2014

Career technical education instructors' perceptions of adult students' academic ability in career technical education classes

III Atlas Helaire

Recommended Citation

Pepperdine University

Graduate School of Education and Psychology

CAREER TECHNICAL EDUCATION INSTRUCTORS' PERCEPTIONS OF ADULT

STUDENTS' ACADEMIC ABILITY IN CAREER TECHNICAL EDUCATION CLASSES

A dissertation submitted in partial satisfaction

of the requirements for the degree of

Doctor of Education in Educational Leadership and Policies

by

Atlas Helaire, III

January, 2014

Linda Purrington, Ed.D. – Chairperson

This dissertation, written by

Atlas Helaire, III

under the guidance of a Faculty Committee and approved by its members, has been submitted to and accepted by the Graduate Faculty in partial fulfillment of the requirements for the degree of

DOCTOR OF EDUCATION

Doctoral Committee:

Linda Purrington, Ed.D., Chairperson

Robert R. Barner, Ph.D.

Christine Hoffman, Ed.D.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

DEDICATION

I have a dream…

To be an orator and an educator,

To shape and mold children to be innovators.

"I Have a Dream Too" by Atlas Helaire, III

This study is dedicated to my loving mother, Marie Ann Helaire, who passed away on August 5, 2013. My desire was to complete this journey in time for her to see me accomplish the most challenging endeavor upon which I have ever embarked, but God had other plans. I am grateful for her spirit that encouraged me to believe that I could accomplish anything. I believe that she knew her journey was coming to an end as she called me "Doc" well before I finished my dissertation. That was her way of telling me that she knew I would finish my course and that she was proud of me. Her guidance and motherly love had a huge impact on the person I have become.

This study is also dedicated to my wife, Shannin Helaire (aka "Butterfly"). Thank you for your patience for the past 4 ½ years. Attaining my doctorate has been a lifelong goal. Because of your support and understanding, I have finally reached that goal. Your sacrifice was monumental in helping me finish this program. Although I will be the one walking across the stage, we both earned this degree. I would not have been able to do this without you. So thank you from the bottom of my heart. You are one of a kind. "A thousand moons that are blue could not be as rare as you." After God, you are my everything. I love you with all of my heart.

To my daughters, you have been great throughout this entire process. Daddy needed to spend so much time completing schoolwork and you never complained. You gave me the space I

needed to be a good student. I am proud that God chose me to be your father. I wouldn't trade any of you for the world. Daddy loves you.

To my father and my siblings, you have always made me feel like I was the smartest person you knew. Even though we know that's not the case, your encouragement has always given me the push to try to make you proud. I hope that you are as proud of me as I am to say that I am a "Helaire." In all of my efforts, I have always been conscious of the fact that I represent my family wherever I am. Like "Momma" would always say, we have the responsibility of carrying the family name in a way that would maintain our dignity and the community's respect. I hope that this accomplishment has contributed to our family's legacy. I love you.

ACKNOWLEDGEMENTS

When I first received the call from Dr. Linda Purrington to tell me that I was accepted in to the Educational Leadership, Administration, and Policy program at Pepperdine University, I was honored beyond belief. Little did I know that this same person would walk me step-by-step through the dissertation process. Dr. Purrington, you have such a way with words, you could encourage anyone to believe that they could accomplish the most difficult task. There were times I thought I might not make it through, times when you expressed more confidence in me than I had in myself. Thank you for your guidance, patience, and persistence in getting me through the final stage of this program.

To Dr. Barner, thank you for giving me words of encouragement and challenging me to have an uncompromising sense of integrity as an administrator. Your example is characterized by a father's love for his own children. You made me feel like you considered me as one of your own children. I will forever be grateful for the interest you took in providing me with guidance and wisdom. Because of you, I believe that there is a greater purpose for me. When it comes to fruition, I will definitely be ready.

To Dr. Doug Leigh and Dr. Anthony Collatos, thank you for not accepting marginal work. Your approaches to teaching challenged me to produce work that was worthy of a doctorate. I appreciate your commitment to maintaining the integrity and quality of academia by refusing to compromise your expectations. I truly admire your candid demeanor.

To Dr. Linda Jungwirth, thank you for your encouraging words and optimism. Your approach to teaching inspires students to believe that all things are possible to those who are willing to dream. Continue instilling hope and confidence in people.

To Dr. Hoffman, thank you for taking the time to participate on my dissertation committee and allowing me to conduct my research at the study site. You encouraged me to take on the challenge of earning my doctorate not knowing that this was a lifelong goal I already had. Your commitment to developing educational leaders has helped me to grow tremendously as an administrator. You saw potential in me and had the insight to give me a chance at being an administrator at a young age. I will forever be grateful that you not only gave me a chance, but also invested in my growth as an educational leader. Thank you.

To Dr. St. Gean, thank you for your encouragement and guidance. I have learned so much about being an administrator through your mentorship. You have provided wisdom and experience that has helped me to grow tremendously as an administrator.

To my co-workers and everyone who has ever provided emotional support to complete this work. Thank you so much.

And last, but definitely not least, thank you C7! You are my second family. It was such a privilege to meet each and every one of you. The time in the classroom went by too fast. It is too bad that we do not have to spend any more weekends together. You are all so talented and brilliant. We should put all of our resources together and form a super school. I wish you all the best.

VITA

Education

Pepperdine University, West Los Angeles, CA   2014
        Doctor of Education in Educational Leadership,
        Administration, and Policy Clear Administrative Credential

Argosy University, Santa Ana, CA   2008
        Master of Arts in Educational Leadership

San Joaquin Office of Education via Los Angeles County   2007
        Office of Education (LACOE), Downey, CA
        Preliminary Administrative Credential

Chapman University, Orange, CA   1998
        Bachelor of Arts in Psychology

Professional Experience

The Study Site   2008 – Present
        Director of Programs & Student Support Services

Colin P. Kelly Elementary School   2007 – 2008
        Resource Teacher

Roosevelt Elementary School   1998 – 2007
        Teacher (Grades 1st – 4th)

ABSTRACT

The purpose of this qualitative survey study was to explore the student performance expectations, classroom management and instructional practices, and related professional experiences and specialized training of Career Technical Education (CTE) instructors at a Regional Occupational Center in Southern California in order to learn more about how these instructors achieved 80% or higher CTE course completion rates for adult students for 2 or more consecutive semesters. The study was grounded in the *Pygmalion Effect Theory,* which postulates that instructors create a *Self-Fulfilling Prophecy* based on the instructors' perceptions of student academic abilities.

Data were collected from 6 CTE instructors and 126 adult students via an anonymous online survey that consisted of 18 questions for instructors and 14 questions for students organized into 4 categories. Analysis of the data resulted in 4 conclusions:

1. CTE instructors who have high expectations for students promote high student achievement by exhibiting behaviors that require students to learn independently. Participating instructors implemented independent activities in which students had to seek answers prior to asking instructors for assistance.

2. Instructors who have high expectations for student achievement utilize multiple and diverse instructional strategies, assess students frequently, and provide frequent feedback throughout the course. This approach provided students with sufficient opportunities to be successful in class.

3. Establishing high expectations for classroom behavior when the course first starts and dealing with individual students when behavioral issues arise discourages inappropriate

behavior. Participating instructors reviewed behavioral expectations throughout their courses.

4. CTE instructors who participate in ongoing professional development after completing a credentialing program promote high student achievement. Each participating instructor participated in ongoing professional development after completing the credentialing program.

Based on the findings and conclusions of this study, it is recommended that: (a) CTE instructors continue to implement instructional strategies that are student-centered and fully engage students, (b) ROC/Ps continue offering and placing a heavy emphasis on professional development, (c) ROC/Ps require instructors to create and review the course syllabus on the first day of class to assist in establishing expectations for classroom behavior, and (d) CTE administrators continue to monitor new instructors' progress throughout the credentialing process.

Chapter 1: Introduction

Introduction to Problem

Career Technical Education (CTE) is an educational curriculum that prepares students to enter the workforce and or to pursue post-secondary education (California Department of Education [CDE], 2006; Levesque et al., 2000, 2008; Threeton, 2007). Regional Occupational Centers (ROCs) are centralized campuses that offer CTE programs intended to give students training in various career areas, a structure that provides students with practical experience and knowledge relevant to industry standards. Negative perceptions of CTE and increased emphasis on core academic courses have contributed to a decline in enrollment and completion rates in CTE courses (Brown, 2009; Gaunt, 2005; Gaunt & Palmer, 2005; Levesque et al., 2008). Classroom instructors' expectations and practices could possibly influence completion rates positively and or negatively. Studies of the *Pygmalion Effect* suggest that instructors have the capability to improve student achievement by establishing high expectations (Alvidrez & Weinstein, 1999; Madon, Jussim, & Eccles, 1997; Rubie-Davies, 2010; Rubie-Davies, Hattie, & Hamilton, 2006). Students are more likely to perform better academically when instructors expect satisfactory academic outcomes and are less tolerant of inappropriate behavior. Replicating the expectations and practices of CTE instructors with satisfactory student completion rates has the potential to improve the overall student completion rate in CTE courses. This study seeks to explore and describe the expectations for student achievement and the classroom and instructional practices of CTE instructors who have consistently had an 80% or higher adult student CTE course completion rate.

Origin of CTE

CTE in America dates back to the colonists' apprenticeship programs where craftsmen taught their respective trades (Banks, 1998; Gordon, 2008; McCaslin & Parks, 2002; Schultz, 1987). During this time, teaching strategies were not regulated or standardized; no legislation existed that governed teaching practices. According to McCaslin and Parks (2002), master craftsmen often sent apprentices to other schools after completing their training to receive academic instruction because the craftsmen did not possess the skills to deliver non-vocational instruction. The sole purpose of apprenticeship programs during this period in American history was to prepare students to enter into the workforce directly mostly in such areas as agriculture and mechanical trades. Since this type of education was predominantly hands-on training, a strong emphasis on academic instruction was not necessary prior to CTE becoming a recognized part of the curriculum.

Colleges and universities provided the first structure for formal CTE course offerings (Banks, 1998; Gordon, 2008; McCaslin & Parks, 2002). These institutions focused primarily on training students for specific occupations. Policy makers coined the phrase *land-grant institutions* for such schools because the United States government granted land to states across the nation to establish these colleges and universities under the Morrill Act. Iowa was the first state to accept the Morrill Act (Iowa State University, 2012), using the funds to establish Iowa State University. Examples of other establishments of land-grant institutions are Tuskegee University, Massachusetts Institute of Technology (MIT), and Georgia Institute of Technology (Georgia Tech; Association of Public and Land-Grant Universities [APLU], 2012; Gordon, 2008). The original focus of such schools was to provide students with both theory and practical

knowledge and graduate competent students who would not require additional training to begin a skilled job immediately after completing training.

Changes in curriculum, ideology, and educational policy resulted in various legislative initiatives and subsequent amendments in CTE. Since the Smith-Hughes Act of 1917 that established CTE as a separate curriculum for training in agriculture, homemaking, and trades, policy makers have redefined and expanded CTE to increase the benefits to American society (Gordon, 2008). Each act and amendment has been aimed at maintaining and improving accessibility to training programs. Other goals of CTE legislation have included providing funding for training instructors, war veterans, nurses, and the economically disadvantaged. The following policies have had a profound impact on CTE:

- Smith-Hughes Act of 1971 – Established CTE as a separate curriculum from traditional education.

- National Defense Education Act of 1958 – Emphasized incorporating science, mathematics, foreign language, and technical competencies in the curriculum.

- Manpower Development Training Act of 1962 – Provided training and identified jobs for the unemployed and underemployed.

- Vocational Education Act of 1963 – Provided funding for part-time employment for youth to continue schooling full-time.

- Carl D. Perkins Vocational and Applied Technology Education Act of 1990 – Emphasized integrating core academic standards with CTE.

- School-to-Work Opportunities Act 1994 – Provided a framework for collaborative partnerships with schools and businesses for students to transition from school to work.

- Carl D. Perkins Vocational and Technical Education Act of 1998 – Included the Tech Prep program, which leads to an associate or baccalaureate degree. Also leads to placement in appropriate employment.

- Carl D. Perkins Career Technical Education Improvement Act of 2006 – Increased accountability measures by requiring more rigorous academic content. Placed a stronger focus on business and industry. Changed the title from *vocational education* to Career Technical Education.

(For a more extensive list of legislative policies and objectives, see Appendix A).

Comparison of CTE and Traditional K-12 Education

California's CTE system differs from the traditional K-12 educational system in that CTE is not compulsory education (Browder, 2007; CDE, 2011c; US Legal, 2010); students are not required to take CTE courses. Each state has established its own legislation to ensure children have access to a free and appropriate education. California's Education Code 48200 mandates that a student must attend school from age 6-18 unless the student graduates before turning 18 years old (CDE, 2011d; Education Commission of the States [ECS], 2010; Legislative Analyst's Office [LAO], 2004; US Legal, 2010). There are core courses such as English, math, and science that students must complete in order to graduate high school and become eligible to attend college. The California Department of Education has designated CTE courses as electives, grouping these courses in 15 industry sectors ranging from Arts/Media, & Entertainment to Transportation (CDE, 2011c). It is not necessary for students to complete CTE courses to either graduate high school or enter college. Although the state of California has approved some CTE courses to satisfy college admission requirements, student enrollment in such courses is completely voluntary.

Policy makers have attempted to make CTE a requirement for graduating. Assembly Bill 2446 aimed to reduce California's dropout rate by providing students with more course options (Official California Legislative Information [OCLI], 2010a). Currently, students are required to complete at least one Visual and Performing Arts (VAPA) or foreign language course in order to graduate. This bill would give students the choice of taking a CTE course to satisfy this requirement, preparing students with skills to obtain gainful employment immediately following high school. However, this bill was vetoed due to lack of funding (California's Children, 2010), and CTE courses in California remain electives. Another bill, AB 1330, allows students to take CTE courses to satisfy VAPA credits necessary to graduate from high school (OCLI, 2011a, 2011b). This legislation commenced with the 2012-2013 school year.

Another distinction between traditional K-12 schools and CTE in California is the structure via which schools provide courses (Association for Career and Technical Education [ACTE], 2011; CDE, 2011c). Traditional K-12 schools are generally comprehensive elementary schools, middle schools, and high schools where students take all courses on a centralized campus. CTE has three different structures: (a) Joint Powers Agreements (JPAs), (b) county board of education-run CTE programs, and (c) single school district operated CTE programs (ACTE, 2011). Joint Powers Agreements are entities made of two or more independent school districts that enter into a contract whereby they agree to share resources in order to operate CTE programs as a group. Joint Powers Agreements Joint Powers Agreements form a board of education, adopt bylaws, and govern the programs according to the needs of each participating district (OCLI, n.d.). In county board of education-run CTE programs, the local county office of education is responsible for all administrative decisions. These programs are generally spread

throughout the multiple school districts within the county board of education's jurisdiction. Single school districts also operate CTE programs independently.

There are 72 Regional Occupational Centers/Programs (ROC/Ps) in California (ACTE, 2011; CDE, 2011c). Of that total, 70 are Regional Occupational Programs (ROPs) where courses are spread out among several campuses throughout a school district. Twenty-five are JPAs, 43 are run by county boards of education, and six are run by single school districts. Only two ROCs are centralized campuses for students to take a sequence of CTE courses. ROCs are able to offer more sequential pathways and equipment-intensive programs than ROPs because the sole purpose of the ROC structure is to provide CTE courses (ACTE, 2011). Therefore, all of the funding is dedicated to ensuring students have the necessary equipment and facilities for quality training.

CTE Stigma

At the inception of CTE in the mid 19th century, proponents argued that hands-on training accompanied with theory was practical and more beneficial for students than the philosophical approach of traditional education (APLU, 2012; Banks, 1998; Gordon, 2008). America's reliance on agriculture and industrial production supported the need for a more practical approach to education. Events such as the American Industrial Revolution and World Wars I and II increased the need for people to be prepared to enter the workforce directly. The abundance of labor required to produce machinery and weapons was fitting for CTE because it did not require extensive amounts of training at traditional colleges and universities (Gordon, 2008). Employers had to use additional resources to retrain employees who were graduating from colleges and universities because these employees did not have the practical knowledge required for those jobs.

However, critics have long debated the value of CTE. Since the formal beginning of CTE in the mid-19th century, opponents have argued that CTE does not provide students with quality instruction and job preparation (Gaunt, 2005; Gaunt & Palmer, 2005; Lewis & Cheng, 2006; Stevens & Vermeersch, 2010). This group of scholars and policy makers believe that CTE curriculum is not rigorous enough to challenge students. In particular, technological advances during the Cold War era gave rise to concerns that American education was falling behind other nations (Banks, 1998; Gordon, 2008; McCaslin & Parks, 2002). When Russia launched Sputnik, the United States government became convinced that America's educational system needed to focus more on core academic subjects such as math, science, and language. Policy makers relegated CTE courses to fulfilling elective requirements, making CTE courses irrelevant for entering post-secondary education (McCaslin & Parks, 2002). This shift in relevance caused people to view CTE as courses for students who were not pursuing higher education, and schools began designating these classes for students who did not perform well academically and or displayed behavior problems.

This view has perpetuated the myth that CTE curricula are not rigorous or relevant. Tracking, the placement of students in classes based on academic ability, has become commonplace in education (Lewis & Cheng, 2006; Van de Gaer, Pustjens, Van Damme, & De Munter, 2006). Schools generally schedule CTE courses in lower tracks where instructors do not expect students to achieve as well as students in higher tracks. Students in lower track courses are discouraged from achieving at higher levels because tracking creates a status hierarchy that instructors reinforce through consistently establishing low expectations (Stevens & Vermeersch, 2010; Van de Gaer et al., 2006). This perception has the potential to influence students to exert less effort in performing well in CTE courses.

CTE has historically faced challenges defending funding for programs as well as sustaining healthy program enrollments. Many of the challenges result from CTE's critics painting CTE courses with the same broad brush; student participants are less capable of performing well academically than non-CTE participants (Brown, 2009; Stevens & Vermeersch, 2010). The combination of negative perceptions, increased emphasis on core academic courses, and economic constraints has contributed to a decrease in the number of students who enroll in CTE courses (Bishop & Mane, 2003; Brown, 2009; Carnevale, Jayasundera, & Hanson, 2012; Gaunt, 2005; Gaunt & Palmer, 2005), resulting in fewer CTE course offerings on high school campuses. The National Center for Education Statistics (2009) reports that student participation in CTE courses declined steadily from 1990 to 2009. The average number of CTE credits students earned dropped from 4.2 to 3.6, and the average percentage of total CTE credits earned fell from 18% to 13.1%. Conversely, the number of credits students earned in traditional courses increased from 16.7 to 19, and the average percentage of total credits earned increased from 70.7% to 74.4%.

In 2008, the California Legislature placed ROC/Ps, along with other categorical programs, into what is called a Tier III program (CDE, 2011a, 2012). This policy allows school districts to redistribute funding designated for specific categorical programs for any other academic purpose. Since the legislature has placed ROC/Ps in Tier III, funding for CTE is at the discretion of school districts. CTE in California must compete with other academic areas in order to continue receiving adequate funding.

Instructor Quality can Address the Stigma

CTE instructors have the responsibility for delivering quality hands-on training in conjunction with challenging academic content. Regardless of people's perception of CTE, the

spectrum of courses included in CTE is expanding to include subjects that require instruction in core content areas such as reading, writing, math, and science: subjects that incorporate academic rigor in the curriculum (CDE, 2009; Threeton, 2007). For example, a Veterinary Assistant course includes a rigorous science curriculum. An instructor for this class needs to be skilled in teaching students how to perform the duties of a Veterinary Assistant as well as teaching the necessary science content to ensure students learn the information. The negative perception of CTE could influence students to believe that CTE courses are not rigorous, assuming that there is no need to exert much effort to finish a course successfully (Doolittle & Camp, 1999; Gaunt & Palmer, 2005). Instructors need to have the ability to deliver quality instruction while keeping students motivated to perform well in class despite the negative stigma some students may have attached to CTE.

Research has shown that instructors evaluate students in CTE courses more poorly than students in traditional education courses (Levesque et al., 2008; Perlmann, 1985; Stevens & Vermeersch, 2010). The perception is that CTE students lack the motivation, academic ability, and interest necessary to succeed in school. However, CTE offers training in areas that can give students an advantage in pursuing post-secondary degrees and careers. Instructors have the opportunity to motivate students to perform better by creating a Pygmalion Effect based on high expectations of students (Rubie-Davies, 2007; Sciarra & Ambrosino, 2011). Implementing high expectations and positive reinforcement could potentially increase student motivation and performance in CTE courses and improve the image of CTE. Additional empirical research related to CTE instructor expectations and methods that promote CTE student achievement is needed.

In order to qualify for a teaching credential, CTE instructors must meet different requirements than traditional K-12 instructors. Applicants for a traditional teaching credential must be highly qualified as defined by the state of California (CDE, 2007a). This means the applicants have successfully completed coursework in an accredited instructor-training program and participated in student teaching prior to being hired (CDE, 2007a; Commission on Teacher Credentialing [CTC], 2010). This gives instructors theory and practical experience to promote success in the classroom prior to obtaining an actual teaching position. CTE instructors qualify for a Preliminary Designated Subjects CTE Teaching Credential by having a high school diploma and 3 or more years of experience working in the industry of the career area the candidates desire to teach (CTC, 2010). For example, people with 3 or more years in the plumbing industry would qualify to receive a Preliminary Designated Subjects CTE Teaching Credential, thus enabling these candidates to teach any course relating to the plumbing profession. After securing a teaching position, credentialing policy requires candidates to complete a series of courses on teaching methodology at an accredited post-secondary institution or 2 years of successful in the industry sector on the preliminary credential in order to qualify for a Clear Designated Subjects CTE Teaching Credential (CTC, 2010). The instructors then have the practical knowledge to teach the subject matter from working in the industry, possessing enough experience to be considered an *expert* in that career area. The credentialing courses then give CTE teaching candidates the pedagogical skills to deliver instruction and manage a class effectively.

The founding principle of the CTE instructor-training program has experienced little change. The Federal Board of Vocational Education founded the instructor-training program on the ideology of Charles Prosser, who believed that post-secondary curricula had little or no

relevance to CTE instructor education (McCaslin & Parks, 2002). The theory-laden content would not improve an instructor's effectiveness in the classroom. However, John Dewey, among others, advocated that instructors needed training in general education as well as professional education (McCaslin & Parks, 2002). Consequently, CTE instructor-training programs are generally structured in accordance with Dewey's philosophy.

Requiring CTE instructors to have industry experience prior to credentialing is beneficial because these instructors are able to provide students with current information regarding industry standards, practices, and employment opportunities. Experience in the industry gives CTE instructors credibility when delivering instruction. Students have access to professionals who have had successful careers and are able to give students practical and theoretical knowledge. CTE instructors also have the potential to assist students with networking opportunities (McCaslin & Parks, 2002).

One aspect of the California CTE credentialing process that could negatively affect the quality of classroom instruction is that CTE instructors can begin teaching with little pedagogical knowledge. McCaslin and Parks (2002) state that instructors are more effective in delivering classroom instruction when they are fully prepared, which makes students more likely to demonstrate increases in achievement. The credentialing process for CTE instructors in California allows professionals to earn a preliminary credential before taking formal coursework in pedagogy. Instructors who do not have a proclivity for implementing effective classroom management and delivering instruction in a classroom setting may find it difficult to make the transition from working in the industry to teaching without any formal teacher training. CTE instructors who enter the class with no prior teaching experience have the challenge of providing

students with content knowledge while developing the pedagogical knowledge and skills to ensure students achieve satisfactorily.

Problem Statement

Ten instructors in an ROC for CTE in Southern California consistently demonstrate 80% or greater adult student completion rates for their CTE students. It is not known how these instructors communicate and support high expectations for CTE student performance. The opportunity exists to study the expectations these instructors hold for their CTE students and how these expectations manifest into practice.

Purpose of the Study

The purpose of this survey study was to explore the student performance expectations and related practices of CTE instructors at an ROC in Southern California in order to learn more about how these instructors achieve 80% or higher CTE course completion rates for adult students.

Research Questions

1. What are the expectations for student academic performance of Career Technical Education instructors at a Regional Occupational Center in Southern California with course completion rates of 80% or higher for adult students as self-reported by the instructors and as described by students?

2. What are the instructional practices of Career Technical Education instructors at a Regional Occupational Center in Southern California with course completion rates of 80% or higher for adult students as self-reported by the instructors and as described by students?

3. What are the classroom management practices of Career Technical Education instructors at a Regional Occupational Center in Southern California with course completion rates of 80% or higher for adult students as self-reported by the instructors and as described by students?

4. What are the professional experiences and specialized training of Career Technical Education instructors at a Regional Occupational Center in Southern California with course completion rates of 80% or higher for adult students as self-reported by the instructors?

Importance of the Study

This study sought to provide instructors with information that could help improve course completion rates among adult students at the study site. Surveying CTE instructors who teach courses with high student completion rates and adult students enrolled in these courses will provide data on factors that positively influence student achievement. This study can assist in gaining insight on how instructors create a *Self-Fulfilling Prophecy* (SFP) through conveying their perceptions of student academic ability. Being knowledgeable of how instructor expectations can improve student aptitude may help instructors to determine and implement appropriate instructional methods to encourage students to complete courses successfully.

Secondly, understanding the effects of how instructors interact with students based on the instructors' perceptions of the students' academic ability may provide insight in developing professional development to improve instructional strategies and student performance in CTE programs at ROC/Ps. The impact of teaching strategies may be of central importance to student achievement. Finding common themes among instructors who consistently have a satisfactory adult student completion rate could benefit other instructors who choose to implement these

practices. These findings have the potential to be valuable tools for informing professional development, which will improve instructor effectiveness and student achievement specifically in ROC programs.

The purpose of CTE is to provide students with training in preparation for post-secondary education or for emerging careers and entry-level positions (Levesque et al., 2000, 2008; Threeton, 2007). This study may provide insight into ways instructors can motivate students to accomplish their career goals. Improving student success could potentially help ROC/Ps serve their purpose as defined by state legislation.

Some critics of CTE believe that this type of curriculum is generally suited to non-college bound students who may have low academic achievement and or students who have behavior problems (Lewis & Cheng, 2006; Stevens & Vermeersch, 2010). Recent legislation requires CTE programs to be academically rigorous due to these negative perceptions. Exploring ways to improve student achievement in CTE settings will add value to career training and help improve its image.

This study will examine the Pygmalion Effect at an ROC in Southern California where all CTE courses are offered at a central location and are part of a sequential pathway, and where student participation is voluntary. Considering that the entire educational program at ROCs focuses on CTE, the results of this study may provide insight to the existing literature on the effects of instructor expectations in an ROC setting specific to Southern California.

Delimitations

The researcher conducted this study at one site, an ROC in Southern California. There were two participant groups: (a) instructors with 80% or higher adult student course completion rates, and (b) adult students enrolled in courses taught by qualifying instructors. The researcher

asked 10 instructors to participate in the study. The instrument for recording data was an online

Qualtrics survey with 18 open-ended questions for the instructor survey and 14 open-ended

questions for the student survey.

Limitations

One limitation of this study is that the study site is a unique organization in that ROCs are

not common in California. In fact, there are only two ROCs in the state of California: one in

Southern California and one in Northern California (California Association of Regional

Occupational Centers and Programs [CAROCP], 2008). The researcher only had access to

instructors and completion rates at the ROC in Southern California. Furthermore, the course

offerings at the other ROC vary depending on student interest and facilities. As a result, the

results of this study may not be applicable to any other educational institution.

Another limitation of this study was the availability of instructors and students to

participate in the study. The majority of instructors at the site work more than one job, limiting

their availability outside of class time to participate in the study. The student participants were

attending the study site to take courses in addition to the other daily necessities such as caring for

families or working, which may have discouraged qualifying students from participating. The

researcher needed to ensure that the survey was convenient in order to obtain a sufficient number

of participants for the study.

Assumptions

An assumption in this study was that the participants would give honest, accurate, and

thorough responses to the survey questions. For this reason, the researcher protected the

anonymity of respondents.

Another assumption was that the instructors would award Certificates of Competency and Certificates of Completion based on clearly defined objectives. Instructors were believed to hold students accountable for earning grades, not allowing students to pass without meeting the grading criteria. For example, the researcher assumed that students who had excessive absences would not be able to pass due to missing too much course content and classroom participation.

The researcher assumed that instructors have established their own lessons and topics based on the course outline and content. The study site allows instructors to develop their own assessments, but all instructors are required to grade students based on a 60/40 grading policy; 60% of the grade is based on classroom participation and formative assessments, and the remaining 40% is based on summative assessments. The instructors' backgrounds, instructional activities, and assessments were all different. However, the researcher assumed that the grading criteria would be comparable to each other although the course content was different. For example, students who master 90% of the course content would all earn a Certificate of Competency regardless of the course.

Operational Definitions

Certificate of Competency – A certificate awarded to students who complete a course at the study site with a grade of A or B. Students who earn this certificate demonstrate proficiency in all or the majority of the course objectives. This is the highest certificate a student can earn at the study site.

Certificate of Completion – A certificate awarded to students who complete a course at the study site with a grade of C. Students who earn this certificate demonstrate an average level of mastery of the course objectives.

Completion rate – A measure by which ROC/Ps determine the percentage of students who successfully complete courses. The study site only considers the students who complete courses with a grade of C or better as completers. However, for the purpose of this study, the researcher measured the adult student course completion rate by dividing the number of adult students who earn a Certificate of Competency by the total number of adult students who enrolled in the course for at least 20 hours. Students who earned a Certificate of Completion were not included in the completion rate.

Instructor expectation – How well instructors expect students to perform based on their perception of students' academic ability (Rubie-Davies, Peterson, Irving, Widdowson, & Dixon, 2010). The researcher measured instructor perceptions through surveys and coding the common themes.

Key Terms

Active Learning – "A process whereby students engage in activities, such as reading, writing, discussion, or problem solving that promote analysis, synthesis, and evaluation of class content" (Center for Research on Learning and Teaching [CRLT], 2013, p.1).

Bias effect – SFP resulting from erroneous information (Dusek, 1975).

Career Technical Education – CTE refers to "organized educational activities that offer a sequence of courses that provides individuals with coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in current or emerging professions" (Threeton, 2007, p. 70).

Differentiated teacher treatment – Situations in which instructors treat students differently based on academic ability (Kuklinski & Weinstein, 2001).

Expectancy effect – SFP or prediction resulting from accurate information (Dusek, 1975).

Regional Occupational Center/Program (ROC/P) – Career and workforce preparation for high school students and adults, preparation for advanced training, and the upgrading of existing skills (CDE, 2011c).

Pygmalion Effect – A theory that states that instructor expectations influence student achievement (Rubie-Davies, 2010).

Self-Fulfilling Prophecy Effect (SFP) – An instance where someone causes a prediction to come to fruition despite basing the prediction on false information (Babad, Inbar, & Rosenthal, 1982).

Student-Centered – Instructional activities that promote critical thinking skills and focus on student needs in order to engage students in the learning process (Maxwell, Vincent, & Ball, 2011).

