). According to Zinn (1998), humanists are described as follows:

(a) Purpose for education is to enhance personal growth and development; to facilitate self-actualization, (b) learner is highly motivated and self-directed; assumes responsibility for learning, (c) teacher is a facilitator; helper; partner; promotes but does not direct learning, (d) concepts or key words are experimental learning; freedom; individuality; self-directedness; interactive; openness; authenticity; self-actualization; empowerment; feelings; group tasks; group discussion; team teaching; self-directed learning; individualized learning; discover method (p.71).

Constructivists seek “the mutual compatibility in our use of words and language” (Von Glasersfeld, 2005, p. 6) through social interactions with others. Von Glasersfeld (2005) explained that “the process that leads to such compatibility, however, is not one of giving, taking, or sharing meanings as an existing commodity, but rather one of a gradual
accommodation that achieves a relative fit” (p. 6). In transformative learning theory, the blend of these two philosophies creates a type of learning where learners and teachers proactively and collaboratively work together to discover and create personalized meanings in their learning in order to form open mindedness and independent attitudes (Cranton, 1994).

**Factors that Promote Transformative Learning**

Critical thinking skills, personal self-reflection, classroom discussions and dialogues, and mentoring are components which encourage transformative learning experiences (King, 1997; Taylor, 1998).

**Critical Thinking Skills**

According to Brookfield (1987), “critical thinking is the process of examining assumptions that are central to beliefs, values, and ways of understanding” (p. 177). It is believed that critical thinking skills could be used to allow that adult learner to be able to consider and improve ideas, beliefs, assumptions, and values (Brookfield, 1986; Cranton, 2006). At the heart of transformative learning is critical thinking that provides the key concept for igniting transformative learning (Brookfield, 1987; Cranton, 1994). Also, Mezirow (2009) clarified that “a critical thinker is one who is apparently moved by reasons” (p. 96).

Cranton (2006) defines critical thinking as “self-directed, self-disciplined, self-monitoring, and self-corrective thinking”. Strategies to help the adult learner develop critical thinking are (a) the use of questioning, (b) creating conscious-raising experiences, (c) experiential learning models, (d) events that impact your personal and professional learning, and (d) journaling (Cranton, 2006).

**Reflection**

Personal self-reflection is the process that enables the adult learner to question the
accuracy of assumptions and beliefs that are rooted in past experiences Mezirow (2000). It is created when there is a new understanding to a contradiction of thoughts, feelings, and action and often leads to change (Cranton, 1994; Mezirow, 2000). Personal reflection allows the adult learner to question and examine their assumptions, where they came from, issues that are manifested by not changing them, and how significant they really are (Brookfield, 1986).

Regarding critical reflection Mezirow (1990) stated “reflection enables us to correct distortions in our beliefs and errors in our problem solving. Critical reflection involves a critique of the presuppositions on which our beliefs have been built” (p.1). Mezirow (1990) also makes distinction between thoughtful action and reflective action. Thoughtful action involves reflection to think-it-out based on one’s prior experience or learning but does not nurture a deep reflection that gets to underlying assumptions (Mezirow, 1990). Reflective action involves the reevaluation of the current unconsciously formulated meaning perspectives built through “the process by which we tacitly construe our beliefs that may involve taken-for-granted values, stereotyping, highly selective attention, limited comprehension, projection, rationalization, minimizing or denial (Mezirow, 2009, p. 95). This is the kind of reflection necessary for perspective transformation.

**Classroom Discussions and Dialogues (Rational Discourse)**

Mezirow defined discourse as a “special function of dialogue devoted to presenting and assessing the validity of reasons by critically examining the widest possible range of evidence and arguments in the context of attempting to find understanding and agreement on the justification of beliefs” (Mezirow, 1998, p.185). To foster effective rational discourse, a safe and accepting environment that is free from judgment is necessary in order to reduce and ease the possible psychological and emotional distress the participants may encounter (Mezirow, 2000).
Educators need to participate in rational discourse as a way to consider different views and to decide if those views are logical (Cranton, 1994). Friere (1970) proposed six attitudes that educators need to demonstrate to achieve a meaningful and authentic dialogue “1) love for the world and human beings, 2) humility, 3) faith in people and their power to create and recreate, 4) trust, 5) hope that dialogue will lead to meaning, and 6) critical thinking and the continuing transformation of reality” (pp.87-92). Cranton (2006) outlines the following criteria to be used with adult learners when the educator wants to engage in dialogue (a) find interesting ways to stimulate dialogue from different perspectives, debatable statements, readings from contradictory points of view, or structured group activities that lead people to see different points of view; (b) develop discourse opportunities where group members direct the flow of the discourse, nurture equal involvement, and watch out for oppression and intimidation; (c) avoid making negative statements or conclusive summaries as the adult learner educator must be careful not to steer the discussion: and (d) encourage quiet time for reflection after the discourse.

**Mentoring**

An adult educator should be an empathetic persuader, a role model, a collaborative learner, or a guide, rather than an authoritarian person who would dictate what and how learners should learn (Mezirow, 1991). As Mezirow (1991) stated:

We professional adult educators have a commitment to help learners become more imaginative, intuitive, and critically reflective of assumptions; to become more rational through effective participation in critical discourse; and to acquire meaning perspectives that are more inclusive, integrative, and discriminating, and open to alternative points of view. (p. 224)

You become a mentor when you provide intellectual, emotional, and even technical support
when it is needed by the learner (Daloz, 1987). Mentoring makes room for the learner or mentee to create new ways of asking questions about the learning process and the educational environment (Daloz, 1987). For mentoring to be successful, the mentor must provide safety, trust, respect, and codes of conduct to encourage and support the transformative learning process (Brookfield, 1986). Daloz (1999) includes (a) actively listening; (b) providing structure; (c) expressing positive guidelines; (d) serving as an advocate; (e) sharing themselves; and (f) making it special as ways to provide support to students. It is also important for educators to maintain an open mind and inclusive educational space as they mentor (Daloz, 1999).

**Research in the Field of Adult Education**

In the field of adult education, transformative learning involves critical reflection on assumptions that enables the learner to either change their perspective or decide to maintain their current perspective (Cranton, 2006; Mezirow, 1991; Taylor, 2008). Since the introduction of the theory of transformative learning three decades ago, this topic has become the most widely discussed and widely researched in the field of adult education (Taylor, 2008). Empirical research has been conducted over the years striving to define and measure transformative learning, but to date, there is not a single, recognized strategy or instrument that researchers gravitate to when investigating transformative learning in adults (Taylor, 2007).

Qualitative research studies have been used in the majority of studies of transformative learning in the literature review. Qualitative research strategies are divided into seven categories: ethnography, case study, phenomenology, narrative methods, grounded theory, participatory action research, and practitioner/teacher research (Conrad, Haworth, & Lattuca, 2001). Examples of all seven types of qualitative research were present in the literature. Case study was the most frequent type of research strategy found. This type of qualitative research provides “intensive,
holistic description and analysis of a single instance, phenomenon, or social unit” (Merriam, 1988, p. 21) and “encourages the reader to compare the subject of inquiry with their own experience and understanding and take an active role in thinking about how the case might generalize to other populations” (Merriam, 2001, p. 194).

**Connection to the Study**

As the U.S. population becomes increasingly diverse, preparing 21st century educators to teach 21st century children of diverse racial, ethnic, social class, and language backgrounds is a critical issue in teacher education (Cooper et al., 2011; Gay, 2010; Grant, et al., 2004; Ladson-Billing, 1995; Villegas & Lucas, 2002). As CTE instructors face the challenge of preparing and training the future workforce (Brown, 2001) society would benefit from CTE instructors developing critical cultural competence towards their diverse students. Research indicates that culturally competent educators can improve the success of diverse students (Gay, 2010; Grant, et al., 2004; Ladson-Billing, 1995). Research also indicates that CTE instructors find cultural diversity a positive challenge and are open to professional development as a means to develop skills to succeed in their classrooms (Rehm, 2008). Professional development rooted in multicultural education within a transformative learning theory framework provides an opportunity to revise old ways of thinking. This revision could reduce stereotyping and prejudice giving the student optimal opportunities to develop the knowledge, attitudes, and skills necessary to participate in an increasingly diverse workforce and society.

**Filling the Gap**

Career and technical education can be faulted with not giving the needed scholarly attention to cultural diversity in today’s classroom (Rios, 1992). Surveys by Adams and Hall (2000) indicated positive attitudes towards cultural diversity and the importance of CTE to be
able to embrace cultural diversity in their classrooms. These surveys did indicate that some CTE instructors experience uncomfortable feelings with cultural diversity as well as perceiving cultural diversity as a negative and disagreed that CTE instructors needed to change to accommodate diverse students (Adams et al., 2000). Career and Technical instructors can create inclusive environments that help address the challenges created in the diverse classroom (Allison & Rehm, 2006; Banks, 1997) through training and support (Banks, 2006; Bell, 1997; Cooper et al., 2011; Grant & Sleeter, 2006; Nieto, 2000).

According to Judith Warren Little (1994) a model of teacher professional development that is primarily focused on expanding well-defined and skillful classroom practice is not adequate to the demanding vision of today’s teaching and schooling. The teacher of the 21st century needs to have the skills that serve diverse learners effectively (Cooper et al., 2011; Darling-Hammond, 2006). Milner (2010) states that preparing today’s teachers for diversity, equity, and social justice are perhaps the most demanding and taxing job facing the field of higher education.

This research study explored how developing multicultural self-awareness through a transformative learning experience can impact CTE instructors’ approaches in the classroom. CTE instructors in the 21st century would benefit with a sensitive approach towards their diverse students (Rehm, 2008). As CTE instructors face the challenge of preparing the future workforce (Brown, 2001) it is necessary that they develop attitudes, knowledge, skills, and dispositions that assist all students in becoming productive workers, citizens, and family members (Rehm, 2008).

**Conclusions**

There is no denying that the classroom of the 21st century is filled with students from culturally diverse backgrounds. It has been suggested that by the year 2020, over 66 percent of
the students in our classrooms will be children of color, many of which speak a different language from the teachers (Hoy & Hoy, 2006). The demands on today’s CTE instructors are to be knowledgeable about their profession, to maintain high academic standards, to teach all types of students, apply teaching strategies that create success, and be responsible for student’s academic progress.

High school CTE instructors are working with students during adolescence, when vocational development is important (Erikson, 1968). So, to be successful in the classroom for all students, CTE instructors need to foster personal growth and development as well as focusing their attention on developing students (Cranton, 1996; Zeichner & Liston, 1996). As an individual moves from adolescence to adulthood, making a career choice is one of the first major decisions that they make. Understanding “who you are” is an important factor when choosing a career as eventually this career becomes “what you are” (Munley, 1977). If an individual lacks a sense of identity or is uncertain how they fit into society it becomes difficult to pick a career path (Erikson, 1968; Munley, 1977). As CTE is at the front line of preparing youth and adults to succeed in today’s middle-skill jobs it is crucial that CTE instructors meet the needs of the adolescent, career seeking diverse student population.

The field of higher education though finds preparing today’s teachers for diversity, equity, and social justice to be the most demanding and taxing job they face (Milner, 2010). The models of professional development that are put into practice today focus on expanding well-defined and skillful classroom practice (Little, 1994) and not on the skills that serve diverse learners effectively (Darling-Hammond, 2006). Since business and industry CTE instructors lack the traditional pedagogical entry into the classroom they may have an insufficient exposure to multicultural education. Through well-designed professional development rooted in multicultural
education focusing on developing critical cultural competence, CTE instructors can be provided the training needed to educate each type of learner who enters their classroom.

Summary

Chapter I provided the rational for the research study. Chapter II provided a review of the relevant research-based literature, associated to career and technical education, identity development, multicultural education, and transformative learning theory. The literature review addressed the gap that this research study is attempting to fill. Chapter III outlines the methodological approach and design of the study. Chapter IV presents the data and the analysis of the data collected from the research participants collected during this three phase research study. Chapter V discusses the findings, provides recommendations for further studies, shares a reflection by the researcher, and concludes the research project.
Chapter III: Method

Introduction

Chapter I provided an overall introduction to the purpose of this study. Chapter I also described the theoretical and conceptual framework for the study. Chapter II provided a review of research-based literature in the fields of democratic education, social identity, multicultural education, cultural competence, and transformative learning theory. Chapter III outlines the methodological approach and design of the study.

Reinstatement of the Purpose

The primary purpose of this research case study was to explore transformative learning experiences of CTE instructors as it relates to developing critical cultural competence through self-awareness. This experience was examined through the lens of Mezirow’s transformative learning theory. This study attempted to identify a perspective change in a transformative learning experience using Tajfel’s social identity model as analytical framework. It is important to note that this study was not intended to predict a cause and effect relationship, rather was intended to document and understand the process of transformative learning as it relates to the conceptual framework and model for achieving critical cultural competence based on the seminal work of Cross et al. (1989). Ideally, the study helped gain insight of whether self-awareness transformative learning experiences can manifest CTE instructors’ development of critical cultural competence.

Restatement of the Research Questions

The primary question that guided this research study was: How does a self-awareness transformative learning experience develop critical cultural competence in CTE instructors? There are two ancillary questions that were also considered: 1) How does the practice of critical
reflection construct CTE instructors’ ability to develop self-awareness of critical cultural competence? 2) How does involvement in critical discourse construct CTE instructors’ ability to develop self-awareness of critical cultural competence?

**Approach to the Study**

The research chosen for this study was qualitative inquiry as it creates a situation where the researcher develops a meaningful and rich understanding of a participant’s experience (Green & Thorogood, 2014; Cuba, 1981). Reasons to consider the use of qualitative research methods include (a) phenomena’s that are difficult to measure quantitatively, (b) when seeking information that contributes to the understanding of a problem, (c) gain insight into impact of the intervention, (d) no development of sound quantitative instruments, and (e) study specific populations (Curry, Nembhard, & Bradley, 2009). Empirically, qualitative research methods have been predominant in the field of transformative learning as Mezirow (2003) stated “to understand communicative learning, qualitative research methods are often more appropriate” (p. 59). For the field of transformative learning theory employment of the qualitative method is necessary to “explore the problem, honor the voices of participants, map the complexity of the situation, and convey multiple perspectives of participants” (Creswell & Plano Clark, 2011, p.7). Furthermore, how much the phenomenon has been studied influences the research method that is chosen (Merriam & Kim, 2012). To the best of my knowledge and based on my extensive review of literature, no research focuses upon the practices of CTE instructors participating in transformative learning experiences and the ways in which engagement with transformative learning has the potential to develop multicultural self-awareness.

More specifically, this was a qualitative, bounded, case study (Creswell, 2013; Merriam, 1988) that attempted to add to the current knowledge base on CTE instructors’ development of
multicultural self-awareness through transformative learning experiences. A case study is chosen “when (a) “how” or “why” questions are being posed, (b) the investigator has little control over events, and (c) the focus is on a contemporary phenomenon with a real-life context” (Creswell, 2013, p.2). Qualitative studies are exploratory and enable the researcher to study participants in natural settings (Creswell, 2013; Denzin & Lincoln, 2005). The researcher has an opportunity to access in-depth information and to uncover pertinent knowledge that may not emerge if using controlled methods. This research study is bounded as the boundaries are the activities that the participants are involved in during a specific time and place (Creswell, 2013).

According to Merriam (1998), the case study method used in qualitative research is defined by the following characteristic: particularistic, descriptive, and heuristic. As this case study was focused on a particular group (business and industry CTE instructors) it is particularistic in nature. This research case study was descriptive as the end results are a description of a new understanding of the phenomenon (development of self-awareness through a transformative learning experience) being studied. Finally, this research case study was heuristic in nature as it will attempt to explain what happened and why. For example, when exposed to a transformative learning experience will/won’t the participants development a self-awareness that begins the development of critical cultural competence.

Documentation of research in education indicates a wide use of case studies to examine real-life experiences in present day settings (Merriam, 1998; Yin, 2009). This was an intrinsic case study as the researcher attempted to better understand transformative learning experiences and clearly describe its operations (Johnson & Christensen, 2008). An intrinsic case study gives the researcher an opportunity to delve into the uniqueness of a case to better describe it in detail (Creswell, 2013). Creswell (2013) and Johnson and Christensen (2008) cite that intrinsic case
studies allow the researcher to dedicate time and attention to a single case in hopes of developing a deeper, richer, and more in-depth understanding of it.

Other Methodological Approaches

After investigating other methodological approaches, I decided the inherent qualities of this research study were in alignment with a case study. The aspects of this research study that contributed to deciding on a case study is that the objects to be studied are “bounded” by nature (Johnson & Christenson, 2008, p. 406) and it takes place in a “real-life, contemporary context or setting” (Creswell, 2013, p. 97). Yin provides an abbreviate definition of the case study:

An empirical inquiry about a contemporary phenomenon (e.g., a “case”), set within its real-world context – especially the boundaries between phenomenon and context are not clearly evident. (2009, p. 18)

Another important characteristic of a case study is the size. Case studies can use one participant, or a small group of participants (Creswell, 2013; Merriam, 1998; Yin, 2009). This research project was composed of eight business and industry licensed CTE instructors. I did, however, consider other methodological approaches before selecting the case study. I first considered a narrative approach, one which looks at the stories of the lived experiences of the participants. Since transformative learning experiences unfold in the present and is a process of development the researcher decided this was not a good fit to clearly understand the phenomenon of developing multicultural self-awareness. Next, I considered phenomenology as this method focuses on a shared experience among a group of individuals. Since there is no way to guarantee that all the participants will experience self-awareness and to use a phenomenological approach, all participants need to have experienced the phenomenon, the researcher eliminated this approach. Finally, based on the time-limit (a semester course) I decided that an ethnographic
approach would not be suitable. After consideration and comparison, it was determined that a case study approach was the best suited approach for this study.