Organization of the Study

This study is organized in five chapters. Chapter 1 provided the background of the study, containing a brief history of American CTE and the evolution of CTE throughout American history. This chapter established the foundation for examining how CTE instructors create the Pygmalion Effect to improve high school student academic achievement. Chapter 2 discusses the history of CTE and how it evolved throughout American history from the colonial period until the present. It also provides the reasoning for the negative stigma associated with CTE. The Pygmalion Effect Theory is discussed to address how instructor expectations potentially affect student achievement. Chapter 3 provides an explanation of the methods utilized in this study. This chapter discusses the research design, context of the study, sample of participants, instrumentation, data collection procedures, and data analysis. Chapter 4 presents the findings

gathered from the data. Chapter 5 discusses the findings, draws conclusions, and proposes

recommendations for policy, practice, and further study.

Chapter 2: Literature Review

The purpose of this survey study was to examine the effects of instructor perceptions of adult student academic ability on adult student achievement at a CTE school.

Literature Search Strategies

The researcher utilized multiple sources to search for literature on CTE and the Pygmalion Effect Theory. The sources for the majority of the information were the Academic Search Elite, ERIC, and ProQuest databases, accessed via Pepperdine University's online library. Textbooks from traditional libraries and consumer stores also provided background information.

Extent and Nature of the Literature

Literature from multiple disciplines including psychology, education, and sociology contributed to this review. Peer-reviewed journals, dissertations, textbooks, and newspaper articles contained historical, empirical, and theoretical information pertaining to the topic. There was a large body of literature pertaining to CTE and the Pygmalion Effect. However, there was little information on how instructor expectancy affects students in a CTE setting.

Overview

This chapter discusses existing literature that describes the evolution of CTE and suggests a correlation between instructor expectations and student academic performance. The terms *general education* and *traditional education* throughout this chapter will refer to curricula that exclude CTE courses. The first section will present an explanation of CTE, including a review of CTE's structure and purpose. In the second section, the researcher will discuss two opposing views of the Pygmalion Effect Theory: the concept that instructor expectancy has the potential to improve or hinder student achievement depending on the instructor's perception of student ability, as well as the importance of studying it in a CTE setting. The third section will review

the history of CTE including how its structure has evolved throughout American history. The researcher will frame the historical context of CTE as evidenced by student achievement and shifting pedagogy. The discussion will cover (a) the creation of CTE, (b) the integration of CTE into the general education curricula, (c) government funding of CTE, and (d) people's perceptions of CTE. In the final section, the researcher will discuss the connections researchers have made between instructor perception and student achievement. Topics will include (a) the origins and studies of the Pygmalion Effect Theory, (b) the Pygmalion Effect Theory's affect on individual students and whole classes, and (c) factors that influence instructor expectancy.

Theoretical Framework

This study was grounded in the Pygmalion Effect Theory, which postulates that instructors create an SFP based on their perceptions of student academic abilities (Babad et al., 1982; Kuklinski & Weinstein, 2001, Rubie-Davies, 2007). An SFP is the process by which people directly or indirectly cause a prediction to come true despite basing that prediction on false information (Babad et al., 1982; Dusek, 1975; Rosenthal & Babad, 1985). Instructors often interact with students based on their personal expectations, whether or not their perceptions of students are accurate. For example, instructors who perceive that students have the potential to perform well exhibit behaviors that promote higher student achievement (Alvidrez & Weinstein, 1999; Madon et al., 1997; Rubie-Davies et al., 2006). Instructors who have low expectations behave in ways that limit their students' opportunities to learn, thus creating an SFP (Alvidrez & Weinstein, 1999; Kuklinski & Weinstein, 2001). Therefore, the instructors can affect student achievement positively or negatively based on their perceptions of how well students can perform academically.

Another view of the Pygmalion Effect Theory posits that instructor expectations do not influence student academic performance (Alvidrez & Weinstein, 1999; Brophy, 1983). Instead, instructors develop expectations based on interactions with students, assessment data, and student behavior. According to this view, instructors' perceptions of students are accurate reflections of student performance, not an influence on student performance. Spending sufficient time interacting with students throughout the course of a class gives instructors the capacity to assess student ability accurately, nullifying the SFP (Alvidrez & Weinstein, 1999). Consequently, instructors do not alter student achievement: rather, instructors develop perceptions based on student performance.

Research through meta-analysis has proven that instructor expectancy impacts student academic performance (Kuklinski & Weinstein, 2001; Madon et al., 1997; Rubie-Davies, 2010). The effect size is small, but significant (Brophy, 1983; Jussim & Harber, 2005; Kuklinski & Weinstein, 2001). The fact that researchers find the effect size significant makes instructor expectancy worthy of further investigation. Instructors have the capability to influence students' level of proficiency positively or negatively based on the level of expectations set forth for students; research has the potential to examine how the Pygmalion Effect Theory can be used to improve student achievement.

CTE

CTE offers sequences of courses to supply the nation with a qualified workforce or to help students transition to postsecondary education (CDE, 2007a; Levesque et al., 2000, 2008). Students gain the ability to make educational and career choices based on experiences and knowledge gained in authentic settings that are aligned to industry standards. The intention of CTE coursework is to offer rigorous academic content and to provide students with technical

knowledge and job skills through hands-on training (Novel, 2009; Threeton, 2007). Legislation

requires CTE programs to offer courses that are industry current and part of a sequential pathway

(see Figure 1).
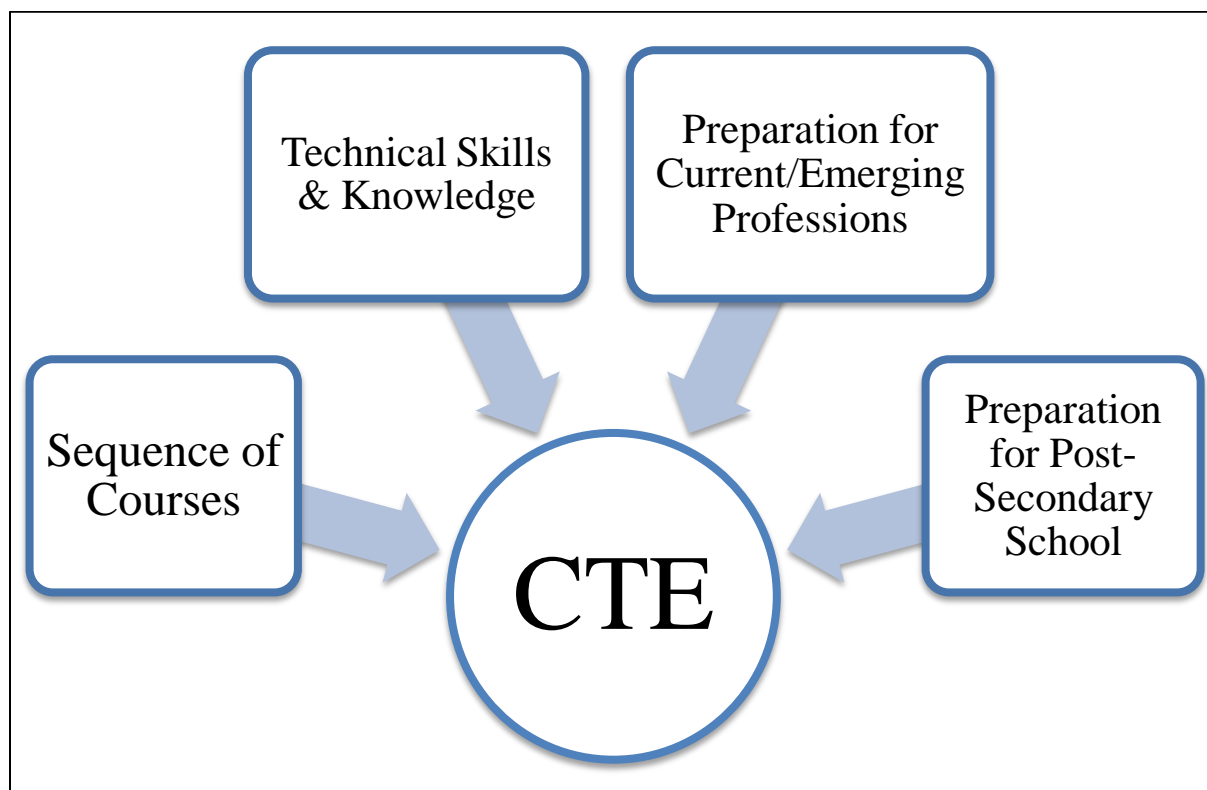
*Figure 1. C*omponents and purposes of CTE.

CTE offers courses through a variety of structures (ACTE, 2011). California offers CTE

in middle and junior high schools, high schools, colleges and universities, and ROC/Ps. ROPs

are programs that school districts or county offices offer at individual schools in addition to core

academic subjects. ROCs are school sites that only offer CTE classes, specializing in career

sectors such as Finance & Business or Arts/Media & Entertainment. There are various courses

within each sector, and courses represent multiple career paths.

The purpose of CTE is to produce a qualified workforce and help students make career

and post-secondary education choices (Rehm, 1989; Threeton, 2007). CTE allows students to

obtain training at a pre-baccalaureate level that enables them to find gainful employment.

Businesses are able to fill entry-level positions without retraining new employees, and CTE offers a quick, efficient method to develop competent laborers.

The Historical Context of CTE

Scholars and policy makers have long debated the value of CTE since its inception (Gordon, 2008; McCaslin & Parks, 2002; Rehm, 1989). This debate continues through today. Proponents of CTE believe it is a valuable educational structure, providing a way for students to obtain training that prepares them to enter the workforce directly without seeking an extensive education (Cohen & Besharov, 2002; Wonacott, 2003). This structure offers an alternative to the traditional educational track leading to college, allowing students to train in a specific or emerging career area. Opponents argue that the value of CTE is limited because it lacks academic rigor and fails to develop critical thinking skills that prepare students to adjust as necessary to changes in the work industry (Browder, 2007; Cohen & Besharov, 2002). In addition, the focus on specific career areas diminishes students' ability to become acclimated to advancements in the workplace and emerging careers (Banks, 1998; Rehm, 1989). This criticism supposes that CTE does not prepare students to be productive laborers because of its narrow scope.

Despite negative criticism and a lasting stigma, CTE continues to be a fixture in the American educational system. High school students have had access to free public CTE schools and programs since the Smith-Hughes Act made provisions to integrate CTE into the general high school curriculum (Banks, 1998; Browder, 2007). Its survival has been contingent on the perceived benefits of practical training. Policy makers have instituted legislation to extend CTE to underrepresented groups such as the economically disadvantaged, the physically disabled, women, and minorities in order to give all citizens access to CTE (Gordon, 2008; Wonacott,

2003). This effort was intended to extend the availability of practical training to all groups to provide more opportunities for people to enter the workforce.

In exchange for continued funding of CTE, legislators have enforced increased accountability measures. Each accountability measure is a performance indicator that CTE schools must meet; schools must achieve 90% of the performance-level targets (Schools Moving Up, 2008). One such measure requires CTE schools to maintain a satisfactory percentage of students who successfully complete courses.

CTE's stigma and the increased accountability measures create a challenge for CTE instructors. They are responsible for providing quality education in an environment where people continue to have negative perceptions of this educational structure (Brown, 2009; Rehm, 1989). The perception is that these courses are not academically challenging, and the students who take these courses have limited academic capabilities. Students often enroll with a false perception of CTE courses, thinking the classes require very little effort to pass (Gaunt, 2005). The combination of these circumstances may cause CTE instructors to view students as underachieving. Consequently, instructors sometimes have lower expectations for students that influence student achievement negatively (Stevens & Vermeesch, 2010). Students perform according to the expectations set by the instructors.

CTE's Evolution Throughout American History

CTE in America dates back to the colonial years when artisans trained apprentices in the artisans' respective trades (Gordon, 2008; McCaslin & Parks, 2002; Schultz, 1987). However, there were no specific school structures or institutes designated to teach these skills. McCaslin and Parks (2002) explain that it was common for master craftsmen to send apprentices to other schools for academic instruction at the conclusion of daily training because the craftsmen were

not skilled in non-vocational instruction. At the beginning stages of the CTE structure, the purpose was to prepare students to enter directly into the workforce in a specific career area. These types of jobs did not require extensive education because preparation for them required mostly hands-on training. Since then, CTE has evolved throughout American history, taking on different forms including changing the name from *land-grant institutions* to *vocational education* to *CTE*.

Training through apprenticeships was mutually beneficial to the apprentices and the artisans (Gordon, 2008). Because artisans traded training for labor, apprenticeship costs were limited to materials needed to manufacture products. Apprentices did not have to pay to receive training that provided the preparation and skills needed to master a trade. However, apprenticeships began to lose importance during the 19th century (Browder, 2007; Gordon, 2008). The American Industrial Revolution brought about changes in the work industry that demanded employers choose laborers differently. Issues such as the emergence of free public schools, the merging of industries, and the proliferation of trained apprentices caused apprenticeships to decline drastically.

The incorporation of CTE into the traditional curriculum. Educators, policy makers, and scholars debated over whether CTE should be a part of all educational curricula (Banks, 1998; Doolittle & Camp, 1999; Silver, 1991; Wonacott, 2003). CTE was capable of educating a large number of people because of the practicality of such training. The course content was absent of vague philosophical content; instead, theory was put into action (Gordon, 2008; Wonacott, 2003). Students learned the trades by actively performing tasks. Supporters of incorporating CTE in the general educational setting argued that American citizens needed to have practical knowledge in addition to theoretical knowledge (Gordon, 2008). Employers found

it necessary to train incoming employees because employees lacked the application skills to perform job responsibilities competently. Although schools educated less than 15% of the school-aged populace, schools were reluctant to integrate vocational training programs (Gaunt, 2005). Those opposed to incorporating CTE into the general curricula believed that this type of education would lower the standards of academia. These critics argued that manual training was only appropriate for schools that focused on specific trades.

Through emphasizing educating the whole child, Booker T. Washington, David Snedden, Charles Prosser, and John Dewey were each influential in the inclusion of CTE in general education (Doolittle & Camp, 1999; Gordon, 2008; Silver, 1991). These scholars advocated that technical training was necessary for a well-rounded education and better preparation for the American workforce. Washington, founder of Tuskegee University, claimed that learning was more than memorization (Gordon, 2008; Larke, 1987). According to Washington, education should include critical thinking, self-discipline, morals, and the spirit of service. Snedden (as cited in Gordon, 2008), an educational administrator, argued that schools should train students for the occupations in which the students showed a proclivity. Furthermore, Prosser, a student of Snedden, shared similar philosophical beliefs about CTE. Prosser believed that interweaving theory and practice would give students the best opportunity to have successful careers (Gordon, 2008; Silver, 1991). Finally, Dewey envisioned CTE as a means of expanding education to a greater mass of people (Gordon, 2008). Dewey believed that education could discourage social predestination, which would give American citizens the opportunity to choose a career path instead of being subjected to mere social reproduction.

Proponents who saw a need for CTE began establishing post-secondary schools for such training during the mid-1800s. The academic ideology of these institutions was that students

would obtain an education that was sound in both theory and practicality (Gordon, 2008; Perlmann, 1985). Schools such as Tuskegee University, Georgia Tech, and MIT provided educational opportunities that helped people become competent in a career area while attaining a quality education. Students were able to apply the theory learned in class by completing projects that simulated activities necessary in the workplace (Gordon, 2008). Students were able to begin a career with sufficient skills and knowledge, not needing to be retrained.

Advocates of CTE believed that this type of educational setting would strengthen the American economy (Brown, 2009; Kanter, 1986; Lewis & Cheng, 2006). The nation would benefit from the expensive development of a quality workforce. The intention of this type of training was to prepare students for agricultural and mechanical jobs that became prominent from the mid 1800s into the 20th century due to the American Industrial Revolution and the wars that followed (Gordon, 2008). These events produced a need for training that was quick and efficient, and the struggle over whether CTE should be included in the traditional education curriculum began to sway towards inclusion. Workers needed to receive quality training without obtaining a college degree or going through lengthy training programs. Policy makers addressed this issue by implementing CTE into the general curricula.

United States government funding of CTE. Because of the limited scope of the program, access to funding was an important consideration for the provision of CTE courses. In the mid 1800s, CTE was only accessible to individuals who could afford private institutions and colleges (Browder, 2007; Perlmann, 1985). Apprenticeships were similar to students receiving a scholarship to attend school since the apprentices did not pay for training. However, these educational opportunities decreased with as reliance on the apprenticeship model declined.

Fortunately, the government began funding CTE in 1862 (Gordon, 2008), at which time the economy relied heavily on agriculture and industrial production. However, the typical colleges and universities were not preparing students to solve practical farming and engineering challenges in the workplace. As a result, policy makers approved funding to enable such training, funding that opened doors for CTE schools. The Morrill Act of 1862 represented the government's first structure for funding CTE (Pulliam & Van Patten, 2007; Wonacott, 2003). The government granted a 30-acre plot of land to the congress members of each state. The states were to use the profit from the sales of this land to develop an experimental farm or college for agricultural and industrial training. People began referring to these schools as land-grant institutions.

The Morrill Act of 1862 led to a succession of other acts that would create support for CTE (Banks, 1998; Browder, 2007). Legislators passed the Second Morrill Act of 1890 to provide CTE for African Americans (Gordon, 2008). This legislation gave land grants to all of the Southern states to establish CTE colleges and universities for Black and White students under the separate but equal laws. Consequently, Historically Black Colleges and Universities (HBCUs) such as Alabama Agricultural and Mechanical (A&M) University and Alcorn A&M University served the educational needs of African Americans and other minorities (Gordon, 2008). The Smith-Lever Act of 1914 began a 50-50 matching formula, meaning that the state and federal government each funded half the cost to operate land-grant institutions.

The Smith-Hughes Act of 1917 made provisions to include CTE in all curricula (Brown, 2009). This funding allowed high schools to offer home economics, industrial trade, and agricultural classes. This act also provided funding for instructor education in these areas to improve student achievement. States had to create a CTE board to meet the criteria of this law.

Although the intent of this legislation was to marry general education and CTE, the separate boards promoted a division between the two (Cohen & Besharov, 2002; Gordon, 2008). The absence of collaboration between these governing boards resulted in the creation of unrelated programs.

World War I was a major catalyst of The Smith-Hughes Act (Gaunt, 2005). The country lacked sufficient numbers of skilled workers during the war, and veterans needed training upon returning from the war. The United States government deemed it essential to provide training to military personnel. According to Gordon (2008), the Federal Board for Vocational Education declared it necessary for the Army to have 200,000 soldiers trained in mechanics. There was a vast need for production jobs for the duration of the war.

Senator Walter F. George was involved in each of the next five acts for CTE, each of which authorized more funding for vocational education: The George-Reed Act of 1929 ($1 million), The George-Elizey Act of 1934 ($5 million), The George-Deen Act of 1936 ($14 million), and The George-Barden Act of 1946 ($29 million). In 1946, legislators amended the George-Barden Act to include an increase of $5.3 million to fund nursing and fishery programs (Gordon, 2008).

Wars that engaged American soldiers also benefitted CTE (Gordon, 2008). The American government determined that such training was essential, and the benefit to society was invaluable. The National Defense Education Act of 1958 made provisions for technical careers like data processing that were necessary for the military (Pulliam & Van Patten, 2007). World War II led to the creation of the Vocational Education for National Defense (VEND) Act, which funded job training specifically for wartime occupations (Gordon, 2008). The Korean and

Vietnam Wars saw an increase in labor supply, a rise in unemployment when troops returned from war, and a need for increased food and industrial production.

The Vocational Education Act of 1963 was highly significant for marginalized groups (Brown, 2009; Lewis & Cheng, 2006). This legislation made provisions for individuals with learning disabilities, economic hardships, and other limitations that hindered them from succeeding in vocational programs (Gordon, 2008). This was the first instance of a mandate for CTE to address the needs of individuals in addition to the employment training gaps of the work industry. According to Gordon (2008), authors of this legislation did not stipulate funds for specific services. Instead, the legislators developed a formula for specific age groups (see Figure 2). Amendments were passed in 1968 and 1976 to address concerns including political and social unrest, the disabled, and gender equity. The amendments provided funding for part-time employment for people who needed income to continue going to school.
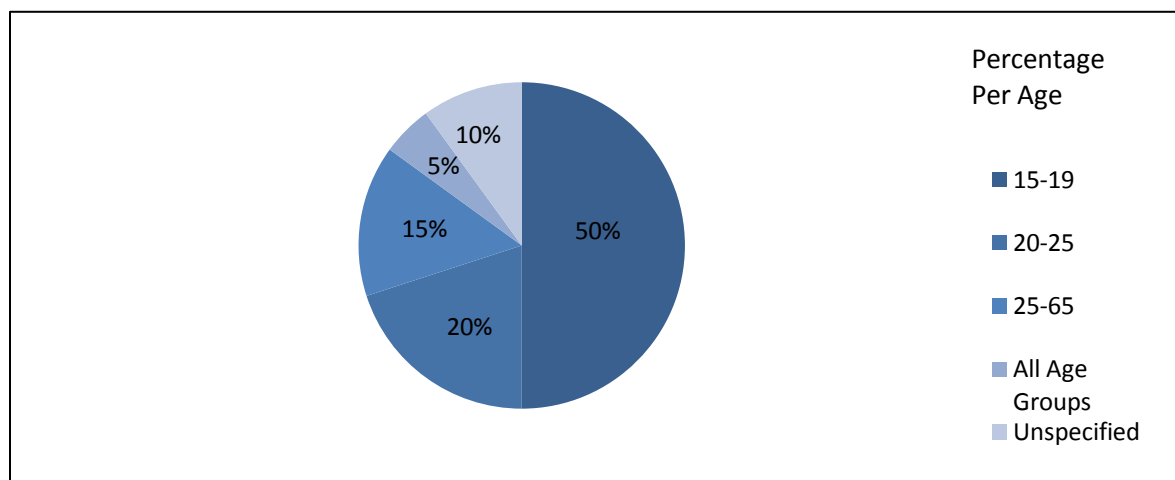
Figure 2. The Vocational Education Act of 1963 funding formula. *Note.* Money was designated by age groups, half of which was allotted for 15-19 year olds.

Policy makers reauthorized the Vocational Education Act of 1963 under the title Carl D. Perkins Vocational Education Act of 1984 (Browder, 2007; Gordon, 2008). The goal of this act was to provide more CTE opportunities for adults by offering more job training and job search

assistance. In light of academic reform efforts to restore prominence to the American educational system, the Carl Perkins Act sought to increase the academic standards in CTE.

The Carl Perkins Act of 1990 intended to increase accountability and academic content while linking CTE with employers (Brown, 2009; Castellano, Stringfield, & Stone, 2003). Legislators titled it the Carl D. Perkins Vocational and Applied Technology Education Act of 1990. This act determined that funds would be distributed directly to Local Education Agencies (LEAs) instead of state agencies because LEAs are more aware than state governments of how CTE operates (Gordon, 2008). States were required to establish standardized performance measures to monitor the effectiveness and progress of CTE schools. This legislation intended for educational institutions to utilize a portion of the funding to make connections with businesses to help students transition into the workforce.

The School-to-Work Opportunities Act (STWOA) of 1994 intended to improve the rate at which students were able to find gainful employment (Browder, 2007; Brown, 2009). This act encouraged partnerships with businesses and schools to offer students training in an actual work setting as part of the curriculum, preparing students with real-life experience and ensuring a transition into the workforce.

The Carl D. Perkins Vocational and Technical Education Act of 1998 replaced the earlier Perkins Act, extending funding for 5 more years. Authorized by President Bill Clinton, many of the conditions of the 1998 legislation were similar to those of the Perkins Act of 1990. States had to establish accountability measures to monitor the effectiveness of schools providing vocational training. The allocation of funds was similar to the funding formula of the Vocational Education Act of 1963, designating specified percentages of money for different age groups (Gordon, 2008).

In 2006, President George W. Bush reauthorized the act as The Carl D. Perkins Career Technical Education Act (Gordon, 2008). Signed into law from 2006-2012, this act focused on accountability and program improvement, integration of rigorous academic content, and links to post-secondary education and industry. CTE schools are responsible for meeting 90% of the performance indicators that are identified in the Carl D. Perkins legislation. Failure to meet these standards requires schools to create an improvement plan to implement sound practices to satisfy the state's requirements. This legislation requires CTE schools and programs to incorporate academic rigor and business and industry standards in all programs so that preparation is sufficient for students to enter post-secondary education or enter the workforce directly after high school. It also mandates that these schools are responsible for student retention in programs and helping students join the military and gain employment.

Negative perceptions of CTE create challenges. From funding to public support, the ways in which people perceived CTE became an important consideration for advocates of this educational approach. For example, concerns about the role of the United States' academic advantage over the Soviet Union led to an increased emphasis on science and math (Brown, 2009; Gaunt, 2005; Gaunt & Palmer, 2005; Gordon, 2008). The United States government's belief that America needed to raise academic standards when the Russians launched Sputnik in the space program was a catalyst for these shifting priorities. There was a growing concern that America was falling behind other nations academically. CTE legislation attempted to address this concern by mandating the integration of core academic content in the CTE curriculum (Castellano et al., 2003): an attempt to improve the CTE structure through implementing a rigorous academic component.

In 1981, Congress appointed the National Commission on Educational Excellence (NCEE) to investigate the deficiencies in the American educational system (Gaunt, 2005). The results of the investigation were not favorable for CTE. The NCEE determined that, in order to improve the quality of education in America, there needed to be a concerted effort in schools to focus on core academic subjects (National Commission on Educational Excellence [NCEE], 1983). Consequently, English Language Arts, mathematics, and science took precedence over CTE (Browder, 2007; Gordon, 2008). In fact, policy makers increased the amount of core subject classes students needed to complete in order to graduate high school and meet college entrance requirements. CTE courses became elective courses; students were not required to take CTE courses. This transition diminished the perceived importance of CTE, contributing to the notion that CTE solely benefits students with behavior problems and students who lack the scholastic aptitude to succeed in college.

CTE's negative image has endured from its early iterations to the current educational context (Cohen & Besharov, 2002; Dally-Trim, Alloway, & Walker, 2008; Gaunt & Palmer, 2005; Mojkowski & Washor, 2007; Palmer, 2007; Rehm, 1989). The debate of CTE's value continues up to the present day. Despite several legislative acts to reestablish a positive image and bring academic rigor to CTE, there remains an overall negative perception (Dally-Trim et al., 2008; Mojkowski & Washor, 2007; Rehm, 1989). This perception leads policy makers, educators, and students to view CTE as a less viable approach to pursue a career path and post-secondary education. California legislation instituted Categorical Flexibility, which means school districts have the ability to use funds designated for specific educational programs such as CTE to supplement other programs (CDE, 2012). Consequently, CTE programs are at risk of

losing funding to programs that have a higher priority: a further indication of the negative perception some policy makers have of CTE.

In 2008, the California Legislature designated ROC/Ps and other categorical programs as Tier III programs (CDE, 2011a, 2012). This policy allows school districts to redistribute funding designated for specific categorical programs to other academic programs that the districts deem more critical to students' education. Since the legislature has placed ROC/Ps in Tier III, funding for CTE is at the discretion of school districts. CTE in California must compete with other academic areas in order to continue receiving adequate funding. California Governor Jerry Brown was proposing zero funding for ROC/Ps in the 2013-2014 state budget (California Department of Finance, 2013). Governor Brown has deemed it redundant for high schools and community colleges to provide job training, asserting that community colleges are better equipped to provide these services. Consequently, the governor was proposing that funding for CTE programs provided through the ROC/P system be eliminated from the state budget after July 1, 2015.

Recently, there has been renewed interest in revitalizing CTE (Gaunt, 2005; Mojkowski & Washor, 2007). The implementation of policies such as the Workforce Investment Act of 2005 and the Carl D. Perkins Act of 2006 demonstrates the government's attempt to produce qualified laborers for the nation's workforce through CTE. The overhaul even included a name change, from vocational education to CTE, in an attempt to reduce CTE's stigma (Gordon, 2008). In addition to rigorous academic integration, these laws mandate that students receive career and educational guidance to help them succeed both in college and in the workforce (Threeton, 2007). Schools providing CTE courses are required to give students support in identifying career goals and pathways to attain these goals.

Legislation in 2008 directed CTE to focus more on high school students (CDE, 2011b). Assembly Bill 2448, also known as the Hancock Bill, required that ROC/Ps give priority to high school students, including reducing the amount of funding CTE schools could receive for adult attendance. The revised funding structure allows CTE schools to receive 90% funding for high school student attendance and 10% for adult student attendance. There was also Senate Bill 1298, which requires organizations that receive CTE funding to utilize those funds to meet the needs of high school students (CAROCP, 2010). Legislators amended Senate Bill 1298 in 2010, restricting districts from withdrawing from ROC/Ps if the State Board of Education determines that such a move would have a negative impact on CTE services provided to other high school students within the region (OCLI, 2010b). This provision established a level of security for CTE to continue despite the recent economic hardships that have required California school districts to reduce spending annually.

California Assembly Bill 1330 enables high school students to satisfy the VAPA or foreign language portion of graduation requirements with CTE courses. The rationale behind the authorization of this legislation is that students need to have more "equitable opportunities to learn skills needed for entry into the workforce, to pursue postsecondary educational goals, and to contribute to the social cohesion of the state" (OCLI, 2011a, Section 1.a.2). Based on this reasoning, legislators recognize that CTE courses have the rigor and quality to give students a range of skills and knowledge that is on or above par of the traditional educational curriculum. Schools that choose to offer CTE courses in the place of traditional courses are required to formally notify all stake holders (i.e. students, instructors, parents, and the public) of the impact these courses would have on graduation requirements at a regularly scheduled board meeting (OCLI, 2011a). This legislation commenced with the 2012-2013 academic school year.

CTE courses meet other high school graduation and college entrance requirements. The University of California (UC) and California State University (CSU) school systems require high school students to complete a minimum of 15 courses in seven academic areas in order to qualify for acceptance as an incoming freshman (University of California Admissions, 2010). The UC system has organized these courses into categories and has labeled them as A-G. Each letter from A to G represents a core academic subject (see Figure 3). CTE courses have been approved through the UC system as A-G courses. Therefore, students who successfully complete these courses satisfy a portion of the requirement to enter college.

A	• History/social science • Two years
B	• English • Four years
C	• Mathematics • Three years
D	• Laboratory science • Two years
E	• Language other than English • Two years
F	• Visual and Performing Arts • One yearlong course
G	• College-preparatory electives • One yearlong course

Figure 3. The categories of the UC A-G courses.

Positive perceptions of CTE. CTE has continued to provide job preparation in the United States despite recent economic hardships. A study on companies in Oklahoma that engage in job partnerships with CTE programs revealed that these companies are able to employ individuals with the appropriate skills and knowledge to perform their job duties effectively. The

results showed that Goodyear Tires realized an annual savings of $50,000-150,000 and a $250,000-500,000 increase in sales. Another company called Pioneer Technology Center attributed better and more effective safety training to partnerships with CTE programs. This company trained 1,500 employees from 1994-2008. In 2009, the number of Pioneer Technology Center employees trained increased to approximately 3,000 (Holle, 2012).

Companies are able to profit from partnerships with CTE programs. Strategically offering courses in specific geographical areas with high job demands allows businesses to hire a sufficient quantity of highly qualified workers who have earned proper credentials through CTE courses (Holle, 2012; Konopnicki, 2012; Mokher, 2011). Completing the appropriate programs, thereby gaining the appropriate certifications and job skills, gives students the opportunity to enter a job or career without the need to be retrained. Employers have the advantage of saving money on expensive training programs because the students have acquired the necessary experience through programs that meet industry standards. According to Holle (2012), the Oklahoma wind energy industry in the Canadian Valley will provide over 650,000 homes with electricity. The Canadian Valley will be able to satisfy the workforce demand including the necessary training through its CTE partnership. Mokher (2011) found that 41% of high wage jobs in the state of Tennessee would be filled by CTE students between the years 2006-2016 if the number of students taking these courses remains constant. Businesses realize an invaluable advantage in utilizing partnerships to secure qualified employees through CTE programs.

Adults are able to access proper training to enter the workforce during these trying economic times. CTE provides the opportunity for adults to maintain and or upgrade the job skills necessary for continuing employment, acquiring promotions, and changing careers (Levesque et al., 2008; Mojkowski & Washor, 2007; Reese, 2012). Recent economic hardships

in the U.S. have forced businesses to make cuts that resulted in dislocated workers. The national unemployment rate was 7.9% in 2012 (Hill, 2012; U.S. Department of Labor, 2013a). In California, the unemployment rate was 9.8% in 2012 (U.S. Department of Labor, 2013b). CTE provides a low cost option for adults to find gainful employment in the current industry or to retrain in order to switch career paths. Adults are finding it increasingly necessary to take work-related educational courses to not only find employment in new career areas, but also learn how to adapt to added responsibilities and procedural changes in current employment that is engendered by budget restrictions (U.S. Department of Commerce et al., 1999; U.S. Department of Education, 2005). Limitations in finances force companies to delegate more duties to employees when hiring more people is not feasible, and CTE programs help adult students to learn those skills.

CTE instructor training. Scholars and policy makers did not readily accept teaching as a respected profession in the American culture before the formation of instructor unions and labor laws (Kersten, 2006; McCaslin & Parks, 2002). Before that time, people viewed teaching as a menial job. Instructors and administrators established the National Education Association (NEA) in 1860 to help educators gain protection from unfair firing practices and nepotism and to change the negative perception of teaching to that of a legitimate profession (Holcomb, 2006; Kersten, 2006). The educational community was reluctant to accept CTE as a science in the midst of the struggle to have teaching recognized as a respected profession (McCaslin & Parks, 2002). Educators in traditional educational systems believed that CTE lacked the rigor and content knowledge that would give students a proper education.

Understanding pedagogy is critical in attempting to optimize learning in the CTE context. Scholars argue that instructors are the most important factor in educating students (Adams, 2010;

Dufour & Eaker, 1998; Kersten, 2006; E. Smith, 2005; U.S. Department of Education, Office of the Under Secretary, Policy and Program Studies Service, 2004). Qualified instructors have the potential to engage students in meaningful learning, prepare students for entering college and or a career, and help alleviate the negative image people ascribe to CTE due to misconceptions. Instructors feel more confident in providing instruction after receiving professional development in instructional strategies (Heck, Banilower, Weiss, & Rosenberg, 2008; National Research Center for Career and Technical Education Curriculum Integration Workgroup, 2010). Empowering instructors to believe that all students have the ability to learn can create an environment where students have more confidence to succeed in the class as well as in the workforce.

The No Child Left Behind (NCLB) Act mandates that schools have highly qualified instructors. Historically, each state is responsible for establishing its own qualifications for instructors (NCLB, 2001). California requires CTE candidates to have 3 years of paid or unpaid work experience and a high school diploma (CDE, 2007b; CTC, 2010), ensuring that instructors have adequate experience to teach students content that is consistent with industry standards. Once a candidate secures a teaching position, the candidate qualifies for a 3-year Preliminary Designated Subjects CTE Teaching Credential. Candidates must complete a series of courses and have 2 years of successful teaching experience to qualify for a 5-year Clear Designated Subjects CTE Teaching Credential. Although CTE instructors complete an instructor training program to qualify to teach, the fact that these instructors generally receive pedagogical training after entering the classroom begets situations in which instructors have misinformed expectations of students.

Conducting research on how instructor perceptions and behavior affect student achievement can inform pedagogical practices. Currently, there is little literature on effective CTE instructor training, providing evidence of a need for further research (McCaslin & Parks, 2002). An in-depth understanding of the Pygmalion Effect will help policy makers and educators develop training that will enhance CTE instructor preparation.

Instructor Perception Influences Student Achievement

Discussions about who is most responsible for student success have become the focus of policy and educational practice. Scholars, educators, and politicians have long debated the influence of instructors, students, families, and peers on student academic achievement (Aldridge & Goldman, 2007; Banks, 2006; Gaunt, 2005, Gaunt & Palmer, 2005). One factor that is present each day in class is the instructor's style of teaching. Instructors are one of the most significant influences on how well students perform (Adams, 2010; Dufour & Eaker, 1998; Kersten, 2006). Consequently, instructors have come under increasing scrutiny with legislation that has increased accountability standards.

SFP theorists argue that instructors' expectations are indicators of student achievement because instructors interact with students according to their perceptions of the students (Alvidrez & Weinstein, 1999; Gates, 2010; Madon et al., 1997; Rubie-Davies, 2010; Rubie-Davies et al., 2006; Rubie-Davies et al., 2010). This occurs because instructors behave in ways that encourage outcomes that align with their beliefs. Students become susceptible to the instructors' treatment, internalizing the instructors' perceptions. This results in students performing according to the instructors' expectations.

The Pygmalion Effect. Studies on how instructor perceptions affect student achievement date back to the mid-1900s (Rubie-Davies, 2010; Stevens & Vermeersch, 2010). In 1948,

sociologist Robert K. Merton named his theory Self-Fulfilling Prophecy (SFP), referring to situations in which people made predictions based on false information (Jussim & Eccles, 1992; Rubie-Davies et al., 2010). Merton suggested that people cause predictions to come true due to their behavior, both directly or indirectly. Rosenthal and Jacobson applied the SFP theory to educators in 1968. These two researchers conducted a study, concluding that instructors influence student achievement positively or negatively relative to the instructors' perceptions of the students' academic ability (Brophy, 1983; Gates, 2010; Rubie-Davies, 2007). Instructors interact with students in ways that convey their level of expectations, creating a climate where instructors consciously or unconsciously treat students in ways that promote or discourage achievement.

Rosenthal named this theory after a Greek Mythology character, Pygmalion: a sculptor who carved a statue of a woman (Babad et al., 1982; Rosenthal & Babad, 1985). Pygmalion wished that the statue would come to life while making an offering to Venus, the goddess of love. Venus sent Cupid to change the statue into a beautiful woman. Rosenthal named the theory Pygmalion suggesting that instructors have the ability to make the instructors' creations come to life, referring to creating an SFP through expectations.

Rosenthal and Jacobson's experiment controlled for instructor expectations. The premise of the Pygmalion Effect Theory was that instructor expectations created an SFP due to the instructor's behaviors, which were based on erroneous information (Rosenthal & Babad, 1985; Rubie-Davies, 2007; Rubie-Davies, 2010). Rosenthal and Jacobson's experiment involved providing instructors with false student achievement data. The researchers randomly selected a sample of students and then told the instructors that these students were going to bloom intellectually that school year because the students were gifted. The identified students made

greater gains on an IQ test than the rest of the students when the school year ended. Rosenthal

and Jacobson concluded that instructor expectancy causes SFP. The conclusion of the initial

Pygmalion experiment proved to be controversial. Public reactions to the results formed a

dichotomy between those who agreed with the results and those who did not (Brophy, 1983;

Jussim & Eccles, 1992; Jussim & Harber, 2005). Scholars who expressed concern about the

validity or lack of validity of this theory expressed directly contrasting viewpoints (see Figure 4).

This debate resulted in numerous follow-up studies to determine which group's assessment was

accurate.
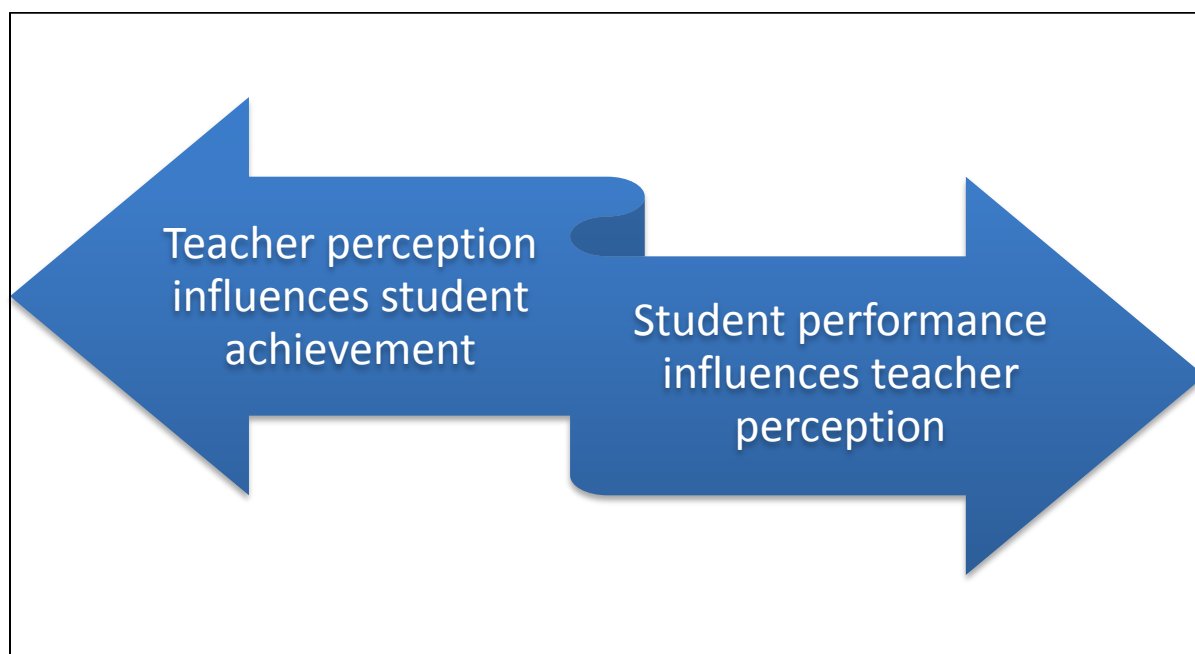
Figure 4. Opposing views of the Pygmalion Effect Theory.

Some accepted the results of Rosenthal and Jacobson's study enthusiastically with no

criticism (Brophy, 1983; Jussim & Harber, 2005; Madon et al., 1997). Jussim and Harber (2005)

stated that researchers cite Rosenthal and Jacobson's research frequently to support the following

arguments: "(a) erroneous social stereotypes are a common source of expectations; (b) instructor

expectations are self-fulfilling; ... (c) instructor expectations are potentially a powerful force in

the creation of social inequalities and injustices" (p. 134). According to Brophy (1983), early

advocates of the Pygmalion Effect Theory believed it would help to improve education. These advocates concluded that instructors could get students to improve their academic achievement if instructors instructed with high expectations. This belief is still prevalent in education. Some scholars argue that all students can learn if instructors use appropriate teaching strategies (Doolittle & Camp, 1999; Dufour & Eaker, 1998; Murray & Zvoch, 2011; Roberts, 2010), providing students with the appropriate structure and support needed to gain access to the information.

Others disagreed with the Pygmalion Effect Theory, attacking the original study's methodology by arguing that the experimental design was flawed (Gates, 2010; Jussim & Harber, 2005). These opponents suggested that the Pygmalion experiment was not valid because the results could not be replicated using the procedure that Rosenthal and Jacobson implemented (Brophy, 1983; Rubie-Davies, 2007, 2010). The inability to duplicate the experiment caused some scholars and researchers to question the credibility of Rosenthal and Jacobson's findings.

In response to critics, later studies caused researchers to question the methodology of the Pygmalion Effect Theory's opponents. Brophy (1983) stated that the studies that claim to discredit Rosenthal and Jacobson's conclusion did not use credible procedures. For example, the original experiment examined instructors' reactions to students based on false data. The Pygmalion experiment was so widely known that the instructors in the replicated experiments simply did not accept the erroneous information. Therefore, the participants in the studies did not react to the false information. An SFP can only occur when instructors continue to interact with students based on erroneous information despite the students' actual performance (Brophy, 1983; Trouilloud, Sarrazin, Martinek, & Guillet, 2002). Making adjustments to the instruction to accommodate students nullifies any SFP.

Although the initial findings were highly controversial, subsequent studies validated Rosenthal and Jacobson's findings (Gates, 2010; Madon et al., 1997; Trouilloud et al., 2002). According to Madon et al. (1997), it was not until the 1980s that researchers tested this theory with a meta-analysis, the study of multiple related studies to determine validity and effect size. Rosenthal published a meta-analysis of over 300 Pygmalion studies that proved that instructor expectancy does affect student achievement (Brophy, 1983; Babad et al., 1982; Rubie-Davies, 2010). This publication illustrated that instructors have the potential to influence student achievement. However, the effect size was smaller than what experimenters initially thought (Brophy, 1983; Madon et al., 1997). A study that looked at Pygmalion experiments revealed that instructor expectancy influenced an average of 5-10% of students (Kuklinski & Weinstein, 2001). Although the Pygmalion Effect does not affect all students, the percentage of affected students was consistent across multiple studies making the results significant.

Another view of the Pygmalion Effect Theory is that instructors' perceptions are not causal of student achievement (Jussim & Eccles, 1992; Trouilloud et al., 2002). Conversely, this view asserts that student performance influences how instructors perceive student ability. According to Jussim and Harber (2005), scholars and researchers who take this position believe that instructor expectations accurately reflect student achievement. Instructors spend enough time with students to understand their academic capability, preventing erroneous expectations. Although instructors may have false perceptions of students initially, instructors eventually adjust their expectations according to how students perform. Achievement data such as class work, assessment results, and performance from previous years all inform instructors about students' abilities. This interaction gives instructors the ability to predict how well students will perform with accuracy.

The Pygmalion Effect affects certain demographics more than others. The Pygmalion Effect offers a helpful lens through which to examine student-instructor interactions in the CTE setting. Specifically, research suggests this phenomenon is more likely to occur with students who have a history of low achievement (Alvidrez & Weinstein, 1999; Rubie-Davies, 2007), which causes students to accept this level of academic performance as normal. The Pygmalion Effect is more likely to affect these students because they develop a lack of confidence and self-efficacy to overcome instructors' perceptions (Alvidrez & Weinstein, 1999), causing them to become more likely to align with the instructors' low expectations. Studies suggest further that instructor expectations have virtually no impact on students who generally have high achievement (Kuklinski & Weinstein, 2001; Madon et al., 1997; Rubie-Davies, 2007). The consistency of high achievement diminishes the possible effect instructors' expectations have on these students because the students have created a reality where the students expect to perform well academically.

Scholars conclude that SFP is more likely to affect minority and low socioeconomic status (SES) students than students from other demographics (Murray & Zvach, 2011; Roberts, 2010; Rubie-Davies, 2010; Strayhorn, 2010). Negative stereotypes of these groups lead instructors to develop low expectations, promoting a learning environment that hinders academic achievement. Instructors are more likely to perceive minorities and people of low SES as being incapable of attaining academic success. For instance, African Americans are viewed as being lazy, loud, promiscuous, and dangerous (Strayhorn, 2010). These unfounded assertions create the framework through which some instructors teach, leading them to instruct through faulty assumptions.

Steele (1995) claims that negative stereotypes discourage individuals from succeeding in education. Steele created a theory called *Stereotype Threat*, which suggests that capable African Americans are more likely to drop out of post-secondary schools because of the vulnerability created as a result of fending off the stigma that African Americans are not as intellectually inclined as other ethnic groups. In fact, students who are most invested and successful in school may be the most vulnerable (Osborne & Walker, 2006). Having the burden of constantly trying to prove one's own and an entire culture's worthiness becomes an arduous and discouraging task.

Effects on the whole class. According to Rubie-Davies et al. (2010), most of the research on how instructor expectation affects student achievement focuses on how it affects individual students. However, some studies suggest that instructor expectancy has greater effects on student achievement at the whole class level more than on individual students (Brophy, 1985; Rubie-Davies, 2007, 2010). In these studies, researchers found common characteristics among instructors regarding the differences in how they treat students based on their expectations. Certain instructor characteristics such as creating a comforting socio-emotional environment and including more challenging activities in the curriculum have the potential to establish classroom climates that promote student progress (Rubie-Davies, 2010). These instructor behaviors result in high academic gains in end-of-the-year assessments.

Expectancy effect vs. bias effect. Dusek (1975) coined terms to differentiate between the effects of informed instructor expectations and induced instructor expectations. He referred to *expectancy effects* as SFP resulting from situations in which instructors base expectations on interactions with students, including reviewing test data and student behavior. Dusek referred to *bias effects* as SFP resulting from situations in which phony information influences instructors'

expectations. For instance, an instructor who maintains erroneous expectations, even though student performance contradicts the expectations, has established the potential to create a bias effect (see Figure 5).

Expectancy Effect

Phase 1
- Teacher interacts with students and examines assessment data

Phase 2
- Teacher develops expectations based on interactions and data

Phase 3
- Teacher expectations accurately reflect and predict student performance

Bias Effect

Phase 1
- Teacher receives erroneous information

Phase 2
- Teacher interacts with students according to erroneous information

Phase 3
- Student performs according teachers expectations

Figure 5. Illustration of the difference between expectancy effect and bias effect. *Note.* The expectancy effect occurs when instructors predict student outcomes based on data and interacting with the student. The bias effect occurs when SFP occurs when instructors establish expectations on erroneous information.

Dusek (1975) found less evidence supporting significant bias effects than expectancy effects in a naturalistic setting: studies with no controlled variables. According to Brophy (1983), bias effects happen less often in this type of environment because instructors spend enough time with students to establish informed expectations. Expectancy effects are more likely to occur because, even if instructors initially have erroneous expectations, instructors adjust their expectations quickly once they have interacted with the students and examined student performance data.

Traits of high bias instructors. Babad (1979) conducted a study to measure instructor vulnerability to biasing information. In other words, Babad measured the likeliness of instructors accepting and behaving according to erroneous information. The results showed that instructors who have a high bias rating exhibit similar characteristics, including describing themselves as being more conforming to social norms, more conventional, and less emotional than low-bias instructors (Babad et al., 1982). This study also showed that high-bias instructors have a tendency to be dogmatic, demonstrating authoritarian characteristics when interacting with students. These instructors are generally reluctant to try different approaches that could potentially meet individual students' needs (Babad et al., 1982; Rubie-Davies, 2010). Instead of seeking other ways to improve student achievement, these instructors interact with students rigidly according to predetermined notions of what students can accomplish.

Babad (1979) also found that high-bias instructors are more susceptible to biasing information than low-bias instructors are. In the initial phase, he asked instructors to score the drawings of two students: one high status and one low status. Babad communicated the students' status through demographic information such as last name, location of residency, and ethnicity. The high-bias instructors scored the drawing perceived to be from the high status student better

than the drawing perceived to be from the low status student (Babad, 1979; Babad et. al., 1982). The study also showed that participating instructors identified students who were perceived as having low academic potential based on characteristics such as "socioeconomic status, physical attractiveness, quality of clothing, and academic achievement" (Babad et al., 1982, p. 466). Other findings suggested that high-bias instructors were more critical and less friendly to students who were perceived as having low academic potential.

Differential Teacher Treatment. Another aspect of the Pygmalion Effect is *Differential Teacher Treatment* (DTT), which occurs when instructors exhibit different behaviors according to student ability (Brophy, 1983; Kuklinski & Weinstein, 2001; Rubie-Davies, 2010). This treatment manifests itself regardless of whether the instructors' perceptions of student ability are accurate or inaccurate, resulting in divergent curricula. Students readily recognize DTT when instructors exhibit behaviors such as giving more verbal praise to high achieving students or allowing less time for low achieving students to give responses.

DTT influences SFP because instructors can limit or enhance student achievement regardless of the students' academic ability (Kuklinski & Weinstein, 2001). Students participate in activities based on what instructors believe is suitable, varying students' educational opportunities. Consequently, students receive different levels of instruction. Instructors can hinder students who have the capability to achieve at a higher level by assigning work that is not intellectually stimulating. DTT limits students' learning opportunities, not because the students do not have the ability to perform better, but because the instructors present limited knowledge. Conversely, instructors can improve the achievement level of students by assigning more challenging work. Student performance will align with instructor expectations in these circumstances, resulting in higher academic achievement.

The probability of the Pygmalion Effect occurring is more likely when DTT is obvious to students (Kuklinski & Weinstein, 2001; Rubie-Davies et al., 2010). DTT can occur subconsciously. Actions such as giving high achieving students more opportunities to answer questions and neglecting to give low achieving students feedback develop a framework through which students establish self-concepts (Brophy, 1983). These actions can be obvious to students. Students who are more susceptible to instructor expectations conform to these expectations due to the repetitive instances in which instructors demonstrate inequitable behavior (Babad et al., 1982; Kuklinski & Weinstein, 2001; Rubie-Davies et al., 2010). Academic achievement is hindered or enhanced based on instructors' interactions with students. According to Brophy (1985), students align themselves with the expectations instructors establish when the expectations are reinforced consistently, regardless of whether or not the instructors' perceptions are accurate. DTT influences the probability of the Pygmalion Effect occurring.

Cooper (1979) identifies two distinct classifications or types of DTT: (a) DTT that maintains existing student differences, and (b) DTT that enhances existing student differences. Instructors help to maintain existing differences when establishing expectations based on accurate information, providing appropriate DTT based on student needs. Instructors enhance differences when displaying DTT dogmatically.

DTT is generally associated with unfair treatment and negative effects on student performance. However, there are instances in which DTT is appropriate, providing access to the curriculum for all students through different teaching strategies (Beecher & Sweeny, 2008; Brophy, 1983; Kuklinski & Weinstein, 2001). Differentiating instruction is necessary for teaching students who learn differently. Behaviorist teaching models in which the instructor teaches all students at the same pace is ineffective for some students because not everyone learns

the same way (Doolittle & Camp, 1999; Romberg, 2010). Students are more likely to retain information when the presentation aligns with a learning style that accommodates them. For example, some students learn better when instructors implement hands-on activities, while other students are auditory learners. Utilizing Specially Designed Academic Instruction in English (SDAIE) strategies allows instructors to make accommodations in order to teach to different learning modalities (Furner, Yahya, & Duffy, 2005). In other words, using DTT positively gives students at different levels the best opportunity to succeed. These methods allow instructors to give more students a chance to excel.

Research on how instructor expectations and student achievement in CTE are related may provide valuable insights to the educational field at large as well as practitioners in particular. Understanding teaching characteristics that affect student learning positively may help to increase student success and improve CTE. However, studies such as these are too few (McCaslin & Parks, 2002). Further research into this topic has the potential to provide instructors with sound instructional strategies that can promote mastery of core academic standards and job skills simultaneously.

Summary

Historical trends in CTE and the potential impact of the Pygmalion Effect create an important moment to explore the influence of instructor expectancy on student achievement within CTE institutions. Studies suggest that, although the effect size is small, instructor expectancy has the potential to affect students both positively and negatively (Jussim & Harber, 2005; Kuklinski & Weinstein, 2001; Madon et al., 1997). Extracting the positive aspects of SFP will give CTE instructors a framework to equip students with a well-rounded education, preparing students for college as well as entering the workforce. Incorporating challenging

activities with academic rigor, establishing a comforting classroom environment, and

differentiating instruction appropriately can foster an environment that is conducive to academic

excellence.

Chapter 3: Methods

Introduction

The purpose of this qualitative survey study was to explore, describe, and compare the student performance expectations and related classroom management and instructional practices of CTE instructors at an ROC in Southern California who were associated with 80% or higher CTE course completion rates among adult students as self-reported by instructors and as described by students. The four research questions that guided this study are:

1. What are the expectations for students' academic performance of Career Technical Education instructors at a Regional Occupational Center in Southern California with course completion rates of 80% or higher for adult students as self-reported by the instructors and as described by students?

2. What are the instructional practices of Career Technical Education instructors at a Regional Occupational Center in Southern California with course completion rates of 80% or higher for adult students as self-reported by the instructors and as described by students?

3. What are the classroom management practices of Career Technical Education instructors at a Regional Occupational Center in Southern California with course completion rates of 80% or higher adult students as self-reported by the instructors and as described by students?

4. What are the professional experiences and specialized training of Career Technical Education instructors at a Regional Occupational Center in Southern California with course completion rates of 80% or higher for adult students as self-reported by the instructors?

This chapter will describe the following: (a) research design, (b) context of the study, (c) sample

of participants, (d) instrumentation, (e) data collection procedure, (f) data analysis, and

(g) positionality.

Research Design

This study used a qualitative survey research design in which the researcher conducted

anonymous online surveys with selected CTE instructors and adult students at an ROC in

Southern California during the spring term of the 2013 academic year. Each CTE instructor with

an 80% or higher adult student completion rate for courses taught from the fall term of the 2009

academic year through the fall term of 2012 was invited to participate in the study. Every adult

student who was enrolled in a course taught by the qualifying instructors was also invited to

participate. The researcher was aware of identities of the people in the pool of potential study

participants. However, the participants' survey responses were anonymous in that no information

that could identify any of the participants appeared on the survey, and participants did not sign

an informed consent form. Instead, participants were required to check an informed consent box

on the online survey in order to gain access to the survey questions. A minimum of 10 CTE

instructors and approximately 150 adult students enrolled in these courses were invited to

participate in the study. The researcher reviewed the completion rates for all courses at the study

site from the fall of 2009 through the fall of 2012 that had at least 10 adult students enrolled to

determine which instructors met the criteria. After determining all the instructors who qualified,

the researcher invited each qualifying instructor to attend a study overview meeting via personal

communication and invitation letter before or after classroom instructional hours (see Appendix

D). Adult students currently enrolled in courses taught by the qualifying instructors were also

invited to attend a study overview meeting that was held separate from the instructors' meeting

(see Appendix F). After receiving GSP IRB approval, the study took place during the spring 2013 semester.

Survey study research enables researchers to collect similar data from multiple groups (Colorado State University [CSU], 2011). Surveys make it possible to examine an issue with precision through standardized questions and definitions. After posing questions to study participants, the researcher summarizes the data and draws inferences about the targeted population (Leedy & Ormrod, 2012). One advantage of survey study research is that surveys make it possible to gather data from a large number of participants and surveys are easy to administer (CSU, 2011; Leedy & Ormrod, 2012). Disadvantages of survey study research include the fact that the quality of responses is limited by the participants' ability to comprehend the questions accurately, participants may not return or complete the survey, and analysis of the responses may only be representative of the sample group.

This study sought to explore, describe, and compare the student performance expectations and related classroom management and instructional practices of instructors who have had continued success with the passing rate of adult students in CTE courses. This study also examined the adult students' perceptions of these instructors' performance expectations and related classroom management and instructional practices. This qualitative method helped the researcher to record the common characteristics of the participants through recording and analyzing instructor and student perceptions.

Qualitative methodology is appropriate in studies where it is necessary for the researcher to see the issue from a fresh perspective (Richards & Morse, 2007). Scholars have conducted extensive studies on the Pygmalion Effect in education since 1968, but few have taken place in an ROC setting (Babad et al., 1982; Brophy, 1983; Rubie-Davies et al., 2006; Rubie-Davies,

2010). This study took place at one site. There are only two ROCs in California: one in Southern California and one in Northern California. The researcher had no access to data from the ROC located in Northern California. Also, the ROC in Northern California may have had different criteria for determining course completion rates and a different grading policy. ROCs offer courses that help students satisfy a portion of college entrance requirements, assist with determining career choices, and offer training that helps students obtain gainful employment. Gaining a deeper understanding of how instructor expectations affect student achievement at this type of school site could help instructors develop strategies to give students an advantage in pursuing higher education and career interests.

Context of the Study

This study took place at an ROC located in Southern California. Each semester, this ROC enrolls approximately 2,000 adult and high school students from urban and suburban neighborhoods. The study site is a JPA composed of six high school districts. These districts consist of 11 comprehensive high schools that range from chronically underperforming schools to California Blue Ribbon and California Distinguished Schools. Although the study site is a JPA, enrollment is not limited to students attending schools within the geographical area of the JPA schools; anyone residing in Southern California can enroll in courses at the study site because it is an ROC.

The study site was the first ROC in the state, located in the same place since its inception. As a result, scores of people are familiar with this school because it was the first ROC in the state of California. Local businesses ranging from medical offices to automotive repair shops have hired former students who completed training while enrolled at the school. The school's Externship Training program has allowed the school to collaborate with these businesses to give

students hands-on training in actual business settings. The campus consists of four buildings that include the district office, maintenance department, business office, and all the classrooms. The study site provides bus transportation for high school students who attend the schools within the JPA. All other students must have the means to get to the school in order to participate.

Section 6500 of the California State Government Code permitted the establishment of JPAs (California Association of Joint Powers Authorities [CAJPA], n.d.), allowing two or more school districts to operate an entity collectively. The California legislature also approved the study site as the first ROC in the state in 1967 under California Education Code 52300 (OCLI, n.d.). The study site's course offerings are non-compulsory education; students attend voluntarily. The campus has a mature learning environment. There are four sessions of classes that last for 3 hours throughout the day, Monday through Thursday. With the exception of approximately 10 programs, adult and high school students take the same courses. However, there are more adult students than high school students enrolled in the morning and evening classes. The two afternoon sessions have more high school students than adult students enrolled. The courses at the study site are generally Concentrator or Capstone courses and equipment intensive. Concentrator and Capstone courses are courses that complete a sequential pathway. Equipment intensive means the courses require expensive and or bulky equipment. The school offers classes in the following career sector areas: Arts/Media & Entertainment; Engineering, Technology, & Industrial Trades; Finance & Business; Health Science & Medical Technology; and Public & Consumer Services.

There are approximately 50 instructors at the study site at any given time. This number varies depending on what courses are active during a given semester. One hundred percent of the instructors are credentialed; 78% are fully credentialed and 22% have a preliminary credential.

Unlike the K12 school system, CTE instructors are required to have industry experience prior to qualifying for a Designated Subjects CTE Teaching Credential. It is common for new CTE instructors to begin teaching at the study site with a preliminary credential.

Sample of Participants

Criteria for participation. The researcher utilized a purposive sampling method to select the participants for this study. Purposive sampling is selecting participants based on specific characteristics such as SES, age, or level of education (Patten, 2010; D. Vodicka, personal communication, April 4, 2011). The participants in this study consisted of two groups: (a) CTE instructors with an 80% or higher adult student completion rate, and (b) adult students 18 years old and older who were enrolled in courses taught by qualifying instructors.