**Role of Researcher**

I (the author) was the sole researcher in this research study, the custodian of all data, and the data analyzer. My responsibilities included developing and implementing all aspects of the research study. These aspects included developing the transformative learning experience, participant recruitment and consenting, creating all interview questions, conducting all the participant interviews, and transcribing the interviews. To ensure objectivity and validity of data analysis, the assistance of an experienced research faculty member through an intercoder agreement was used.

**Methodology: Case Study Model**

This section describes the methodology for the research study. It explains each stage of the process including the description of the research setting, recruitment of the participants, the study timeline, and the data collection and analysis process.

**Setting**

This research study took place in a public university in the southwest region of the United States. This setting is an accredited postsecondary institution where business and industry licensed CTE instructors can earn the mandatory 12 semester credit hours towards their license.

**Participants and Rationale for Participant Sample**

For this research study, convenience and purposeful sampling was used (Creswell, 2013). As this study gained access to participants from a specific geographic area convenience sampling is employed (Merriam, 1998). This study included CTE instructors who were enrolled in an accredited public postsecondary university in the southwest region of the United States. The
selection of the instructors was based on: (a) willingness to participate in the study, (b) business and industry licensed Career and Technical Education instructors, (c) instructors who were able to meet with the researcher and attend individual and group sessions. Since the focus of this study was on transformative learning experiences of business and industry CTE instructors, instructors currently attending courses to maintain their business and industry license at a public university qualified to participate in this research study. This straightforward selection of participants who are likely to provide appropriate and useful data (Green & Thorogood, 2014) follows the method of purposeful sampling in qualitative research (Creswell, 2013; Coyne, 1997). Research sample selection is important in qualitative research as it affects the quality of the research (Coyne, 1997; Merriam, 1998). According to Patton (1990), the

…logic and power of purposeful sampling lies in selecting information-rich cases for study in depth. Information-rich cases are those from which one can learn a great deal about issues of central importance to the purpose of the research, thus the term purposeful sampling. (p. 169)

Patton (1990) goes on to state that “qualitative inquiry typically focuses in depth on relatively small samples, even single cases, selected purposefully” (p. 169).

Working with the Career and Technical and Postsecondary Education (CTPE) Program Coordinator, I described the research study and my role as a researcher to CTE instructors who were students enrolled in Career and Technical Education courses. Specifically, I shared my personal, professional and academic background, my affiliation to the postsecondary institution, the purpose of the study, the participant selection criteria, the specific process of participation in the research study, and then answered any questions. Students who met the study selection process (see purposeful sampling, above) and who showed an interest in participating where
taken through the informed consent process. As I applied purposeful sampling to identify the target number of research participants, I identified the target number of participants from a larger group of participants who met the study criteria and were willing to participate. Purposeful sampling gave me the ability to identify participants who met the inclusion criteria (see below). For example, if through purposeful sampling I was able to identify ten students it was necessary to exclude those that have had previous exposure to multicultural education in a higher education setting.

After gaining consent from all interested participates I determined the number of participants I could accept (if there are more than ten) or the number of additional participants I needed to recruit (if there are fewer than six). Recruitment of participants at that point would need to be done during the next academic semester. After I had eight participants committed to participate in the research study I began the transformative learning experience created by the researcher (myself) to develop multicultural self-awareness.

**Inclusion Criteria**

This purposeful sampling of participants included instructors with a special teaching license for Career and Technical Education subjects in the public school system. The participants were enrolled at an accredited postsecondary institution in the required courses to maintain their business and industry license.

**Exclusion Criteria**

This purposeful sampling of participants excluded CTE instructors that have obtained a traditional, undergraduate degree from a teacher preparation program that often have an introduction to multicultural education. These participants were excluded because they do not fall under the category of CTE instructors who have entered the teaching field by way of a
business and industry license as there is a concern that entry into the teaching field by this method lacks an introduction to multicultural education.

**Recruitment**

A systematic recruitment strategy for inviting participants from a sampling frame was employed to obtain enough participants to answer the research question (Green & Thorogood, 2014). The sampling frame was a list of current CTE instructors enrolled at an accredited public postsecondary institution in the required courses to maintain their business and industry license. This list was obtained from UNLV’s CTPE Program Coordinator. Compensations included lunch during the transformative learning session and a $10 Starbucks gift card upon completion of the final interview. At the onset of the research project, participants signed a consent form.

**Timeline and Data Collection Sources**

To ensure that enough data was collected to explore the research questions a timeline and a data collection process was followed. For the research study, the following components were necessary for planning and execution.

**Data Collection Sources**

There are four types of qualitative data collection methods: “observations, interviews, documents, and audiovisual materials” (Creswell, 2013, p. 159). Data Collection most suited for this case study was by the methods of interviews and documents. Interview questions were developed from related literature on transformative learning experiences. Qualitative interviewing is appropriately used when “studying people’s understanding of the meaning in their lived world” (Kvale, 1996, p. 105). Qualitative interviews obtain rich descriptions of the subject being studied and interviews allow for triangulation of information obtained from the sources (Creswell, 2013; Merriam, 1998). Documents included initial interview questions,
answers to open-ended reflection questions, notes from participation in group discussions, and final interview questions. Data collection included researcher transcribed notes, interview notes, participant generated documents, document analysis, and semi-structured interviews all related to the study.

Table 3

Data Sources

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Data Source</th>
<th>Time &amp; Administration</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>How does a self-awareness transformative learning experience develop critical cultural competence in CTE instructors?</td>
<td>Final interview questions</td>
<td>Phase III</td>
<td>8 research participants</td>
</tr>
<tr>
<td>How does the practice of critical reflection construct CTE instructors’ ability to develop self-awareness of critical cultural competence?</td>
<td>Open-ended reflection questions</td>
<td>Phase I and Phase II</td>
<td>8 research participants</td>
</tr>
<tr>
<td>How does involvement in critical discourse construct CTE instructors’ ability to develop self-awareness of critical cultural competence?</td>
<td>Activity reflection questions discussed in group</td>
<td>Phase II</td>
<td>8 research participants</td>
</tr>
</tbody>
</table>

Coding Process

In qualitative research, data analysis involves the use of a coding process to generate a description of the setting (Creswell, 2013). Bogdan and Biklen (1998) stress, “Most methods of analyzing qualitative data require a procedure called coding” (p. 126). Codes are developed for certain words, phrases, patterns of behavior, participants’ ways of thinking, and events. After studying answers to the reflection questions, notes taken during classroom discussions, and face-to-face interviews, I read through the data, made notes, created and assigned labels to the codes,
and grouped the codes into categories and themes. Analysis of data followed the outlines suggested by Creswell (2013) to include (as) collect the data, (b) prepare the data for analysis, (c) labeling the segments of information into codes, (d) analyze and group the segments into categories, (e) repeat the process to obtain more categories from more data sets, (f) simultaneously combine categories into themes.

In the case of establishing coding categories, this process was somewhat predetermined prior to data analysis. Bogdan and Biklen (1998) state “researchers are sometimes employed by others to explore particular problems or aspects of a setting or subject. In that case, the coding categories may be more or less assigned” (p. 177). I had predetermined my interest in exploring the development of critical cultural competence through a transformative learning experience. Areas of transformation identified by Mezirow (1998) include perceptions, values, and beliefs. Perceptions, values, and beliefs were utilized as the major themes in this study. Bogdan and Biklen (1998) affirm,

Analysis is shaped by both the researcher’s perspective and theoretical positions and by the dialogue about the subject that one cannot help but enter…These theories are influential before the data are collected, and researchers working in this mode frame their project in the light of these views. (p. 177)

The analysis conducted within this study followed the guidelines outlined by Bogdan and Biklen (1998), utilizing the theoretical lens of transformative learning theory.

After the data was coded, organized, and categorized my goal was to summarize the data. I discovered major and recurring themes based on identified codes and categories. The themes that were important in the research provided an avenue of developing meaning of the participants’ transformative learning experience.
Reliability

Reliability in qualitative research refers to the strength of findings of data sets among more than one coder (Creswell, 2013; Merriam, 1998). To insure reliability I employed an intercoder agreement. Intercoder reliability refers to the degree in which two or more independent coders agree on the coding of the data while using the same coding strategy (Armstrong, Gosling, Weinman, & Marteau; Creswell, 2013). An experienced research faculty member was used in the position of intercoder. The experience of the faculty member was determined by the publication of multiple qualitative studies in their field of expertise. I provided the intercoder with my transcribed notes and theme categories. The intercoder then evaluated my themes, provided feedback, and served as a consultant during the research process. The purpose of assigning data to a second coder was to establish accuracy of the identified categories and themes.

Research Procedures

This qualitative study involved three phases. Phase I and Phase II were designed to ignite the transformative learning process. Phase III consisted of face-to-face interviews with the research participants.

Phase I

Phase I consisted of the introduction to research; demographic and background information; students, school, and curriculum information; diversity training and preparation information; participation in Harvard’s Project Implicit, and reflection questions.

This phase began the ten phase transformation process Mezirow (1995) articulates in the Transformative Learning Theory. The first phase is a disorienting dilemma. This dilemma represents the first of three key themes of Mezirow’s Transformative Learning Theory.
experience – participants have an experience that does not fit with their pre-existing meaning structure, causing a disorienting dilemma. As long as our experiences match our current way of thinking we tend to not participate in transformative learning (Mezirow, 1995). Completion of IAT and receipt of results has the potential to create a disorientating dilemma as it uncovers hidden racial and gender biases. This phase also addressed aspects of the second of the theory’s themes – critical reflection. After experiencing a disorienting dilemma through critical reflection there is a self-examination with feelings of guilt or shame and a critical assessment of epistemic, socio-cultural, or psychic assumptions (Mezirow, 1991) (see Figure 4).

**Implicit Association Test.** The Implicit Association Test (IAT) is an instrument used to collect survey (self-report) responses. Implicit measures are used to investigate thoughts and feeling that people may be unwilling or unable to report (Project Implicit, 2011). I choose IAT as it is a valid instrument to use to measure hidden racial and gender biases. Research has shown that those who show a strong IAT effect are more likely to demonstrate overt racist behavior (Nosek, Greenwald, & Banji, 2007). More in alignment with this study is the way some people quickly categorize those who are in the “in-group” and those who are in the “out-group”. Although this skill can be helpful when processing a large amount of information, it can be harmful if it is a catalyst of racist thoughts and behaviors.

As a non-profit organization, Project Implicit unites national and international researchers who study and are interested in implicit social cognition. Implicit Social cognition is “thoughts and feelings outside of conscious awareness and control” (Project Implicit, 2011). The Implicit Association Test (IAT) was developed to measure attitudes and beliefs that the test takers may not be able to or willing to identify. The IAT was designed to uncover implied or hidden attitudes that the test participants are unaware of (Project Implicit, 2011).
The IAT is a computer-based test used to measure how quickly participants recognize and then categorize words and images. Its strength comes from the concept that participants quickly connect certain words with certain image. For example, one may think of a Boy Scout leader as nice and a gang leader as mean. The test rapidly exposes your brain to synonyms for nice (kind, sweet, pleasant) while associating those with images of Boy Scout leaders and synonyms for mean (awful, foul, unpleasant) while associating those with images of gang leaders. When the words and images are switched (Boy Scout leader/mean or gang leader/nice) there may be a delay in response as that is not a normal recognition or categorization for the participant. The speed in which it takes to respond to the new recognition or categorization may indicate an implicit stereotype.

The participants of this research project took the Skin-tone IAT (‘Light Skin – Dark Skin’) that requires the ability to recognize light and dark-skinned faces. This often reveals an automatic preference for light-skin relative to dark-skin. The participants took the Gender-Career IAT that often reveals a relative link between family and females and between careers and males (Project Implicit, 2011).

**Ethical concerns of using Implicit Association Test.** Because the IAT sometimes reveals troubling aspects of human nature, it poses the possibility of causing harm. This research plan took this concern in to account as the researcher carefully considered the costs associated with misuse. This application of IAT was used with the safeguards of the Institutional Review Board and the participants could choose to opt out of the test at any time.

**Validity of Implicit Association Test.** A study conducted by Nosek, Greenwald, and Banji (2007) indicated that the gathered proof for the construct and predictive validity of the IAT proves it is a thriving research tool especially in education. There is a concrete base of proof for
its internal, construct, and predictive validity (Nosek et al., 2007). In a meta-analysis, Nosek et al., 2007, drew two main conclusions

In studies that involve some measure of discrimination toward a social group, both explicit and IAT measures predict behavior but the IAT does a superior job of prediction (mean $r_{IAT} = .25$, mean $r_{self-report} = .13$). In studies that measure brand preferences or political candidate preferences, both IAT and explicit measures predict the outcome, but explicit measures do a superior job of prediction (mean $r_{IAT} = .40$, mean $r_{self-report} = .71$) (p. 285).

In 2008, the University of Washington published a list of studies showing validity of the IAT with actual participant populations that included studies in the fields of voting behavior, mental health, medical, employment, and forensics (see Appendix P).

**Reliability of Implicit Association Test.** Acceptance of IAT’s implicit measurement is attributed to its ability to achieve greater reliability than other computer generated implicit measures (Nosek et al, 2007). In a direct comparison, the “IAT outperformed the Extrinsic Affective Simon Task (EAST $a = .19, .24, .19$; IAT $a > .75$; Teige, Schnabel, Banse, & Asendorpf, 2004)” (p. 274).

**Reflection questions.** Reflection has long been seen in the literature as an essential method in looking at the personal and professional self (Cooper et al., 2010; Rodgers, 2002). As a way to challenge the validity of prior learning the participants will engage in reflection (Mezirow, 1990). In reflection there is an assessment of prior knowledge. Through this assessment we can challenge attitudes, values, and beliefs that may not be working in a current situation (Mezirow, 1990). Through this challenge the opportunity for change is possible that could transform our future actions (Mezirow, 1990).
To assess critical reflection I will be using questions developed by Kember et al. (2000) that measure the level of reflective thinking. These are open-ended questions that leave room for interpretation.

1. As a result of this course I have changed the way I look at myself.
2. This course has challenged some of my formerly held ideas.
3. As a result of this course I have changed my normal way of doing things.
4. During this course I discovered faults in what I had previously believed to be right. (p. 395)

**Reliability and validity of Kember et al. reflection questionnaire.** Results from the most recent study conducted by Kalk, Luik, Taimalu, and Thät (2014) indicated this instrument of reflection demonstrated the validation and reliability to measure reflection. The Reflection Questionnaire (Kember et al., 2000) is based in Mezirow’s framework with a reliability of 0.62 – 0.76 (Cronbach’s alpha).

Kember’s shortened Reflection Questionnaire two-factor model (reflection and critical reflection) was evaluated through a confirmatory factor analysis (CFA) using a generalized least squares estimation. The Goodness of Fit statistics for this model did not indicate adequate model fit. The chi-square statistic for the measurement model normalized by degrees of freedom (χ²/df) did not exceed 3.0 as is suggested (χ² = 55.58, df = 19, χ²/df = 2.9) and GFI was 0.98, which is also within the acceptable criteria range, but the RMSEA was 0.095, which exceeded the criteria 0.08. (Brown 2006)
Phase II

Phase II consisted of a PowerPoint presentation on developing critical cultural competence, activities that began to help the participants explore personal characteristics and beliefs, a follow up group meeting which include group discussion questions, and another set of reflection questions. This helped the participants focus on the first insights required for developing teachers’ critical cultural competency: understanding themselves.

This phase addressed aspects of the second of the theory’s themes, critical reflection, as well as the third of the theory’s themes, rational discourse (Mezirow, 1991). The chosen activities that the participants complete begin the steps of exploring personal characteristics and beliefs. Answering the reflection questions facilitates self-examination and critical assessment that are aspects of the second of the theory’s themes. As there is a group discussion after the activities the third of the theory’s theme, rational discourse, provides opportunity for exploring with others the newly discovered misunderstanding between assumptions and reality. Specifically, grasping one’s discontent, sharing the process of transformation, and understanding that others have negotiated a similar change. This exchange allows for exploration of options for new roles, relationships, and actions with others.

Contents of PowerPoint presentation. This presentation introduced the participants to the definition of cultural competence used for research study, a foundational understanding about diversity through the lens of Milner’s five conceptual repertoires of diversity, including the steps necessary to go beyond knowledge of diversity, and Edward T. Hall’s iceberg analogy of culture. This PowerPoint presentation was reviewed by a group of the researchers peers prior to using with the participants. To assess critical reflection I used the four questions that Kember et al. (2000) developed.
**Autobiography activity.** Autobiographies provide a way for teachers to use facts as they begin to investigate themselves (Cooper et al., 2011). The objective of this activity was to provide participants with an opportunity to share how they perceive themselves in relation to aspects of cultural beings, and to explore one’s own cultural assumptions (Cooper, et al., 2011). Reflection questions (Cooper et al., 2011, p. 38) after completing the autobiography activity will be:

1. In what ways do your experiences with various cultural subgroups influence how you identify yourself to others?
2. In what ways do your experiences with various cultural subgroups influence your personality?
3. In what ways do you think the sharing of your experiences will impact how others may receive, perceive, or believe you as an educator?

**Bio-Poem.** Bio-poems are a simple and effective way for the participants to express how they want others to see them as they choose the words that describe themselves, their interests, and their lives (Cooper et al., 2011). The objective of this activity was to provide participants with an opportunity to express what they want others to know about themselves (Cooper, et. al, 2011).

Reflection questions (Cooper, et al., 2011, p. 49) after completing the bio-poem activity will be:

1. What was the hardest part about writing your Bio-Poem? Why?
2. What is the purpose of this activity in relation to diversity issues and cultural competence?
**Privilege walk.** The privilege walk gives the participants an opportunity to discover diversity within themselves and to uncover preconceived notions and beliefs about others (Cooper et al., 2011). The objective of this activity was to provide participants with an opportunity to understand the intricacies of privilege (Cooper et al., 2011). Participation in the privilege walk reveals how certain perceptions associated with race, ethnicity, class, gender, ability, and religion are forms of privilege for some and not for others (Cooper et al., 2011).