The first group included six CTE instructors who had a course completion rate of 80% or higher for adult students in at least two consecutive semesters by the end of the 2012 fall semester. The instructors needed to have had at least 10 adult students enrolled in the course to qualify. The completion rates were calculated using the number of adult students who enrolled in the course for at least 20 hours. Students who dropped the course prior to attending 20 hours were be included in calculating the completion rate. The researcher chose the instructors from a pool of qualifying instructors who teach courses in at least one of the five career sectors offered at the study site: (a) Arts/Media & Entertainment, (b) Engineering, Technology, & Industrial Trades, (c) Finance & Business, (d) Health Science & Medical Technology, or (e) Public & Consumer Services.

The researcher reviewed the course completion rates for adult students in each course at the study site by the end of the 2012 fall semester utilizing the Youm-Tzib Software Solutions (YSS) system. YSS is a reporting system that allows the study site to run various reports to

monitor student progress, attendance, and other demographic information. The researcher ran a

report to examine the adult student completion rate of all courses at the conclusion of the 2012

fall semester and created a table listing each qualifying course with the adult student completion

rate. The table included the total number of adult students who successfully completed each

course and the total number of adult students who enrolled in the course (see Table 1). The

number of adult students who finished the course with a grade of A or B divided by the total

number of adult students enrolled in the course determined the course completion rate. There are

two types of certificates students can earn. Completing a course with an A or a B earns students a

Certificate of Competency. Completing a course with a C earns students a Certificate of

Completion. Although students who finish a course with a C earn a Certificate of Completion,

these students were not included in the number of completers. Instructors needed to have a

minimum of 10 adult students enrolled in the class to qualify for the sample group.

Table 1

Sample Table for Recording Adult Student Completion Rates

Course Title	Session	# of Adult Students Who Passed	Total # of Adult Students Enrolled	Adult Student Completion Rate
Administrative Office Assistant	F02	16	18	89%
Banking	F02	9	11	82%
Banking	F03	13	15	87%
Cosmetology	F02	16	20	80%
Developmental Psychology of Children	F03	11	13	85%
Medical Assisting	F02	9	10	90%
Medical Assisting	F03	21	23	91%
Pharmacy Technician	Y11	10	10	100%

After determining all the courses with qualifying completion rates, the researcher

reviewed the past four semesters to see if those instructors have established a pattern. Instructors

who had an 80% or higher completion rate for consecutive semesters qualified to participate in the study. During the 2013 spring semester, following completion of the IRB process, the researcher asked the qualifying instructors to participate in this study.

The second group of participants consisted of adult students who were 18 years old or older and enrolled during the spring of 2013 in courses taught by instructors who qualified to participate in the study. Adult students enrolled in courses taught by qualifying instructors were able to participate in the study regardless of whether or not they had previously taken a course with one of these instructors.

Participant recruitment. Upon completing the GSP IRB process, the researcher gave qualifying instructors an invitation (Appendix D) before or after class to attend a study overview session. The researcher informed the instructors that the purpose of the informational session was to inform potential participants of the title and purpose of the study, the research questions, and the study design. Potential participants were also informed of the criteria for subject eligibility to participate in the study so that potential participants understood the purpose of the recruitment and why participation was valuable.

During the overview session, the researcher disclosed the following information:

- Title, purpose, and qualifying criteria of the study.

- Participation in the study was strictly voluntary.

- Participant information was kept confidential.

- Participants were able to withdraw from the study at any time with no penalty.

- Participating required completing an anonymous online survey consisting of 18 open-ended questions.

- Participants were required to provide informed consent to participate in the online survey.

- The time frame to complete the online survey.

- Participants who wanted to receive study results would need to provide email address.

- Each participant would receive a California Lottery Scratcher Ticket for completing the study.

At the conclusion of the study overview, the researcher handed the instructors a recruitment flier that provided the instructors with information regarding the study and directions to access the online survey (see Appendix B). The researcher also delivered invitations in a sealed envelope to qualifying instructors who did not attend the study overview. After 7 days, the researcher sent qualifying instructors a recruitment email for participation (see Appendix C). The email included the same information as the recruitment flyer and served as a reminder for instructors who were interested in participating.

Upon completing the GSP IRB process, the researcher also invited adult students 18 years old and over who are enrolled in courses with the qualifying instructors during the spring 2013 semester to participate in the study. The researcher contacted qualifying students to a study overview session via the instructors with a sealed invitation (see Appendix F). The invitations were accompanied with a cover memo to the instructors (Appendix E) asking the instructors to deliver a sealed invitation to each adult student before or after class.

During the study overview, the researcher disclosed the following information:

- Title, purpose, and qualifying criteria of the study.

- Participation in the study was strictly voluntary.

- Participant information was kept confidential.

- Participants were able to withdraw from the study at any time with no penalty.

- Participating required completing an online survey consisting of 14 open-ended questions.

- Participants were required to consent to participate in the online survey.

- The time frame to complete the online survey.

- Each participant would receive a California Lottery Scratcher Ticket for completing the study.

The researcher provided each qualifying student with a recruitment letter (Appendix H) to invite the students to participate in the study and the directions (Appendix K) for taking the online survey. Qualifying students who did not attend the overview session also received a sealed recruitment letter from the researcher via a qualifying instructor. Sealed student recruitment letters were accompanied by a memo informing instructors to give a recruitment letter to each adult student before or after class (see Appendix G). The researcher attached instructions for taking the online survey (Appendix L) to the invitation to participate in the study.

Human subjects considerations. The district's superintendent, Dr. Christine Hoffman, granted the researcher permission to conduct this study at the ROC located in Southern California (see Appendix Q). The researcher followed the GSP IRB guidelines for an exempt study and seeking approval to conduct the study. Potential participants were informed that participating in the study would in no way affect their grades or job evaluations and that participation was strictly voluntary, giving participants the right to withdraw at any time. Potential participants were also informed that the study consisted of an anonymous online survey on Qualtrics.com. Participants were able to complete the survey on the study site's campus for

the participants' convenience. Surveys could also be completed from any electronic device that had access to the Internet so that participants could take the survey at any location.

Potential participants were informed that all information collected for the purpose of this study would be kept confidential. The researcher knew the names and identities of potential subjects from the pool of qualifying persons, but the researcher did not know who actually participated. Therefore, this study had a waiver of documentation of informed consent so that the researcher would not know the identities of the participants. Potential participants had a week to consider participating in the study. Since the researcher completed a waiver of documentation of informed consent, the survey included an informed consent page with a box for participants to indicate consent to participate (see Appendix J). The study required all participants to read the informed consent statement and then check the box in order to access the survey questions.

Participants could also request the results of the study by providing an email address in the *Request for Study Results* section of the survey (see Appendix N). After completing the survey, participants could print out the *Request for Study Results* page and then write the preferred email address for receiving the results. Participants placed this form in an envelope provided by the designated staff member at the study site. The envelope was sealed and submitted along with the *Thank you* page.

Instrumentation

The researcher utilized a survey with open-ended questions to collect data. Instruments that are specific and detailed are more likely to influence the participants' responses (Patten, 2010). Therefore, the researcher utilized open-ended questions to help participants describe the instructional practices and expectations of CTE instructors participating in this study without biasing the participants' responses. The study instrumentation consisted of two surveys. The 18-

question instructor survey (Appendix K) asked the instructors to describe their own expectations for student academic performance and classroom and instructional practices. The 14-question student survey (Appendix M) asked the students to describe their perception of the instructors' expectations for student academic performance and classroom and instructional practices.

The survey instruments were developed from a review of the literature on teacher expectations and the Pygmalion Effect. The questions were generated based on questionnaires used in studies by Dr. Christine Rubie-Davies, who has conducted extensive research on the long-term effects of teacher expectations on student outcomes. Dr. Rubie-Davies, Head of School and Associate Professor at the University of Auckland's School of Learning Development and Professional Practice, granted the researcher permission to use her instruments to design the surveys for this study.

The researcher serves as a director at the study site. Although this position does not require the researcher to supervise all of the potential instructor participants, the researcher's position may have influenced the participants' responses to personal interviews, observations, and artifact collection. An anonymous survey was used to minimize any influence the researcher had on participants' responses. Therefore, the anonymous survey was the sole instrument for collecting data in this study. The researcher triangulated the data by comparing the instructors' responses with the students' responses.

Validity

The researcher validated the survey instrument with Dr. Laurie St. Gean, who serves as the deputy superintendent at the study site, and Dr. Tambrelyn Quick, who completed her doctorate at Pepperdine in the Educational Leadership, Administration, and Policy Program. The researcher informed Dr. St. Gean and Dr. Quick about the basic tenets of the Pygmalion Effect

Theory: the Pygmalion Effect, Expectancy Effect, Bias Effect, and DTT. Then, the researcher asked them to review the survey questions to determine if the questions were appropriate. Based on the feedback and consultation with the dissertation chair, the researcher made changes to the survey questions as appropriate.

Data Collection Procedure

The researcher established a date range for the instructors to take the online survey. Instructor participants had the ability to take the survey in the study site's Professional Development Center. This is a room with very little random traffic because it is designated for staff development. Instructors had privacy to take the survey with no distractions. Instructors were also able to take the survey in any place with an electronic device that had access to the Internet and the Qualtrics software.

The researcher placed instructions for taking the online survey in each qualifying instructor's work mailbox when the survey time period began (see Appendix I). Another copy was emailed to the instructors. After completing the survey, instructors printed out the final page of the survey (Appendix O) that states "Thank you for participation in this study!" The instructors gave this form to a designated staff member in the study site's Career Center. The designated staff member then exchanged the form for a California Lottery Scratcher Ticket.

The adult student participants followed a similar process for completing the survey and receiving the gift for participating. The researcher established the date range for the student participants to complete the survey. Student participants were able to take the survey in the study site's Career Center for convenience. However, students were also able to take the survey in any place with an electronic device that has access to the Internet and the Qualtrics software. Student

participants also printed out the final page of the survey and exchanged it in the study site's Career Center for a California Lottery Scratcher Ticket.

The data collection was facilitated through Qualtrics. This online survey tool provides a central location to record the data from the participants' responses. When the date range for completing the surveys was over, the researcher exported the data into a Microsoft Excel document with the Qualtrics software for coding (see Appendix P). The researcher created separate documents for the instructor responses and student responses. The researcher saved the Excel spreadsheet on a thumb drive and stored the thumb drive, along with any other data and documentation that contained any identifying information from this study, in a locked file cabinet at the researcher's residence where only the researcher has a key, ensuring that no one else has access to this information.

The survey was anonymous to protect the identities of the participants. The researcher did not include any personal information when recording or reporting the results of the data to maintain separation of the participants' identities from their responses. When any of the responses were used in reporting the study results, the researcher referred to participants with numbers (see Appendix P). For example, *Teacher 1 responded…* or *Student 7 responded…* The researcher assigned numbers to each participant based solely on the order in which participants responded to the survey. The first instructor to respond was assigned number 1, the second instructor was assigned number 2, etc. The researcher used the same process to assign numbers to the student participants. All data will be stored securely for 3 years and will then be destroyed via shredding or deleting unless the researcher is granted further exploration of the study within the 3-year period.

Data Analysis

The researcher utilized the Qualtrics software to gather and organize the data for analysis. After gathering the data, the information was reviewed to determine coding topics and themes. The researcher followed the steps listed below to analyze the data:

- Step 1 – Collect data from Qualtrics website.

- Step 2 – Download data onto an Excel spreadsheet (a separate spreadsheet for instructor and student responses).

- Step 3 – Distribute Excel spread sheets to external coders.

- Step 4 – Review data.

- Step 5 – Code data.

- Step 6 – Determine themes for data.

- Step 7 – Write exhaustive description for each theme.

- Step 8 – Triangulate data through comparing and contrasting instructor and student responses.

- Step 9 – Report findings in Chapter 4.

The researcher and two external coders reviewed the data retrieved from the online surveys to code the information. The two external coders were Dr. Estella Garrison and Dr. Howard Ho. These two coders have utilized coding for analyzing data in completing dissertations for the Educational Leadership, Administration, and Policy program at Pepperdine University. Qualitative research involves "describing, classifying and interpreting" data (Creswell, 2007, p. 151). Therefore, the researcher and the two external coders reviewed the participants' responses multiple times to identify significant statements or phrases. This constituted the basis of formulating themes that were common to all participants. The researcher

and external coders grouped and charted the participant responses into these themes. The researcher negotiated any and all differences between coders. After establishing the major themes, the researcher wrote an exhaustive description of each theme.

According to Rubie-Davies (2010), instructors who have high expectations practice the following: (a) mixed-ability grouping, (b) promote student autonomy, (c) explain new concepts carefully, (d) give students clear feedback, (e) manage behavior positively, and (f) ask open-ended questions regularly. Each survey question addressed one of these factors. The researcher analyzed the data from the online survey to examine the extent to which the instructor participants utilize these practices. According to Richards and Morse (2007), triangulation is the practice of obtaining multiple perspectives on the same topic in order to challenge, add to, or verify conclusions. Accordingly, the researcher utilized a survey tool that asks the same questions of the two different participant groups (CTE instructors and adult students). The researcher triangulated the data through examining and comparing the instructor and student participants' perception of the instructors' implementation of the practices identified by Rubie-Davies.

Coding

Coding allows researchers to structure and organize data (Richards & Morse, 2007). The open-ended survey questions made it possible for the participants to provide a wide range of responses. However, those responses all focused on the different aspects of the Pygmalion Effect Theory as identified by Dr. Rubie-Davies. Coding allowed the researcher to identify the common themes that appeared throughout the data. The researcher utilized topic and analytic coding. Topic coding gives researchers the ability to "reflect on all the different ways people discuss particular topics, to seek patterns in their responses, or to develop dimensions of that experience"

(Richards & Morse, 2007, p. 134). Therefore, the researcher utilized topic coding to determine similarities and differences in the participants' perceptions. Analytic coding gives the researcher the ability to organize the data into concepts (Richards & Morse, 2007), which helped the researcher establish themes for conceptualizing and reporting on the data results.

Positionality

As a child, I have always had an interest in giving back to the community. My opportunity to achieve this goal came when I began my career as an instructor in 1998. The obligation of teaching students has created a concern within me to see students succeed in the classroom and develop life skills. I began working at the study site in 2008. Working in CTE has helped me to realize that CTE is an ideal environment for students to receive academic rigor as well as critical life skills for success in career pursuits.

I have served as the Director of Programs and Student Support Services at the study site for the past 4 years. My responsibilities include:

- Supervising students.

- Monitoring student enrollment.

- Monitoring and collecting data for Carl D. Perkins requirements.

- Supervising instructors in three career sectors – School of Engineering & Design, School of Finance & Business, and School of Public & Consumer Services.

Working at the study site has allowed me to interact with students on a daily basis. Students have shared their career goals, jokes, and personal problems with me. This interaction has furthered my interest to see students do well in their life pursuits. I am committed to utilize my capacity as an administrator to make a positive impact on student achievement.

Each semester, the study site's administrative team reviews each course to examine course completion rates and to determine our progress in meeting Carl D. Perkins legislative requirements. Factors that contribute to whether the study site continues to offer courses are the courses' relevance in the industry, student interest, and course completion rates. The administrative team strives to make each course as successful as possible through providing the necessary support to instructors and students.

My interest in this study stems from my job responsibilities, my desire to help improve the instructional program at the study site, and my desire to see students succeed. Finding common instructional strategies and other related practices of instructors who have demonstrated the ability to help students succeed in CTE courses can help other instructors achieve similar success. In this study, I sought to find insights that will help provide instructors with training that will increase their effectiveness in teaching students.

Chapter 4: Results

Introduction

The purpose of this survey study was to explore the student performance expectations and related practices of CTE instructors at an ROC. This study investigated classroom management and instructional practices of instructors with 80% or higher course completion rates among adult students. The four research questions guiding this study were:

1. What are the expectations for students' academic performance of Career Technical Education instructors at a Regional Occupational Center in Southern California with course completion rates of 80% or higher for adult students as self-reported by the instructors and as described by students?

2. What are the instructional practices of Career Technical Education instructors at a Regional Occupational Center in Southern California with course completion rates of 80% or higher for adult students as self-reported by the instructors and as described by students?

3. What are the classroom management practices of Career Technical Education instructors at a Regional Occupational Center in Southern California with course completion rates of 80% or higher adult students as self-reported by the instructors and as described by students?

4. What are the professional experiences and specialized training of Career Technical Education instructors at a Regional Occupational Center in Southern California with course completion rates of 80% or higher for adult students as self-reported by the instructors?

This qualitative study utilized an anonymous online survey with selected CTE instructors and adult students at an ROC in Southern California. The researcher invited instructors who taught courses with an 80% or higher adult student completion rate for at least two consecutive semesters and the adult students enrolled in these courses to participate in the study. There was a separate survey for instructors and adult students. The instructor survey consisted of 18 open-ended questions that asked the instructors to describe their expectations for student academic performance, classroom management practices, instructional strategies, and professional development experiences. The student survey consisted of 14 open-ended questions that asked students to describe their perception of the instructors' expectations for student academic performance, classroom management practices, and instructional strategies. The researcher developed the surveys based on a review of the literature on teacher expectations and the Pygmalion Effect.

This chapter reports the study findings in four sections, one section for each guiding research question, and presents the overall key findings in the chapter summary.

Research Question 1: Instructor Expectations for Student Academic Performance

Research Question 1 asked, "What are the expectations for students' academic performance of Career Technical Education instructors at a Regional Occupational Center in Southern California with course completion rates of 80% or higher for adult students as self-reported by the instructors and as described by students?" Survey Questions 4 and 5 on the Instructor Survey and the Student Survey addressed Research Question 1. The two questions were identical on both surveys.

Instructor and Student Survey Question 4. Instructor and Student Survey Question 4 asked if the instructor believes the student or the instructor is more responsible for students learning the course material. Three key findings resulted from the analysis of Survey Question 4:

- Student Responsibility

- Shared Responsibility

- Instructor Responsibility

Table 2 presents and compares instructor and student responses. All six instructors who participated in the survey responded to the question. Out of 126 student participants, 117 students responded to the question. Two of the responsibility categories resulted from the analysis of instructor responses to Survey Question 4. Three of the responsibility categories resulted from student responses to Survey Question 4. Two categories were common to both groups: *Instructor Responsibility* and *Shared Responsibility*. The one category that was not common to both groups was *Student Responsibility*.

Table 2

Responsibility for Students' Learning

Categories	Instructor Responses	Student Responses	Total Responses
Student Responsibility	0	61	61
Shared Responsibility	4	40	44
Instructor Responsibility	2	15	17

All instructors who participated in the survey believed that instructors are responsible for students' learning. Four of the respondents indicated that it is both the instructor's and the student's responsibility. Instructor #5 stated that it is up to the instructor to present the information in such a way that is "clear, understandable..., and geared to the different learning

styles of the students in the class." The same instructor stated that it is the student's

responsibility to have the willingness to learn the material, and that he/she must play an active

role in learning. Two instructors indicated that the instructor is more responsible for students

learning the material. Instructor #3 stated that 60% of the responsibility for students learning the

material is the instructor's and 40% of the responsibility belongs to the student. This participant

stated that all students have a right to have access to the course material. Therefore, the instructor

needs to make every effort to ensure this happens.

The majority of student participants thought that instructors believe the student is more

responsible than the instructor is for students learning the material. Sixty-one student participants

indicated that the instructor believes it is the student's responsibility to learn the material.

Student #6 stated that the instructor gives the student all of the tools and information the student

needs. It is then the student's responsibility to acquire the knowledge. Student #7 stated that the

student is more responsible because all the instructor can do is present the information; it is up to

the student to use the tools and information that the instructor provides in order to understand

and apply the knowledge. Student #12 stated that it is the student's responsibility to inform the

instructor of what information the student does not understand. Student #27 stated that regardless

of how well the instructor presents the information, if the student does not put forth the effort to

acquire the knowledge the student will not learn.

Forty students indicated that the instructor believes it is both the instructor's and the

student's responsibility for students learning the material. Student #2 stated that the instructor

was responsible for ensuring students had the appropriate skills and information to be successful

in the class. After the instructor teaches, the student becomes responsible for receiving and

applying the information. Student #15 stated that the instructor teaches the student the

information, and the student needs to ask questions whenever he/she does not understand what the instructor taught.

Instructors and students both indicated that their respective group was responsible for students learning. Sixty-six percent of the instructor group indicated that both the instructor and the student are responsible for students' learning. The remaining 33% of instructors indicated that the instructor is responsible. Fifty-three percent of the student respondents indicated that the instructor believes that students are more responsible for students learning the material. Thirty-four percent of the student respondents believed that both the instructor and student are equally responsible for students learning the material. Only 13% of the student group indicated that the instructor believes the instructor is more responsible. It appears that the instructor group believed that the instructor and student share the responsibility, whereas the student group believed the instructors convey the message that students are more responsible.

Instructor and Student Survey Question 5. Instructor and Student Survey Question 5 asked how instructors encourage students to learn independently. Seven key findings resulted from the analysis of Instructor and Student Survey Question 5:

- Assign Individual Activities

- Give Students Study Advice

- Assess Students

- Praise Students

- Review Concepts

- Require Students to Seek Answers on Their Own

- Explain the Importance of Acquiring the Knowledge

Table 3 presents and compares instructor and student responses. All six of the instructor participants responded to the question. One hundred nine of the 126 student participants responded to Survey Question 5. Three categories for encouraging students to learn independently resulted from the analysis of the instructor responses and five categories resulted from student responses to Survey Question 5. Only one category, *Assign Individual Activities*, was common to both survey groups. Seven categories that were not common to both survey groups included *Require Students to Seek Answers on Their Own* and *Explain the Importance of Acquiring the Knowledge* from the instructor responses and *Assess Students*, *Give Students Study Advice*, *Review Concepts*, and *Praise Students* from student responses.

Table 3

Strategies for Encouraging Students to Learn Independently

Categories	Instructor Responses	Student Responses	Total Responses
Assign Individual Activities	3	49	52
Give Students Study Advice	0	25	25
Assess Students	0	9	9
Praise Students	0	6	6
Review Concepts	0	5	5
Require Students to Seek Answers on Their Own	2	0	2
Explain the Importance of Acquiring the Knowledge	1	0	1

With respect to strategies for encouraging students to learn independent of the direct instruction as described by instructors, half of the instructors believed that assigning students individual work motivates students to work independently. Such assignments included group work, projects, and other hands-on activities. Instructors who indicated *Assign Individual*

Activities as a strategy to encourage students to learn independently gave examples such as assigning homework, giving tests to assess students' individual abilities, and requiring students to do research outside of class time. Instructor #5 stated that assigning individual work in and outside of class was necessary because the course is an accelerated program. Two instructors identified *Require Students to Seek Answers on Their Own* as a strategy to encourage students to learn independently. Instructor #3 stated that giving students all of the answers creates an environment where students do not need to put forth any effort to discover new information or obtain new knowledge.

Student respondents commonly indicated that instructors utilized reading, research, and homework assignments to encourage students to learn independently. The most common category identified by student participants was *Assign Independent Assignments*. Students stated that the instructor designated classroom time for students to perform designated skills without direct instruction. During this time, the instructor did not readily give students the answers to the problems. Instead, students needed to search for the answers. Instructors provided answers after students attempted to discover the answers independently. Student #102 stated that the instructor gave the students a chance to figure out the problems before correcting the students. Student #119 stated that the instructor assigned work that promoted student autonomy every day. The second most common response from students was *Give Students Study Advice*. Student #24 stated that the instructor shared different ways to study that helped the student to succeed. Students who identified *Reviews Concepts* as a strategy that instructors used to encourage students to learn independently stated that the instructor continued to go over concepts until students were able to understand fully. The last category identified by student participants was *Praise Students*. Student #110 stated that the positive feedback the instructor gave was highly

inspirational, giving students the confidence to put forth the effort needed to succeed in the classroom and in a career.

Instructors and students reported a variety of strategies used by instructors to encourage students to participate actively in the learning process. The strategy that appeared most often on the instructor and student surveys was *Assign Individual Activities*, which describes independent practice taking place both within and outside of the classroom. Instructor and student participants stated that instructors assigned work that gave students the opportunity to apply the information instructors presented during direct instruction. Student respondents also acknowledged that instructors assigned homework frequently to give students independent practice. *Require Students to Seek Answers on Their Own*, *Explain the Importance of Acquiring the Knowledge*, and *Give Students Study Advice* were representative of promoting critical thinking skills whereby students learn how to acquire knowledge. Student participants who identified *Assess Students* as a strategy indicated that instructors used multiple types of assessments and gave students feedback to encourage learning outside of direct instruction. The strategy *Praise Students* revealed that students believe positive feedback from instructors encourages students on an individual basis to perform well in class. Students #21 and #35 stated that the instructor's encouragement gave them the confidence to believe that they have the ability to complete the work. The strategy *Review Concepts* revealed that students believed review was necessary for them to gain the ability to internalize the knowledge instructors presented. Student #15 indicated that through reviewing the information, the instructor ensures that students have ample time to ask questions to resolve any misunderstandings. Consequently, students are able to access the information.

Overall key findings. Based on their responses, the qualifying instructors who participated in this study believed that it was either the instructor's responsibility or the instructor's and the student's responsibility for ensuring students learn the material presented in class. Every instructor participant stated that the instructor's role in the learning process was critical to student learning because it was necessary for the instructor to present information clearly and in ways that would give all students access to the knowledge regardless of the students' learning modality.

Student responses demonstrated that the majority of students believe instructors place the responsibility for learning on the students. The second group of student participants indicated that instructors believe students and instructors share the responsibility for students learning the course material. Only 13% of the student participants thought that instructors believe it is the instructor's responsibility for ensuring that students learn the material. Student participants in general interpreted the instructors' actions as placing the responsibility for learning on the students or as a shared responsibility between the instructors and the students.

Both instructor and student responses indicated that instructors gave assignments that did not include direct instruction to encourage students to learn independently. Instructors also indicated that requiring students to seek information without the instructors' assistance required students to learn autonomously. Student participants indicated that instructors' advice on how to study encouraged students to learn independent of the instructors' immediate assistance.

Research Question 2: Instructional Practices

Research Question 2 asked, "What are the instructional practices of Career Technical Education instructors at a Regional Occupational Center in Southern California with course completion rates of 80% or higher for adult students as self-reported by the instructors and as

described by students?" Instructor Survey Questions 1-3, 6-11, and 14-16 addressed Research Question 2. Student Survey Questions 1-3, 6-9, and 12-14 addressed Research Question 2. However, Student Survey Question 3 was eliminated from the data analysis because the question was written incorrectly, causing it to read as almost identical to Student Survey Question 2.

Instructor and Student Survey Question 1. Instructor and Student Survey Question 1 asked participants to identify the types of instructional strategies instructors used to deliver instruction. Six key findings resulted from the analysis of Instructor and Student Survey Question 1:

- Active Learning

- Visual Aid

- Lecture

- Demonstrations

- Repetition/Review

- Questions & Answers

Table 4 presents and compares instructor and student responses. All six instructors who participated in the survey responded to the question. One hundred fifteen out of 126 student participants responded to this survey question. Four of the instructional strategy categories resulted from the analysis of the instructor survey, and six categories resulted from the student survey. Four of the categories were common to both groups: *Lecture*, *Visual Aid*, *Active Learning*, and *Demonstrations*. The two categories identified by student participants that were not common to both groups were *Repetition/Review* and *Questions & Answers*.

Table 4

Types of Instructional Strategies

Categories	Instructor Responses	Student Responses	Total Responses
Active Learning	4	56	60
Visual Aid	3	37	41
Lecture	3	31	34
Demonstrations	2	16	18
Repetition/Review	0	15	15
Questions & Answers	0	10	10

Instructional strategies as described by instructors and students indicated that instructors utilized visual aids to deliver instruction. Examples of visual aids included PowerPoint presentations, videos, realia, charts, and drawings. Student #43 stated that the instructor utilized drawings on the white board with detailed information. Student #81 stated that the instructor gave students notes from the PowerPoint presentation. Instructor and student respondents also identified *Lecture* as an instructional strategy. *Active Learning* was identified by 50% of the instructor participants and 49% of the student participants. Active learning is the process of students participating in learning that engenders "analysis, synthesis, and evaluation of class content" (CRLT, 2013, p.1). Examples of *Active Learning* as identified by instructors and students included hands-on activities, group work, classroom discussions, and games. Another category identified by both participant groups was *Demonstrations*. Instructor #5 stated, "First, I give some background information on the skill we will be learning followed by a demonstration of the skill." Student #98 indicated that the instructor gave a demonstration and then required the students to practice while the instructor observed. Fifteen student participants identified the category *Repetition/Review* as an instructional strategy. Student #12 stated that the instructor

reviewed the material various times to ensure students had many opportunities to learn the information. Student #15 indicated that the instructor always reviewed the material prior to giving any exams or tests. Ten student participants indicated that the instructor reviewed all students' questions to ensure that students had an appropriate understanding of the material.

Responses given by instructors and students indicate that instructors use a variety of instructional strategies to deliver instruction. The strategy described by instructors and students as utilized most often was *Active Learning,* which is representative of more interactive instruction versus direct instruction. Although participants listed *Active Learning* most often, the next three categories are representative of direct instruction. Fifty percent of the instructor participants listed *Lecture* and *Visual Aid* as one of the instructor's instructional strategies. Thirty-three percent of the instructors listed *Demonstrations*, 27% of the student participants listed *Lecture*, and 32% percent listed *Visual Aid* as an instructional strategy.

Instructor and Student Survey Question 2. Instructor and Student Survey Question 2 asked how often instructors group students for classroom activities. Six key findings resulted from the analysis of Instructor and Student Survey Question 2:

- Daily
- Often
- Not Often
- Weekly
- Most of the Time
- For Projects

Table 5 presents and compares instructor and student responses. All six of the instructor participants responded to this question. One hundred nineteen out of 126 student participants

responded to the question. Three group frequency categories resulted from the analysis of the instructor survey, and five group frequency categories resulted from the analysis of the student survey. One category, *For Projects*, was unique to the instructor survey. Two of the categories, *Daily* and *Weekly*, were common to both groups. Three categories identified by student participants that were not common to both groups were *Often*, *Most of the time*, and *Not Often*.

Table 5

Frequency of Assigned Group Activities

Categories	Instructor Responses	Student Responses	Total Responses
Daily	3	41	44
Often	0	20	20
Not Often	0	19	19
Weekly	2	16	18
Most of the Time	0	11	11
For Projects	1	0	1

Frequency of assigned group activity responses as described by instructor participants indicated that group activities were a central part of instruction. Five of the six instructor participants stated that assigning group activities takes place at least once a week. This could mean that up to 50% of class time was used for this instructional strategy because three of the 10 qualifying instructors had classes that only met two times a week. One of those instructors teaches up to six separate courses during the course of a semester. Instructor #5 stated that group activities occurred on a daily basis with the students grouped in pairs or in small groups. Instructor #1 stated that the students were "always" divided into groups. Two of the instructor participants stated that the instructors assigned group work at least once a week. One of the instructor participants stated that instructors assigned group activities for projects.