Reflection questions (Cooper et al., 2011, p. 49) after completing the privilege walk activity will be:

1. What happened?
2. How did this exercise make you feel?
3. What were your thoughts as you did this exercise?
4. What have you learned from this experience?
5. What can you do with this information in the future?

**Rational discourse.** Cranton (1994) states that educators need to participate in conversation with others in order to be exposed to different views and to decide if those views are logical. Furthermore, Mezirow (2000) suggests that to foster effective rational discourse, a safe and accepting environment that is free from judgment is necessary in order to reduce and ease the possible psychological and emotional distress the participants may encounter.

As the researcher facilitated the transformative learning experience every attempt to create the best conditions in which to nurture discourse was made. Mezirow (1989) suggested ideal conditions for participants to engage in discourse are:

(a) Accurate and complete information about the topic discussed; (b) freedom from coercion; (c) ability to reason argumentatively about competing validity
claims and to argue logically from the evidence; (d) ability to be critically reflective about assumptions and premises; (e) openness to consideration of the validity of other meaning perspectives and paradigms; (f) self-knowledge sufficient to assure participation free from distortion, inhibitions, compensatory mechanisms or other forms of self-deception; (g) role reciprocity – equal opportunity to interpret, explain, challenge, refute and take other roles in dialogue; and (h) a mutual goal of arriving at a consensus based upon evidence and the cogency of argument alone. (p. 171)

As the researcher facilitated the group discussion use of a note-taker was used to ensure accurate dictation of the dialogue.

**Phase III**

Phase III consisted of individual, face-to-face, semi-structured interview. These interview questions were designed to assess information about how self-awareness through a transformative learning experience changed their perceptions. As long as our experiences match our current way of thinking we tend to not participate in transformative learning (Mezirow, 1995). This final interview attempted to take a rich and meaningful look at the possible transformative learning experience of the participant. Phase I and Phase II provided opportunities for disorienting dilemmas which is the first of the theory’s phases. These dilemmas or ah-ha moments can be all at once or gradual over time and display a disconnect between our understanding and reality.

**Rationale for Interview Research**

Interview is a verbal conservation between two people and is used to collect relevant information for the purpose of research. The use of interview research is to explore the view,
experiences, beliefs, and motivations of the research participants (Gill, Stewart, Treasure, & Chadwick, 2008). According to McNamara (1999), interviews can obtain information about a participants experience, can pursue in-depth information about the topic, and can be used as follow-up to certain respondents. Silverman (2011) states that when compared to quantitative research methods such as questionnaires, qualitative research method interviews provide a much deeper understanding of the social phenomena being studied.

**Data Analysis and Interpretation**

From the data collected an in-depth understanding was gained of how self-awareness can be obtained through transformative learning experiences. During the analysis stage, I reviewed filed notes and face-to-face interviews to determine the emergence of themes. More specifically, I sought indigenous themes that characterized the experience of the research participants.

Data analysis included analyzing interviews, document analysis, and participation observations. According to Creswell (2013), there are six steps to take when analyzing the qualitative data: (1) organize and prepare (transcribe), (2) read through all the transcribed data to understand the overall meaning, (3) code and label the data in chunks, (4) organize the chunks of codes or labels into smaller numbers of categories and themes, (5) identify the themes found in the interview data, and (6) make interpretation or meaning of the data. These steps will be followed in the data analysis procedures of this study.

To prepare the reflection questions, notes from the classroom discussion, and face-to-face interviews for coding, I read the answers and responses and took notes to discover the general concepts and ideas presented by the participants. I reduced the chunks into categories and themes using the axial coding process. I compared the data of each research to investigate and understand the differences. Interpretation and summarization of the findings were reported with
quotations to represent and support the findings. Finally, I compared the findings with the information in the literature review.

In order to ensure a rich, robust, comprehensive, and well-developed study it is recommended to use multiple data sources (Denzin, 1978; Patton, 1999). Triangulation involves using multiple data sources to produces understanding. The types of triangulation used in this research study are triangulation of sources (comparing people with difference points of view), analyst triangulation (using multiple analyst to review findings), and theory/perspective triangulation (using multiple theoretical perspectives to examine and interpret the data) (Denzin, 1978; Patton, 1999). The use of multiple data sources also serves to enhance each data source as it provides the data collected in one area to shed light on data collected in another area (Creswell, 2013; Merriam, 1998).

As the sole researcher on this research study, I kept the research questions in mind to ensure efficacy in providing answers during the data analysis and interpretation process. As research can lead to unexpected or predicted findings, I stayed open to the possibilities of new research questions, new theories of identity development, and implications for future research.

**Ethical Considerations**

The research study followed all guidelines of the Research Protocol Proposal Form that was submitted to and approved by the university’s Institutional Review Board (IRB). This approval was secured prior to beginning any data collection associated with the conduct of this research study.

The purpose of the research study and the data collecting methods were explained to all participants. All information pertaining to participants in this research study was collected and will be stored in a confidential manner (i.e. on a password protected wifi-disabled laptop, in a
locked area of the researcher’s home). Likewise, all data will be handled with confidentiality, be stored for three years, after which will be destroyed. Participants received and signed a consent form to voluntarily participate in the research study. To protect participant’s identity, pseudonyms will be used throughout the entire data collection process. The participants had the opportunity of picking the pseudonym or having the researcher pick one for them.

As the researcher is a graduate assistant at the public university where the participants will be enrolled, it was important to consider how this impacted the participants’ participation in the research study. Having an “insider” status could have affected the approach taken by the participants. In order to preserve the efficacy of the research study, the researcher actively created a safe environment where participants could speak freely and share their possible perspective transformations. During the informed consent process, the researcher explained that the data collected was to be used for research purposes only and will not impact current or future personal or professional relationships between the researcher and the participants.

**Summary**

Chapter I introduced and provided the rational for the research study. Chapter II reviewed the relevant research-based literature that supports the need and importance of the research study. This chapter, Chapter III, provided the methodological approach and design of the research study as well as restating the main research questions and the two ancillary questions. This chapter also described the role of the researcher, set forth the study timeline, and presented ethical considerations and limitations of the study. Finally, data collection and analyses were clarified in this chapter. Chapter IV presents the data and the analysis of the data collected from the research participants collected during this three phase research study. Chapter V discusses the findings,
provides recommendations for further studies, shares a reflection by the researcher, and concludes the research project.
Chapter IV: Results

Introduction

Chapter I provided an overall introduction to the purpose of this study. Chapter I also described the theoretical and conceptual framework for the research study. Chapter II provided a review of research-based literature in the fields of democratic education, social identity, multicultural education, cultural competence, and transformative learning theory. Chapter III outlined the methodological approach and design of the research study. Chapter IV presents the data and the analysis of the data collected from the research participants during this three phase research study.

Overview of the Study

The purpose of this qualitative case study was to examine transformative learning experiences of CTE instructors, specifically focusing on the development of multicultural self-awareness. This experience was examined through the lens of Mezirow’s transformative learning theory. According to Mezirow (1991), adult educators (the researcher) have a responsibility to help their students (CTE instructors) become more “imaginative, intuitive, and critically reflective of assumptions; to become more rational through effective participation in critical discourse; and to acquire meaning perspectives that are more inclusive, integrative, discriminating, and open to alternative points of view ”(p. 224). With this in mind, the primary question that guided this study is: How does a self-awareness transformative learning experience develop critical cultural competence in CTE instructors? There were two ancillary questions that were also considered: 1) How does the practice of critical reflection construct CTE instructors’ ability to develop self-awareness of critical cultural competence? 2) How does involvement in
critical discourse construct CTE instructors’ ability to develop self-awareness of critical cultural competence?

Approval for conducting this research study was obtained from the UNLV Institutional Review Board (IRB). The design of the study utilized a qualitative research method, specifically, a case study approach. The case, or the unit that was analyzed, was CTE instructors. The case samples for this study were eight CTE instructors who were enrolled in an accredited public postsecondary university in the southwest region of the United States.

A list of current CTE instructors enrolled at an accredited public postsecondary institution in the required courses to maintain their business and industry license was obtained from UNLV’s CTPE Program Coordinator. The purposeful sample of CTE instructors identified as possible participants for this study was based on (a) willingness to participate in the study, (b) business and industry licensed Career and Technical Education instructors, (c) instructors who were able to meet with me and attend individual and group sessions.

Initial contacted in person was made with each CTE instructor selected to participate in the study. After agreeing to participate in this study, the CTE instructors were given an IRB approved letter of informed consent. The consent form outlined the purpose and procedures of the study. The consent form also indicated that the participant could opt to drop out if she/he decided to after beginning the research study. CTE instructors agreeing to participate were assured that their identity would not be revealed and their responses to the activities, reflection questions, participation in group dialogue, and final interview questions would be kept confidential. To maintain anonymity, I assigned a name (i.e., pseudonym) for each participant: Jim, Lauren, Sarah, Samuel, Julianne, Alexis, Kelly, and Scott. All activities, reflection questions, and final interview questions were assigned the participants number.
Data were collected during all three phases of this research study. The use of multiple data sources served to enhance each data source as it provides the data collected in one area to shed light on data collected in another area (Creswell, 2013; Merriam, 1998). Phase I included background and demographic information; information on students, school, and curriculum; information on diversity training and preparation; participation in Harvard’s Project Implicit, and IAT reflection questions. Phase II included a PowerPoint presentation on developing critical cultural competence, activities that begin to help the participants explore personal characteristics and beliefs, a follow up group discussion, and critical reflection questions. Phase III consisted of face-to-face interviews with the primary purpose of collecting a specific type of information (Patton, 1990). Interviewing is the recommended technique to use when conducting intensive case studies of a few selected individuals (Merriam, 1998). According to Merriam, interviewing is necessary when the researcher wants to understand behaviors, feelings, or how people understand the world around them (1998).

The interviews for phase III of this study lasted 20 to 40 minutes for each participant. During each interview, I listened to the participants for indications and features that could be associated with the 10 phases of Mezirow’s transformative learning theory:

(1) a disorienting dilemma; (2) a self-examination with feelings of fear, guilt, or shame; (3) a critical assessment of assumptions; (4) recognition of one’s discontent and the process of transformation shared; (5) exploration of options for new roles, relationships, and actions; (6) planning a course of action; (7) acquiring knowledge and skills for implementing one’s plan; (8) provisionally trying new roles; (9) building competence and self-confidence in new roles and relationships; and (10) a reintegration into one’s life on the basis of conditions dictated by one’s perceptions. (Kitchenham, 2008, p. 105)
By listening for these indications and features I was able to approximate if the participants underwent a transformative learning experience.

**Data Analysis: Phase I**

Phase I consisted of the introduction to research; background and demographic information; students, school, and curriculum information; diversity training and preparation information; participation in Harvard’s Project Implicit, and IAT reflection questions.

**Demographics and Background**

The questions for this demographics and background questionnaire were created to gather information about participants’ demographics and background (age, race, gender, education level, business background, socioeconomic status, prior teaching experience) (see Table 4 and Table 5). The answers to these questions are considered descriptive statistics as it provided simple summaries or descriptions about the participants (Gay, Mills, & Airasian, 2012).

**Analysis of Demographics and Background.** The average age of the eight participants in this study was 42.9 years. The oldest in this study was 55 and the youngest was 29. Jim reported his ethnicity as White, Lauren reported her ethnicity as European/White, Sarah reported her ethnicity as Asian/Korean, Samuel reported his ethnicity as Black, Julianne reported her ethnicity as White/Irish, Alexis reported her ethnicity as Caucasian, Kelly reported her ethnicity as Asian, and Scott reported his ethnicity as Caucasian/White.

The degree of education obtained varied among the participants. All participants had education beyond high school. Alexis and Scott reported obtaining Associate’s Degrees, Jim, Julianne, and Kelly reported achieving Bachelor’s Degrees, and Lauren, Sarah, and Samuel reported obtaining Master’s Degrees. The Nevada Department of Education (NDE) does not require individuals to hold a degree from an accredited higher education institution to become a
CTE instructor. To obtain a business and industry teaching license the applicant needs to verify five years of work experience in their area of endorsement and within three years successfully complete four required university level CTE courses.

Of the participants Sarah and Alexis identified as lower-middle class; Lauren, Samuel, Kelly, and Scott identified as middle class; Jim identified as middle-upper class, and Julianne identified as upper-middle class. When reporting prior teaching experience Jim, Lauren, Sarah, Samuel, and Julianne reported no teaching experience; Alexis reported experience as a substitute, and Kelly and Scott reported experience teaching adults.

Significant to this research study was the question of prior cultural or diversity courses. Jim, Sarah, Samuel, and Alexis reported experiencing prior cultural or diversity courses while Lauren, Julianne, Kelly, and Scott reported that they had not experienced prior cultural or diversity course. For example, Kelly took an anthropology course, which introduced her to culture. Participants also indicated exposure to cultural and diversity courses outside of their teaching profession and in the form of classes offered through a human resource department.
Table 4

Demographics of Research Participants

<table>
<thead>
<tr>
<th>Participant</th>
<th>Age</th>
<th>Race/Ethnicity</th>
<th>Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jim</td>
<td>34</td>
<td>White</td>
<td>Male</td>
</tr>
<tr>
<td>Lauren</td>
<td>54</td>
<td>European/White</td>
<td>Female</td>
</tr>
<tr>
<td>Sarah</td>
<td>34</td>
<td>Korean/Asian</td>
<td>Female</td>
</tr>
<tr>
<td>Samuel</td>
<td>54</td>
<td>Black</td>
<td>Male</td>
</tr>
<tr>
<td>Julianne</td>
<td>29</td>
<td>White/Irish</td>
<td>Female</td>
</tr>
<tr>
<td>Alexis</td>
<td>55</td>
<td>Caucasian</td>
<td>Female</td>
</tr>
<tr>
<td>Kelly</td>
<td>33</td>
<td>Asian</td>
<td>Female</td>
</tr>
<tr>
<td>Scott</td>
<td>50</td>
<td>Caucasian/White</td>
<td>Male</td>
</tr>
</tbody>
</table>
Table 5

Background of Research Participants

<table>
<thead>
<tr>
<th>Participant (P)</th>
<th>Education Background</th>
<th>Business Background</th>
<th>Prior Cultural or Diversity Courses</th>
<th>Socio-Economic Status</th>
<th>Prior Teaching Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jim</td>
<td>B.S Business Administration</td>
<td>Management, marketing, customer service</td>
<td>Basic</td>
<td>Middle to Upper Class</td>
<td>No</td>
</tr>
<tr>
<td>Lauren</td>
<td>Masters Degree in Economics Restaurant Assistant Manager</td>
<td>No</td>
<td>Middle Class</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Sarah</td>
<td>B.F.A Documentary Film Making and Broadcasting, M.Ed. Curriculum and Instruction, M.M. Music Education Marketing, Audio and Media Production, News Producer</td>
<td>Yes</td>
<td>Lower to Middle Class</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Samuel</td>
<td>Masters Degree in Business and Human Resources Retired U.S. Air Force</td>
<td>Yes</td>
<td>Middle Class</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Julianne</td>
<td>B.S. Hospitality Hospitality</td>
<td>No</td>
<td>Upper Middle Class</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Alexis</td>
<td>Associates Degree Events, Graphic Design, Hospitality, Education</td>
<td>Yes</td>
<td>Lower-middle Class</td>
<td>Substitute Teaching</td>
<td></td>
</tr>
<tr>
<td>Kelly</td>
<td>B.S. Nursing None</td>
<td>No</td>
<td>Middle Class</td>
<td>Yes Adults</td>
<td></td>
</tr>
<tr>
<td>Scott</td>
<td>A.S. Occupational Studies Restaurant Owner</td>
<td>No</td>
<td>Middle Class</td>
<td>Yes Adults</td>
<td></td>
</tr>
</tbody>
</table>
Students, School, and Curriculum

The questions for the research participants perception of their students, school, and curriculum questionnaire were created to gather information regarding demographics of the school, geography of school, socioeconomic status of the students, cultural climate of the school, and how the teacher’s ethnicity influences the teaching methods in the classroom (see Table 6).

Analysis of Students, School, and Curriculum. As indicated by research (Cooper et al., 2001; Chou, 2007; Gay, 2010; Grant et al., 2004; Ladson-Billings, 1995), the anatomy of the research participants’ classrooms is quite diverse. The data collected in this research project indicates that 77% of the population at the research participants’ facilities are students of color. When describing school geography, Jim, Lauren, Samuel, Julianne, Alexis, and Kelly identified as urban; Sarah and Scott identified as suburban. Their high school cultural climate was described ranging from “welcoming” to “hostile with Jim identifying an inviting and open school cultural climate; Lauren identified a hostile cultural climate; Julianne identified a tolerant cultural climate; Kelly identified a chaotic cultural climate; Scott identified a welcoming cultural climate; and Samuel, Sarah, and Alexis identified a diverse cultural climate. When reflecting on whether teacher ethnicity had an effect on curriculum Sarah and Scott reported never thinking about it, Jim and Kelly stated it did not play a role, Lauren and Alexis reported being open to the idea, Julianne reported yes, and Samuel reported not really.
### Table 6

**Students, School, and Curriculum**

<table>
<thead>
<tr>
<th>Participant</th>
<th>School Demographics</th>
<th>School Geography</th>
<th>School Cultural Climate</th>
<th>Effect of Teacher Ethnicity on Curriculum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jim</td>
<td>40% White, 25% Asian, 20% Black, 15% Hispanic</td>
<td>Urban</td>
<td>Inviting and open</td>
<td>Does not play a role</td>
</tr>
<tr>
<td>Lauren</td>
<td>60% Hispanic, 20% White, 11% African American, 5% Multiracial, 4% Asian</td>
<td>Urban</td>
<td>Hostile</td>
<td>I am more open and sensitive</td>
</tr>
<tr>
<td>Sarah</td>
<td>49.7% White, 20.3% Hispanic, 14.3% Black, 8% Bi-Racial, 5.3% Asian, 1.7% Pacific Islander, 0.7% American Indian</td>
<td>Suburban</td>
<td>Diverse</td>
<td>I never thought about it</td>
</tr>
<tr>
<td>Samuel</td>
<td>50% Hispanic, 20% White, 10% Asian, 10% Pacific Islander, 5% Black, 5% Other</td>
<td>Urban</td>
<td>Open and diverse</td>
<td>Not really</td>
</tr>
<tr>
<td>Julianne</td>
<td>35.1% Hispanic, 29.9% White, 11.8% Asian, 10.5% Black, 8.9% Bi-Racial, 3.2% Pacific Islander, 0.06% American Indian/Alaskan</td>
<td>Urban</td>
<td>Tolerant</td>
<td>Yes</td>
</tr>
<tr>
<td>Alexis</td>
<td>85% Black, 12% Hispanic, 3% White</td>
<td>Urban</td>
<td>Open and diverse</td>
<td>I have widened my scope to be more inclusive</td>
</tr>
<tr>
<td>Kelly</td>
<td>70% African American, 20% Hispanic, 10% Asian</td>
<td>Urban</td>
<td>Somewhat chaotic</td>
<td>Doesn’t play a role</td>
</tr>
<tr>
<td>Scott</td>
<td>35% Asian, 20% White, 15% African American, 10% Pacific Islander, 10% Hispanic, 10% Muslim</td>
<td>Suburban</td>
<td>Welcoming without obvious borders or prejudices</td>
<td>I never thought about it</td>
</tr>
</tbody>
</table>
Diversity Training and Preparation

The questions for the research participants’ perceptions of diversity training and preparations questionnaire were created to gather information regarding participants’ professional development opportunities and diversity training opportunities (see Table 7).

Analysis of Diversity Training and Preparation. All of the participants in this study reported having professional development opportunities provided to them at their school or place of employment. When reporting professional development training opportunities in diversity offered at their place of employment Jim, Sarah, and Kelly reported there was no diversity training; Lauren, Samuel, and Kelly reported there was diversity training; and Julianne and Alexis reported they were not sure. When reporting on whether more sessions on diversity where needed Jim, Sarah, Samuel, Alexis, Kelly, and Scott reported that more sessions were needed; Lauren reported there were enough sessions; and Julianne reported it was not applicable.

Implicit Association Test Reflection Questions

Using the IAT reflection this began the process of identifying transformative learning experience as I inspected the data collected from the participants’ for indications and features that could be associated with the 10 phases of Mezirow’s transformative learning theory (see Figure 4).
### Table 7

*Diversity Training and Preparation*

<table>
<thead>
<tr>
<th>Participant (P)</th>
<th>Professional Development Opportunities</th>
<th>Professional Development Training in Diversity</th>
<th>Are more sessions on diversity needed?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jim</td>
<td>Not often</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Lauren</td>
<td>A lot</td>
<td>Yes</td>
<td>There are enough</td>
</tr>
<tr>
<td>Sarah</td>
<td>Not often</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Samuel</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Julianne</td>
<td>Yes</td>
<td>Not sure</td>
<td>N/A</td>
</tr>
<tr>
<td>Alexis</td>
<td>Yes</td>
<td>Not sure</td>
<td>Yes</td>
</tr>
<tr>
<td>Kelly</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Scott</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**Analysis of Implicit Association Test Reflection Questions.** When reflecting on whether taking the IAT and receiving the results changed the way the research participants looked at themselves Jim, Julianne, and Scott stated no; Lauren, Sarah, Samuel, and Kelly stated yes; Alexis reported not really. (see Table 8)

Jim stated no, “I expected the results. However, I did not expect them to correlate as well as they did. That’s a little scary”.

Lauren stated yes and reflected:

My results from the gender/career IAT startled me, because as an ERA-supporting feminist, I was surprised that I still associated male gender with career and female gender with domesticity. I was disappointed in my results, but I think that they have stirred awareness that people truly are products of their environment. I grew
up with a stay-at-home mom and a father who worked two jobs. I attended Brigham Young University, an ultra-conservative gender-role-enforcing religious university. I am disappointed that some of those values seemed to stick with me despite my personal preferences and feelings on the subject.

Samuel stated yes, most definitely, and reflected:

Yes, most definitely I was very surprised at the results, to know as a black male I have a slight preference for light skin compared to dark skin. And to know that I associate males with a career and female with family compared to female with a career and male with family and it is a strong association. I really thought that I had evolved a lot further in my views, and I am really starting to look at how I act around people and hope that I have not hurt anyone consciously or unconsciously with my actions. I really pride myself on treating people equally, and felt that I had always accomplished that. Now I am not so sure because I truly believe actions speak louder than words so on these two subjects in particular I will be more aware when placed in these situations or ask my particular viewpoint on the subjects.

Julianne answered no and reflected:

I am actually a bit surprised on how the white & black questions turned out because I know that I do not care how an individual looks or appears. I am not surprised on how the gender-career questions turned out. I was raised on the traditional thinking that a man should always hold a job but I also seen my mother head back to college and get into a career that ultimately paid better than my father’s job.
Kelly answered yes, “I never expected I would be thinking the way I was answering the questions”.

When reflecting on whether taking the IAT and receiving the results changed their formerly held ideas Lauren, Sarah, Samuel, Kelly, and Scott reflected yes, Julianne reflected no, Jim reflected slightly, and Alexis reflected not much. When reflecting on whether taking the IAT and receiving the results changed the way they do things Jim, Lauren, Julianne, and Scott reflected no; Samuel and Kelly reflected yes, Sarah reflected I hope so, and Alexis reflected not much.

Reflecting on whether taking the IAT and receiving the results created a discovery in a fault they had previously believed to be right Jim, Lauren, Sarah, Alexis, and Kelly reflected yes while Samuel, Julianne, and Scott reflected no.

Jim stated yes and reflected:

The description at the end of the skin-tone test affected my sense of racial bias. I question my view of those with darker skin-tones. Do I have an issue, or is it simply an unforeseen consequence of teaching concepts of good & evil?

Lauren stated yes and reflected:

The main fault I discovered was in my belief that people are 100% responsible for their choices and dispositions. I was shocked to find that, despite my personal beliefs, I was still relating men with careers and women with home. Whenever my mother-in-law says something that I find racially offensive and hurtful, my husband shrugs it off, saying that she’s just a product of her environment (rural Utah). I always felt like people can transcend their upbringing and environment. Seeing my results on the IAT made me question this.
Alexis stated yes and reflected, “I always want to learn, I have moved away from
gender identity in the workplace. My struggles are with age differences, young people
with a lot less life experience being my boss”.

There is evidence through-out the reflections that a discernible transformative learning
experience has began for some of the participants. Phases one, two, and three of Mezirow’s
transformative learning theory are present as some of the participants experienced a disorienting
dilemma in that they were surprised, scared, and felt unsure of themselves when assessing the
results. Participants also began to self-examine and found feelings of fear, guilt, or shame.
Finally, through-out the reflections, I found a critical assessment of assumptions in Jim, Lauren,
Sarah, Alexis, and Kelly as they had discovered fault in thoughts that they previously believed to
be right.

Table 8

Implicit Association Test Reflection Questions

<table>
<thead>
<tr>
<th>Participant</th>
<th>The way I look at myself changed</th>
<th>My formerly held ideas have changed</th>
<th>My normal ways of doing things have changed</th>
<th>I discovered fault in thoughts I previously believed to be right</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jim</td>
<td>No</td>
<td>Slightly</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Lauren</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Sarah</td>
<td>Yes</td>
<td>Yes</td>
<td>I hope so</td>
<td>Yes</td>
</tr>
<tr>
<td>Samuel</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Julianne</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Alexis</td>
<td>Not really</td>
<td>Not much</td>
<td>Not much</td>
<td>Yes</td>
</tr>
<tr>
<td>Kelly</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Scott</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>
Data Analysis: Phase II

Phase II consisted of a PowerPoint presentation on developing critical cultural competence, specific activities to help the participants explore personal characteristics and beliefs, a follow up group discussion, and the final set of reflection questions. Again, I inspected the data collected from the participants’ for indications and features that could be associated with the 10 phases of Mezirow’s transformative learning theory (see Table 2).

Analysis of group discussion. Group discussions followed the activities in Phase II: the autobiography, the bio-poem, and privilege walk.

During the group discussion, research participants shared their feelings regarding their autobiographies. Comments that provided opportunity for all participants to create a new understanding were: “as an immigrant I felt lost”; “I kind of pass as white and I don’t talk about culture”; “I had no Korean friends”; “identity is where you are from”; “I feel like I have to adapt and I can’t be me”; “I felt like a nerd”; “can’t speak about military because of negative connotations”; “If we can’t speak our minds, how do our students feel?”; “be politically correct”; “I feel uncomfortable at work because I am the minority”; “I disappear at first and listen to what others say”; “mixed family – don’t belong”; “everyone feels excluded, devalued in some way”.

By using bio-poems, participants were able to express “the me I want others to see”. Participants pick the ideas and words that describe what they want other to know about them, their interests, and their lives. During the group discussion following the activity, research participants shared their feelings regarding their bio-poem. Comments that provided opportunity for all participants to create a new understanding were: “outward appearance isn’t truthful about what we feel like on the inside”; “if we don’t know ourselves, then we can’t see others”; “when do we drop the façade?”; “no more judgments”, “hardest part of bio-poem was honesty”.

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The privilege walk activity is designed to reveal the unseen benefits of being White (Cooper et al., 2011; McIntosh, 1990). This activity is about revealing privileges based on gender, race, ethnicity, class, or sexual orientation. Research participants begin by standing shoulder to shoulder and take a step forward or backward depending on the answer to the statements read by the facilitator. This activity provides an opportunity for the participants, although they are all taking the same university class, to see how diverse of a group they really are. This activity had the potential of providing many “aha” moments and can also be very emotional. During the group discussion, research participants shared their feelings regarding the privilege walk. Comments that provided opportunity for all participants to create a new understanding were: “minorities were going back”; “surprised I took so many steps back”; “embarrassed by privilege”; “grateful”; “wouldn’t have admitted that in the outside world”; “reflection on life”; “shines light on life”; “appreciation”; “did fight battles”; “can’t take any students story for granted”; “we aren’t that person in the privilege walk as their teachers”; “feel enlightened”.

**Analysis of final reflection questions.** At this point in the research, there was hope of reaching phases four and five of Mezirow’s Transformative Learning Theory. Step four allows participants the opportunity to recognize and make connections between one’s discontent and the process of transformation. Step five allows participants the opportunity to explore options for new roles, relationships, and actions (Mezirow, 1991). The final reflection questions provide the data necessary to determine where the research participants are in the transformative process (see Table 9).

When reflecting on whether the activities during Phase II changed the way the research participants looked at themselves Lauren, Sarah, Samuel, Julianne, Alexis, and Kelly stated yes;
Scott stated no; and Jim stated not exactly. Reflection on whether their formerly held ideas had changed Jim, Lauren, Sarah, Samuel, Julianne, Alexis, and Kelly stated yes and Scott stated no. When reflecting on whether their normal ways of doing thing had changed Lauren, Samuel, Julianne, Kelly, and Scott reported yes; Sarah and Alexis stated I hope so; and Jim thought it was too early to tell. Reflecting on discovering possible faults in what they previously perceived to be right Lauren, Sarah, Julianne, Alexis, Kelly, and Scott stated yes, Jim stated more embarrassed than finding fault, and Samuel stated no. There is evidence from these reflections that there was recognition of a connection between one’s discontent and the process and transformation (phase 4) and exploration of options for new roles, relationships, and actions (phase 5).

Table 9

*Final Reflection Questions*

<table>
<thead>
<tr>
<th>Participant (P)</th>
<th>The way I look at myself changed</th>
<th>My formerly held ideas have changed</th>
<th>My normal ways of doing things have changed</th>
<th>I discovered fault in thoughts I previously believed to be right</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jim</td>
<td>Not Exactly</td>
<td>Yes</td>
<td>Too early to tell</td>
<td>More embarrassed than finding fault</td>
</tr>
<tr>
<td>Lauren</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Sarah</td>
<td>Yes</td>
<td>Yes</td>
<td>I hope so</td>
<td>Yes</td>
</tr>
<tr>
<td>Samuel</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Julianne</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Alexis</td>
<td>Yes</td>
<td>Yes</td>
<td>I hope so</td>
<td>Yes</td>
</tr>
<tr>
<td>Kelly</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Scott</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>
Data Analysis: Phase III

Phase III consisted of an individual, face-to-face, semi-structured interview. The questions for this questionnaire were created to gather information about how self-awareness through a transformative learning experience changed their perceptions. This final interview attempted to take a rich and meaningful look at the possible transformative learning experience of the participant. These dilemmas can be epochal (all at once) “Ah-ha, or lights-on experience”, or incremental, that is, a gradual recognition over time of a disconnect between an individual’s meaning structure and his/her environment (Mezirow, 1991).

Analysis of Individual Interviews

The sample in this research study consisted of eight CTE instructors who are enrolled in courses at an accredited public postsecondary university to maintain their business and industry license. The individual interviews with the research participants were conducted in a one-on-one format. The individual interviews explored participant’s initial and changing views as well as their experiences, beliefs, and motivations before, during, and after the research study activities. The interviews took place either in the research participant’s classroom or the researcher’s office. These settings allowed the research participants to be in a comfortable and safe environment. Each interview lasted on the average of 35 minutes during the research participant’s prep period, after school, or while on campus to take a course.

Jim’s interview. Jim is a 34 year old, middle to upper class, White male. His career focus is on management, marketing, and customer service. He has a B.S. in Business Administration and is meeting the provision of his Business and Industry license while pursuing his master’s degree in Career and Technical and Postsecondary Education. His role as an instructor is at his place of business where he supervises training of the employees.
Jim reflected that he enjoys teaching as it creates transformation and change in others. He never considered teaching and feels that “teachers wear many hats”. He shared that “developing relationships, having discussions and conversations, and personal interaction” are keys to a successful teaching experience. His experience with professional development has not been meaningful and feels that previous in-service programs have been somewhat a waste of time. Jim felt that although the IAT was subtle it created an “aha” moment. More significant for him though was the privilege walk as he experienced feelings of “embarrassment and surprise”. He did not realize that “the differences he had with some of his peers were going to be that wide”. Overall, he felt “the IAT put the ball on the tee and the privilege walk knock it out of the park”. This transformative learning experience “created understanding, shed light, developed understanding, and created awareness of differences for him”.

Lauren’s interview. Lauren is a 54 year old, middle class, European White female. Her career focus is on restaurant management and she has master’s degree in Economics. She is a teacher at a high school where she teaches Culinary Arts.

Lauren stated that she enjoys teaching as it is a way to share her knowledge. She is an immigrant and feels very proud of her accomplishments in the fact the “she can be a teacher in a country where she did not grow up”. She went into teaching because her husband and daughter are both teachers and she was “jealous for them because they told me all of the stories from school”. Talking to the students, “having meaningful conversations”, is how she connects with her students. She feels that the professional development in-services she has attended have been excellent. She did indicate that the topics of these previous professional developments she has gone to were on technology use and classroom management. She has enjoyed the collaboration with other teachers and has been able to apply the information from the professional
development sessions. She found the IAT to be a disorienting experience and shared that “sometimes she was offended by some of the questions”. For Lauren, the privilege walk created feelings of gratefulness as she “realized how lucky she had been”. She found it surprising that there were differences in individual effort to be at the same place as her. “I never know that another teacher who is sitting here next to me probably for him took twice as much effort to be here; another one probably half as much”. Since this transformative learning experience she “sees people differently and feels that it would be good for everyone to have a class like this”.

Of specific interest to this research project Lauren shared actions that indicate reaching phase five (exploration of options for new roles, relationships, and actions) and phase six (planning a course of action) of transformative learning. Lauren stated “since this happened, I realized that one of my students was very far behind most of the time”. She clarified “that when she talked to him he told her he had difficulty with reading and writing”. Lauren stated that “she checked for an IEP or 504 and did not find one. She now provides a little more time because he always turns in completed assignments just a little late”.

**Sarah’s interview.** Sarah is a 34 year old, lower to middle class, Asian/Korean female. Her career focus is on marketing, audio and media production, and news production. She has a B.F.A. in Documentary Film Making and Broadcasting, a M.Ed. in Curriculum and Instruction, and a M.M. in Music Education. She is a teacher at a middle school where she teaches Broadcasting and Journalism.

Sarah enjoys teaching because it is a way of changing lives and creating success in for her students. She finds it very rewarding when her students “overcome challenges”. She never saw herself teaching and shared she went in to teaching for the “wrong” reasons. “I was looking for a career that would provide a steady income and health insurance”. She stated “even though
she started for the wrong reasons, she has stayed because she loves working with her students”. Sarah shared that being a “mentor, spending time with her students, and developing family-like relationships” is how she connects with her students. Her experience with professional development has been minimal and feels that it is somewhat lacking in middle school. Sarah was surprised at the results of the IAT. She stated “the results really shocked her and she felt kind of unsettled about it”. She found the privilege walk to be “eye opening especially since everyone was going forward and she was going back”. This transformative learning experience created an “awareness of others and their unique experiences”.

**Samuel’s interview.** Samuel is a 54 year old, middle class, Black male. His career focus is on Aerospace Engineering and retired from the U.S. Air Force after 27 years of service. He has a master’s degree and is meeting the provision of his Business and Industry license while pursuing another master’s degree in Career and Technical and Postsecondary Education. He is a teacher at a high school where he teaches Aerospace Engineering.