Frequency of assigned group activity responses as described by student participants indicated that group activities were generally incorporated into the curriculum. Forty-one student participants stated that group activities were a part of the instruction on a daily basis. Student #19 stated that the instructor assigned group activities at least once every time the class met. Student #29 stated that students were required to work in groups daily for projects and other activities. Twenty student participants stated that instructors assigned group activities often. Although the way students used the term "often" is not quantifiable, these responses indicated that students perceive the instructor as assigning group activities on a regular basis. Student #14 stated that the instructor assigned group activities often so that the students developed a familiarity with the assigned groups and gained the ability to help each other "without any questions." Student #79 stated that it was necessary for the instructor to assign group activities often because the students needed to practice skills such as taking vital signs on a regular basis. Nineteen student participants stated that the instructor did not assign group activities often. Student #81 stated that there had only been one group assignment since the class started, which does not necessarily indicate that the instructor did not assign group activities regularly. For example, Student #39 stated that the instructor had not assigned any group activities yet because the class had just started. However, the instructor informed the class that group activities would be assigned for projects. Sixteen student participants stated that the instructor assigned group activities weekly. For seven of the 13 classes that qualified for this study, having weekly group activities means that this type of instructional strategy occurred at least 50% of the time because those classes only met twice a week. Eleven student participants stated that group activities were assigned most of the time. This category is also not quantifiable; however, it implicates that group activities occurred regularly.

Instructor and student responses indicated that most of the qualifying instructors utilized group activities on a regular basis. Fifty percent of the instructors stated that instructors assigned group work each day. Thirty-three percent of the instructors stated that instructors assigned group work weekly. Seventeen percent of the instructors stated that instructors assigned group work for projects. Forty-four percent of the student participants stated that instructors assigned group work daily. Nineteen percent of the student participants stated that instructors assigned group work often. Eighteen percent of the student participants indicated that instructors did not assign group work often. However, some of these responses mentioned that the lack of group activities was due to the class just starting. Fifteen percent of the students stated that instructors assigned group work weekly. Ten percent of the student participants stated that instructors assigned group work most of the time.

Instructor Survey Question 3. Survey Question 3 asked how instructors grouped students. Student Survey Question 3 was eliminated from the analysis because the question was recorded incorrectly. Five key findings resulted from the analysis of Instructor Survey Question 3:

- Mixed Ability Grouping
- Students Choose Groups
- Mixing Personalities
- Same Ability Grouping
- Random Grouping

Table 6 presents and compares instructor responses. All six instructor participants provided a response to the question. Five grouping categories resulted from the instructor responses. *Mixed*

Ability Grouping and *Students Choose Groups* were the only categories identified by multiple participants.

Table 6

Grouping Strategies

Category	Instructor Responses
Mixed Ability Grouping	2
Students Choose Groups	2
Mixing Personalities	1
Same Ability Grouping	1
Random Grouping	1

Grouping strategy responses as described by instructor participants indicated that instructor participants utilized different types of strategies to group students. Two instructor participants selected the *Mixed Ability Grouping* category. Instructor #1 stated that putting students in groups with mixed abilities is beneficial to both high achieving students and students who struggle to learn the material. The higher achieving students are able to provide assistance to the students who do not learn the information readily. According to Instructor #1, this type of grouping helps students retain the information better through repetition and accountability. Instructor #6 stated that students were grouped so that students who struggle can receive assistance from students who "grasp the subject matter more quickly and may be willing to take a leadership role." Two instructor participants also selected *Students Choose Groups* as the grouping strategy. Instructor #5 stated that students were able to choose the groups as long as the students did not choose the same people for the next group assignment. Students are required to continue selecting different group members until each student has worked with each class

member at least once. Instructor #2 identified *Same Ability Grouping* as the strategy for assigning groups. This participant stated that students were placed in groups based on the Adobe Suites software program in which the students enrolled. This instructor also stated that students with similar abilities were placed in the same group in order for the projects to be "pushed to the team's best capabilities." Instructor #3 identified *Mixing Personalities* as the strategy for assigning groups. This participant stated that assigning groups by mixing personalities gave the groups balance through teaching the students to work with a diverse group of people. Instructor #4 identified *Random Grouping* as the strategy for assigning groups. This participant stated that groups were determined by having students count off numbers. For example, students may count off using the numbers one through four. All the students who counted one would be in a group, all students who counted twos would be in a group, etc.

Instructors identified five different strategies for assigning groups. Two categories were selected by two instructors. All other categories were unique to each individual instructor. Responses to each category, with the exception of *Same Ability Grouping*, were all representative of instructors incorporating diversity when assigning students to groups.

Instructor and Student Survey Question 6. Instructor and Student Survey Question 6 asked what types of instructional strategies instructors used to introduce new concepts to students. Six key findings resulted from the analysis of Instructor and Student Survey Question 6:

- Visual Aids
- Review Information
- Active Learning
- Demonstrations

- Lecture

- Explain Concepts

Table 7 presents and compares instructor and student responses. Five out of the six instructor

participants identified at least one of the categories. Three instructional strategy categories

resulted from the analysis of the instructor survey, and five instructional strategy categories

resulted from the analysis of the student survey. One hundred three of the 126 student

participants identified at least one of the instructional strategy categories. The *Explain Concepts*

category was unique to the instructor responses. The *Lecture*, *Active Learning*, and *Review*

Information categories were unique to the student responses. Two categories, *Demonstrations*

and *Visual Aids*, were common to both groups.

Table 7

Strategies for Introducing New Concepts

Categories	Instructor Responses	Student Responses	Total Responses
Visual Aids	2	40	42
Review Information	0	21	21
Active Learning	0	19	19
Demonstrations	2	16	18
Lecture	0	18	18
Explain Concepts	2	0	2

Strategies for introducing new concept responses as described by instructors were spread

out evenly among the three instructional strategy categories. Each category received two

responses from instructor participants. Instructor #2 stated that utilizing visual aids offers the

students exposure to examples of professional work. Instructor #5 mentioned that showing

videos was beneficial to students because "most students are visual learners." The two instructor

responses to the *Demonstrations* category simply stated that the instructors provided

demonstrations to introduce new concepts to students. Instructor #6 identified *Explain Concepts*

as an instructional strategy, stating that new concepts were introduced by using real life scenarios

as examples.

Strategies for introducing new concept responses as described by student participants

indicated that instructors utilized multiple instructional methods to deliver instruction. Forty

student participants identified *Visual Aids* as a strategy the instructors used to introduce new

concepts to students. Examples of visual aids that student participants identified included videos,

pictures, and posters. Student #119 stated that the visual aids made the class more interesting and

fun. The videos that the instructor used in class ranged from clips that gave demonstrations in a

doctor's office to scenes from popular television shows. Student participants also identified

diagrams as a tool that instructors used to introduce new concepts. Student #98 stated that the

instructor drew diagrams on the white board when it was necessary to give students a visual

demonstration of a concept. The second most frequent response to Survey Question 6 was

Review Information; 21 student participants identified this strategy. Students #6 and #8 stated

that the instructor introduced the information and then reviewed the information by asking

questions. Student #19 stated that the instructor assigned the students to read the chapter. Then,

the instructor reviewed the information from the chapter with the class. Nineteen student

participants identified *Active Learning* as a strategy that instructors used to introduce new

concepts to students. Examples of *Active Learning* included hands-on activities, class

discussions, and group work. Eighteen student participants identified *Lecture* as a strategy

instructors used to introduce new concepts to students. A common statement was that instructors

introduced the concepts with a lecture followed by hands-on activities. Sixteen student

participants selected the *Demonstrations* category. Student #26 stated that the instructor

demonstrated the procedure so that the students could see exactly what the instructor wanted the

students to perform. Student #32 stated that the demonstrations were very helpful in

understanding and applying the information that was taught.

Instructors and students identified a variety of instructional strategies for introducing new

concepts. Two of the three categories from the Instructor Survey indicated that instructors

provided students with visual representations of the expected outcomes. Instructor responses

appeared to demonstrate that instructors focused on providing some type of visual aid to ensure

that students gained a proper understanding of how to apply the information that the instructors

taught. Three of the five categories that student participants identified solely required actions on

the instructors' behalf. The other two categories were representative of strategies that required

student interaction.

Instructor and Student Survey Question 7. Instructor and Student Survey Question 7

asked how instructors made adjustments to instructional strategies to accommodate students who

did not understand the information when instructors first presented the information. Four key

findings resulted from the analysis of Instructor and Student Survey Question 7:

- Repeat/Review Instruction

- Work With Student Individually

- Check for Understanding

- Use Various Aids

Table 8 presents and compares instructor and students responses. All six instructor participants

provided at least one response that aligned with one of the adjustment to instruction categories.

Eighty-five of the 126 student participants provided a response that identified one of the

categories listed in Table 8. Two adjustment to instruction categories resulted from the analysis

of the instructor survey. Four adjustment to instruction categories resulted from the analysis of

the student survey. Two categories were common to both participant groups.

Table 8

Adjustment to Instruction

Categories	Instructor Responses	Student Responses	Total Responses
Repeat/Review Instruction	4	45	49
Work with Student Individually	3	26	29
Check for Understanding	0	11	11
Use Various Aids	1	5	6

Four instructor participants identified *Repeat/Review Instruction* as a strategy to make

adjustments in instruction for students who did not understand the information when it was first

presented. Examples of explaining differently included presenting the information in a slightly

different way and breaking down the concepts to a level where students were able to access the

information. Instructor #2 stated that the same information was taught in many different ways so

that the students grasped the concepts after applying the knowledge three or four times in various

activities. Three instructor participants identified *Work with Student Individually* as an

adjustment strategy. Examples of working with students individually included helping students

answer questions one-on-one and breaking down the lesson into smaller parts. The one instructor

participant who selected *Visual Aids* as an adjustment strategy stated that drawing diagrams on

the white board when students did not understand was an effective tool.

Forty-five student participants identified *Repeat/Review Instruction* as an adjustment

strategy. Examples of repeating and or reviewing instruction included giving another lecture and

explanation, explaining thoroughly until students understand, taking extra time to explain, and

explaining the information in a different way. Student #33 stated, "When someone doesn't understand the information the first time, we always ask questions and she answers all the questions we may have." Student #54 stated that the instructor reviewed the material multiple times and explained it to individual students and the whole class in case some students were too shy to ask for assistance. Twenty-six student participants identified *Working with Student Individually* as an adjustment strategy. Examples of working individually with students included reviewing the information one-on-one with the student after the lecture, sitting with the student, and explaining the information patiently. Student #67 stated that the instructor utilized one-on-one tutoring. Student #81 stated that the instructor took class time to work one-on-one with the student who did not understand. Eleven student participants identified *Check for Understanding* as an adjustment strategy. Examples of checking for understanding included asking the students if there were any concepts that were too difficult to understand, asking students to be very specific when telling the instructor what the student did not understand, and making sure students understood before proceeding to the next concept. Student #83 stated that the instructor asked students what concepts they did not understand in order to make improvements to the lesson delivery in the future. Multiple student participants stated that the instructor asked if there was anything that the students did not understand in order for the instructor to repeat the information or explain the information in a different way. Five student participants identified *Use Various Aids* as an adjustment strategy. Three of the five participants who selected this adjustment strategy stated that the instructor used videos to accommodate students who did not understand the information the first time.

Instructors and students both identified strategies that were indicative of the instructor reteaching the information when students did not understand the first time. Some participants

simply stated that the instructor repeated the information. Other participants stated that the instructor repeated the information in a different way. Regardless of the category, all participants indicated that the instructor did some type of reteaching so that the student would be able to understand the information.

Instructor Survey Question 8. Instructor Survey Question 8 asked how important the instructor's feedback to student success in class was. Two key findings resulted from the analysis of Instructor Survey Question 8:

- Very/Extremely Important

- Important

Table 9 presents the instructor participants' responses. All six of the instructors responded to the question.

Table 9

Importance of Feedback

Categories	Instructor Responses
Very/Extremely Important	5
Important	1

Five of the six instructor participants stated that feedback is very important to student success. Instructor #5 stated that it is very important to give students feedback early so they can make adjustments and continue gaining proficiency. Instructor #6 stated that students need feedback to determine if students are on track. Without the feedback, the students would have difficulty succeeding in class. In the sole response for the *Important* category, Instructor #3 stated that feedback is important in order to ensure that students are on track with correct information.

Each instructor participant's response indicated that feedback is critical to student success because feedback assist students in obtaining the information correctly and clarifying misunderstandings. Providing feedback gives students the opportunity to make adjustments as necessary to ensure that they make the appropriate progress in class.

Instructor Survey Question 9 and Student Survey Question 8. Instructor Survey Question 9 and Student Survey Question 8 asked how instructors provide feedback to students. Five key findings resulted from the analysis of Instructor Survey Question 9 and Student Survey Question 8:

- Grade/Review Work

- Positive Feedback

- Questions & Answers

- Individually

- As a Group

Table 10 presents and compares instructor and student responses. All six instructor participants responded to this question. One hundred out of the 126 student participants provided responses to this question. Three feedback method categories resulted from the analysis of the instructor survey, and five feedback method categories resulted from the analysis of the student survey. The *Positive Feedback*, *Grade/Review Work,* and *Questions & Answers* categories were common to both surveys. The *Individually* and *As a Group* categories were unique to the student survey responses.

Four instructors recorded an answer to the *Grade/Review Work* category. Examples of grading and or reviewing work included writing comments and suggestions on graded work, informing students of the students' progress, and giving class critiques. Instructor #1 stated that

the instructor gave students suggestions for remedial practices. Instructor #3 stated that the instructor provided feedback in order to inform students about how close the students were to achieving the stated academic goal. Instructor #5 stated that the instructor gave students verbal feedback in a timely manner. Two instructors identified *Questions & Answers* as a feedback strategy. Examples of providing feedback through questions and answers included checking for understanding through conducting a question and answer session and giving opportunities for students to ask questions. Instructor #4 stated that the instructor conducted question and answer sessions after the lesson objective was covered. Instructor #6 stated the instructor provided feedback to larger classes with written progress reports and smaller classes with individual attention. However, regardless of the class size, the instructor gave all students the opportunity to ask questions regarding feedback. Instructor #3 was the only instructor who indicated *Positive Feedback* as a feedback strategy, stating that building the students' confidence is critical in helping students reach the next level of understanding.

Table 10

Feedback Methods

Categories	Instructor Responses	Student Responses	Total Responses
Grade/Review Work	4	56	60
Positive Feedback	1	24	25
Questions & Answers	2	13	15
Individually	0	12	12
As a Group	0	6	6

One hundred of the 126 student participants provided responses to Student Survey Question 8. Fifty-six student participants indicated *Grade/Review Work* as a strategy that the instructor used to provide feedback to students. Examples of grading and or reviewing work

included reviewing information the instructor covered, providing constructive criticism, signing

off on competencies, and repeating the information with more details. Student #26 stated that the

instructor explained in more detail when students did not understand the information correctly.

Student #30 stated that the instructor helped students recognize weaknesses by identifying the

concepts with which the students needed more assistance. Student #36 stated that the instructor

provided students with detailed information on how to improve their quality of work. The

instructor also allowed students to provide other students feedback through class discussions.

Twenty-three student participants identified *Positive Feedback* as a strategy instructors

utilized to provide students with feedback. Examples of grading and or reviewing work included

instructors returning graded tests and quizzes to students with written comments, verbal

feedback, and checking off competencies. Student #32 stated that the instructor observed

students as they completed procedures. During the observation, the instructor provided

immediate feedback so that students would not learn the procedures incorrectly. Student #98

stated that the instructor provided tips after assignments to inform students about how to make

corrections. Student #122 stated that the instructor reviewed coursework in class in order to

explain why students had incorrect answers.

Thirteen student participants identified *Questions & Answers* as a feedback strategy.

Examples of question and answer sessions included allowing students to ask questions, ensuring

that there was enough class time to address student questions, and consistently asking students if

there were any questions after each lesson topic. Student #13 stated that the instructor provided

time immediately following the lesson topic to allow students to ask any questions. Students #37

and #114 stated that the instructor was always available when students had questions. Student

#71 stated that the instructor graded every quiz and answered all questions related to the quizzes.

Twelve student participants identified *Individually* as a feedback strategy. Examples of providing individual feedback included working with students one-on-one, consulting personally with students, and offering explanations one-on-one. Student #24 stated that the instructor called students over to speak with them individually when students appeared to be confused or unsure about the information. Student #28 stated that the instructor pulled students aside to address any corrections. Six student participants identified *As a Group* as a strategy for providing feedback. Examples of providing feedback to the entire group included having class discussions about everyone's work, standing in front of the class and explaining everything to everyone, and lectures. Student #20 stated that the instructor talked to the class as group while providing feedback. Student #38 stated that the instructor held class discussions in order for the students to express what the students liked and disliked, and how the instructor could make changes to future assignments.

The strategy identified most often by instructors and students was *Grade/Review Work*, which indicates that the work assigned in class is critical to monitoring student progress. Instructors reported that they provide feedback to student work both verbally and in writing. Responses to Instructor Survey Question 9 and Student Survey Question 8 indicated that instructors utilized student work as a meaningful tool to allow students to practice applying the information taught in the curriculum. With that practice, instructors were able to correct mistakes before the final assessment.

Instructor Survey Question 10. Instructor Survey Question 10 asked how often instructors provide students with feedback. Two key findings resulted from the analysis of Instructor Survey Question 10:

- Daily

- When Needed

Table 11 presents and compares instructor responses. All six instructors responded to this question. Two feedback frequency categories resulted from the analysis of the instructor survey: *Daily* and *When Needed*.

Table 11

Frequency of Instructor Feedback

Categories	Instructor Responses
Daily	4
When Needed	2

Four instructor participants indicated that feedback occurs daily. Instructors #1 and #4 stated that feedback takes place each time students receive a performance task, which is daily. Instructor #3 stated that feedback occurs daily because it is important for students to know how they are progressing throughout the course. Two instructor participants stated that feedback occurs when the instructors determine the students need feedback. Instructor #2 stated that feedback occurs weekly and as often as needed. Instructor #6 stated that feedback occurs twice during the semester, but more often if necessary.

The frequency of instructor feedback category that occurred most often was *Daily*. This is indicative of instructors believing that feedback is not only important, but also needs to take place often to keep students informed of the progress they make in class. Even the two instructors who did not choose the *Daily* category stated that feedback takes place when needed.

Student Survey Question 9. Student Survey Question 9 asked whether the students believe the instructor gives enough feedback for students to be successful in class. Three key findings resulted from the analysis of Student Survey Question 9:

- Yes

- No

- Sometimes

Table 12 presents and compares student responses. Of the 126 student participants, 113 students responded to the question.

Table 12

Sufficiency of Instructor Feedback

Categories	Student Responses
Yes	99
No	7
Sometimes	7

Ninety-nine student respondents indicated that the instructor provided enough feedback for students to be successful in class. Student #19 stated that the instructor provided feedback for each assigned task, which helps the students know where improvement needs to take place. Students #84 and #92 stated that the instructor gave enough feedback and encouraged students to do well. The frequency of the feedback and grades from assignments encouraged the students to perform well. Student #102 stated that the instructor informed students of what they needed to work on in order to become proficient in specific areas before a test. Seven student participants stated that the instructor did not provide enough feedback. Student #30 stated that the instructor should give more feedback that is critical so that the student is able to determine the areas that need more focus and improvement. Student #79 stated that the instructor provided feedback, but not enough. Student #115 stated that the instructor needed to go over the test so that the students can be aware of the questions the students answered incorrectly.

Seven student participants indicated that the instructor only provided enough feedback sometimes. Students #22 and #31 stated that they preferred the instructor to utilize more videos for each chapter in order to provide feedback. Students #24 and #35 stated that the instructor did not have the time or patience to provide sufficient feedback. Student #75 stated that the instructor should provide feedback more often so that students can make adjustments sooner. Student #78 stated that the instructor provided feedback for the bookwork, but did not provide feedback on assessments. Student #90 stated that the instructor needed to do more review of the worksheets to make students aware of the questions that students answered incorrectly.

The category that student participants selected most often was *Yes*, which is indicative of students believing that instructors provided sufficient feedback for students to perform well in class. Only six percent of the student participants did not believe that the instructors provided enough feedback.

Instructor Survey Question 11. Instructor Survey Question 11 asked how instructors determine when it is time to give students feedback on student work. Two key findings resulted from the analysis of Instructor Survey Question 11:

- After Each Task

- When Students Need Help

Table 13 presents and compares the instructor responses. Five out of the six instructor participants responded to the question.

Table 13

Strategies for Determining Frequency of Feedback

Categories	Instructor Responses
After Each Task	4
When Students Need Help	2

Four instructor participants identified *After Each Task* as the frequency with which instructors provide feedback to students. Instructors #1 and #2 stated that feedback occurred after each project or task, which was indicative of feedback taking place daily. Instructor #3 stated that feedback was provided for practically everything that takes place in class. The instructor then gave students the opportunity to practice and apply the information given. When students were practicing, Instructor #3 stated that he/she was able to determine the areas where students needed more feedback. Instructor #5 stated that students were given feedback during hands-on activities so that students would know what corrections needed to be made immediately. Two instructor participants indicated that instructors provided feedback when students needed help. Instructor #3 stated that the instructor observed the students to determine when students showed signs of frustration or confusion. At that time, the instructor provided the students with feedback that would clarify any misunderstandings. Instructor #6 stated that feedback occurred when students were not performing well in class.

The strategy for determining frequency of feedback category that occurred most often was *After Each Task*, which is indicative of instructors providing constant feedback to keep students informed of student progress. Instructor participants stated that they provided feedback as often as students needed so that students did not fall behind with any of the information needed to be successful in class.

Instructor Survey Question 14 and Student Survey Question 12. Instructor Survey Question 14 and Student Survey Question 12 asked participants to list the types of assessments instructors used to assess student progress. Seven key findings resulted from the analysis of Instructor Survey Question 14 and Student Survey Question 12:

- Homework/Tests

- Observe Active Learning

- Bookwork

- Multiple Choice Tests

- Matching Tests

- True/False Tests

- Fill-In the Blank Tests

Table 14 presents and compares instructor and student responses. Each of the six instructor participants responded to the question. Ninety-two of the 126 student participants responded to the question. Five assessment categories resulted from the analysis of the instructor survey. Three assessment categories resulted from the analysis of the student survey. One category, *Observe Active Learning*, was common to both groups.

Table 14

Types of Assessments

Categories	Instructor Responses	Student Responses	Total Responses
Homework/Tests	0	66	66
Observe Active Learning	5	47	52
Bookwork	0	15	15
Multiple-Choice Tests	5	0	5
Matching Tests	2	0	2
True/False Tests	2	0	2
Fill-In the Blank Tests	1	0	1

Five instructor participants identified *Observe Active Learning* as an assessment strategy. Instructors #1, #3, and #5 all stated that hands-on activities were utilized regularly to assess students. Instructor #1 indicated that the instructor assessed students through "many hands-on

assignments." Instructor #3 stated that the instructor allowed students to show how well the

students comprehended the information through actively demonstrating the skills the instructor

taught. Instructor #5 said that students perform hands-on procedures that the instructor observes.

Five instructor participants also identified *Multiple-Choice Tests* as a means to assess students.

Instructors #1, #2, #3, #4, and #5 all listed *Multiple-Choice Tests*. Two instructor participants

selected the *Matching Tests* and *True or False Tests* categories. Only one of the instructor

participants listed *Fill-in the Blank Tests* as an assessment strategy.

Sixty-six student participants identified *Homework/Tests* as an assessment strategy.

Respondents listed several types of summative assessments such as Fill-in the Blank, Multiple-

Choice, and projects as means to assess students. Respondents also stated that instructors utilized

homework as an assessment tool. Forty-seven student participants indicated that instructors

utilized *Observe Active Learning* as an assessment strategy. Student #7 stated that the instructor

observed classroom discussions in order to assess student learning. Student #28 said that the

instructor assigned hands-on projects to observe. Students #84, #86, and #91 stated that the

instructor observed the students participating in class as an assessment strategy. Fifteen student

participants indicated *Bookwork* as an assessment strategy. Students who selected the *Bookwork*

category simply listed this strategy with no additional comments regarding how the instructor

utilized bookwork to assess their progress.

The assessment strategies that instructor participants identified most often were *Active

Learning* and *Multiple-Choice Tests*. The assessment strategies that student participants

identified most often were *Homework/Tests* and *Observe Active Learning*. Instructor and student

participants essentially identified the same strategies: observation of active learning and

summative assessments. Eighty-three percent of the instructor participants listed *Active Learning*

and *Multiple-Choice* as means of assessing students. Thirty-three percent of the instructor participants listed *Matching Tests* and *True/False Tests*. Seventy-eight percent of the student participants listed *Homework/Tests*. Fifty-one percent of the student participants listed *Observe Active Learning*. Sixteen percent of the student participants listed *Bookwork* as an assessment strategy, which indicates the importance of students being able to demonstrate the gaining, retaining, and proper understanding of the information provided by the instructors. Observing active learning gives instructors the opportunity to see students actually using the knowledge in a laboratory setting that is similar to the industry students are studying.

Instructor Survey Question 15 and Student Survey Question 13. Instructor Survey Question 15 and Student Survey Question 13 asked participants to list the types of activities the instructor used most often to assess students. Eight key findings resulted from the analysis of Instructor Survey Question 15 and Student Survey Question 13:

- Multiple-Choice Tests

- Active Learning

- Open-Ended Questions

- Fill-In the Blank Tests

- True/False Tests

- Essay

- Matching

- Quizzes

Table 15 presents and compares instructor and student responses. Each of the six instructor participants responded to the question. Ninety-seven of the 126 student participants responded to the question. Three assessment categories resulted from the analysis of the instructor survey.

Seven assessment categories resulted from the analysis of the student survey. Two categories, *Active Learning* and *Multiple-Choice Tests*, were common to both groups. The *Quizzes* category was unique to the instructor survey. Five categories were unique to the student survey.

Table 15

Assessments Used Most Often

Categories	Instructor Responses	Student Responses	Total Responses
Multiple-Choice Tests	3	82	85
Active Learning	6	31	37
Open-Ended Questions	0	19	19
Fill-In the Blank Tests	0	16	16
True/False Tests	0	14	14
Matching Tests	0	11	11
Essay	0	7	7
Quizzes	2	0	2

All six instructor participants identified *Active Learning* as an assessment that instructors utilized most often to assess students. Three instructor participants listed *Multiple-Choice Tests* as an assessment utilized often to assess students. Two instructor participants listed *Quizzes* as an assessment tool utilized most often.

Student participants listed the *Multiple-Choice Tests* most frequently. Eighty-two student participants identified the *Multiple-Choice Tests* category. Students #7 and #29 stated that the instructor used this method most often because the format of the national certification exam is multiple-choice. *Active Learning* was the next largest category. Thirty-one student participants listed this category. Nineteen student participants listed *Open-Ended Questions*. Sixteen student participants listed *Fill-In the Blank Tests*, 14 students listed *True/False Tests*, 11 students listed

Matching Tests, and seven students listed *Essay* as the assessment tool instructors utilized most often.

The assessment strategies listed most often were *Multiple-Choice Tests* and *Active Learning*. One hundred percent of the instructor participants listed *Active Learning* as the means of assessment used most often. Fifty percent of the instructor participants listed the *Multiple-Choice Tests* category. Thirty-three percent of the instructor participants listed the *Quizzes* category. Eighty-five percent of the student participants identified Multiple-Choice as the method of assessment that instructors used most often. Thirty-two percent of the student participants listed *Active Learning* as the means of assessment that instructors used most often. Twenty percent of the student participants listed the *Open-Ended Questions* category. Sixteen percent of the student participants listed *Fill-In the Blank Tests* as the method of assessment instructors utilized most often. Sixteen percent of the students listed *Fill-In the Blank Tests*, 14% listed *True/False Tests*, 11% listed *Matching Tests*, and seven percent listed *Essay* as the method of assessment instructors utilized most often. The frequency of *Multiple-Choice Tests* responses indicates that this is common form of assessment. The *Active Learning* responses are indicative of the instructors providing authentic assessments.

Instructor Survey Question 16 and Student Survey Question 14. Instructor Survey Question 16 and Student Survey Question 14 asked participants how often instructors assessed students. Five key findings resulted from the analysis of Instructor Survey Question 16 and Student Survey Question 14:

- Weekly

- Daily

- Bi-Monthly

- After Each Chapter/Unit

- Bi-Weekly

Table 16 presents and compares instructor and student responses. All six of the instructor participants responded to the question. Ninety-nine of the 126 student participants responded to the question. Two assessment frequency categories resulted from the analysis of the instructor survey. Five assessment frequency categories resulted from the analysis of the student survey. Two frequency categories, *Daily* and *After Each Chapter/Unit*, were common to both groups.

Table 16

Frequency of Assessments

Categories	Instructor Responses	Student Responses	Total Responses
Weekly	0	47	47
Daily	6	13	19
Bi-Monthly	0	18	18
After Each Chapter/Unit	1	12	13
Bi-Weekly	0	9	9

Each instructor participant listed the *Daily* category. One instructor listed *After Each Chapter/Unit* category. Students listed the *Weekly* category most often on the student survey. Forty-seven student participants stated that the instructors assessed students each week. Thirteen student participants listed the *Daily* category. Eighteen students listed *Bi-Monthly*, 12 students listed *After Each Chapter/Unit*, and nine students listed the *Bi-Weekly* category.

Instructors and students both indicated that instructors assessed students every day. One hundred percent of the instructor participants listed the *Daily* category for frequency of assessments. One of the instructors identified the *After Each Chapter/Unit* category. The category that students listed most often was *Weekly*. Forty-seven percent of the student

participants indicated that instructors assessed students on a weekly basis. Eighteen percent of the student participants listed the *Bi-Monthly* category. Thirteen percent of the students listed the *Daily* category. Twelve percent of the student participants listed *After Each Chapter/Unit*. Nine percent listed the *Bi-Weekly* category. These findings indicate the importance of instructors place on staying abreast of student progress throughout the class.

Overall key findings. Instructors reported using multiple instructional and assessment strategies throughout the courses. Instructors reported assessing students often and providing frequent feedback to keep students informed of academic progress. Instructional strategies described by instructors and students as utilized most often included lecturing, observing active learning, and providing visual aids and demonstrations. The frequency of grouping students described by instructors and students as utilized most often was daily. These findings indicate that more interactive instructional strategies were being reported versus isolated activities involving bookwork.

The frequency of assessments described by instructors as utilized most often was daily. The frequency of assessments described by students as utilized most often was weekly. Feedback methods described by instructors and students as utilized most often included grading and reviewing work and providing positive feedback. The frequency of feedback described by instructors most often was daily. Eighty-eight percent of the student participants indicated that the instructors provided adequate feedback. These findings indicate that instructors communicated student progress frequently versus instructors not informing students of academic progress.

Research Question 3: Classroom Management Practices

Research Question 3 asked, "What are the classroom management practices of Career Technical Education instructors at a Regional Occupational Center in Southern California with course completion rates of 80% or higher for adult students as self-reported by the instructors and as described by students?" Instructor Survey Questions 12 and 13 addressed Research Question 3. Student Survey Questions 10 and 11 addressed Research Question 3.

Instructor Survey Question 12 and Student Survey Question 10. Instructor Survey Question 12 and Student Survey Question 10 asked how instructors communicated expectations for classroom behavior. Six key findings resulted from the analysis of Instructor Survey Question 12 and Student Survey Question 10:

- Review Rules/Policies

- Via the Syllabus

- Treat Students Like Adults

- Remind Students

- Show By Example

Table 17 presents and compares instructor and student responses. All six of the instructor participants responded to this question. Ninety-one of the 126 student participants responded to this question. One classroom norm category resulted from the analysis of the instructor survey, and five categories resulted from the analysis of the student survey.