Samuel enjoys experiencing the “emotional growth” in his students. He enjoys participating in their “emotional growth, watching their personalities take shape, and contributing to their achievement”. He actually went in to teaching “to have the summers off” and did not realize that “it would have a big impact on his life”. He stated “there is more to teaching then giving a lesson, we are changing lives here”. He shared “hanging out with his students, creating a safe environment, and conversing with his students” are key to a successful teaching experience. He participates in professional development through his school and has found them helpful. He enjoys the collaboration with other teachers as “they give me new ideas”. Samuel “felt bad” about the results of the IAT. As a Black man he experienced his “biggest aha moment” of the transformative learning experience when his results indicated a preference to
lighter skin people than darker skin people. He found the privilege walk very “eye opening and didn’t realize he had experienced half of those challenges”. This transformative learning experience “changed his approach with his students, sparked a self-actualization, and created change and awareness”.

**Julianne’s interview.** Julianne is a 29 year old, upper middle class, White/Irish female. Her career focus is on hospitality and she has a B.S. in Hospitality. She is a teacher at a high school where she teaches Hospitality.

Julianne is a new teacher and is “passionate” about her career. She hopes to pass that passion on to her students as well as “inspiring them”. She went in to teaching because she “had a great example of a teacher growing up”. She stated “I want someone to remember me as a teacher when I am in my 90s and be an inspiration”. She feels that “starting conversations by simply greeting her students and getting to know them beyond the classroom” are ways to connect with her students. She has had minimal exposure to professional development as this is her first year teaching. She did not find it helpful and is “hoping that future developments will be more helpful”. Julianne doesn’t necessarily agree with the results of the IAT that indicated she preferred light skin over dark skin. She stated “I guess they had to come up with some answer at the end but to me skin color doesn’t matter”. She did experience two “aha” moments during the privilege walk. She was surprised that “people were actually further back then they started and being white she expected to make it further”. She stated “I guess I’m not so privileged”. This transformative learning experience created an awareness that “there are a hundred different views, a hundred different walks of life, and you just have to remember students have individual experiences and identities”.
**Alexis’s interview.** Alexis is a 55 year old, lower-middle class, Caucasian female. Her career focus is events, graphic design, hospitality, and education. She has an associate’s degree in Event Planning. She is a teacher at a private K-12 school where she teaches Art.

Alexis enjoys “seeing the spark in her students’ eyes, seeing the inspiration, and knowing that you have actually reached somebody with something – you see you’ve touched them, you’ve made a difference”. She went in to teaching because “she felt it was an age friendly job and can’t say she ever imagined going to be a teacher ever”. For her, teaching now means “giving knowledge and growing another human being”. She stated that she feels “with this, you do make a difference and when you see that you matter to somebody, that matters”. She gets to know her students by “observing and talking with them”. She has been exposed to many different professional development opportunities at her school and feels that they have been “good even though some things don’t apply”. She did not find the IAT results to impact her and the privilege walk “confirmed thoughts that life has been challenging”. This transformative learning experience has helped her “to not have preconceived thinking that I know and to try to look at how the other person is feeling instead of thinking that I know how they feel”.

**Kelly’s interview.** Kelly is a 33 year old, middle class, Asian female. Her career focus is nursing and she has a B.S. in Nursing. She is a teacher at a high school where she teaches Medical Assisting.

Kelly enjoys developing relationships with her students and hopes she “puts them in the right direction and helps them get an education”. She became a teacher because she “is not in the hospital yet” and this allows her to “stay in her field”. She feels that “teaching means a lot because instead of helping just one patient I can help a lot of students instead”. She gets to know her students by “individual talks” and “spending time with them”. She has participated in
technology, classroom management, and student engagement professional development. She stated that the professional development “teaches me a lot, it’s very helpful, and professionally, it’s growth”. Her IAT results “opened her mind as she grew up in a traditional Filipino culture where the mom stays home and the dad works”. She stated “it’s amazing I bring it with me now, even if it’s old”. She was especially impacted by the privilege walk and stated that “I am very grateful”. She shared “where I came from we don’t have anything, but it made me realize that I can and I reached what I wanted to do”. This transformative learning experience has helped her become more “open-minded to everything” and taught her “that culture is the most important factor in how you are really”.

**Scott’s interview.** Scott is a 50 year old, middle class, Caucasian/White male. His career focus is restaurant management and cooking. He has an A.S. degree in Occupational Studies and is a teacher at a high school where he teaches Culinary Arts.

Scott stated that at this moment he “was frustrated and disillusioned and feels like a babysitter”. He feels he knows the students that have volunteered to help him with special events and struggles with getting to know all the other students’ names. He has taught before but not at the high school level. Scott has participated in professional development offered through the local school district’s CTE program and has found it to be “supplemental information”. He did find the professional development sessions to be helpful especially being able to collaborate with the other CTE instructors. Scott did not share about the IAT results but shared that “it’s not a color issue, it’s not a gender issue, it’s the personality issue and whether I get along with them”. His comment on the privilege walk was that “I did feel like white bread” and stated “I’m privileged”. This transformative learning experience helped him “reformulate my way of thinking” and realize that “the problem is, is when you have an assumption and you have to
change it, you have to reevaluate the whole direction you were going, where you need to go, and that’s a lot of work”.

Scott shared actions that indicate reaching phase five (exploration of options for new roles, relationships, and actions) and phase six (planning a course of action) of transformative learning. Scott stated “the first thing I did after this exercise was I sat down with my counselor and went over my roster of people that I was having problems with”. He clarified that “I needed to know what was going on. Are they having money issues, are their parents broke, do they have parents at home”? Scott felt that he “needed to know this before making an evaluation of the student”.

**Themes and Key Findings**

Data analyses of this research study uncovered three major themes: perceptions, values, and beliefs. Each theme contained subthemes that were connected to the literature discussed in Chapter II. I had predetermined my interest in exploring the development of critical cultural competence through a transformative learning experience. Areas of transformation identified by Mezirow (1998) include perceptions, values, and beliefs. Perceptions, values, and beliefs were utilized as the major themes in this study. The analysis conducted within this study followed the guidelines outlined by Bogdan and Biklen (1998), utilizing the theoretical lens of transformative learning theory.

**Meaning Perspectives**

Our “habits of expectation” (Mezirow, 1991, p. 4) can direct the ways we perceive, comprehend, and remember. These meaning perspectives can actually diminish our awareness of the ways things really are (Mezirow, 1991). Since meaning perspectives constitute specific
perceptions, value judgments, and beliefs, Mezirow (1978, 1991, 1995) theorized that a transformative learning experience was necessary to create new meaning perspectives.

**The Meaning of Perceptions**

Perceptions can limit the way we observe our surroundings. They establish expectations that are attached to relationships, the way things should happen, outcomes, and the way others should act (Mezirow 1978, 1991, 1995). Perceptions can be a driving force in how we handle circumstances and can actually become “self-fulfilling prophecies” (Mezirow, 1991, p. 50). Goleman (1985) stated “the intentional patterns learned in childhood become self-perpetuating” (p. 148). Goleman (1985) expands on this by saying:

And you do this because it represents an area that you can firmly hold on to, that you can skillfully manipulate, that you can use easily to justify yourself – your actions, your sense of self, your option in the world. (p. 133)

Perceptions of self, students and others arose as subthemes in this study.

**Self.** The Implicit Association Test (IAT) measures attitudes and beliefs that people may be unwilling or unable to report. The IAT may be especially interesting if it shows that you have an implicit attitude that you did not know about (Project Implicit, 2011). Analysis of the questionnaires, personal reflections, and face-to-face interviews revealed that Jim, Lauren, Sarah, Alexis, and Kelly experienced a disorientating dilemma that included feelings of surprise, anger, and shame as well as a critical assessment of assumptions. According to Mezirow (1991), this is phase one, two, and three of transformative learning and is necessary when beginning the process of becoming critically aware of assumptions and expectations (see Figure 4).

**Students.** Milner’s five conceptual repertoires of diversity provide a foundational understanding about diversity. An introduction to the key concepts is suggested before beginning
to develop critical cultural competence (Cooper, et al, 2011; Milner, 2010). The research participants were exposed to Milner’s five conceptual repertoires of diversity during Phase II of the research project. During the final interview Lauren, Sarah, Julianne, and Alexis still talked about “not seeing color”, the concept of color-blindness, when talking about how they saw their students.

**Others.** White privilege is defined as “A special right, benefit, or advantage given to a person, not from work or merit, but by reason of race, social position, religion, or gender. “Privilege is usually unconscious and invisible to the individual graced with it, and privilege is exercised unknowingly and assumed to be a natural right” (Liu, Pickett, & Ivey, 2007, p. 195).

Of all the activities that the research participants engaged in the privilege walk provided the most noteworthy transformative learning experience. Analysis of the questionnaires, personal reflections, group dialog, and the face-to-face interviews revealed that during this activity seven of the research participants become critically aware of the unquestioned assumptions and expectations which were compiled during childhood. Subsequent to the activity, they began to consciously reform and reframe their understandings in ways that are more acceptable and certain, and shared recognition of one’s discontent and the exploration of options for new roles, relationships, and actions (Mezirow, 200). These findings indicate that all research participants experienced phases one, two, three, four, and five of the transformative learning process.

**The Meaning of Values**

The value that America has put on education has created a higher standard of living, shaped our culture, and contributed to our way of life (Morgan & Holmes, 1963). Plato, the ancient Greek philosopher, stated

Man, if he enjoys a right education and a happy endowment, becomes the most
divine and civilized of all living beings; but he is most savage of all products
of the earth if he is inadequately and improperly trained. (Morgan & Holmes, 1963, p. 4)

Value of education and professional development arose as subthemes in the study.

**Education.** One of the most critical challenges faced by CTE instructors today can be simply stated: if teachers are to successfully teach all students to high standards, then everyone who affects student learning must be continuously learning during their careers (Sparks, 2000). Gordon (2014) states that CTE instructors are less likely to have earned a bachelor’s degree when compared to other teachers. Analysis of the questionnaires, personal reflections, and the face-to-face interviews found that of the CTE instructors that participated in this research study Jim, Lauren, Sarah, Samuel, Julianne, and Kelly had earned a bachelor’s or master’s degree. Analysis of the face-to-face interviews revealed that Lauren and Kelly indicated that education was very important. Interesting to note was that both Lauren and Kelly are from other countries and have become American citizens.

**Professional Development.** The models of professional development that are put into practice today focus on expanding well-defined and skillful classroom practice (Little, 1994) and not on the skills that serve diverse learners effectively (Darling-Hammond, 2006). Analysis of the questionnaires, personal reflections, and the face-to-face interviews found Jim, Sarah, Samuel, Julianne, and Alexis had experienced marginal professional development experiences while Lauren, Kelly and Scott had experienced good professional development experiences. The professional development sessions covered topics such as classroom management, technology, and student engagement. All participants sought meaningful professional development experiences and preferred face-to-face interactions.
The Meaning of Beliefs

The belief that one has about oneself as a member of society creates the base for self or the concept of identity (Stedman, 2002). More specifically, social identity is defined as the “part of an individual’s self-concept that derives from his knowledge of his membership of a social group (or groups) together with the value and emotional significance attached to that membership” (Tajfel, 1978, p. 63). Bar-Tal (1998) goes further to define group beliefs as those beliefs that are shared by members of a group and which clarify their oneness.

**Vocation.** Social identity theory claims that individuals develop self-concept largely by comparison (Tajfel, 1978). At the heart of social identity theory is the idea that individuals have a basic desire and are motivated by the need to attain and maintain a positive self-image (Ashforth & Mael, 1989; Tajfel, 1978). All the research participants were passionate about their careers and had enjoyed working in the industry.

**Teaching.** Human beings are constantly classifying and evaluating where they “fit” which helps them develop a sense of self. This process is called social categorization and is defined as “the taking on of the categories that defines one’s group and using them to construct one’s self-image” (Tyler & Blader, 2001, p. 353-354). Analysis of the questionnaires, personal reflections, and the face-to-face interviews revealed that Jim, Lauren, Sarah, Samuel, Alexis, and Kelly never thought that they would become a teacher. As stated by Gordon (2014), the participants were less academically prepared to teach than other secondary teachers when they entered the classroom.

Transformative Learning Experience

Transformative learning can be described as the action of closely inspecting ones beliefs, values, and assumptions in order to gain understanding and develop new knowledge. (Mezirow,
1990, 2000). By reframing their perspectives they start the process of personal and social change (Mezirow, 1990). Critical thinking skills, personal self-reflection, classroom discussions and dialogues, and mentoring are components that encourage transformative learning experiences (King, 1997; Taylor, 1998).

**Critical thinking skills.** It is believed that critical thinking skills are used to give the adult learner to ability to reflect on and improve ideas, beliefs, assumptions, and values (Brookfield, 1987). Analysis of the questionnaires, personal reflections, and the face-to-face interviews found that the process of examining assumptions that are central to beliefs, values, and ways of understanding took place during the professional development activities.

**Personal self-reflection.** For adult learners to have the ability to reflect on one’s own practice, to grow, and change professionally is to be an effective practitioner (Cranton, 1996; Mezirow, 1991; Sparks, 1999). Analysis of the personal reflections found that although the research participants engaged in answering The Reflection Questionnaire (Kember et al., 2000) there was little to no evidence that indicated critical reflection. Answers to the questions were either yes, no, or one to two sentences long. Mezirow (1990) inferred that reflection would include making “inferences, generalizations, analogies, discriminations, and evaluations, as well as feeling, remembering, and solving problems” (p. 5).

**Classroom discussions and dialogues.** To foster effective rational discourse, a safe and accepting environment that is free from judgment is necessary in order to reduce and ease the possible psychological and emotional distress the participants may encounter (Mezirow, 2000). Examination of the group dialogue notes found implicit and explicit claims regarding life experiences, classroom experiences, and what was being experienced during the professional development activities. Research participants shared: “I feel like I have to adapt – I can’t be me”,

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“I feel like a nerd”, “I had to be politically correct”, “I feel uncomfortable because I am a minority”, and “I disappear at first”. These comments are indicative of a safe and accepting environment that fosters effective rational discourse.

**Mentoring.** An adult educator should be an empathetic persuader, a role model, a collaborative learner, or a guide, rather than an authoritarian person who would dictate what and how learners should learn (Mezirow, 1991). Study of the face-to-face interviews found that I acted as a mentor during this transformative learning experience. For mentoring to be successful, the mentor must provide safety, trust, respect, and codes of conduct to encourage and support the transformative learning process (Brookfield, 1986). Research participants shared: “People became more open and more acceptable and less judgmental after a while”, “It was a safe environment where we trusted each other”, and “there was an intimacy in the classroom provided by the researcher”. Review of the face-to-face interviews also found that collaboration with other teachers and mentoring opportunities were often sought by the research participants to further their development in the teaching profession.

**Unexpected Results**

Analysis of the face-to-face interviews found Jim, Lauren, Sarah, Samuel, Alexis, and Kelly never thought they would become a teacher. These findings bring up the question “Do CTE instructors see themselves as teachers?” While it was not the intent of this study to investigate teacher identity these findings bring many unanswered questions that might drive future studies. These questions might include: Can you develop a concept of “self” for teaching and if you don’t develop a sense of self for teaching do your students succeed?
Conclusion

Transformative learning can be described as the action of closely inspecting one’s beliefs, values, and assumptions in order to gain understanding and develop new knowledge (Mezirow, 1990, 2000). Changing the way one looks at current and past events can spark the beginning of personal and social growth which then develops into a transformation. It has been agreed on that transformative learning is a series of actions that changes our present way of looking at matters that effect how we maneuver through everyday life (Brookfield, 1986; Cranton, 1996; Mezirow, 1994, 1995).

This research project employed a learning opportunity through teacher professional development that focused on developing critical cultural competence. This model of professional development was presented in three phases and created a learning experience built on Mezirow’s 10 phases of transformative learning. Since transformative learning is learning through action each phase was designed to trigger a learning process of accepting a different meaning perspective (Mezirow, 2000). Descriptive data, personal reflections, group dialog, and face-to-face interviews were used in the analysis of this research study.

Overall, analysis of the descriptive data, personal reflections, group dialog, and face-to-face interviews found that seven of the research participants in this study had begun to experience phases one through five of Mezirow’s transformative learning. Findings also showed that Lauren and Scott experienced phases five and six of Mezirow’s transformative learning. Analysis of the data indicated the key factors of transformative learning (critical thinking skills, personal self-reflection, classroom discussions and dialogues, and mentoring) were utilized to produce the transformative learning experience. However, there were findings that indicated
personal reflection skills were underdeveloped. This lack of personal reflection skills may halt the ability to reflect on one’s own practice, to grow, and change professionally.

The development of critical cultural competence occurs when behaviors, attitudes, and policies integrate within a specific system and come together to transform that system to actually participate in cross-cultural environments (Cross et al., 1989). Cultural competence is a developmental process that happens over a period of time and that evolves from a commitment and dedication to provide a service so that all can experience educational equality (Cross et al., 1989). Analysis of the face-to-face interviews found Lauren, Sarah, Julianne, and Alexis experiencing Milner’s concept of colorblindness.

Findings also indicated that the eight research participants’ value education and professional development. As cultural competence is a developmental process that occurs along a continuum it is possible that the research participants would further develop their knowledge and skills in the area of cultural competence if opportunities for further education through professional development were presented.

Social identity theory outlines certain characteristics and defines categories that make an individual a member of a group (Hogg et al., 1995). It defines what one should think, how one should feel, and how one should behave. Occupation, race, nationality, religion, and gender are just a few examples of the ways that people use to form social identities (Grice, Jones, & Paulson, 2002). Human beings are constantly classifying and evaluating where they “fit” that helps them develop a sense of self. Analysis of the face-to-face interviews found that Jim, Lauren, Sarah, Samuel, Julianne of the research participants never thought they would become a teacher. These findings bring up the question “Do CTE instructors see themselves as teachers?”
Summary

Chapter I provided an overall introduction to the purpose of this study. Chapter I also described the theoretical and conceptual framework for this research study. Chapter II provided a review of research-based literature in the fields of democratic education, social identity, multicultural education, cultural competence, and transformative learning theory. Chapter III outlined the methodological approach and design of the research study. Chapter IV presented the data and the analysis of the data collected from the research participants collected during this three phase research study. Based on the interviews conducted after phase I, phase II, and phase III of this research study several themes emerged from the data. Discovered themes were perceptions uncovered during the research participants’ in the project, identified values of the research participants, and beliefs that solidified research participants’ social identity as it related to group connectedness. Chapter V will discuss the findings, provides recommendations for further studies, shares a reflection by the researcher, and provide a conclusion to the research project.
Chapter V: Discussion, Recommendations, and Conclusions

Introduction

Chapter I provided an overall introduction to the purpose of this study. Chapter I also described the theoretical and conceptual framework for the research study. Chapter II provided a review of research-based literature in the fields of democratic education, social identity, multicultural education, cultural competence, and transformative learning theory. Chapter III outlined the methodological approach and design of the research study. Chapter IV presented the data and the analysis of the data collected from the research participants during this three phase research study.

This chapter will discuss the themes and how they relate to the literature review in Chapter II. Also discussed in this chapter will be the implications of the findings, limitations of the study, and recommendations for future research. Given that reflection has long been seen in the literature as an essential method in looking at the personal and professional self (Cooper et al., 2011; Rodgers, 2002) this chapter includes a researcher reflection section. Because of my academic connection to this study it was important to reflect on the results in order to challenge attitudes, values, and beliefs that may not be working in my current position as an educator of adult students (Mezirow, 1990).

Significance of the Study

This qualitative research study developed and analyzed a transformative learning experience as it relates to developing critical cultural competence through self-awareness of eight CTE instructors. In a professional development setting I applied Mezirow’s Transformative Learning Theory to uncover a transformative learning experience. Research participants engaged in critical thinking skills, critical discourse, and personal reflection while being monitored by me.
Data was collected during all three phases of this research study. Multiple data sources provided a means in which to enhance the findings as data collected in one area was used to shed light on data collected in another area (Creswell, 2013; Merriam, 1998). Data collected in Phase I included background and demographic information; information on students, school, and curriculum; information on diversity training and preparation; participation in Harvard’s Project Implicit, and IAT reflection questions. Data collected in Phase II included personal reflection questions after each activity as well as final reflection questions for the entire Phase II experience. The reflection questions used after each activity were developed by Cooper, et al., (2011) as a means to explore self-awareness. The reflection question used after Phase I and Phase II were developed by Kember, et al., (2002) as an instrument to measure reflective thinking. Data collection in Phase III consisted of analyzing and coding the face-to-face semi-structured interviews. These final interviews attempted to take a rich and meaningful look at the possible transformative learning experience of each participant. To ensure accuracy in coding the interviews an experienced research faculty member was used in the position of intercoder.

Data analyses of this research study uncovered three major themes: perceptions, values, and beliefs (Creswell, 2013; Yin, 2009). Each theme contained subthemes that were tied to the literature discussed in Chapter II. Subthemes for perceptions included IAT, Milner’s Five Conceptual Repertoire of Diversity, and White privilege and are linked to the concepts of multicultural education. Subthemes for values included education and professional development and are connected to the concepts of Erikson’s Theory of Identity Development. Subthemes for beliefs were career and teaching and are related to the concepts of Social Identity Theory.

Data analysis also uncovered concepts of transformative learning for each of the participants. The findings of transformative learning were connected to the 10 phases of
Mezirow’s Transformative Learning Theory. The findings of this study implied that transformative learning is “learning through action” (Mezirow, 2000, p. 6). This is in alignment with Cross (1989) who believed cultural competence is a developmental process that actually happens over a period of time and that evolves from a commitment and dedication to providing a service so that all can experience educational equality. Both of these findings are consistent with the literature and drive the recommendations for future research.

Review of Research Question

The primary question that guided this study was: How does a self-awareness transformative learning experience develop critical cultural competence in CTE instructors? There were two ancillary questions that were also considered: 1) How does the practice of critical reflection construct CTE instructors’ ability to develop self-awareness of critical cultural competence? 2) How does involvement in critical discourse construct CTE instructors’ ability to develop self-awareness of critical cultural competence?

Review of the Findings

Important to the field of CTE are the major findings concerning the primary research question: How does a self-awareness transformative learning experience develop critical cultural competence in CTE instructors? All eight of the research participants experienced some level of transformative learning as it pertains to development of multicultural self-awareness and critical cultural competence. There were also findings that aligned with advanced transformative learning as Lauren and Scott made changes to their approaches in the classroom based on this transformative learning experience. Examples included changes in communication with students, changed graphic representation of students, and awareness of student names. Since the professional development aspect of this research study employed critical thinking, personal
reflection, critical discourse, and mentoring it is not an unexpected finding that some levels of transformative learning transpired (King, 1997; Taylor, 1998). Since transformative learning is a uniquely individual experience it was not an unexpected finding that not all participants responded the same to the learning experience (King, 1997; Taylor, 1998).

The first ancillary question was: How does the practice of critical reflection construct CTE instructors’ ability to develop self-awareness of critical cultural competence? Findings indicated underdeveloped personal reflection skills in the research participants. Personal self-reflection is the process that enables the adult learner to question the accuracy of assumptions and beliefs that are rooted in past experiences. For adult learners to have the ability to reflect on one’s own practice, to grow, and change professionally is to be an effective practitioner (Cranton, 1996; Mezirow, 1991; Sparks, 1999). In analyzing the personal reflections of the research participants, I found answers to the reflection questions lacked depth and failed to delve into one’s own practice as participants answered questions with “yes” and “no” responses.

The second ancillary question was: How does involvement in critical discourse construct CTE instructors’ ability to develop self-awareness of critical cultural competence? Findings indicated that CTE instructors were able to engage in critical discourse when provided the correct environment. Research participants shared: “People became more open and more acceptable and less judgmental after a while”; “It was a safe environment where we trusted each other”; and “there was an intimacy in the classroom provided by the researcher”. To foster effective rational discourse, a safe and accepting environment which is free from judgment is necessary in order to reduce and ease the possible psychological and emotional distress the participants may encounter (Mezirow, 2000). It was my role to provide the correct environment to foster positive critical discourse for the research participants.
Review of the Themes

In this section I will revisit the themes and subthemes found in Chapter IV. The three major themes were: perceptions, values, and beliefs. Subthemes include: perceptions of self, perceptions of students, perceptions of others, education, professional development, vocation, and teaching.

Perceptions

Perceptions can limit the way we observe our surroundings and can be a driving force in how we handle circumstances (Mezirow, 1978, 1991, 1995). Research participants shared that this transformative learning experiences addressed perceptions that were deeply rooted during reflection on the IAT. Data analysis of the face-to-face interviews found that there were still perceptions of the concept of “color-blindness” as it relates to their students. Participation in the privilege walk activity significantly changed the perceptions that the research participants had of each other. Not only were the participants surprised and embarrassed with the results of the privilege walk activity, but they also shared their gratefulness for the activity.

Values

This research study found that the research participants valued education and professional development. As instructors in secondary education, when adolescent identity is developing, career decisions such as finishing high school, seeking employment out of high school or continuing on to college are important (McWhirter, Rasheed, & Crothers, 2000). It is during this period that Erikson (1968) believed that vocational development is part of the larger undertaking of identity development. This value of education and professional development enable career and technical education instructors to develop attitudes, knowledge, skills, and dispositions that assist all students in becoming productive workers (Brown, 2001; Rehm, 2008).
Beliefs

Social identity is defined as “part of an individual’s self-concept that derives from his knowledge of his membership of a social group (or groups) together with the value and emotional significance attached to that membership” (Tajfel, 1978, p. 63). Bar-Tal (1998) goes further to define group beliefs as those beliefs that are shared by members of a group and that clarify their oneness. Teachers do change lives forever. This research study raises the question: If one does not identify with being a teacher, can they truly be effective?

Implications

Important pedagogical approaches as well as educational implications for CTE instructors, teacher educators, professional developers, and administrators were suggested as a result of this study. The findings of this research study support the prioritization to help CTE instructors acquire the attitudes, knowledge, skills, and dispositions that are needed to be effective in today’s classroom (Cooper, He, & Levin, 2011; Chou, 2007; Gay, 2010; C. Grant, Elsbree, & Fondrie, 2004; Ladson-Billings, 1995). To be effective in today’s classroom CTE instructors need time and opportunities to develop, master, and reflect on effective ways of working with their students.

A model of teacher professional development that is primarily focused on expanding well-defined and skillful classroom practice is not adequate to the demanding vision of today’s teaching and schooling (Little, 1994). Research on transformative learning has enhanced our understanding of changing perceptions, values, and beliefs. This research study was designed as professional development focusing on a transformative learning experience which led to critical cultural competence. The findings imply that through a transformative learning experience research participants developed a greater understanding of the perceptions they hold, the values
they take to the classroom, and the beliefs they have about career and technical education. Transformative learning can be described as the action of closely inspecting one’s beliefs, values, and assumptions in order to gain understanding and develop new knowledge. (Mezirow, 1990, 2000). By reframing perceptions they start the process of personal and social change (Mezirow, 1990). These changes can lead to the development of critical cultural competence. The development of critical cultural competence could significantly impact future CTE student achievement (Cooper et al., 2011; Darling-Hammond, 2006).

The demands on today’s CTE instructors are to be knowledgeable about their profession, to maintain high academic standards, to teach all types of students, apply teaching strategies that create success, and be responsible for their students’ academic progress. However, CTE instructors need further opportunity to develop attitudes, knowledge, skills, and dispositions that make them more effective in today’s classroom and that serve diverse learners effectively (Cooper et al., 2011; Darling-Hammond, 2006). These findings add to the research on how CTE instructors can face the challenge of better preparing their students by developing attitudes, knowledge, skills, and dispositions that will allow them to assist all students.

These findings have implications for teacher educators as well. These findings add to the research on how CTE instructors can create inclusive environments that help address the challenges present in today’s diverse classroom through additional training and support (Allison & Rehm, 2006; Banks, 1997; Banks, 2006; Bell, 1997; Cooper et al., 2011; Grant & Sleeter, 2006; Nieto, 2000). As Mezirow (1991) stated:

We professional adult educators have a commitment to help learners become more imaginative, intuitive, and critically reflective of assumptions; to become more rational through effective participation in critical discourse; and to acquire meaning perspectives
that are more inclusive, integrative, and discriminating, and open to alternative points of view. (p. 224)

Teacher educators can design learning experiences that seek to transform their students’ knowledge, skills, and dispositions.

**Evaluative Criteria**

A qualitative research approach allows the selection of a number of research design. For this study, I selected a case study approach (Creswell, 2013). Since the area of CTE instructors’ development of multicultural self-awareness through a transformative learning experience, had not been previously studied, the qualitative approach offered the benefit of an inductive and deductive analysis (Creswell, 2013). I also “positioned myself” in the research study allowing my personal experiences (e.g. background, classroom and life experiences) to shape my interpretation of the information gathered in the study (Creswell, 2013, p. 47).

This research study attempted to fill a gap in the CTE literature by giving scholarly attention to cultural diversity in today’s CTE classroom (Rios, 1992). With that in mind I was dedicated to rigorous qualitative research. To ensure rigor Creswell’s evaluative criteria was employed. This evaluative criterion focuses on verification (Creswell, 1998). Creswell identifies eight procedures for verifying qualitative research findings and recommends that at least two be employed during evaluation (Creswell, 1998). This research study employed four of the eight procedures.

**Prolonged engagement.** Prolonged engagement is met by spending sufficient time in the field to become familiar with the situation, blend in to gather authentic data, overcome previous held assumptions, and build trust (Creswell, 1998). Providing a three phase study created the opportunity for prolonged engagement.
**Triangulation.** Triangulation involves using multiple data sources in a research study to increase understanding (Creswell, 1998; Lincoln & Guba, 1985). A triangulation of sources was employed as data were collected at different times and compared participants having different viewpoints. The diversity of the research participants created rich, powerful, comprehensive, and well-developed data to analyze. Multiple theoretical perspectives were also employed to examine and interpret the data collected during all three phases.

**Peer debriefing.** Peer debriefing is defined as “a process of exposing oneself to a disinterested peer in a manner paralleling an analytical session and for the purpose of exploring aspects of the inquiry that might otherwise remain only implicit within the inquirer's mind” (Lincoln & Guba, 1985, p. 308). Continual contact with the committee co-chair was maintained by me throughout this study. This created an opportunity for me to be aware of biases, perspectives, and assumptions as well share emotions that were being uncovered and developing during the research study.

**External audits.** External audits provide evaluative opportunity during the research study for summarization, assessment of adequacy, and feedback (Creswell, 1998; Lincoln & Guba, 1985). Through continual contact with committee members, as well as employment of an intercoder, ongoing external audits were present during the research study.

**Limitations of the Study**

This research study was conducted with a small sample population of CTE instructors. Because this research study was limited to CTE instructors enrolled in a public southwest university, generalized conclusions about factors that promote transformative learning experiences of CTE instructors cannot and should not be drawn. Furthermore, because this research study was limited to teachers who qualify for their teaching endorsement based
primarily upon their business and industry experiences, I cannot make generalizations about CTE instructors that participated in a traditional teacher program.

The topics and content covered in this research study may also be a limitation. Perception changes can be difficult to discuss or even acknowledge. This study began with a disorientating dilemma (investigating thoughts and feeling that people may be unwilling or unable to report) and as the sole researcher, it was my responsibility to create a safe environment where participants felt supported and encouraged during all activities.

My academic connection to the research study could be seen as a limitation. As a current doctoral student in career and technical and multicultural education I may have been inclined to impose my own critical pedagogical practices and passion to developing critical cultural competence because I believe it promotes student achievement. Awareness of this allowed me to be highly vigilant and thorough in my approach to the research study. This awareness also gave me the opportunity to cognitively address any inappropriate biases that may affect the data collection and analysis. As a strategy towards extreme thoroughness in qualitative research, I employed a systematic and self-conscious approach to design, data collection, interpretation, and communication (Drisko, 1997; Mays & Pope, 1995). As I employed this approach, the integrity of this research study was maintained throughout the research process.

**Biases**

While every effort was made to maintain neutrality, biases may have impacted the interpretation of the results (Lincoln & Guba, 1985). While researcher bias can be looked upon as a weakness of qualitative case study, a vested interest and passion for the research study can be seen as strength. The theoretical and analytical framework that guided this research study helped to reduce biasness. To be clear, my thoughts and perceptions towards CTE instructors
was that they have not been exposed to multicultural education and that this could create a lack of critical cultural competence in the classroom.

Other biases that could have impacted my findings include the way in which data were collected and the timeframe of the study. Preconceived ideas about what the outcomes would be may have impacted the way in which I collected my data and the timeline I allowed for that collection. It was thought that the research participants would better articulate their experiences. One of the ways I thought they would better articulate was in the amount of time they spent describing the experience. The primary focus of the first year teachers were classroom management, creating lesson plans, and developing competency in classroom technology and not on the diverse student population. I also held preconceived notions about the amount of time that I needed to spend collecting rich and meaningful data. Six weeks limited the timeframe for talking in depth about the changes the participants experienced or to elaborate on how they put those changes in to action.

**Recommendations for Further Research**

This study has implications for future research and practice. While the study did not examine every aspect of developing multicultural self-awareness through transformative learning experiences, the results did provide a basis for future research on the topic. Based on the findings of this research study, there are several recommendations for further studies which address developing critical cultural competence, teacher identity, ongoing professional development, and development of personal reflection skills.

Additional studies that address continued development of critical competence are needed and suggested here:
A longitudinal qualitative research study could be conducted to determine after an initial transformative learning experience research participants continued on a path of developing critical cultural competence.

A longitudinal qualitative study spanning at least one year and designed as a three phase continuum professional development on critical cultural competence could be conducted to determine if ongoing professional development in critical cultural competence is beneficial to CTE instructors by building on prior learning experiences.

Studies that examine CTE teacher identity are necessary. A quantitative survey including CTE instructors in multiple regions could be conducted to determine if CTE instructors see themselves as teachers. These results could be applied to other research studies regarding Social Identity Theory, student achievement, and teacher longevity. If you don’t belong to the “in” group – do you stay in the field? Can you develop a concept of “self” – I am a teacher? If you don’t believe you are a teacher – do your students succeed?

Further examination of the development and use of personal reflection skills of CTE instructors could be considered. An exploratory sequential mixed methods research study (Creswell & Plano Clark, 2011) designed to examine the development of reflection skills in CTE instructors could be conducted. This study could determine how many CTE instructors use personal reflection, is there a need to develop personal reflection skills, and the best way to develop those skills.

A replication of this study that includes CTE instructors beyond their first year of teaching could be developed. As a large portion of CTE instructors do not enter the classroom through the traditional teacher preparation programs the first year in the classroom is spent learning day to day operations such as methods, classroom management, and administrative duties. Attitudes,
knowledge, and skills develop and change beyond the first year of teaching that could affect the results of the research study.

Lastly, any of these studies could be applied to other teachers who have entered the classroom via an alternative route to licensing. These research studies would address the importance of multicultural education for all of today’s teachers – Alternative Route to Licensure (ARL), Teach For America (TFA), and even substitute teachers.