Table 17

Establishing Expectations for Classroom Behavior

Categories	Instructor Responses	Student Responses	Total Responses
Review Rules/Policies	6	66	72
Via the Syllabus	0	14	14
Treat Students Like Adults	0	12	12
Remind Students	0	4	4
Show By Example	0	2	2

All six instructor participants stated that instructors establish expectations for classroom behavior by reviewing the rules and policies with the students. Instructor #3 stated, "Setting a precedent at the beginning with everyone is a must." The students agree to adhere to the rules once they understand the classroom rules and expectations. Instructors #4 and #5 stated that the instructor covers the classroom rules and expectations on the first day of class. Instructor #5 stated that the expectations are included in the course syllabus. Instructor #6 stated that the instructor establishes a routine early in the semester so that the students know what the instructor expects each day.

Sixty-seven of the 91 student participants indicated that the instructor established expectations for classroom behavior by reviewing the rules and policies. Twenty of those 67 participants stated that the instructor told the students about those expectations on the first day of class. Student #29 stated that the instructor informed the students that the instructor expected the students to act like adults. Students #30 and #50 indicated that the instructor verbally communicated the expectations clearly. Student #97 stated that the instructor "gave the students a small lecture" to establish expectations for classroom behavior. Fourteen student participants indicated that the instructor established the expectations for classroom behavior by giving and

reviewing a course syllabus. Nine of those participants stated that the instructor reviewed the

syllabus on the first day of class. Student #6 stated that the instructor issued the syllabus on the

first day, and the instructor expected the students to retain the syllabus through the duration of

the course. Student #24 indicated that the instructor gave students time to read the syllabus

before reviewing it orally. Student #71 stated that the instructor listed the rules in the syllabus

and communicated that the students were to follow the rules.

Twelve students indicated that the instructor established the expectations for classroom

behavior by treating the students like adults. Student #49 stated that the instructor communicated

with the students like adults. Student #65 indicated that the instructor treated the students like

adults and with respect. Student #74 stated that the instructor reminded the students that the

students were responsible for the consequences of all the decisions they made. Student #84 stated

that the instructor expected the students to act like adults because the students were taking the

class in order to acquire a job, "not to fool around" so behavior is never a problem. Four student

participants indicated that the instructor established expectations for classroom behavior by

reminding the whole class about expected conduct. Student #96 stated that the instructor

reviewed the expectations repeatedly. Whenever a student was not behaving appropriately, the

instructor addressed the entire class instead of putting attention on the one student. Student #114

indicated that the instructor reminded the class in a non-threatening way when a student was not

following the classroom rules. Two student participants indicated that the instructor established

the expectations for classroom behavior by demonstrating appropriate behavior. Student #36

stated that the instructor always behaved professionally. Student #119 indicated that the

instructor established expectations for classroom behavior by setting a good example.

Instructors and students both indicated that instructors established expectations for classroom behavior at the beginning of the class. One hundred percent of the instructors stated that they reviewed the rules and policies on the first day. It appears that instructor participants emphasize the importance of establishing classroom behavior expectations early in order to eliminate behavioral issues that would interfere with instruction. Seventy-three percent of the student participants selected the *Told Students* category most frequently. This finding is indicative of the instructors ensuring that expectations were communicated clearly, giving students a proper understanding of the classroom behavior expectations. Fifteen percent of the student participants stated that the instructors established expectations via the course syllabus. This finding is indicative of the importance of providing communication in writing to affirm the classroom behavior expectations.

Instructor Survey Question 13 and Student Survey Question 11. Instructor Survey Question 13 and Student Survey Question 11 asked how instructors respond to students who disrupt the class. Four key findings resulted from the analysis of Instructor Survey Question 13 and Student Survey Question 11:

- Hasn't Had To

- Address Individual Student

- Address the Whole Class

- Ensure Student Knows the Rules

Table 18 presents and compares instructor and student responses. All six instructor participants responded to the question. One hundred of the 126 student participants responded to the question. Two response categories resulted from analyzing the instructor responses. Three

response categories resulted from analyzing the student responses. One response category,

Address Individual Student, was common to both groups.

Table 18

Methods of Responding to Disruptive Behavior

Categories	Instructor Responses	Student Responses	Total Responses
Hasn't Had To	0	58	58
Address Individual Student	5	36	41
Address the Whole Class	0	6	6
Ensure Student Understands the Rules	2	0	2

All six instructor participants responded to the survey question. Five out of the six

instructors indicated that the instructor approached the individual student when a student

disrupted the class. All five instructors stated that the instructor addressed the student in private.

Instructor #1 stated that privacy enables the instructor and the student to have a positive

experience while correcting the behavior. Writing a behavior contract was necessary on some

occasions. Instructor #2 indicated that the instructor has a private conversation with the student

to "help us both get on the same page to have the student excel in the class." Two instructors

indicated that they ensured the student understood the rules. Instructor #5 indicated that he/she

checks for understanding because sometimes the disruption may have been a misunderstanding;

the student may have also been dealing with other circumstances of which the instructor was not

aware.

One hundred of the 126 student participants responded to the survey question. Fifty-eight

of the students indicated that the instructor did not have to deal with any disruptive behavior.

Student #13 stated that there have not been any behavior problems in class. Student #56 stated

that the lack of disruptions was due to how well the instructor managed the class. Thirty-six

students stated that the instructor addressed the individual student whenever there was disruptive behavior. Student #3 indicated that the instructor waited until after class to speak with the student. Student #10 indicated that the instructor quietly asked the student to get back to work. Student #30 stated that the instructor simply told the student that the behavior was disruptive. Six student participants stated that the instructor addressed the whole class when a student was being disruptive. Student #53 stated that the instructor stopped the entire class until the student realized that he/she was being disruptive. Student #92 indicated that the instructor displayed a demeanor that informed the students that the instructor was upset. The instructor would then disclose that the behavior was counterproductive to the work environment in which the students would be working. Student #96 indicated that the instructor spoke to the entire class without singling out the student who was being disruptive.

Instructors and students both indicated that instructors addressed individual students when disruptive behavior occurred. Thirty-six percent of the students indicated that the instructors addressed the individual student when there were instances of inappropriate behavior. Eighty-three percent of the instructors indicated that the instructors addressed inappropriate behavior by speaking with the individual student. These findings are indicative of instructors seeking to deal with the source of the problem directly. However, 58% of the student participants stated there were no incidents in which the instructors needed to address inappropriate behavior.

Instructors and students indicated that instructors established expectations for classroom behavior by reviewing the rules and policies via giving the students a syllabus and telling the students the rules and policies. Strategies described by instructors and students as utilized most often were *Told the Students*, *Via the Syllabus*, and *Review Rules/Policies*. These categories are

representative of instructors giving direct instructions regarding classroom behavior expectations.

Overall key findings. Based on the instructors' and students' responses to survey questions related to Research Question 3, the instructors were able to establish classroom expectations for behavior well. Most of the student participants indicated that the instructors did not have to address inappropriate behavior after discussing the rules and policies at the beginning of the course. The next largest group indicated that the instructor addressed the individual student. The instructor participants indicated that the instructors were able to resolve disruptions in class by addressing the individual student. Responses to survey questions related to Research Question 3 also indicated that instructors utilized verbal and written communication to establish expectations for classroom behavior.

Research Question 4: Professional Experiences and Specialized Training

Research Question 4 asked instructors, "What are the professional experiences and specialized training of Career Technical Education instructors at a Regional Occupational Center in Southern California with course completion rates of 80% or higher for adult students as self-reported by the instructors?" Instructor Survey Questions 17 and 18 addressed Research Question 4.

Instructor Survey Question 17. Instructor Survey Question 17 asked instructor participants to describe the training program the instructor went through to receive a CTE credential. All six instructor participants responded to the survey question. Three key findings resulted from the analysis of Instructor Survey Question 17:

- University Training Program
- County Office of Education

- Industry Experience

Table 19 presents the instructor responses. All six instructor participants responded to the question. The *University Training Program* category was the only category selected by multiple participants.

Table 19

Instructor Training Program

Categories	Instructor Responses
University Training Program	5
County Office of Education	1
Industry Experience	1

Five instructors indicated that the instructors went through a university credentialing program to obtain a CTE credential. Instructor #1 listed UCLA as the training program. The instructor stated that this was an extension program. Instructor #3 listed the University of San Diego as the training program. This instructor stated that this program provided training on leadership in the classroom, pedagogy, and SDAIE teaching strategies. Instructors #4, #5, and #6 listed California State University Long Beach. Instructor #5 indicated that the credentialing program took place entirely in the classroom; there was no online learning component, and the majority of the assignments were hands-on activities. Students were required to do presentations, demonstrations, and lesson plans. Instructor #6 indicated that the program was for a Designated Vocational Teaching Credential. Instructor #2 listed the Los Angeles County Office of Education as the teacher-training program. Instructor #6 indicated that 25 years of industry experience provided training for obtaining a teaching credential.

The instructors indicated that they all attended an institution for formal education. The type of institution described by instructors as attended the most frequently was a university

training program. Eighty-three percent of the instructor participants stated that they attended a

university training program to obtain a Designated Subjects CTE Teaching Credential. This

finding is indicative of the credentialing requirements established by the state of California, as

CTE instructors are required to earn a credential through an approved educational institution.

Instructor Survey Question 18. Instructor Survey Question 18 asked instructor

participants to list the professional development activities in which they participated. All six

instructor participants responded to the question. Three key findings resulted from the analysis of

Instructor Survey Question 18:

- Workshops Provided by the Study Site

- Continuing Education Units

- Various Workshops Throughout Career

Table 20 presents the instructor responses. All six instructor participants responded to the

question.

Table 20

Professional Development Activities

Categories	Instructor Responses
Workshops Provided by the Study Site	5
Continuing Education Units	3
Various Workshops Throughout Career	2

Five of the instructors indicated that they attended professional development activities

provided by the study site. Instructors #4 and #5 indicated that the instructors attended the

Student Engagement Techniques workshop. The study site provided this professional

development opportunity to help instructors acquire more teaching strategies that engage

students. This workshop took place over a series of meetings that concluded with the instructors

presenting a notebook of lessons that the instructors utilized throughout the school year. The

instructors discussed how well the lessons worked and how the instructors would present the

lessons differently. Three instructor participants stated that the instructors completed continuing

education units (CEUs). Instructors #4, #5, and #6 indicated that these units were required for the

instructors to maintain the proper certification for the medical field. Two instructors indicated

that the instructors attended various workshops throughout the course of the instructors' careers.

Instructor #1 indicated that his/her professional development activities included student teaching

and workshops on learning and evaluation strategies.

Instructors indicated that they attended various professional development activities.

Professional development activities that instructors reported attending most often were those

provided by the study site; 83% of the instructor participants selected this category. This finding

is indicative of the study site providing opportunities for instructors to develop and adapt

instructional strategies continually. Instructors also indicated that they participated in

professional growth opportunities throughout their careers via CEUs and other various

workshops. The three instructors who mentioned taking CEUs stated that it was necessary to

maintain certifications. This finding is indicative of the instructors taking responsibility to ensure

they could continue working in the industry as well as teach in the classroom.

Overall key findings. Instructor participants indicated that every instructor attended a

formal educational institution to obtain a Designated Subjects CTE Teaching Credential. This

finding indicates that each instructor completed the necessary training to teach. Instructor

participants have attended various professional development activities through the study site,

CEUs, and other workshops provided by various organizations. Each instructor stated that he/she

participated in some type of training, which indicates the importance of continuing to develop professionally in order to be an effective instructor and to stay abreast of changes in the industry.

Chapter Summary

Research Question 1 inquired about instructor expectations for student academic performance. Instructor and Student Survey Questions 4 and 5 addressed Research Question 1. Instructor and Student Survey Question 4 asked if the instructor or the student was more responsible for students learning the course material. Three key findings resulted from the analysis of data collected in response to Instructor and Student Survey Question 4: *Student Responsibility*, *Shared Responsibility*, and *Instructor Responsibility*. Based on their responses to Instructor Survey Question 4, the majority of instructors perceived that the instructors and students shared the responsibility to ensure students learned the necessary information in class. Based on their responses to Student Survey Question 4, the majority of the student participants perceived that the instructors believed students were responsible for their learning the course material. Instructor and Student Survey Question 5 asked how instructors encourage students to learn independently. Seven key findings resulted from the analysis of data collected in response to Instructor and Student Survey Question 5: *Assign Individual Activities*, *Give Students Study Advice*, *Assess Students*, *Praise Students*, *Review Concepts*, *Require Students to Seek Answers on Their Own*, and *Explain the Importance of Acquiring the Knowledge*. Based on their responses to Instructor and Student Survey Question 5, instructors and students indicated that instructors encouraged students to work independently through assigning activities that did not include direct instruction. Instructors also stated that they required students to seek answers independently. The second most common response from students was that instructors gave students advice on how to study.

Research Question 2 inquired about the instructional practices instructors utilized to present information to students and to assess students. Instructor Survey Questions 1-3, 6-11, and 14-16 addressed Research Question 2. Student Survey Questions 1-2, 6-9, and 12-14 addressed Research Question 2. Instructor and Student Survey Question 1 asked what types of instructional strategies the instructor utilized. Six key findings resulted from the analysis of data collected in response to Instructor and Student Survey Question 1: *Active Learning*, *Visual Aid*, *Lecture*, *Demonstrations*, *Repetition/Review*, and *Questions & Answers*. The most common instructor and student responses indicated that instructors used multiple instructional strategies to present information. Instructional strategies utilized most often were lecture, demonstration, and observing active participation. Instructor and Student Survey Question 2 asked how often instructors grouped students for classroom activities. Six key findings resulted from the analysis of data collected in response to Instructor and Student Survey Question 2: *Daily*, *Often*, *Not Often*, *Weekly*, *Most of the Time*, and *For Projects*. The most common instructor responses indicated that the instructors grouped students at least once a week. The most common student responses indicated that instructors assigned group work on a daily basis. Student Survey Question 3 was eliminated from the analysis because the researcher recorded the question incorrectly on the survey. Instructor Survey Question 3 asked how instructors grouped students for group activities. Five key findings resulted from the analysis of data collected in response to Instructor Survey Question 3: *Mixed Ability Grouping*, *Students Choose Groups*, *Mixing Personalities*, *Same Ability Grouping*, and *Random Grouping*. Based on their responses to Instructor Survey Question 3, instructors indicated that strategies utilized most often to designate groups included mixed ability grouping and allowing students to choose the groups.

Instructor and Student Survey Question 6 asked what types of instructional strategies instructors utilized to introduce new concepts. Six key findings resulted from the analysis of data collected in response to Instructor and Student Survey Question 6: *Visual Aids*, *Review Information*, *Active Learning*, *Demonstrations*, *Lecture*, and *Explain Concepts*. Based on their responses to this survey question, instructors indicated that they utilize visual aids, demonstrations, and explanations to introduce new concepts to students. Student responses to this survey question indicated that instructors utilized multiple strategies to introduce new concepts. The most common strategy that students identified was the usage of visual aids. The other strategies that students listed were *Review Information*, *Active Learning*, *Demonstrations*, and *Lecture*.

Instructor and Student Survey Question 7 asked how instructors adjusted instructional strategies to accommodate students who did not learn the information the first time the instructor presented the information. Four key findings resulted from the analysis of data collected in response to Instructor and Student Survey Question 7: *Repeat/Review Instruction*, *Work with Student Individually*, *Check for Understanding*, and *Use Various Aids*. Responses to Instructor and Student Survey Question 7 indicated that instructors most commonly utilized *Repeat/Review Instruction* and *Work with Student Individually*. Instructors stated that repeating the instruction in a slightly different way and working with students individually was effective in reteaching concepts. Student participants identified *Repeat/Review Instruction* and *Work with Student Individually* more frequently than *Check for Understanding* and *Use Various Aids*.

Instructor Survey Question 8 asked how important instructor feedback was to student success. Two key findings resulted from the analysis of data collected in response to Instructor Survey Question 8: *Extremely/Very Important* and *Important*. Instructors indicated that feedback

is critical to student success because it gives students the opportunity to make necessary adjustments to continue improving in class. Instructor Survey Question 9 and Student Survey Question 8 asked what methods instructors utilized to provide feedback to students. Five key findings resulted from the analysis of data collected in response to Instructor Survey Question 9 and Student Survey Question 8: *Grade/Review Work*, *Positive Feedback*, *Questions & Answers*, *Individually*, and *As a Group*. Based on their responses to Instructor Survey Question 9 and Student Survey Question 8, instructors and students indicated that the most common method instructors utilized to provide feedback to students was grading and reviewing the work with students. Instructors stated that this method helps students identify mistakes that students can correct. Students stated that instructors provided corrective criticism and reviewed the information with more details. The second most common response from instructors was conducting a question and answer session during class. Instructors stated that this strategy gave students the opportunity to clarify any misunderstandings the students had. The second most common response from students was that instructors gave students positive feedback. An example of positive feedback as indicated by students was that instructors returned graded work to students with comments to encourage the students.

Student Survey Question 9 asked students if instructors provided enough feedback for students to perform well in class. Three key findings resulted from the analysis of data collected in response to Student Survey Question 9: *Yes*, *No*, and *Sometimes*. Analysis of this survey question indicated that 88% of the 113 student participants who answered this question believed that instructors provided sufficient feedback. Instructor Survey Question 10 asked how often instructors provided feedback to students. Two key findings resulted from the analysis of data collected in response to Instructor Survey Question 10:*Daily* and *When Needed*. Analysis of

Instructor Survey Question 10 revealed that 83% of the instructor participants reported providing feedback to students on a daily basis. The remainder of the instructor participants stated that they provided feedback when students needed feedback. Instructor Survey Question 11 asked how instructors determined when to give students feedback. Two key findings resulted from the analysis of data collected in response to Instructor Survey Question 11: *After Each Task* and *When Students Need Help*. Based on their responses to Instructor Survey Question 11, instructors indicated that they generally provided feedback after each assignment or task. Other instructors indicated that they provided feedback when students displayed signs of confusion or frustration.

Instructor Survey Question 14 and Student Survey Question 12 asked instructors and students to list the types of assessments instructors utilized to assess student progress. Seven key findings resulted from the analysis of data collected in response to Instructor Survey Question 14 and Student Survey Question 12: *Homework/Tests*, *Observe Active Learning*, *Bookwork*, *Multiple-Choice Tests*, *Matching Tests*, *True/False Tests*, and *Fill-In the Blank Tests*. Through analysis of Instructor Survey Question 14, instructor responses indicated that instructors utilized the following assessment strategies most often: observation of students actively participating in activities and multiple-choice tests. Instructors stated that observing students perform hands-on tasks allowed them to determine how well the students comprehended the information. Based on their responses to Student Survey Question 12, students indicated that instructors utilized homework and tests most often to assess students. The second most common response as indicated by student participants was observation of active learning. Students stated that instructors also assigned class discussions and hands-on projects to assess student learning.

Instructor Survey Question 15 and Student Survey Question 13 asked instructors and students to list the types of assessments instructors utilized most often to assess student learning.

Seven key findings resulted from the analysis of data collected in response to Instructor Survey Question 15 and Student Survey Question 13: *Multiple-Choice Tests*, *Active Learning*, *Open-Ended Questions*, *Fill-In the Blank Tests*, *True/False Tests*, *Essay*, and *Quizzes*. Based on their responses to Instructor Survey Question 15 and Student Survey Question 13, instructors and students indicated that instructors utilized active learning activities and multiple-choice tests were used to assess students more often than any other assessment strategies. One hundred percent of the instructor participants selected the *Active Learning* category and half of the instructors selected the *Multiple-Choice Test*s category. The *Multiple-Choice Tests* category was endorsed most often among student participants. The *Active Learning* category was the second most common category endorsed in the student survey.

Instructor Survey Question 16 and Student Survey Question 14 asked how often instructors assessed students. Five key findings resulted from the analysis of data collected in response to Instructor Survey Question 16 and Student Survey Question 14: *Weekly*, *Daily*, *Bi-Monthly*, *After Each Chapter/Unit*, and *Bi-Weekly*. Responses to Instructor Survey Question 16 indicated that instructors assessed students at least once a day. Responses to Student Survey Question 14 indicated that instructors gave assessments at varying times. The category selected most often by students indicated that instructors assessed students at least once a week.

Research Question 3 inquired about the methods instructors utilized to establish expectations for classroom behavior. Instructor Survey Questions 12 and 13 and Student Survey Questions 10 and 11 addressed Research Question 3. Instructor Survey Question 12 and Student Survey Question 10 asked how instructors established expectations for classroom behavior. Five key findings resulted from the analysis of data collected in response to Instructor Survey Question 12 and Student Survey Question 10: *Review Rules/Policies*, *Via the Syllabus*, *Treat*

Students Like Adults, *Remind Students*, and *Show by Example*. Analysis of Instructor Survey Question 12 revealed that 100% of the instructor participants established expectations for classroom behavior by reviewing the rules and policies with the students. Instructor participants stated that they reviewed their expectations on the first day of class. Responses to Student Survey Question 10 also indicated that instructors establish the expectations for classroom behavior by reviewing the rules and policies with students on the first day of class through classroom discussion and the syllabus.

Instructor Survey Question 13 and Student Survey Question 11 asked how instructors respond to students who disrupt class. Four key findings resulted from the analysis of data collected in response to Instructor Survey Question 13 and Student Survey Question 11: *Hasn't had To*, *Address Individual Student*, *Address the Whole Class*, and *Ensure Student Understands the Rules*. Responses to Instructor Survey Question 13 indicated that the instructors addressed the individual student when he/she was disruptive in class. The second most common response from instructor participants indicated that instructors review the rules to ensure that students understand the rules and policies. Responses to Student Survey Question 11 indicated that instructors have not had to deal with students disrupting the class. The second most common answer among student participants indicated that instructors addressed the individual student when a student was disruptive in class.

Research Question 4 inquired about the professional experiences and specialized training in which the instructors participated. Instructor Survey Questions 17 and 18 addressed Research Question 4. Instructor Survey Question 17 asked instructors to describe the training program in which the instructors participated in order to obtain a Designated Subjects CTE Teaching Credential. Three key findings resulted from the analysis of data collected in response to

Instructor Survey Question 17: *University Program*, *County Office of Education*, and *Industry Experience*. All instructors indicated that they attended a training program at a formal educational institution. Eighty-three percent of the participants stated that they attended a university program. Instructor Survey Question 18 asked instructors to list the professional development activities in which they participated. Three key findings resulted from the analysis of data collected in response to Instructor Survey Question 18: *Workshops Provided by the Study Site*, *Continuing Education Units*, and *Various Workshops Throughout Career*. The instructors indicated that they participated in various professional development activities at the study site. Instructors also indicated that they participated in professional development activities throughout their careers and through CEUs, which were necessary for them to retain industry certifications in the medical field.

Chapter 5: Discussion of Findings, Conclusions, and Recommendations

The purpose of this qualitative survey study was to explore the student performance expectations and related practices of CTE instructors at an ROC in Southern California in order to learn more about how these instructors achieve 80% or higher CTE course completion rates for adult students. Six CTE instructors and 126 adult students participated in this study and completed an anonymous online survey. The instructor survey consisted of 18 open-ended questions, and the student survey consisted of 14 open-ended questions. This chapter presents the conclusions of the study's findings, recommendations for policy and practice, recommendations for further study, and final thoughts.

This study utilized a qualitative survey study research design in which anonymous online surveys were conducted with selected CTE instructors and adult students at an ROC in Southern California during the spring term of the 2013 academic year. Each instructor at the study site who had an 80% or higher adult student completion rate for courses taught from the fall term of the 2009 academic year through the fall term of 2012 was invited to participate in the study. These courses had to have a minimum of 10 adult students enrolled in the course. Every adult student who was enrolled in a course taught by the qualifying instructors was also invited to participate. The researcher was aware of the identities of the people in the pool of potential study participants. Four research questions guided this study:

1. What are the expectations for student academic performance of Career Technical Education instructors at a Regional Occupational Center in Southern California with course completion rates of 80% or higher for adult students as self-reported by the instructors and as described by students?

2. What are the instructional practices of Career Technical Education instructors at a Regional Occupational Center in Southern California with course completion rates of 80% or higher for adult students as self-reported by the instructors and as described by students?

3. What are the classroom management practices of Career Technical Education instructors at a Regional Occupational Center in Southern California with course completion rates of 80% or higher for adult students as self-reported by the instructors and as described by students?

4. What are the professional experiences and specialized training of Career Technical Education instructors at a Regional Occupational Center in Southern California with course completion rates of 80% or higher for adult students as self-reported by the instructors?

Discussion of Findings

Research Question 1. Research Question 1 asked, "What are the expectations for student academic performance of Career Technical Education instructors at a Regional Occupational Center in Southern California with course completion rates of 80% or higher for adult students as self-reported by the instructors and as described by students?" Survey Questions 4 and 5 on the Instructor Survey and the Student Survey addressed Research Question 1. The two questions were identical on both surveys. The overall findings for Research Question 1 indicated that instructors who participated in this study believe that it was either the instructors' responsibility or the instructors' and the students' responsibility for ensuring the students learn the material presented in class. Every instructor participant stated that the instructor's role in the learning process was critical to student learning because it was necessary for the instructor to present

information clearly and in ways that would give all students access to the knowledge regardless of the students' learning modality.

The majority of instructor participants indicated that the instructors and students shared the responsibility for students learning the course material. The instructors felt responsible for ensuring students learned the course material because instructors have to deliver the necessary information to cover the curriculum, and students have the responsibility of putting forth the effort to acquire the information.

Instructors are able to encourage students to take responsibility for learning through implementing instructional activities that are student-centered (Knowles, Holton, & Swanson, 1998; Moore, 2010). Student-centered activities focus on student needs to keep them engaged in the learning process (Maxwell et al., 2011). This approach promotes critical thinking and increases the students' interest in the subject matter. Instructor participants created a supportive learning environment where they facilitated learning. Instead of delivering instruction from the perspective that the instructor is *all knowing*, the instructors made students active participants in the learning process.

Based on their responses, the majority of students believed instructors place the responsibility for learning on the students. A second group of student participants indicated that instructors believed students and instructors shared the responsibility for students learning the course material. Only 13% of the student participants thought that instructors believed it was the instructors' responsibility for ensuring that students learned the material. Student participants in general interpreted the instructors' actions as placing the responsibility for learning on the students or as a shared responsibility between the instructors and the students.

Adult students are more likely to take responsibility for learning when the course content is relevant and meaningful to them (Knowles et al., 1998; Moore, 2010). The instructors in this study also expected students to perform well because they took the initiative of enrolling in the course by completing the course prerequisites and paying the course fees. Additionally, the students enrolled in the courses to accomplish personal goals. According to Knowles et al. (1998), adults are responsible for learning when making self-improvements, increasing knowledge for job promotions or job satisfaction, and learning information to cope with real-life situations. These are all reasons adult students take courses at the study site. Moore (2010) stated that adult students have the capacity to draw from life experiences that help them to learn more effectively. Thus, students are able to make the information applicable instead of simply receiving theory from the instructor. Knowles et al. state that adults have a self-concept of being responsible for the decisions they make. This research further supports the notion that adult students enrolling in a course by choice engenders a sense of responsibility in them to perform well academically in order to complete the course successfully.

Both instructor and student responses indicated that instructors assigned work that was interactive to encourage students to learn independently without direct instruction. Such work included being engaged in activities including projects, group work, and discussions. Instructors stated that students were required to seek answers without the instructors' assistance. Students also indicated that instructors encouraged students to take responsibility for learning by giving students advice on how to study.

Having high expectations promotes student autonomy as students align themselves to the instructors' expectations (Kuklinski & Weinstein, 2001; Rubie-Davies, 2010; Rubie-Davies et al., 2010). Instructors in this study were able to prompt students to learn independently of direct

instruction because the instructors' high expectations required students to take responsibility for learning. Instructional strategies that are compatible with such outcomes are engaging to students and encourage critical thinking. Effective teaching is not based solely on instructors delivering instruction to the students, but requires students to be engaged actively in acquiring the information (Hamid, Hassan, & Ismail, 2012; Maxwell et al., 2011; Sandholtz, 2011). Instructor participants were able to foster a learning environment in which students were able to contribute to the learning process. Critical thinking and student engagement are necessary for students to be able to work independently of the instructor (Maxwell et al., 2011). The instructor participants were able to implement instructional strategies that promoted critical thinking and student engagement.

Research Question 2. Research Question 2 asked, "What are the instructional practices of Career Technical Education instructors at a Regional Occupational Center in Southern California with course completion rates of 80% or higher for adult students as self-reported by the instructors and as described by students?" Instructor Survey Questions 1-3, 6-11, and 14-16 addressed Research Question 2. Student Survey Questions 1-2, 6-9, and 12-14 addressed Research Question 2. Survey Questions 1, 2, 6, and 7 on the Instructor Survey and the Student Survey addressed Research Question 1. The questions were identical on both surveys. Student Survey Question 3 was omitted because it was recorded incorrectly. Instructor Survey Questions 9, 14, 15, and 16 were identical to Student Survey Questions 8, 12, 13, and 14, respectively. The overall findings for Research Question 2 indicated that instructors used a variety of instructional strategies to deliver instruction and to assess students. The findings also indicated that instructors assessed and provided feedback frequently.

Instructor and student responses indicated that instructors utilized multiple instructional strategies to deliver instruction. The strategies identified most often by instructors and students included lecture, demonstrations, and observing active participation in hands-on activities. The findings also indicate that instructors utilized visual aids, review of concepts, and question and answer sessions. The strategy described by instructors and students as utilized most often was *Active Learning,* which is representative of more interactive instruction versus direct instruction.

Some scholars argue that all students can learn if instructors use appropriate teaching strategies (Dufour & Eaker, 1998; Murray & Zvoch, 2011; Roberts, 2010). Utilizing different teaching strategies enables students to gain access to the curriculum because instructors are adapting the instructional approach to accommodate the students' learning style. Research supports the notion that using a variety of instructional strategies is effective, especially when implementing activities that require students to be active participants (Bouwma-Gearheart, 2012; Furner et al., 2005; Marzano, Pickering, & Pollock, 2001; Schumacher, Grigsby, & Vesey, 2011; Silver, Strong, & Perini, 2000). Instructors in this study implemented a variety of instructional activities to address students' different learning styles to help them demonstrate how well they understood the information. Therefore, instructors were able to determine how to present the course material in order to give students a better opportunity to access the information.

Instructors and students indicated that instructors frequently grouped students for classroom activities. The most common instructor responses indicated that they grouped students at least once a week. The most common student response indicated that instructors assigned group work on a daily basis. Other frequency categories listed were *Most of the Time* and *For Projects*. Instructors indicated that groups were developed based on student choice, mixed ability, and random selection.

Implementing group activities frequently is an effective instructional strategy (Jensen, 2011; Schumacher et al., 2011; Silver et al., 2000). Peer explanations, cooperative grouping, and small group instruction are techniques that foster independence and allow instructors to monitor student progress closely. Instructors found that this strategy encouraged students to take responsibility for learning.