**Researcher’s Reflection**

As I participated in this study it became apparent that I was also undergoing another transformative learning experience in my academic journey. I have developed an understanding that as I become engaged in multicultural education I will continue to be stretched, develop new understandings, and find compassion towards others. As uncomfortable as it has been at times, this growth has been one of the most exhilarating experiences of my academic journey.

During this research study I discovered that new CTE instructors are overwhelmed their first year of teaching. It is important to understand that as I continue in my journey of educating CTE instructors. The demands of large class sizes, multiple learning styles, lack of support, advancement in technology, and students with social and emotional issues create an extremely challenging job for any new teacher. This is especially true for the teacher entering the classroom without a traditional teacher education background. This research study provided me with an opportunity to look at CTE instructors in a different light.

Having the opportunity to experience transformation in others especially as it relates to developing critical cultural competence stirred many emotions. To begin with, I was not expecting to have such a diverse group of research participants. This diversity created sincere and significant outcomes as the participants had such different life experiences to share. I often
found myself excited about the revelations and then deeply saddened by the pain. I do believe that my role as researcher was to facilitate the study. During the facilitation, I found it hard not to embrace the entire learning experience my participants were having. This balancing act did enable me to develop the skills of an empathetic persuader, a role model, a collaborative learner, or a guide, rather than an authoritarian person who would dictate what and how learners should learn (Mezirow, 1991). According to Mezirow (1991), adult educators have a responsibility to help their students become more “imaginative, intuitive, and critically reflective of assumptions; to become more rational through effective participation in critical discourse; and to acquire meaning perspectives that are more inclusive, integrative, discriminating, and open to alternative points of view” (p. 224). I did not expect this research study to assist me in developing these attitudes, knowledge, skills, and dispositions.

Conclusions

Beyond delivering education, the focus of this research study was to shape change in self-understanding and basic “ways of knowing” (King, 2005, p. 2). Creating an environment for CTE instructors to understand themselves and their world in new ways can open the door for new perceptions – perceptions that lead to cultural competence. An introduction to the key elements of transformative learning promotes shifts in understanding (King, 2005). Research participants were able to question their previously held perceptions, beliefs, and values in order to develop the attitudes, knowledge, skills, and dispositions to be successful in their diverse classrooms.

Since adult learning is considered a lifelong journey, continuing to create and provide learning opportunities that focus on developing critical cultural competence in CTE instructors will help nurture and support student achievement. By doing this, opportunities to move towards
a deeper and more meaningful understanding of others and of shared experiences are likely to present themselves.
Appendix A: Consent Form

TITLE OF STUDY: A Case Study Analysis of Career and Technical Instructors’ Development of Multicultural Self-Awareness through Transformative Learning Experience

INVESTIGATORS: Dr. Christine Clark; Cindy Bezard

For questions or concerns about the study, you may contact Dr. Clark at 702.895.3888 or Cindy Bezard at 702.277.4812.

For questions regarding the rights of research subjects, any complaints or comments regarding the manner in which the study is being conducted you may contact the UNLV Office of Research Integrity – Human Subjects at 702-895-2794, toll free at 877-895-2794, or via email at IRB@unlv.edu.

Purpose of the Study
You are invited to participate in a research study. The purpose of this research study is designed to explore transformative learning experiences of Career and Technical Education instructors’ as it relates to developing cultural competence through self-awareness.

Participants
You are being asked to participate in the study because you fit this criteria: are 1) willing to participate in the study, 2) are business and industry licensed Career and Technical Education instructors, 3) are instructors who were able to meet with the researcher and attend individual and group sessions will be taken through the informed consent form process.

Procedures
If you volunteer to participate in this study, you will be asked to do the following: Participation in this research study is divided into three phases and is estimated to take five hours.
Phase I – 1 hour (these can be done on your own before meeting for Phase II)
  - Interview questions
    - Background/demographic questions
    - Perceptions of students, school, and curriculum questions
    - Perceptions of diversity training/preparation questions
  - Implicit Association Test (https://implicit.harvard.edu/implicit/)
    - Critical reflection questions
Phase II – 3 hours (group meeting at UNLV’s College of Education in a private classroom)
  - PowerPoint Presentation
    - Definition of Cultural Competence
    - Milner’s Five Conceptual Repertoires of Diversity
• Hall’s Iceberg Analogy of Culture
  Autobiography Activity
  • Autobiography Activity Reflection Questions
  Bio-Poem Activity
  • Bio-Poem Activity Reflection Questions
  Privilege Walk Activity
  • Privilege Walk Activity Reflection Questions
  • Final Reflection Questions

Phase III – 1 hour (face-to-face scheduled meeting with participants in a College of Education classroom at UNLV)
  • Final Interview Questions

Benefits of Participation
Participation in the research study could develop attitudes, knowledge, and skills that could improve instructors’ approaches towards diversity in the classroom thus ensuring academic achievement for all students. This experience could provide Career and Technical Education instructors with information they could share with other instructors, use to change educational policy, and use to enhance professional development.

Risk of Participation
There are no any serious risks for this research study. We are, however, dealing with topics of cultural identity, perceived or unperceived stereotypes and biases, white privilege, and diversity which can often be uncomfortable for individuals to discuss openly. Because of this if at any time you are not comfortable you can chose to not answer a question, end the interview, or leave the study immediately with any consequences.

Cost/Compensation
The total amount of participation time is estimated at five hours. Phase I estimated at one hour, phase II estimated at three hours, and phase three estimated at one hour. Phase I includes interview questions, completion of Implicit Association Test, and reflection questions. Phase II includes a Power Point presentation, activities, group discussion, and reflection questions. Phase III is a face-to-face interview. Lunch will be provided during phase II and a $10 Starbucks card will be given at the completion of the final face-to-face interview.

Confidentiality
All information gathered in this study will be kept as confidential as possible. No reference will be made in written or oral materials that could link you to this study. All records will be stored in a locked facility at UNLV for 3 years after completion of this study. After the storage time the information gathered will be kept by the researcher for further studies.

Voluntary Participation
Your participation in this study is voluntary. You may refuse to participate in this study or in any part of this study. You may withdraw at any time without effect to your relations with UNLV. You are encouraged to ask questions about this study at the beginning or any time during the research study.
**Participant Consent**
I have read the above information and agree to participate in this study. I have been able to ask questions about the research study. I am at least 18 years of age. A copy of this form has been given to me.

_________________________________________  _____________________
Signature of Participant  Date

____________________________________
Participant Name (Please Print)
Appendix B: Phase I

Interview Questions

Demographics and Background

1. What is your age?
2. What is your race/ethnicity?
3. What is your gender?
4. What is your educational background?
5. What is your business background?
6. Have you ever participated in cultural or diversity courses?
7. What topics did that cultural or diversity courses cover?
8. What is your present socioeconomic status?
9. Did you have prior teaching experience before becoming a teacher in the CCSD?
10. How many years have you been employed at your current school?

Appendix C: Phase 1

Interview Questions

Students, School, and Curriculum

1. What are the demographics of your school?
2. Is your school considered urban, suburban, or rural?
3. What are the gender, socioeconomic status and ethnicity/race of the students attending your school?
4. What grades do you teach?
5. How would you describe the cultural climate of the school?
6. Do you think it is important to ask students to evaluate your work to determine if you are meeting their needs?
7. Do you feel as though you could be doing more to give a broader cultural flavor to your subject matter to your students?
8. Do you feel there are ways your school can help you achieve this?
9. Do you feel that you are developing good relationships with your students, regardless of their race or ethnicity?
10. How does your ethnicity affect your teaching methods in the classroom?

Appendix D: Phase I

Interview Questions

Diversity Training/Preparation

1. Does your school/CCSD offer professional development opportunities?
2. Does your school/CCSD offer professional development training in diversity or cultural competence for all staff?
3. How many sessions have you had this school year focused on working with racially/ethnically diverse students or faculty?
4. What topics have been covered on diversity?
5. Have you found sessions on diversity helpful?
6. Are there more sessions on diversity needed?
7. What topics would you like to see presented on diversity?
8. Should diversity professional development be about certain individuals?
9. What are your observations of the cultural competence of at your school?
10. What role has CCSD played in professional development on diversity?

Appendix E: Phase I

IAT Reflection Questions

1. As a result of this course I have changed the way I look at myself.
2. This course has challenged some of my formerly held ideas.
3. As a result of this course I have changed my normal way of doing things.
4. During this course I discovered faults in what I had previously believed to be right. (Kember et al., 2000, p. 395)
Appendix F: Phase II

Definition of Cultural Competence

“Cultural competence is not a state at which one arrives; rather, it is a process of learning, unlearning, and relearning. It is a sensibility cultivated throughout a lifetime. Cultural competence requires awareness of self, reflection on one’s own cultural position, awareness of other’s positions, and the ability to interact genuinely and respectfully with others.”

(American Evaluation Association, 2011, p. 3)
### Appendix G: Phase II

Milner’s Five Conceptual Repertoires of Diversity

<table>
<thead>
<tr>
<th>Concepts</th>
<th>Explanations</th>
<th>Teacher’s Assertions</th>
<th>Instructional Consequences</th>
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</table>
| **Color-blindness**  
*(conceptions of race matter!)* | Teachers avoid and reject their own and their students’ racialized experiences in their decision making. Teachers see race as a taboo topic that is irrelevant and inconsequential to the success of their students. Teachers do not recognize the multiple layers of privilege associated with their race and how race can manifest in teaching, learning, and curricula experiences. | If I acknowledge the racial or ethnic background of my students or myself, then I may be considered racist. If I admit that people experience the world differently and that race is an important dimension of people’s experiences, I may be seen as “politically incorrect.” I may offend others in the teacher education classroom discourse if I express my beliefs and reservations about race. I should treat all my students the same regardless of who they are, what their home situations are, or what their or what their experiences | Teachers teach their students in a myopic manner; they do not consider how racially diverse students experience the world inside the classroom, inside the school, and in society. Curriculum and instructional decisions are grounded in a White norm that students of color just have to deal with. |
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<th>Concepts</th>
<th>Explanations</th>
<th>Teacher’s Assertions</th>
<th>Instructional Consequences</th>
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<td>Cultural conflict (conceptions of culture matter!)</td>
<td>Inconsistency emerges in the teaching and learning context based on (among other factors) race, gender, geography, and socioeconomic disconnections between teachers and students. Conflicts may be historically or currently grounded and shaped.</td>
<td>I must teach students based on how I would teach my own children, not based on their own cultural ways of knowing. I’m not going to tolerate students joking around with me or with each other during class. If they misbehave, I’m going to send them to the office—period! “Those” students need to adapt and assimilate into the culture of my classroom and accept the consequences if they do not.</td>
<td>Teachers refer students to the office when students of color “misbehave.” Teachers refer students to special education when students are not grasping curriculum material rather than attempting to adjust their instructional practices to better meet the learning styles of the culturally diverse students. Disproportionate numbers of African American students are suspended and expelled.</td>
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<tr>
<td>Myth of meritocracy (conceptions of socioeconomic status matter!)</td>
<td>The idea that people are rewarded based (solely or mostly) on their ability, performance, effort, and talents. Systemic and institutional structures and barriers are not considered. Individual achievement is seen as an independent variable.</td>
<td>All groups of people were born with the same opportunities and if students or people just work hard, put forth effort, and follow the law, then (like a formula) they will be successful. My grandparents and/or great-grandparents immigrated to the United States, and they made something of their lives. There is no excuse for other groups not to succeed.</td>
<td>Teachers do not give students multiple chances for success. Teachers do not delve (more) deeply into the reasons behind students’ lack of engagement or the reasons why students do not complete their homework. The reality that students’ performance may be a consequence of students’ economic realities is not considered in the classroom.</td>
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<tr>
<td>Concepts</td>
<td>Explanations</td>
<td>Teacher’s Assertions</td>
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<td>Deficit conceptions (mind-sets matter!)</td>
<td>Teachers approach their work concentrating on what students do not have rather than focusing on what students actually bring into the learning environments (their assets). Teachers have a narrow conception of what it means to be normal or successful; these views are based on their own cultural references that may be inconsistent with others.</td>
<td>I need to distance the students of color from the “horrors” of their present cultural conditions. The students are lacking so much. I am being sensitive to culturally diverse students when I feel sorry for them. If I expect too much, then I am setting students up for failure. Students need teachers who try to make up for what they are lacking and not necessarily those who build on what students because some bring so little. It is my job to concentrate mostly on</td>
<td>Teachers spend their time remediating students instead of building on the knowledge students actually bring into the classroom. Teachers refuse to allow students to develop their own critical and analytic thinking skills. Students are expected to regurgitate a right answer that the teacher or the textbook has provided. Very little discussion and creative learning opportunities are available. Students are given busy work in hopes that the students will not talk; the classroom is</td>
</tr>
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<td>(Low) Expectations (optimism and efficacy matter!)</td>
<td></td>
<td>viewed as the teacher’s space, and the students are expected to conform and to be quiet.</td>
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<td>Teachers do not believe that culturally diverse students are capable of rigorous academic curriculum so they provide unchallenging learning opportunities in the classroom.</td>
<td>I am actually helping to build self-esteem among my students when I give them easy work that they can complete without difficulty. Those poor students cannot meet high expectations because they do not have the resources to do so. My job is to just allow students to get by and, at best, pass their standardized tests. When they accomplish this (passing of their standardized tests), my job is done.</td>
<td>Teachers water down the curriculum and provide only minimal curricular expectations. Teachers focus on basic skills only and push students to get a “right” answer in all academic subject matters. Students are not allowed to think outside the box, develop critical and analytic thinking skills, or question power structures in order to improve unfair, inequitable learning environments</td>
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Appendix H: Phase II

Iceberg Analogy of Culture

Appendix I: Phase II

Autobiography Activity

Instruction to Participants

Think and write about how you identify with each of the following aspects of culture: gender/sexual orientation, ethnicity, race, class, geography, age, exceptionality (abilities and/or disabilities), socioeconomic status, religion, and language. Also, feel free to write additional aspects of culture that may be important to you such as family members, occupation, hobbies, personal or family values, and the like.

Begin with the aspect of culture that currently has the most impact on you as an educator, and work down to what you perceive to be the least influential aspect of culture influencing you.

Take each aspect of culture one at a time, explain how your membership in a particular subgroup has helped create both the kind of person and the kind of educator you are now or want to become.

Appendix J: Phase II

Autobiography Activity Reflection Questions

1. In what ways do your experiences with various cultural subgroups influence how you identify yourself to others?

2. In what ways do your experiences with various cultural subgroups influence your personality?

3. In what ways do you think the sharing of your experiences will impact how others may receive, perceive, or believe you as an educator?

Appendix K: Phase II

Bio-Poem Activity

Format for Bio-Poem with Sample

(Line 1)  First name
(Line 2)  Three or four adjectives that describe the person
(Line 3)  Important relationship (daughter of . . . , mother of . . . , etc)
(Line 4)  Two or three things, people, or ideas that the person loved
(Line 5)  Three feelings the person experienced
(Line 6)  Three fears the person experienced
(Line 7)  Accomplishments (who composed . . . , who discovered . . . , etc.)
(Line 8)  Two or three things the person wanted to see happen or wanted to experience
(Line 9)  His or her residence
(Line 10) Last name

Appendix L: Phase II

Bio-Poem Activity Reflection Questions

1. What was the hardest part about writing your Bio-Poem? Why?

2. What is the purpose of this activity in relation to diversity issues and cultural competence?

Appendix M: Phase II

Statements for Privilege Walk Activity

1. If you never feel conflicted or confused regarding your ethnic identity, take one step forward.
2. If you or your parents came to the U.S. involuntarily (not by choice), take one step back.
3. If you felt comfortable inviting your friends to your home growing up, take one step forward.
4. If you ever felt ashamed of talking about your family members or their backgrounds, occupations, or experiences for fear of what others would say, take one step back.
5. If you always felt you lived in a safe community, take one step forward.
6. If you ever had to depend on public transportation daily, take one step back.
7. If you ever went without health insurance for long periods of time, take one step back.
8. If you were raised in a community where there was crime and violence, take one step back.
9. If you had opportunities to attend courses or workshops or to participate in field experiences outside of school to develop a hobby or interest, take one step forward.
10. If you felt you were denied access to educational opportunities because of your cultural or linguistic background growing up, take one step back.
11. If you ever felt that society questioned your educational background (i.e., school you attended, courses you took, etc.), take one step back.
12. If you ever felt you were denied access to social opportunities because of your cultural or linguistic background, take one step back.
13. If you felt you were able to accomplish what you wanted to accomplish in school so long as you tried hard enough, take one step forward.

14. If you were discouraged from considering certain career options because of your cultural or linguistic background, take one step back.

15. If you had access to a computer at home while you were growing up, take one step forward.

16. If you believe you can be anything you want to be, take one step forward.

Appendix N: Phase II

Privilege Walk Activity Reflection Questions

1. What happened?

2. How did this exercise make you feel?

3. What were your thoughts as you did this exercise?

4. What have you learned from this experience?

5. What can you do with this information in the future?

Appendix O: Phase II

Final Reflection Questions

1. As a result of this course I have changed the way I look at myself.
2. This course has challenged some of my formerly held ideas.
3. As a result of this course I have changed my normal way of doing things.
4. During this course I discovered faults in what I had previously believed to be right. (Kember et al., 2000, p. 395)
Appendix P: Phase III

Final Interview Questions

At the beginning of this semester you signed an agreement to participate in a research study of transformative learning and its impact on CTE instructors’ professional development experiences. This involved identifying conscious and unconscious bias, becoming informed on cultural competence, implementing transformative learning through critical discord and reflection, and this structured one hour long interview. Today I will ask some open-ended questions. There is no right or wrong answers to these questions. I will not be judgmental about your responses. Please describe your responses the best way you can.

The interviews will be audio taped using a digital voice recorder.

1. What is a highlight of being a teacher?
   a. Is that why you went into teaching?
2. What does it mean to be a teacher?

3. Describe your classroom.
4. How do you get to know your students?

5. What professional development opportunities have you participated in?
   a. Has the professional development been successful?
   b. What did you like about those sessions?
6. How has professional development assisted you in teaching?

7. Where there any aha moments?
8. Of those aha moments, what have you taken back to the classroom?
9. What changed for you after the cultural competent professional development?
   a. Do you believe you are now experiencing views that are different that you used to? If so, in what ways?
   b. Do you now see yourself and the world around you in different ways than before? If so, in what ways?
   c. Can you describe any new ways you may think or act?
   d. If nothing changed, why?

10. What really stands out about this (cultural competence professional development) experience?
Appendix Q: IAT Studies

IAT Studies Showing Validity with “Real-World” Subjects updated 3 Nov 2008

Voting Behavior

Among undecided voters assessed one month before a local Italian election IAT measures of implicit political attitudes successfully predicted subsequent voting behavior.


An IAT measure predicted future shift in judgments about desirability of enlarging a U.S. military base in Vicenza, Italy, for 129 residents who initially reported themselves as undecided.


Votes by self-reported undecided voters in a representative sample of Italian voters (Itanes) were predicted by their IAT measures of liberal–conservative ideology


Mental Health

A suicide-ideation IAT differentiated among adolescents who were nonsuicidal, suicide ideators and suicide attempters.

A self-injury IAT differentiated non-self-injuring from self-injuring adolescents and improved the prediction of self-injury beyond that achieved with demographic and psychiatric predictors.


An IAT measure of phobic reactions to spiders differentiated spider-phobics from controls and showed reduction in phobic associations following exposure therapy.


In a sample of patients meeting DSM-IV criteria for panic disorder, an IAT measure of panicrelated associations predicted severity of panic symptoms, agoraphobic avoidance, and distress in response to panic stressor.


In a sample of persons diagnosed with panic disorder, change in a panic IAT over the course of a 12-week treatment predicted subsequent change in panic symptoms.


An IAT measure of self–shame association significantly distinguished the a sample of 60 women meeting diagnostic criteria for borderline personality disorder (BPD) from a comparison sample of healthy women (N = 60).

In a sample of women who met diagnostic criteria for borderline personality disorder (BPD), an IAT measure of self–anxiety association significantly distinguished 23 diagnosed with comorbid posttraumatic stress disorder (PTSD) from the comparison group (N=37) not diagnosed with comorbid PTSD.


**Medical**

ER and general internal medicine resident physicians’ implicit bias against Black patients predicted fewer recommendations for thrombolysis for Black than White myocardial infarction patients.


The laboratory of Reinout Wiers in Netherlands has produced numerous results showing the use of IAT measures in understanding adolescents at risk to develop serious alcohol and other drug problems. Here are a few references to this large body of work.


An IAT measure of attitudes of 5th-grade children toward smoking showed variations as a function of parental smoking, and was responsive to effects of tobacco-prevention activities.


**Employment**

IAT correlated with hiring managers’ ethnic bias in inviting Swedish vs. Arab–Muslim job applicants for hiring interviews.


IAT measure implicit bias against injecting drug users (IDUs) predicted intention to change jobs of nurses working with IDUs.


**Forensics**

An IAT measure revealed that pedophiles have an association between children and sex, whereas nonpedophilic offenders have an association between adults and sex.


The IAT method successfully distinguished truth-tellers from criminal liars, including drug users, traffic offenders, and murderers.


Appendix R: UNLV IRB Exempt Notice

UNLV Social/Behavioral IRB - Exempt Review
Exempt Notice

DATE: July 17, 2015

TO: Christine Clark
FROM: Office of Research Integrity - Human Subjects

PROTOCOL TITLE: [774742-1] A Case Study Analysis of Career and Technical Education Instructor's Development of Multicultural Self-Awareness through Transformative Learning Experience

ACTION: DETERMINATION OF EXEMPT STATUS
EXEMPT DATE: July 17, 2015
REVIEW CATEGORY: Exemption category #1&2

Thank you for your submission of New Project materials for this protocol. This memorandum is notification that the protocol referenced above has been reviewed as indicated in Federal regulatory statutes 45CFR46.101(b) and deemed exempt.

We will retain a copy of this correspondence with our records.

PLEASE NOTE:
Upon final determination of exempt status, the research team is responsible for conducting the research as stated in the exempt application reviewed by the ORI - HS and/or the IRB which shall include using the most recently submitted Informed Consent/Assent Forms (Information Sheet) and recruitment materials. The official versions of these forms are indicated by footer which contains the date exempted.

Any changes to the application may cause this protocol to require a different level of IRB review. Should any changes need to be made, please submit a Modification Form. When the above-referenced protocol has been completed, please submit a Continuing Review/Progress Completion report to notify ORI - HS of its closure.

If you have questions, please contact the Office of Research Integrity - Human Subjects at IRB@unlv.edu or call 702-895-2704. Please include your protocol title and IRBNet ID in all correspondence.

Office of Research Integrity - Human Subjects
4505 Maryland Parkway . Box 451047 . Las Vegas, Nevada 89154-1047
(702) 895-2704 . FAX: (702) 895-0805 . IRB@unlv.edu
Appendix S: Timeline

**Timeline.** For the research study, the following timeline was put forward. This timeline was intended to guide the research study from beginning to end. The dates listed were tentative and may have changed. Given the possibility of change the extent of that change was minimal as there are beginning and ending dates associated with course enrollment.

<table>
<thead>
<tr>
<th>Start Date</th>
<th>End Date</th>
<th>Steps</th>
</tr>
</thead>
<tbody>
<tr>
<td>06.07.15</td>
<td>07.07.15</td>
<td>Complete IRB.</td>
</tr>
<tr>
<td>08.24.15</td>
<td></td>
<td>Starting date for fall semester.</td>
</tr>
<tr>
<td>08.24.15</td>
<td>10.23.15</td>
<td>Introduction of research study to students and beginning of recruitment.</td>
</tr>
<tr>
<td>11.02.15</td>
<td>11.06.15</td>
<td>Phase II – PowerPoint presentation, completion of autobiography and bio-poems, participation in privilege walk, classroom discussion to engage in rational discourse, and second set of reflection questions administered.</td>
</tr>
<tr>
<td>12.07.15</td>
<td>12.18.15</td>
<td>Phase III – One-hour long individual interviews.</td>
</tr>
<tr>
<td>12.01.15</td>
<td>04.01.15</td>
<td>Analyze, organize, and write up data by case themes, results, and implications.</td>
</tr>
</tbody>
</table>
References


presented at the annual conference of the American Vocational Association, Las Vegas, NV.


Brown, B.L. (2001). Diversity training: Myths and realities. Columbus, OH: ERIC Clearinghouse on Adult, Career, and Vocational Education. (ED 454 403)


American Heart Association. Retrieved from
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10.1161/circulationaha.107.742775


Dev, P. C. (1992). *Multicultural education: What do we need to know to better meet our students' needs?* Retrieved from


http://journals.cambridge.org/action/displayAbstract?fromPage=online&aid=8964696&fileId=S0003055400175227


R. Lattuca (Eds.), *Qualitative research design in higher education: Expanding perspectives* (2nd ed.) (pp. 191-201). Boston, MA: Pearson Custom Publishing.


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Curriculum Vitae

Cynthia L. Bezard

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College of Education
Department of Teaching and Learning
Career & Technical and Postsecondary Education
1305 Capri Drive Unit C
Boulder City, Nevada 89005
702-277-4812
cbezard@cox.net
cbezard@unlv.nevada.edu

EDUCATION

Ph.D. University of Nevada, Las Vegas
Curriculum and Instruction Career & Technical and Postsecondary Education – cognate studies in Multicultural Education
(ABD – anticipated graduation date Spring 2016)
Dissertation Title: A Case Study Analysis of Career and Technical Instructors’ Development of Multicultural Self-Awareness through Transformative Learning Experience

M.Ed. Abilene Christian University
Higher Education and Student Affairs 2013

B.S. University of Nevada, Las Vegas
Workforce Education and Civic Engagement and Leadership 2011

A.S. University of Nevada, Las Vegas
Radiologic Technology 1981

PROFESSIONAL EXPERIENCE

February 2016 – Present Adjunct Professor – School of Education
Nevada State College
1021 E. Paradise Hills Drive
Henderson, NV 89002

Instructor for EDRL 474 HO1 Methods for English Language Learners. Responsible for delivering teaching strategies for the ELL high school population to CCSD teachers in a hybrid format.
November 2015 – present  Education Programs Professional
                     Striving Readers Comprehensive Literacy (SRCL)
                     Grant Project Associate
                     Nevada Department of Education
                     Office of Student and School Supports

Maintain federally-mandated documentation system, attend formal SRCL training workshops on
the primary elements of the grant, provide on-site monitoring of southern Nevada
SRCL districts, create SRCL monitoring reports in an electronic format, collaborate in the
gathering and analysis of required SRCL data, and maintain effective communication systems
with district level partners.

September 2013 – present  Doctoral Graduate Teaching and Research Assistant
                        Department of Teaching & Learning,
                        University of Nevada, Las Vegas
                        4505 S. Maryland Pkwy
                        Las Vegas, Nevada 89154

Assist with Career & Technical and Postsecondary Education research, facilitation of
undergraduate and graduate courses, professional presentations, student counseling, student
recruitment, student retention, and student advisement.

January 2015 – April 2015  ESL Academic Advisor
                          Las Vegas-Clark County Library District
                          1401 E. Flamingo Road
                          Las Vegas, Nevada 89119

Investigate and collect information regarding postsecondary education and training for
intermediate/advanced ESL students; create individual career and higher education plans;
manage career and postsecondary information; implement and report on attainment of grant
objectives, assist with the collecting of information and the writing of the final report for the
grant.

May 2013 – July 2013  ESL Instructor
                         Las Vegas-Clark County Library District
                         1401 E. Flamingo Road
                         Las Vegas, Nevada 89119

Prepare lesson plans for English Language Learners; teach English grammar, writing, reading,
speaking, and listening skills; teach pronunciation and accent reduction.

November 2012 – June 2013  Long Term Substitute
                            J.D. Smith Middle School/Clark County School District
                            5100 West Sahara Ave
                            Las Vegas, Nevada 89146
Organize lesson plans for ELA Resource Room – 6th and 7th grade; Co-Teach in U.S. History, World Geography, and Pre Algebra; assist in I.E.P development and management; Operate Easy Grade Pro, Classxp, Curriculum Engine, and CCSD Interact.

**November 2012 – March 2013**

**Boys’ Basketball Coach**  
**J.D. Smith Middle School/Clark County School District**  
1301 E. Tonopah Ave.  
North Las Vegas, Nevada 89030

Train and instruct the boys’ basketball team, develop leadership skills while promoting team work.

**August 2012 – November 2012**

**Substitute Teacher – Clark County School District**  
5100 West Sahara Ave  
Las Vegas, Nevada 89146

Assumed duties of regular classroom teacher; follow instructions left by regular classroom teacher; maintain normal classroom routines and discipline procedures; assist with bus, lunchroom, playground, and hall duty.

**June 2008 – June 2010**

**Restaurant Manager**  
**Boulder City Museum and Historical Association**  
1305 Arizona St  
Boulder City, Nevada 89005

Organize, direct and evaluate food and beverage service; recruitment and training of staff; review staff development; prepare shift scheduling; manage payroll and time keeping; monitor staff performance and provide feedback; initiate administrative actions; purchase and maintain food inventory; monitor revenues and expenses; assist in fundraising; ensure practice of health and safety regulations; negotiate supplier arrangements for food and beverages products and orders; negotiate with clients for use of facilities for catering and special events; prepare reports and presentations for the Board of Directors; answer phone calls and schedule reservations; work with Health Department to ensure food safety; work with Boulder City Chamber of Commerce to set up events and mixers.

**January 2006 – June 2008**

**Small Business Owner – Treasured Times Teahouse**  
550 California Ave  
Boulder City, Nevada 89005

Organize, direct, evaluate food and beverage service; file tax forms, state forms, city forms, and federal forms; computer knowledge of word, excel, power point, and quicken; monitor staff performance and provide feedback; negotiate salaries; purchase and control retail inventory; track revenue and expenses; practice health and safety regulations; negotiate supplier arrangements for food and beverage products; schedule reservations, catering, and special
events; answer phone calls and determine client needs; work with Health Department to ensure food safety; work with local business and Chamber of Commerce.

1606 Royal Troon Court
Boulder City, NV 89005

Provided the service of using a long-arm sewing machine to sew together the three layers of a quilt (quilt top, batting, and backing). Maintained accurate records tracking appointments, customer files, income and expenses.

**December 2002 – June 2005 Fiddlesticks Quilts – Manager**
1229 Arizona Street
Boulder City, NV 89005

Schedule employee work hours, greet customers, set up sales opportunities, keep store clean, neat, and orderly, check inventory, merchandise effectively, teach classes, create new projects, prepare class presentations, maintain high customer service level, perform other duties as assigned.

**June 2001 – June 2003 Boulder City Horseman’s Association Secretary**
1 Corral Road
Boulder City, NV 89005

Take minutes of general business meetings, follow Roberts Rule of Order, create and distribute newsletter, maintain office files, prepare reports, briefings and presentations for the Board of Directors, perform lot inspections, read water meter and prepare billing, work with other board members to prepare annual budget and present to general membership, identify medical emergencies, manage BCHA animal welfare, work with city officials regarding building permits and zoning issues, work with the LVCCVA and Boulder City Chamber of Commerce, and manage sponsorship of State of Nevada High School Rodeo.

**March 2001 – December 2006 Barnyard Bunch 4-H – Leader**
1 Corral Road
Boulder City, NV 89005

Organize and conduct monthly meetings, maintain financial records, prepare state reports, coordinate travel for competitions, prepare club members for completion, teach animal husbandry, maintain animal information files, develop emergency kits, create fund raisers, teach club members 4-H principles, work with State of Nevada Extension office.

**January 2000 – October 2003 Hutch of Heaven – Founder**
1606 Royal Troon Court
Boulder City, NV 89005
Created and maintained a 501(c)(3) organization dedicated to the rescue of rabbits and community education, performed clerical functions to meet state and federal standards, maintained financial reports, maintained medical files on rescued rabbits, manage proper care of rescued rabbit.

**March 1988 – October 1990**  
**United States Navel Reserves – Hospital Corpsman**  
Naval and Marine Reserve Center – Las Vegas, Nevada

Responsible for administrative duties, sick call, training and assisting physician with physicals and preliminary exams.

**January 1981 – February 1992**  
**Radiologic Technologist**  
St. Rose Dominican Hospital  
102 Lake Mead Drive  
Henderson, NV 89005

Provide patient care in the following areas: routine x-ray, surgery, mammography, and emergency room. Perform administrative duties to maintain patient files, maintain a safe and clean work environment, attend professional training, maintain inventory for special procedures and daily operations, maintain and operate darkroom.

**UNLV COURSES TAUGHT AND/OR DEVELOPED**

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<thead>
<tr>
<th>Course</th>
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<tr>
<td>EDCT 230</td>
<td>Intro to Career and Technical Education</td>
<td>Spring 2016</td>
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<tr>
<td>EDWF 439/EDW 539</td>
<td>Methodology of Teaching Workforce Education</td>
<td>Fall 2015</td>
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<tr>
<td>EDWF430/EDW 530</td>
<td>Tools for Success</td>
<td>Spring 2014</td>
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<tr>
<td>EDW 748</td>
<td>Postsecondary/Adult Supervised Teaching</td>
<td>Fall 2013</td>
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<tr>
<td>EDW 719</td>
<td>Leadership in Workforce Education and Development</td>
<td>Fall 2013</td>
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</tbody>
</table>

**PRESENTATIONS**


PROFESSIONAL JOURNAL ARTICLES


GRANTS


TEACHING LICENSES

State of Nevada License for Education Personnel
License No. 0000095441
Business & Industry with Marketing and Business Administration Endorsements Substitute

PROFESSIONAL DEVELOPMENT

Nevada Tests of Adult Basic Education (TABE) January 2015
Certificate of Completion

College and Career Readiness Standards for Adult ESL January 2015
Professional Development Workshop

Research Practicum
Multicultural Organizational Development consultancy Fall 2014
at a Career and Technical College in the Pacific Northwest

DACUM Training Institute (The Ohio State University) August 2014
Certified to coordinate and facilitate The DACUM occupational analysis process.

SCID (The Ohio State University) Systematic Curriculum and Instructional Development Certification August 2014

DACUM International Seminar, University of Nevada, Las Vegas December 2013
UNIVERSITY ACTIVITIES

Campus Co-Advisor, UNLV DECA
Resource Speaker for Teaching and Learning Department Licensure Information Sessions

PROFESSIONAL ORGANIZATIONS

American College Professional Association
Association for Career and Technical Education
Association for Career and Technical Education Research
National Association Multicultural Education
Nevada Association for Career and Technical Education
Nevada Association of Teacher Educators

PUBLIC SERVICE ACTIVITIES

Judge FCCLA 2014 State Leadership Conference
Judge FCCLA 2013 State Leadership Conference
Volunteer Boulder Dam Museum and Historical Association
Volunteer Boulder City Chamber of Commerce
Volunteer God Behind Bars – Central Christian Church
Volunteer Boulder City Horseman’s Association
Volunteer Spread the Word Nevada Books and Buddies Mentor Program

HONORS

Alpha Chi National Honor Scholarship Society
Dean’s Honor Roll - UNLV

AWARDS AND RECOGNITION

May 2014 Edward Pierson Scholarship
January 2011 Bernard Osher Reentry Scholarship
October 2008 Boulder City Chamber of Commerce Business of the Quarter
June 2007 Boulder City Chamber of Commerce Business of the Year 2006-2007
December 1988 Navy Sailor of the Quarter