Instructor and student participants indicated that instructors utilized multiple strategies to introduce new concepts. Instructor responses described the use of visual aids, demonstrations, and explanations of the concepts. The most common strategy that students identified was the use of visual aids. The other strategies that students listed included *Review Information*, *Active Learning*, *Demonstrations*, and *Lecture*.

As stated earlier, utilizing different teaching strategies enables students to gain access to the curriculum. Varying instructional strategies is an effective teaching strategy (Bouwma-Gearheart, 2012; Furner et al., 2005; Romberg, 2010). Instructors implemented a variety of instructional activities to introduce new concepts, which sustains student interest in the subject matter and promotes higher information retention.

Instructors and students revealed that instructors repeated and reviewed the instruction, worked with individual students, checked for understanding, and used various aids to adjust the instructional approach to accommodate students who did not learn the material the first time instructors introduced the information. Instructors stated that repeating the instruction in a slightly different way and working with students individually was effective in reteaching concepts. The majority of student participants stated that the instructor reviews the information until students are able to grasp the concepts.

Teaching information in various ways in anticipation of student misconceptions and to clarify misunderstandings provides a supportive learning environment that promotes student success (Allan, Clarke, & Jopling, 2009; Gregory & Chapman, 2002; Schumacher et al., 2011). Instructors in this study were able to give students access to the information and provide students with sufficient support by reteaching the information with a different approach. Differentiating the instruction increased the potential for all students to be successful. Students have a better opportunity to grasp the concepts when instructors present the same information with a different method.

Only the instructor survey asked about the importance of feedback. Each response to this question indicated that instructors believed feedback is extremely important to student success. Instructors indicated that providing feedback to students is critical to student success because feedback gives students the opportunity to make corrections to any misconceptions students have about the information and to correct mistakes students make on assignments. Instructors and students indicated that instructors utilized multiple strategies to provide feedback, including grading and reviewing assignments with students, providing positive feedback, setting aside class time for question and answer sessions, working with students individually, and providing feedback to the entire class. The most common response by instructors was grading and reviewing work. Instructors stated that this method helps students identify mistakes that they can correct prior to summative assessments. Students indicated that the feedback was important because instructors provided constructive criticism and reviewed the information with more details. Students also indicated that receiving positive feedback from the instructors was encouraging.

Effective feedback is likely to produce gains in student learning (Getzlaf, Perry, Toffner, Lamarche, & Edwards, 2009; Schumacher et al., 2011). Providing feedback helped students in this study to fill gaps in their knowledge and afforded students the opportunity to develop strategies for future learning. Students were receptive to the instructors' attempts at monitoring student progress due to the instructors utilizing constructive criticism and positivity.

Only the student survey asked if instructors provided enough feedback for students to perform well in class. Eighty-three percent of the student participants indicated that the instructors provided a sufficient amount of feedback. The instructor survey asked how often instructors provided feedback. Instructors indicated that they provided feedback after each task and when students needed assistance. Signals that helped determine if students needed assistance included students asking the instructor for assistance, students showing signs of confusion, and students demonstrating frustration.

Monitoring student progress consistently helps instructors understand deficits and strengths in the students' knowledge of the course content (Maxwell et al., 2011; Schumacher et al., 2011). This understanding provides instructors with the ability to utilize strategies that promote higher student achievement. Instructors indicated that they can more easily offer proper guidance when they are aware of the accuracies and inaccuracies in students' understanding.

Instructor and student participants indicated that instructors utilized different types of assessments to monitor student progress, such as homework/tests, observation of active learning, multiple-choice tests, matching tests, and true/false tests. The types of assessments utilized most often were observation of students actively participating in activities and multiple-choice tests. Observing students performing hands-on activities allowed the instructors to determine how well the students comprehended the information because students were required to apply the

information. Multiple-choice tests were utilized often because the industry exams for various certifications are multiple-choice tests. Assessment frequencies included weekly, daily, after each chapter or unit, and bi-weekly. The most common responses indicated that instructors assessed students daily or weekly.

Checking for understanding through assessing students consistently is an effective teaching strategy (Gregory & Chapman, 2002; Jensen, 2011; Sandholtz, 2011). Instructor participants were able to promote student success by monitoring the students' progress with frequent assessments, providing the opportunity to fill in any gaps in knowledge and correct any misconceptions.

Instructors and students indicated that instructors utilized observation of students actively participating in activities and multiple-choice tests as assessment strategies. Other assessment strategy categories listed were *Homework/Tests*, *Bookwork*, *Matching Tests*, *True/False Tests*, and *Fill-In the Blank Tests*. However, instructor and student participants identified observation of active learning and multiple-choice tests most often. Instructors stated that observing students perform hands-on tasks on a daily basis allowed them to determine how well students comprehended the information. Instructors also indicated that multiple-choice tests were appropriate because many of the industry certification exams are multiple-choice tests. Students stated that hands-on activities and projects occurred frequently. The assessment frequency category selected most often by students indicated that instructors assessed students at least once a week.

Instruction and assessment that incorporate active learning fosters effective learning (Bedgood et al., 2010; Hassler, 2006; Lynch, 2011; C. Smith & Cardaciotto, 2011). Students are better able to retain the information when instructors use a hands-on approach because it

promotes more familiarity with the course content. Students were able to demonstrate the degree to which they acquired the knowledge through authentic assessments as opposed to regurgitating information. Instructors were able to give students constant feedback because of the formative nature of the assessments.

Research Question 3. Research Question 3 asked, "What are the classroom management practices of Career Technical Education instructors at a Regional Occupational Center in Southern California with course completion rates of 80% or higher for adult students as self-reported by the instructors and as described by students?" Instructor Survey Questions 12 and 13 and Student Survey Questions 10 and 11 addressed Research Question 3. The questions were identical on both surveys. The overall findings indicated that establishing expectations for appropriate behavior when the class first started practically eliminated misbehavior. Instructors either had no behavior problems or addressed individual students when problems occurred.

Instructors and students indicated that instructors established the expectations for classroom behavior by reviewing the rules and policies with the students on the first day of class. Students also stated that the course syllabus was a key instrument for ensuring students understood the expectations. Other strategies listed were treating students like adults, reminding students of the rules when necessary, and leading by example.

Establishing clear policies and reinforcing those policies enables instructors to maintain a positive classroom environment (Brophy, 1985; Jensen, 2011; Schumacher et al., 2011; Stronge, 2007). The instructors were able to create a learning environment in which students behaved according the instructors' expectations because the expectations were made clear. Treating students like adults and modeling the appropriate behavior encouraged students to behave appropriately. Additionally, Knowles et al. (1998) posit that adult students are likely to take

responsibility for learning. The adult students in this study were taking the course to accomplish personal goals, which may discourage misbehavior.

Instructors indicated that they addressed the individual student or reviewed the rules to ensure that students understood the rules and policies when there was a disruption in the class. The majority of student participants indicated that there were no disruptions in class. However, the second most common response among student participants was that the instructors addressed the individual student when he/she disrupted class.

Having an 80% or higher course completion rate for adult students suggests that the instructors in this study have effective classroom management strategies. Effective classroom management encompasses managing behavior, providing effective instruction, and establishing a supportive learning environment (Allen, 2010; Johnson, Rice, Edgington, & Williams 2005). Instructors in this study have implemented classroom management strategies that have allowed them to minimize disruptions in class. Working with students individually has proven to be an effective technique when students are disruptive. Developing a positive, respectful approach also promotes relationship building and cooperation from students (Beaty-O'Ferrall, Green, & Hanna, 2010; Johnson et al., 2005). The data showed that students believed the instructors demonstrated a respectful approach. Using domineering and intimidating strategies may have a negative impact because these types of tactics engender fear and resentment (Beaty-O'Ferrall et al., 2010). The instructors in this study were able to gain students' respect by working with them on an individual basis to provide opportunities to correct the inappropriate behavior instead of embarrassing students in front of the class.

Research Question 4. Research Question 4 asked, "What are the professional experiences and specialized training of Career Technical Education instructors at a Regional

Occupational Center in Southern California with course completion rates of 80% or higher for

adult students as self-reported by the instructors?" Instructor Survey Questions 17 and 18

addressed Research Question 4. These survey questions only appeared on the instructor survey.

The overall findings indicated that each instructor participant attended a training program at a

formal educational institution. Instructors also participated in ongoing professional development

activities.

Instructors identified university programs, county office of education programs, and

industry experience as the avenues through which they obtained the Designated Subjects CTE

Teaching Credential. Eighty-three percent of the participants stated that they attended a

university program. Thirty-three percent of the participants indicated that industry experience

provided training to obtain the credential.

A high school diploma and 3 or more years of experience working in the industry of a

specific career area qualifies CTE teaching candidates for a Preliminary Designated Subjects

CTE Teaching Credential (CTC, 2010; Orange County Office of Education, 2011). Industry

experience provides instructors with the practical knowledge to teach the subject matter. The

candidates were then required to enroll in an accredited post-secondary educational institution to

complete a series of courses on teaching methodologies to qualify for a Clear Designated

Subjects CTE Teaching Credential (CTC, 2010). Every instructor participant in this study has

obtained the clear credential. Formal training at educational institutions, as well as the ongoing

staff development activities at the study site, has provided the instructors with the pedagogical

skills to deliver instruction and manage a class effectively.

The professional development opportunities listed were workshops provided by the study

site, CEUs, and various workshops taken during the instructors' careers. Instructors were able to

attain high student success because of formal training and continued professional development. The study site places a heavy emphasis on professional development, requiring all staff members to participate in professional development activities. This expectation is established during the goal setting meetings with instructors at the beginning of each school year and is reflected in the instructors' annual evaluation. Participation in approved professional development activities qualifies instructors to advance on the certificated salary schedule. Examples of the types of professional development opportunities provided by the study site included workshops on student engagement techniques, action research, and assessment strategies.

Research supports the assertion that instructors feel more confident and competent in providing instruction after receiving ongoing professional development (Heck et al., 2008; Lucilio, 2009; National Research Center for Career and Technical Education Curriculum Integration Workgroup, 2010). Professional development empowers instructors with the ability to create an appropriate learning environment where students have the confidence to succeed in the class. The instructor participants were able to communicate clear learning objectives, deliver effective instruction, and establish expectations for classroom behavior as a result of participating in professional development.

Conclusions

Based on analysis of the data collected, findings from the study support the following conclusions.

Conclusion one. CTE instructors who consistently engage students in learning tend to generate higher levels of student achievement (Alvidrez & Weinstein, 1999; Madon et al., 1997; Rubie-Davies et al., 2006; Rubie-Davies, 2010). Instructors in this study who expected students to share the responsibility for learning found that students demonstrated higher order thinking

skills. The instructors in this study assumed partial responsibility for students learning the course material while attributing the rest of the responsibility to students. Therefore, students were expected to seek the necessary information for succeeding in class through active learning, independent assignments, and study advice from the instructor. Based on the instructors' expectations, the student participants perceived that the instructors held the students responsible for learning.

Conclusion two. CTE instructors who utilize multiple and diverse instructional strategies, assess frequently, and provide frequent feedback throughout the course promote high student achievement. Utilizing a variety of instructional strategies that require students to be active participants is effective in delivering instruction (Bouwma-Gearheart, 2012; Furner et al., 2005; Marzano et al., 2001; Schumacher et al., 2011). Instructors were able to accommodate students' different learning modalities while constantly monitoring the students' progress, providing the opportunity to fill any gaps in knowledge and correct any misunderstandings of the course material.

Conclusion three. CTE instructors who establish high expectations for classroom behavior when the course first starts discourage inappropriate behavior. Developing a classroom environment that is conducive to optimizing student achievement involves managing behavior proactively and positively in conjunction with implementing effective teaching strategies (Allen, 2010; Jensen, 2011; Johnson et al., 2005). Instructors in this study either experienced no behavior problems or addressed individual students when problems occurred, in part to ensure that their expectations were clear. Instructor participants accomplished this by reviewing the course syllabus, reviewing the rules and policies when necessary, and addressing individual students when disruptive behavior occurred.

Conclusion four. CTE instructors who participate in ongoing professional development during and after completing a credentialing program promote high student achievement. Instructors are more confident in managing a classroom and delivering instruction after participating in professional development (Heck et al., 2008; Lucilio, 2009; National Research Center for Career and Technical Education Curriculum Integration Workgroup, 2010). Understanding pedagogy is critical in attempting to create an environment that is conducive to high student achievement. Scholars argue that instructors are the most important factor in educating students (Adams, 2010; Dufour & Eaker, 1998; Kersten, 2006). Instructors in this study demonstrated the ability to engage students in meaningful learning that contributed to high student achievement.

Recommendations for Policy and Practice

The purpose of this study was to examine how instructor expectations influence adult student academic achievement at an ROC in Southern California. The study's findings can be used to inform instructional practices and professional development in order to continuously improve the quality of CTE courses. Key findings and conclusions from the study support the following recommendations.

Recommendation one. It is recommended that all CTE instructors implement instructional strategies that are student-centered and fully engage students. Research supports the finding that effective instruction consists of organizing the learning environment in such a way that students are the focus (Allan et al., 2009; Schumacher et al., 2011). The study site's administrative team emphasizes the importance of having students learn by performing tasks that are similar to what the students would be doing in a job setting. CTE instructors in ROC/P settings should continue to structure the instructional program so that assignments require

students to participate actively in the learning process versus passively receiving information. This promotes critical thinking and encourages individuals to take responsibility for learning (Maxwell et al., 2011). Consequently, students develop the skills to be able to work independently. This approach also increases the chances of students remaining interested in the course content.

Recommendation two. It is recommended that all ROC/Ps offer and place a heavy emphasis on professional development. Instructors have the skills and confidence to deliver effective instruction after attending professional development activities (Heck et al., 2008; Lucilio, 2009). Professional development opportunities for instructors should focus on effective instructional strategies that promote high student academic achievement. Receiving ongoing training will keep participants abreast of the latest research-based strategies and help instructors broaden their repertoire to meet the students' needs.

Recommendation three. It is recommended that all CTE instructors be required to create and review the course syllabus on the first day of class to establish classroom expectations for behavior. The expectations should then be reinforced throughout the duration of the course. Effective instruction includes creating a positive classroom environment in which instructors establish clear expectations (Allan et al., 2009l; Maxwell et al., 2011; Schumacher et al., 2011). The syllabi inform students of the instructors' expectations regarding topics such as how grades are earned, classroom rules and policies, course objectives, assessment schedules, and attendance policies. Presenting this information gives students clear guidance on what is required to complete the course successfully and what behaviors are appropriate. Reviewing and reinforcing behavioral expectations throughout the course helps to deter inappropriate behavior.

Recommendation four. It is recommended that CTE administrators continue to monitor new instructors' progress throughout the credentialing process while providing continuous professional development opportunities. Instructors are the one of the most important factors in educating students (Adams, 2010; Dufour & Eaker, 1998; Kersten, 2006; E. Smith, 2005; U.S. Department of Education, Office of the Under Secretary, Policy and Program Studies Service, 2004). Ongoing support encourages instructors to complete the credentialing program successfully and implement effective instructional strategies. Polly (2012) found that training only affected instructor practices when coupled with support in the classroom during and immediately following the training. Instructors are likely to adopt effective instructional strategies in the early stages of their career when support is provided (Washburn, Powers, & Morales, 2006). The study site currently monitors and tracks instructors' progress for credentialing, providing reminders for completing the necessary requirements within the designated timeframe. Administrators visit classes on a daily basis and provide feedback to guide instructors. There is also a mentor teacher on staff who works closely with county office of education approved credentialing programs. The mentor teacher supports new instructors with planning lessons, taking attendance, providing feedback, and various other responsibilities. New instructors are also encouraged to participate in all professional development opportunities offered at the study site. The trainings range from workshops on effective instructional strategies to inputting attendance correctly. The practice of tracking new instructor progress in credentialing programs and providing professional development opportunities could increase the potential for new instructors to ensure high student achievement in ROC/Ps.

Recommendations for Further Study

Findings from this study provided some insight into the common practices of CTE instructors who have consistently had 80% or higher adult student completion rates. Recommendations for further study were determined based on the interpretations of the key findings.

CTE teacher credentialing programs. Transitioning from a student in a credentialing program to instructor can be a difficult process (Lovo, Cavazos, & Simmons, 2006; Washburn et al., 2006). Taking the skills learned in a program and applying those skills in a classroom environment can be a challenge for some. Further research needs to be conducted in the area of successful CTE instructor preparation programs.

Leadership practices that support effective programs. It is the responsibility of administrators to help instructors provide effective instruction in an environment that is conducive to learning. Effective leadership practices should be studied and refined to enhance CTE instructors' ability to ensure that students are successful in the classroom. Leadership characteristics that promote effective instruction include "knowledge of and involvement in curriculum, instruction, and assessment" (Stearns, Margulus, & Shinsky, 2012, p. 7). Examining the practices of administrators who have demonstrated the ability to support instructors in cultivating and maintaining effective CTE programs would be beneficial to ROC/Ps.

CTE instructors' motivation for being effective instructors. Motivation is the key element in instructors being persistent in delivering effective instruction (Popescu & Tudorache, 2013). Studying the factors that cause instructors to be effective in delivering instruction would help identify the influences that contribute to high student achievement. Kaur and Kaur (2013) found that instructor motivation is one of the most influential factors in student achievement.

Identifying common motivating factors among effective instructors could further current understanding of why these instructors perform at such high levels.

Adults' motivation for taking CTE classes. Studying adults' motivation for taking CTE courses could provide insight into what adults are seeking in order to achieve self-improvement. According to Knowles et al. (1998), internal motivators are more likely to encourage adult students to attain success. Therefore, knowledge of the reasons why adult students take CTE courses could indicate different elements that could be included in the course curricula. Since adults seek to achieve personal goals, implementing components into courses in accordance with student interest would make the programs more attractive.

Tracking the success of CTE students. Studying the success stories of CTE students could provide insight into patterns or characteristics that lead to employment. Observing and partaking in successful experiences increases the potential for developing positive self-efficacy (Arslan, 2012; Hines, 2008). Helping students recognize skills that have led to positive results could influence students to develop these skills. The ultimate goal of CTE is to provide training that helps students attain gainful employment and pursue further education. If there are common factors among students who are hired because of their CTE training, identifying these factors could help ROC/Ps prepare students with skills to improve their ability to attain jobs.

Final Thoughts

CTE provides meaningful training that has opened the doors for many people to gain access to successful careers. Students who have attended CTE courses have also entered post-secondary schools to continue courses of study that started in high school. Instructors have been critical to these success stories. CTE instructors' instructional practices, classroom management

practices, expectations for student academic performance, and professional experiences and specialized training all play a significant role in producing these successful results.

Instructors are the one of the most important factors in educating students (Adams, 2010; Dufour & Eaker, 1998; E. Smith, 2005). Therefore, it is important to provide instructor training and professional development to enhance the potential for the continued success of ROC/Ps. This study examined how CTE instructors' expectations influence adult student academic achievement. Instructor participants demonstrated that utilizing effective instructional and classroom management strategies along with having high expectations for student academic performance promote high student academic achievement. These instructors also demonstrated that participating in ongoing professional growth opportunities enhance their ability to teach and train students. ROC/Ps should ensure that professional development opportunities for CTE instructors are available to prepare instructors to teach effectively.

Based on the results of this study, ROC/Ps should place a heavy emphasis on the importance of ongoing professional development to improve instruction, student achievement, and the overall quality of CTE. Implementing this practice would be beneficial to both CTE instructors and students. Instructors would have the theoretical and practical knowledge to deliver quality instruction, which is characterized by utilizing multiple instructional strategies that are student-centered. Instructors would also stay abreast of effective, research-based instructional strategies. Students would benefit from receiving effective instruction, which promotes high student academic achievement.

ROC/Ps should also emphasize establishing high expectations for student academic performance. Instructors interact with students based on their expectations for students (Rosenthal & Babad, 1985). Creating a culture where establishing high expectations for student

performance is the norm would encourage instructors to interact with students in ways that promote high student academic achievement. Based on these interactions, students would be accountable for performing satisfactorily. Students would have a clear understanding of the quality of work they need to produce in order to be successful in the class.

Emphasis on high expectations and ongoing professional development has proven to be effective as evidenced by the results of this study. The instructor participants' practices and professional experiences have resulted in high student achievement. Implementing these strategies at ROC/Ps will help to ensure the continued success of CTE. Incorporating high expectations in every aspect of the educational program at ROC/Ps will help students receive effective training that prepares them for the industry and post-secondary education.

REFERENCES

Adams, E. (2010). A framework for the preparation of accomplished Career and Technical Education Teachers. *Journal of Career and Technical Education*, *25*(1), 21-34. Retrieved from http://files.eric.ed.gov/fulltext/EJ931085.pdf

Arslan, A. (2012). Predictive power of the sources of primary school students' self-efficacy beliefs on their self-efficacy beliefs for learning and performance. *Educational Sciences: Theory and Practice*, *12*(3), 1915-1920. Retrieved from http://files.eric.ed.gov/fulltext/EJ1000903.pdf

Association for Career and Technical Education. (2011). *State profiles - California CTE delivery system*. Retrieved from https://www.acteonline.org/stateprofiles.aspx

Association of Public and Land-Grant Universities. (2012). *The land-grant tradition*. Retrieved from http://www.aplu.org/NetCommunity/Document.Doc?id=780

Aldridge, J., & Goldman, R. (2007). *Current issues in education* (2nd ed.). Boston, MA: Pearson Education.

Allan, J., Clarke, K., & Jopling, M. (2009). Effective teaching in higher education: Perceptions of first year undergraduate students. *International Journal of Teaching and Learning in Higher Education*, *21*(3), 362-372. Retrieved from http://files.eric.ed.gov/fulltext/EJ909070.pdf

Allen, K. P. (2010). Classroom management, bullying, and teacher practices. *Professional Educator*, *34*(1). Retrieved from http://files.eric.ed.gov/fulltext/EJ988197.pdf

Alvidrez, J., & Weinstein, R. S. (1999). Early teacher perceptions and later student academic achievement. *Journal of Educational Psychology, 91*(4), 731-746. doi:10.1037/0022-0663.91.4.731

Babad, E. Y. (1979). Personality correlates of susceptibility to biasing information. *Journal of Personality and Social Psychology, 37*(2), 195-202. doi:10.1037/0022-3514.37.2.195

Babad, E. Y., Inbar, J., & Rosenthal, R. (1982). Pygmalion, Galatea, and the Golem: Investigations of biased and unbiased teachers. *Journal of Educational Psychology, 74*(4), 459-474. doi:10.1037/0022-0663.74.4.459

Banks, E. L. (1998). *The integration of work-related education and academic education from the Colonial period to the early establishment of the Smith-Hughes Act* (Doctoral dissertation). Available from ProQuest Dissertations & Theses. (UMI No. 1392565)

Banks, J. A. (2006). *Cultural diversity and education: Foundations, curriculum and teaching* (5th ed.). Boston, MA: Pearson Education.

Beaty-O'Ferrall, M. E., Green, A., & Hanna, F. (2010). Classroom management strategies for difficult students: Promoting change through relationships. *Middle School Journal (J1)*, *41*(4), 4-11. Retrieved from http://files.eric.ed.gov/fulltext/EJ887746.pdf

Bedgood, D. R. Jr., Bridgeman, A. J., Buntine, M., Mocerino, M., Southam, D., Lim, K. F., … & Zadnik, M. (2010). The development of teaching skills to support Active Learning in University Science (ALIUS). *Journal of Learning Design*, *3*(3), 10-19. doi:10.5204 /jld.v3i3.58

Beecher, M., & Sweeny, S. H. (2008). Closing the achievement gap with curriculum enrichment and differentiation: One school's story. *Journal of Advanced Academics, 19*(3), 502-530. Retrieved from http://files.eric.ed.gov/fulltext/EJ810785.pdf

Bishop, J. H., & Mane, F. (2003). *The impacts of Career-Technical Education on high school completion and labor market success* (CAHRS Working Paper 03-18). Retrieved from http://digitalcommons.ilr.cornell.edu/cahrswp/37

Bouwma-Gearhart, J. (2012). Science faculty improving teaching practice: Identifying needs and finding meaningful professional development. *International Journal of Teaching and Learning in Higher Education*, *24*(2), 180-188. Retrieved from http://files.eric.ed. gov/fulltext/EJ996264.pdf

Brophy, J. E. (1983). Research on the Self-fulfilling Prophecy and teacher expectations. *Journal of Educational Psychology, 75*(5), 631-661. doi:10.1037/0022-0663.75.5.631

Brophy, J. E. (1985). Classroom management as instruction: Socializing self-guidance in students. *Theory Into Practice, 24*(4), 233-240. doi:10.1080/00405848509543180

Browder, A. (2007). *Students' views of Career Technical Education: A qualitative study* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI 1466501)

Brown, A. C. (2009) *Factors and perceptions that affect enrollment in career and technical education programs in rural East Central Mississippi*. Available from ProQuest Dissertations and Theses database. (UMI 3386307)

California Association of Joint Powers Authorities. (n.d.). *About our history*. Retrieved from http://www.cajpa.org/about

California Association of Regional Occupational Centers and Programs. (2010). *Legislative updates.* Retrieved from http://www.carocp.org/library/document/ M3_legupdate_6-17-10.pdf

California's Children. (2010). *Update: Vetoed: AB 2446: Ups CA HS grad rates by changing standards.* Retrieved from http://californiaschildren.typepad.com/californias-children /2010/10/ab-2446-upping-ca-hs-grad-rates-by-changing-the-standards-ready-to-sign.html

California Department of Education. (2006). *California Career Technical Education model curriculum standards: Grades seven through twelve*. Retrieved from http://www.cde.ca.gov/ci/ct/sf/documents/ctestandards.pdf

California Department of Education. (2007a). *Career Technical Education framework for California public schools: Grades seven through twelve*. Retrieved from http://www.cde.ca.gov/ci/ct/sf/documents/cteframework.pdf

California Department of Education. (2007b). *NCLB teacher requirements resource guide.* Retrieved from http://www.cde.ca.gov/nclb/sr/tq/documents/nclbresourceguide.doc

California Department of Education. (2009). *Fiscal issues related to budget reductions and flexibility provisions.* Retrieved from http://www.cde.ca.gov/fg/ac/co/documents/ sbx34budgetflex.doc

California Department of Education. (2011a). *2009 Budget Act and related legislation*. Retrieved from http://www.cde.ca.gov/nr/el/le/2009budgetact.asp

California Department of Education. (2011b). *Assembly Bill 2448 Program Summary*. Retrieved from http://www.cde.ca.gov/ci/ct/rp/ab244807summary.asp

California Department of Education. (2011c). *ROCP*. Retrieved from http://www.cde.ca. gov/ci/ct/rp/

California Department of Education. (2011d). *School attendance review boards*. Retrieved from http://www.cde.ca.gov/ls/ai/sb/

California Department of Education. (2012). *Resources subject to Categorical Flexibility*. Retrieved from http://www.cde.ca.gov/fg/ac/co/resourcecatflex.asp

California Department of Finance. (2013). *Governor's budget: Proposed budget summary. K-12 education.* Retrieved from http://www.ebudget.ca.gov/pdf/BudgetSummary /Kthru12Education.pdf

Carnevale, A. P., Jayasundera, T., & Hanson, A. R. (2012). *Career and Technical Education: Five ways that pay along the way to the B.A.* Retrieved from http://www9.georgetown.edu/grad/gppi/hpi/cew/pdfs/CTE.FiveWays. FullReport.pdf

Castellano, M., Stringfield, S., & Stone, J. R. (2003). Secondary Career and Technical Education and comprehensive school reform: Implications for research and practice. *Review of Educational Research 73*(2), 231-272. doi:10.3102/00346543073002231

Center for Research on Learning and Teaching. (2013). *Active learning*. Retrieved from http://www.crlt.umich.edu/tstrategies/tsal

Cohen, M., & Besharov, D. J. (2002). *The role of Career Technical Education: Implications for the federal government* (Master's thesis). Retrieved from ERIC database. (ED466939)

Colorado State University. (2011). *Advantages and disadvantages of the survey method*. Retrieved from http://edu-net.net/bus-riting/writing/guides/research/survey/com2d1.html

Commission on Teacher Credentialing. (2010). *Science, Technology, Engineering, Mathematics, and Career Technical Education*. Retrieved from http://www.ctc.ca.gov/STEM-CTE/files/STEM-CTE-individuals.pdf

Cooper, H. S. (1979). Pygmalion grows up: A model for teacher expectation, communication and performance influence. *Review of Education Research 49*(3), 389-410. doi:10.3102/00346543049003389

Creswell, J. W. (2007). *Qualitative inquiry and research design: Choosing among five approaches* (2nd ed.). Thousand Oaks, CA: Sage.

Dally-Trim, L., Alloway, N., & Walker, K. (2008). Secondary school students' perceptions of, and the factors influencing their decision-making in relation to, VET in schools. *The Australian Educational Researcher, 35*(2), 55-69. Retrieved from http://files.eric.ed.gov/fulltext/EJ810264.pdf

Doolittle, P. E., & Camp, W. G. (1999). Constructivism: The Career Technical Education perspective. *Journal of Vocational and Technical Education*, *16*(1). Retrieved from http://scholar.lib.vt.edu/ejournals/JVTE/v16n1/doolittle.html

Dufour, R., & Eaker, R. (1998). *Professional Learning Communities at work: Best practices for enhancing student achievement.* Bloomington, IN: Solution Tree.

Dusek, J. (1975). Do teachers bias children's learning? *Review of Educational Research, 45*, 661-684. doi:10.3102/00346543045004661

Education Commission of the States. (2010). *Compulsory education requirements*. Retrieved from http://www.ncsl.org/documents/educ/ECSCompulsoryAge.pdf

Furner, J. M., Yahya, N., & Duffy M. L. (2005). Teach mathematics: Strategies to reach all students. *Intervention in School and Clinic, 41*(1), 16-23. doi:10.1177/10534512050410010501

Gates, J. (2010). Children with gifts and talents; Looking beyond traditional labels. *Roeper Review, 32*(3), 200-206. doi:10.1080/02783193.2010.485308

Gaunt, D. (2005). *High school seniors' perceptions of Career Technical Education and factors influencing their decision to attend an area career technical center* (Doctoral dissertation). Available from ProQuest Dissertations & Theses. (UMI No. 756862712)

Gaunt, D., & Palmer, L. B. (2005). Positive student attitudes toward CTE (Career and Technical Education). *Techniques: Connecting Education and Careers*, *80*(8), 44-47. Retrieved from https://www.acteonline.org/techniques/

Getzlaf, B., Perry, B., Toffner, G., Lamarche, K., & Edwards, M. (2009). Effective instructor feedback: Perceptions of online graduate students. *Journal of Educators Online*, *6*(2), 1-16. Retrieved from http://files.eric.ed.gov/fulltext/EJ904070.pdf

Gregory, G. H., & Chapman, C. (2002). *Differentiated instructional strategies: One size doesn't fit all*. Thousand Oaks, CA: Corwin.

Gordon, H. R. D. (2008). *The history and growth of Career Technical Education in America* (3rd ed.). Long Grove, IL: Waveland Harris, M. J., & Rosenthal, R. (1985). Mediation of interpersonal expectancy effects: 31 meta- analyses. *Psychological Bulletin, 97*, 363-386. doi:10.1037/0033-2909.97.3.363

Hamid, S. R. A., Hassan, S. S. S., & Ismail, N. A. H. (2012). Teaching quality and performance among experienced teachers in Malaysia. *Australian Journal of Teacher Education, 37*(11), 85-103. Retrieved from http://files.eric.ed.gov/fulltext/EJ999392.pdf

Hassler, A. (2006). Learning in the lecture classroom: Quick and easy suggestions for a more interactive classroom. *Inquiry*, *11*(1), 20-22. Retrieved from http://files.eric.ed.gov /fulltext/EJ844987.pdf

Heck, D. J., Banilower, E. R., Weiss, I. R., & Rosenberg, S. L. (2008). Studying the effects of professional development: The case of the NSF's local systemic change through teacher enhancement initiative. *Journal for Research in Mathematics Education*, *39*(2), 113-152. Retrieved from http://www.nctm.org/publications/

Hill, P. (2012, November 2). Unemployment rate inches up to 7.9 percent; Jobs increased in October. *The Washington Times*. Retrieved from http://www.washingtontimes.com/news /2012/nov/2/unemployment-rate-inches-79-percent-jobs-increased/

Hines, M. T., III (2008). The interactive effects of race and teacher self efficacy on the achievement gap in school. *International Electronic Journal for Leadership in Learning*, *12*(11), 1-11. Retrieved from http://files.eric.ed.gov/fulltext/EJ940572.pdf

Holcomb, S. (2006). The history of the NEA. *NEA Today.* Retrieved from http://www.nea.org /home/11608.htm

Holle, T. L. (2012). Effective and sustainable business and industry partners. *Techniques: Connecting Education & Careers*, *87*(8), 20-24. Retrieved from https://www.acteonline.org/techniques/

Iowa State University. (2012). *Facilities planning & management*. Retrieved from http://www.fpm.iastate.edu/maps/memorials/marker.asp?id=31-01

Jensen, J. L. (2011). Higher education faculty versus high school teacher: Does pedagogical preparation make a difference? *Bioscene: Journal of College Biology Teaching*, *37*(2), 30-36. Retrieved from http://files.eric.ed.gov/fulltext/EJ972012.pdf

Johnson, D. D., Rice, M. P., Edgington, W. D., & Williams, P. (2005). For the uninitiated: How to succeed in classroom management. *Kappa Delta Pi Record*, *42*(1), 28-32. doi:10.1037/0033-2909.97.3.363

Jussim, L., & Eccles, J. S. (1992). Teacher expectations II: Construction and reflection of student achievement. *Journal of Personality & Social Psychology, 63*(6), 947-961. doi:10.1037 /0022-3514.63.6.947

Jussim, L., & Harber, K. D. (2005). Teacher expectations and Self-fulfilling Prophecies: Knowns and unknowns, resolved and unresolved controversies. *Personality & Social Psychology Review, 9*(2), 131-155. doi:10.1207/s15327957pspr0902_3

Kanter, H. (1986). Work, education, and vocational reform: The ideological origins of Vocational Education, 1890-1920. *American Journal of Education, 94*(4), 401-423. doi:10.1086/443860

Kaur, K., & Kaur, P. (2013). Relationship between self-efficacy and teacher motivation of secondary school teachers of Punjab. *Indian Streams Research Journal, 3*(9), 1-3. Retrieved from http://www.isrj.net/

Kersten, T. A. (2006). Teacher tenure: Illinois School Board presidents' perspectives and suggestions for improvement. *Planning and Changing*, *37*(3&4), 234-257. Retrieved from http://planningandchanging.illinoisstate.edu/

Knowles, M. S., Holton III, E. F., & Swanson, R. A. (1998). *The adult learner: The definitive classic in adult education and human resource development* (5th ed.). Houston, TX: Gulf.

Konopnicki, P. (2012). The economic vitality formula of success. *Techniques: Connecting Education & Careers*, *87*(6), 36-39. Retrieved from https://www.acteonline.org/techniques/

Kuklinski, M. R., & Weinstein, R. S. (2001). Classroom and developmental differences in a path model of teacher expectancy effects. *Child Development, 72*(5), 1554-1578. doi:10.1111/1467-8624.00365

Larke, C. G. (1987). *Booker T. Washington's faith in industrial education for Blacks* (Doctoral dissertation). Retrieved from American Studies database. (AAT No. 8724633)

Leedy, P. D., & Ormrod, J. E. (2012). *Practical research: Planning and design* (10th ed.). Upper Saddle River, NJ: Pearson Merrill Prentice Hall.

Legislative Analyst's Office. (2004). *A review of California's Compulsory Education Laws.* Retrieved from http://www.lao.ca.gov/2004/compulsory_ed /020304_compulsory_ education_laws.htm

Levesque, K., Laird, J., Hensley, E., Choy, S. P., Cataldi, E. F., & Hudson L. (2008). Career Technical Education in the United States: 1990-2005 (NCES 2008-035). Washington, DC: National Center for Education Statistics.

Levesque, K., Lauen, D., Teitelbaum, P., Alt, M., Librera, S., & Nelson, D. (2000). *Vocational Education in the United States: Toward the year 2000 (NCES 2000029)*. Washington, DC: National Center for Education Statistics.

Lewis, T., & Cheng, S. (2006). Tracking, expectations and the transformation of Vocational Education. *American Journal of Education, 113*(1), 67-99. doi:10.1086/506494

Lovo, P., Cavazos, L., & Simmons, D. (2006). From BTSA to induction: the changing role of school districts in teacher credentialing. *Issues in Teacher Education*, *15*(1), 53-68. Retrieved from http://files.eric.ed.gov/fulltext/EJ796295.pdf

Lucilio, L. (2009). What secondary teachers need in professional development. *Catholic education: A journal of inquiry and practice*, *13*(1), 53-75. Retrieved from http://files.eric.ed.gov/fulltext/EJ934031.pdf

Lynch, D. J. (2011). Adapting postsecondary teaching to the needs of a new generation. *College Quarterly*, *14*(3), 1-5. Retrieved from http://files.eric.ed.gov/fulltext/EJ962365.pdf

Madon, S., Jussim, L., & Eccles, J. (1997). In search of the powerful self-fulfilling prophecy. *Journal of Personality & Social Psychology 72*(4), 791-809. doi:10.1037/0022-3514.72.4.791

Marzano, R. J., Pickering, D. J., & Pollock, J. E. (2001). *Classroom instruction that works: Research-based strategies for increasing student achievement*. Alexandria, VA: Association for Supervision and Curriculum Development.

Maxwell, L. D., Vincent, S. K, Ball, A. L. (2011). Teaching effectively: Award winning faculty share their views. *Journal of Agricultural Education*, *52*(4), 162-174. doi:10.5032/jae.2011.04162

McCaslin, N. L., & Parks, D. (2002). Teacher education in Career Technical Education: Background and policy implications for the new millennium. *Journal of Vocational Education Research*, *27*(1), 65-103. doi:10.5328/JVER27.1.69

Mojkowski, C., & Washor, E. (2007). Seeding the edge of Career Technical Education. *Techniques: Connecting education and careers, 82*(7), 2-5.

Mokher, C. (2011). *Aligning career and technical education with high-wage and high-demand occupations in Tennessee: Issues and answers*. Retrieved from ERIC Database. (ED522341)

Moore, K. (2010). The three-part harmony of adult learning, critical thinking, and decision-making. *Journal of Adult Education*, *39*(1), 1-10. Retrieved from http://files.eric.ed.gov/fulltext/EJ917394.pdf

Murray, C., & Zvoch, K. (2011). Teacher-student relationships among behaviorally at-risk African American youth from low-income backgrounds: Student perceptions, teacher perceptions and socioemotional adjustments correlates. *Journal of Emotional and Behavioral Disorders, 19*(1), 41-54. doi:10.1177/1063426609353607

National Center for Education Statistics (2009). *Career/Technical Education (CTE) statistics*. Retrieved from http://nces.ed.gov/surveys/ctes/tables/h125.asp

National Committee on Excellence in Education. (1983). *A nation at risk*. Retrieved from http://www2.ed.gov/pubs/NatAtRisk/risk.html

National Research Center for Career and Technical Education Curriculum Integration Workgroup. (2010). *Capitalizing on context: Curriculum integration in career and Technical Education*. Retrieved from http://136.165.122.102/UserFiles/File /Tech_Reports/NRCCTE_Curriculum_WEB_READY.pdf

No Child Left Behind Act of 2001. Pub. L. No. 107-110

Novel, J. (2009). *Implementation of the Carl D. Perkins Career-Technical Education reforms of the 1990s: Postsecondary education outcomes of students taking an enhanced vocational curriculum* (Doctoral dissertation). Available from ProQuest Dissertations and Theses. (UMI 3345824)

Official California Legislative Information. (n.d.). Education Code Section 52300-52334.5. *Legislative Counsel's Digest*. Retrieved from http://www.leginfo.ca.gov/cgi-in/displaycode?section=edc&group=52001-53000&file=52300-52334.5

Official California Legislative Information. (2010a). Bill number: AB 2446. *Legislative Counsel's Digest*. Retrieved from http://www.leginfo.ca.gov/pub/09-10/bill/asm/ab_2401-2450/ab _2446_bill_20100413_amended_asm_v97.html

Official California Legislative Information. (2010b). Bill number: SB 1298 amended. *Legislative Counsel's Digest*. Retrieved from http://www.leginfo.ca.gov/pub/09-10/bill/sen/sb_ 1251- 1300/sb_1298_bill_20100421_amended_sen_v97.html

Official California Legislative Information. (2011a). Assembly Bill Number: 1330. *Legislative Counsel's Digest*. Retrieved from http://www.leginfo.ca.gov/pub/11-12/bill/asm/ab_1301-1350/ab_1330_bill_20110920_ enrolled.pdf

Official California Legislative Information. (2011b). Bill Number: AB 1330. Chartered bill text. *Legislative Counsel's Digest*. Retrieved from http://www.leginfo.ca.gov/pub/11-12/bill/asm/ab_1301-1350/ab_1330_bill_20111008_chaptered.html

Orange County Office of Education. (2011). *Preliminary Career Technical Education (CTE) credential requirements for applicants*. Retrieved from http://www.ocde.us/Leadership/ Documents/Preliminary%20Credential%20Requirements%20for%20Applicants.pdf

Osborne, J. W., & Walker, C. (2006). Stereotype Threat, identification with academics and withdrawal from school: Why the most successful students of colour might be the most likely to withdraw. *Educational Psychology, 26*(4), 563-577. doi:10.1080 /01443410500342518

Palmer, J. (2007). Measuring for marketing. *Techniques: Connecting Education and Careers, 82*(2), 26-27. Retrieved from https://www.acteonline.org/techniques/

Patten, M. L. (2010). *Proposing empirical research: A guide to the fundamentals* (4th ed.). Glendale, CA: Pyrczak.

Perlmann, J. (1985). Curriculum and tracking in the transformation of the American high school: Providence, R.I. 1880-1930. *Journal of Social History, 19*(1), 29-55. doi:10.1353 /jsh/19.1.29

Polly, D. (2012). Supporting mathematics instruction with an expert coaching model. *Mathematics Teacher Education and Development, 14*(1), 78-93. Retrieved from http://files.eric.ed.gov/fulltext/EJ991866.pdf

Popescu, C., & Tudorache, A. M. (2013). Motivation - Key element of teachers' performance in the national colleges of Dambovita County. *Revista Academiei Fortelor Terestre, 18*(3), 280-286. Retrieved from http://www.armyacademy.ro/reviste/

Pulliam, J. D., & Van Patten, J. J. (2007). *History of education in America* (9th ed.). Upper Saddle River, NJ: Pearson Merrill Prentice Hall.

Reese, S. (2012). Today's students: Today's adult student. *Techniques: Connecting Education and Careers, 87*(7), 30-35. Retrieved from https://www.acteonline.org/techniques/

Rehm, M. (1989). Emancipatory vocational education: Pedagogy for the work of individuals and society. *Journal of Education, 171*(3), 109-123. Retrieved from http://www.bu.edu /journalofeducation/current-issues/archives/

Richards, L., & Morse, J. M. (2007). *Readme first for a user's guide to qualitative methods* (2nd ed.). Thousand Oaks, CA: Sage.

Roberts, M. A. (2010). Toward a theory of culturally relevant critical teacher care: African American teachers' definitions and perceptions of care for African American students. *Journal of Moral Education, 39*(4), 449-467. doi:10.1080/03057241003754922

Romberg, T. A. (2010). Wittrock's influence on mathematics: Some personal comments. *Educational Psychologist, 45*(1), 61-63. doi:10.1080/00461520903433570

Rosenthal, R., & Babad, E. Y. (1985). Pygmalion in the gymnasium. *Educational Leadership, 43*(1), 36-39. Retrieved from http://www.ascd.org/publications/educational-leadership.aspx

Rubie-Davies, C. M. (2007). Classroom interactions: Exploring the practices of high- and low-expectation teachers. *British Journal of Educational Psychology, 77*(2), 289-306. doi:10.1348/000709906X10601

Rubie-Davies, C. M. (2010). Teacher expectations and perceptions of student attributes: Is there a relationship? *British Journal of Educational Psychology, 80*(1), 121-135. doi:10.1348/000709909X466334

Rubie-Davies, C., Hattie, J., & Hamilton, R. (2006). Expecting the best for students: Teacher expectations and academic outcomes. *British Journal of Educational Psychology, 76*(3), 429-444. doi:10.1348/000709905X53589

Rubie-Davies, C. M., Peterson, E., Irving, E., Widdowson, D., & Dixon, R. (2010). Expectations of achievement: Student, teacher and parent perceptions. *Research in Education 83*(1), 36-53. doi:10.7227/RIE.83.4

Sandholtz, J. H. (2011). Preservice teachers' conceptions of effective and ineffective teaching practices. *Teacher Education Quarterly*, *38*(3), 27-47. Retrieved from http://eric.ed.gov/?q=teacher+responsibility&pr=on&ft=on&id=EJ940632

Schools Moving Up. (2008). *2008-2012 California state plan for Career Technical Education*. Retrieved from http://www.schoolsmovingup.net/cte/downloads/cteplan_apdx_k_122808.pdf.

Schultz, R. (1987). Review: Printer's devils: The decline of apprenticeship in America. *Reviews in American History*, *15*(2), 226-231. doi:10.2307/2702172

Schumacher, G., Grigsby, B., & Vesey, W. (2011). Development of research-based protocol aligned to predict high levels of teaching quality. *International Journal of Educational Leadership Preparation, 6*(4). Retrieved from http://files.eric.ed.gov/fulltext/EJ974343.pdf

Sciarra, D. T., & Ambrosino, K. E. (2011). Post-secondary expectations and educational attainment. *Professional School Counseling*, *14*(3), 231-241. doi:10.5330/PSC.n.2011-14.231

Silver, R. (1991). *An analysis of Charles Allen Prosser's conception of secondary education in the United States* (Unpublished doctoral dissertation). Loyola University of Chicago, Chicago, IL.

Silver, H. F., Strong, R.W., & Perini, M. J. (2000). *So each may learn: Integrating learning styles and multiple intelligences*. Alexandria, VA: Association for Supervision and Curriculum Development.

Smith, E. (2005). A rich tapestry: Changing views of teaching and teaching qualifications in the vocational education and training sector1. *Asia-Pacific Journal of Teacher Education 33*(3), 339-351. doi:10.1080/13598660500286374

Smith, C. V., & Cardaciotto, L. (2011). Is active learning like broccoli? Student perceptions of active learning in large lecture classes. *Journal of the Scholarship of Teaching and Learning*, *11*(1), 53-61. Retrieved from http://files.eric.ed.gov/fulltext/EJ915923.pdf

Steele, C. M. (1995, August 31). Students live down to expectations. *New York Times*.

Stearns, M., Margulus, L., & Shinsky, J. (2012). Theory into practice: A study to assess the influence of a customized leadership development program on a cohort of aspiring urban leaders. *International Journal of Educational Leadership Preparation*, *7*(2), 1-13. Retrieved from http://files.eric.ed.gov/fulltext/EJ973801.pdf

Stevens, P. A. J., & Vermeersch, H. (2010). Streaming in Flemish secondary schools: Exploring teachers' perceptions of and adaptations to students in different streams. *Oxford Review of Education, 36*(3), 267-284. doi:10.1080/03054981003629862

Strayhorn, T. L. (2010). The role of schools, families, and psychological variables on math achievement of Black high school students. *High School Journal*, *93*(4), 177-194. doi:10.1353/hsj.2010.0003

Stronge, J. H. (2007). *Qualities of effective teachers* (2nd ed.). Alexandria, VA: Association for Supervision and Curriculum Development.

Threeton, M. D. (2007). The Carl D. Perkins Career Technical Education (CTE) Act of 2006 and the roles and responsibilities of CTE teachers and faculty members. *Journal of Industrial Teacher Education*, *44*(1), 66-82. Retrieved from http://files.eric.ed.gov/fulltext /EJ830476.pdf

Trouilloud, D. O., Sarrazin, P. G., Martinek, T. J., & Guillet, E. (2002). The influence of teacher expectations on student achievement in physical education classes: Pygmalion revisited. *European Journal of Social Psychology, 32*(5), 591-607. doi:10.1002/ejsp.109

U.S. Departments of Commerce, Education, and Labor, the National Institute for Literacy, and the Small Business Administration (1999). *21st century skills for 21st century jobs.* Washington, DC: U.S. Government Printing Office.

U.S. Department of Education. (2005). *Issue brief: Reasons for adults' participation in work-related courses, 2002-03.* Retrieved from ERIC database. (ED484754)

U.S. Department of Education, Office of the Under Secretary, Policy and Program Studies Service (2004). *National Assessment of Vocational Education: Final report to Congress*. Retrieved from http://www2.ed.gov/rschstat/eval/sectech/nave/navefinal.pdf

U.S. Department of Labor. (2013a). *Economic news release: Employment situation summary*. Retrieved from http://www.bls.gov/news.release/empsit.nr0.htm

U.S. Department of Labor (2013b). *Local area unemployment statistics: Unemployment rates for states.* Retrieved from http://www.bls.gov/web/laus/laumstrk.htm

US Legal (2010). *Compulsory Education*. Retrieved from http://education.uslegal.com/
        compulsory-education/california/

University of California Admissions. (2010). *Freshman A-G courses*. Retrieved from
        http://admission.universityofcalifornia.edu/freshman/index.html

Van de Gaer, E., Pustjens, H., Van Damme, J., & De Munter, A. (2006). Tracking and the effects
        of school-related attitudes on the language achievement of boys and girls. *British Journal
        of Sociology of Education*, *27*(3), 293-309. doi:10.1080/01425690600750478

Washburn, J., Powers, A., & Morales, R. (2006). Building an innovative induction program for
        urban teachers through a university and district partnership. *Journal of Urban Learning,
        Teaching, and Research, 2*, 178-190. Retrieved from http://files.eric.ed.gov/
        fulltext/EJ943152.pdf

Wonacott, M. E. (2003). *History and evolution of vocational and career-technical education. A
        compilation.* Retrieved from ERIC database. (ED482359)

APPENDIX A

Timeline of CTE Acts and Amendments

This timeline presents some of the most significant legislative acts, amendments, and their purposes from 1862 to 2006.

Table A1

Timeline of CTE Acts and Amendments

Act/Amendment	Provisions of Act/Amendment
1862 – Morrill Act	Provided each state with 30 acres of land to establish institutions for agricultural and industrial training
1890 – The Second Morrill Act	Designated funding to Southern states to establish segregated CTE schools under separate but equal laws
1917 – Smith Hughes Act	Integrated CTE into high school general education curriculum and funded training for military personnel
1929 – George-Reed Act	Increased funding by $1 million for four years
1934 – George-Elizey Act	Gave $3 million for three year extension of CTE
1936 – George-Dean Act	Funded $14 million a year for CTE
1946 – George-Barden Act	Increased funding to $29 million a year
1956 – George-Barden Amendment	Added another $5 million for nursing and fishery programs
1958 – National Defense Education Act	Emphasized the integration of science in the curriculum; Funded training for particular military jobs
1962 – Manpower Development Training Act	Funded $370 million to train and retrain the economically disadvantaged
1963 – Vocational Education Act (VEA)	First CTE legislation to mandate services for the disabled
1968 – Vocational Education Amendments	Continued provisions for the disabled; Emphasized CTE in postsecondary schools; Broadened definition of CTE
1973 – Comprehensive Employment Training Act	Issued funding directly to local and state governments
1976 – Vocational Education Amendments	Funded part-time employment for individuals who needed to work while continuing their education
1984 – Carl D. Perkins Vocational Education Act	Replaced VEA; Emphasized program improvement and assisting at-risk populations
1990 – Carl D. Perkins Vocational and Applied Technology Act	Intended to integrate core academic content with CTE; Signed into law by President George Bush
1994 – School-to-Work Opportunities Act (STWOA)	Funded collaboration between schools and businesses to better prepare students to transition into the workforce
1998 – Carl D. Perkins Vocational and Technical Education Act	Authorized CTE funding for five years; Signed into law by President Clinton
2006 – Carl D. Perkins Career Technical Education Improvement Act	Increased accountability measures; Emphasized links to postsecondary schools and businesses/industry

APPENDIX B

Instructor Recruitment Flyer

Date

Dear Career Technical Education Instructor,

You are cordially invited to participate in a research study conducted by Mr. Atlas Helaire, III, a doctoral student in the Educational Leadership, Administration, and Policy (ELAP) doctoral program at Pepperdine University. This study is being conducted in partial fulfillment of the requirements for a dissertation. You were invited to participate in this study because you have had an adult student completion rate of 80% or higher in one or more courses at a Regional Occupational Center.

Title of the Study

"Career Technical Education Instructors' Perceptions of Adult Students' Academic Ability in Career Technical Education Classes"

Purpose of the Study

The purpose of this study is to examine how instructor expectations influence adult student academic achievement at a Regional Occupational Center in Southern California.

Potential Risks and Discomforts

The risks to the participants include discomfort with regards to answering questions about yourself and or your experiences. You may feel pressure to answer questions in a socially desirable way. You may withdraw your consent at any time and discontinue participation without penalty. You are not waiving any legal claims, rights, or remedies because of your participation in this research study. If you have questions regarding your rights as a research subject, contact Dr. Doug Leigh, chair of the Graduate and Professional Schools Institutional Review Board, at 310-568-2389 or at doug.leigh@pepperdine.edu.

If you decide to participate, you will be required to take an online survey that consists of 18 open-ended questions. Go to https://qtrial.qualtrics.com/SE/?SID=SV_1X1m5tJpFep7wtT from any computer or electronic device that has access to the internet. The survey will take approximately 20-30 minutes. Directions for completing the survey are available in the Career Center. Your informed consent is required for participating in this study. You must read the informed consent statement on the survey welcome page. In order gain access to the survey questions, you must check the informed consent box. All survey responses will be kept anonymous. You may refuse to answer any question that you do not want to answer and still remain in the study. No information that can identify you will be published in the results of this study. Participation is strictly voluntary. If you volunteer to be in this study, you may withdraw at any time without consequences of any kind. Participation or non-participation will not affect your job status or any personal consideration or rights you usually expect. All participants will receive a California Lottery Scratcher Ticket. After completing the survey, print out the final page which states "Thank you for your participation" and bring it to the Career Center. A staff member will exchange that page for the lottery ticket. You have until (insert date) to complete the survey. If you would like to receive the study results, print out the "Request for Study Results" page. Then, write your email address in the space provided. Submit this form along with the "Thank You" form. A blank envelope will be provided for this form. Place the "Request for Study Results" form in the envelope and seal the envelope before submitting it to the designated staff member. Failing to leave your email address indicates that you would not like to receive the study results. If you have any questions, you may contact me at XXX-XXX-XXXX or XXXXX@gmail.com.

Respectfully,

Atlas Helaire, III

APPENDIX C

Recruitment Email

Date

Dear Career Technical Education Instructor,

You are cordially invited to participate in a research study conducted by Mr. Atlas Helaire, III, a doctoral student in the Educational Leadership, Administration, and Policy (ELAP) doctoral program at Pepperdine University. This study is being conducted in partial fulfillment of the requirements for a dissertation. You were invited to participate in this study because you have had an adult student completion rate of 80% or higher in one or more courses at a Regional Occupational Center.

Title of the Study

"Career Technical Education Instructors' Perceptions of Adult Students' Academic Ability in Career Technical Education Classes"

Purpose of the Study

The purpose of this study is to examine how instructor expectations influence adult student academic achievement at a Regional Occupational Center in Southern California.

Potential Risks and Discomforts

The risks to the participants include discomfort with regards to answering questions about yourself and or your experiences. You may feel pressure to answer questions in a socially desirable way. You may withdraw your consent at any time and discontinue participation without penalty. You are not waiving any legal claims, rights, or remedies because of your participation in this research study. If you have questions regarding your rights as a research subject, contact Dr. Doug Leigh, chair of the Graduate and Professional Schools Institutional Review Board, at 310-568-2389 or at doug.leigh@pepperdine.edu.

If you decide to participate, you will be required to take an online survey that consists of 18 open-ended questions. Go to https://qtrial.qualtrics.com/SE/?SID=SV_1X1m5tJpFep7wtT from any computer or electronic device that has access to the internet. The survey will take approximately 20-30 minutes. Directions for completing the survey are available in the Career Center. Your informed consent is required for participating in this study. You must read the informed consent statement on the survey welcome page. In order gain access to the survey questions, you must check the informed consent box. All survey responses will be kept anonymous. You may refuse to answer any question that you do not want to answer and still remain in the study. No information that can identify you will be published in the results of this study. Participation in this study is strictly voluntary. If you volunteer to be in this study, you may withdraw at any time without consequences of any kind. Participation or non-participation will not affect your job status or any personal consideration or rights you usually expect. All participants will receive a California Lottery Scratcher Ticket. After completing the survey, print out the final page which states "Thank you for your participation" and bring it to the Career Center. A staff member will exchange that page for the lottery ticket. You have until (insert date) to complete the survey. If you would like to receive the study results, print out the "Request for Study Results" page. Then, write your email address in the space provided. Submit this form along with the "Thank You" form. A blank envelope will be provided for this form. Place the "Request for Study Results" form in the blank envelope and seal the envelope before submitting it to the designated staff member. Failing to leave your email address indicates that you would not like to receive the study results. If you have any questions, you may contact me at XXX-XXX-XXXX or XXXXX@gmail.com.

Respectfully,

Atlas Helaire, III

APPENDIX D

Instructor Invitation to Study Overview

Date

Dear Instructor,

You are invited to attend a study overview conducted by me, Mr. Atlas Helaire, III, a doctoral student in the Educational Leadership, Administration and Policy (ELAP) doctoral program at Pepperdine University. The study overview will take place on (insert dates) at (insert times) in the Board Room.

Title of the Study

"Career Technical Education Instructors' Perceptions of Adult Students' Academic Ability in Career Technical Education Classes"

Purpose of the Study

The purpose of this study is to examine how instructor expectations influence adult student academic achievement at a Regional Occupational Center in Southern California.

Potential Risks and Discomforts

The risks to the participants include discomfort with regards to answering questions about yourself and or your experiences. You may feel pressure to answer questions in a socially desirable way. You may withdraw your consent at any time and discontinue participation without penalty. You are not waiving any legal claims, rights, or remedies because of your participation in this research study. If you have questions regarding your rights as a research subject, contact Dr. Doug Leigh, chair of the Graduate and Professional Schools Institutional Review Board, at 310-568-2389 or at doug.leigh@pepperdine.edu.

The purpose of this overview is to give you information regarding a study that I am conducting on how instructor expectations influence student academic performance to fulfill part of the

requirements for a dissertation. During this session, you will learn more details regarding the purpose of the study, requirements for participating in the study, and times and dates for participating. Attending the study overview is strictly voluntary and does not obligate you to participate in the study. Each person who participates in the study will receive a California Lottery Scratcher Ticket. If you are interested, you can attend whichever session is most convenient for you.

If you have any concerns, feel free to contact me at XXX-XXX-XXXX or XXXXX@gmail.com.

Respectfully,

Atlas Helaire, III

APPENDIX E

Memo to Instructors to Give Students Invitation to Study Overview

Memorandum

To: Instructors

From: Atlas Helaire, Director of Programs/Student Support Services

Date: (Insert Date)

Subject: Student Invitations to Study Overview

Attached are sealed invitations for an informational meeting. Either before or after class, please give one to each adult student who is currently enrolled in this course. If you have any questions, contact me at XXX-XXX-XXXX or XXXXX@gmail.com.

Thank you

APPENDIX F

Student Invitation to Study Overview

Date

Dear Student,

You are invited to attend a study overview conducted by me, Mr. Atlas Helaire, III, a doctoral student in the Educational Leadership, Administration and Policy (ELAP) doctoral program at Pepperdine University. The study overview will take place on (insert dates) at (insert times) in the Board Room.

Title of the Study

"Career Technical Education Instructors' Perceptions of Adult Students' Academic Ability in Career Technical Education Classes"

Purpose of the Study

The purpose of this study is to examine how instructor expectations influence adult student academic achievement at a Regional Occupational Center in Southern California.

Potential Risks and Discomforts

The risks to the participants include discomfort with regards to answering questions about yourself and or your experiences. You may feel pressure to answer questions in a socially desirable way. You may withdraw your consent at any time and discontinue participation without penalty. You are not waiving any legal claims, rights, or remedies because of your participation in this research study. If you have questions regarding your rights as a research subject, contact Dr. Doug Leigh, chair of the Graduate and Professional Schools Institutional Review Board, at 310-568-2389 or at doug.leigh@pepperdine.edu.

The purpose of this overview is to give you information regarding a study that I am conducting on how instructor expectations influence student academic performance to fulfill part of the

requirements for a dissertation. During this session, you will learn more details regarding the purpose of the study, requirements for participating in the study, and times and dates for participating. Attending the study overview is strictly voluntary and does not obligate you to participate in the study. Each person who participates in the study will receive a California Lottery Scratcher Ticket. If you are interested, you can attend whichever session is most convenient for you.

If you have any concerns, feel free to contact me at XXXXX@gmail.com.

Respectfully,

Atlas Helaire, III

APPENDIX G

Memo to Instructors to Give Students Invitation to Participate in Study

Memorandum

To: Instructors

From: Atlas Helaire, Director of Programs/Student Support Services

Date: (Insert Date)

Subject: Student Invitations to Participate in Study

Attached are sealed invitations for an informational meeting. Either before or after class, please give one to each adult student who is currently enrolled in this course. If you have any questions, contact me at XXX-XXX-XXXX or XXXXX@gmail.com.

Thank you

APPENDIX H

Student Invitation to Participate in Study

Date

Dear Student,

You are cordially invited to participate in a research study conducted by Mr. Atlas Helaire, III, a doctoral student in the Educational Leadership, Administration and Policy (ELAP) doctoral program at Pepperdine University. This study is being conducted in partial fulfillment of the requirements for a dissertation. You were invited to participate in this study because you are an adult student who is enrolled in a course with an instructor who has a completion rate of 80% or higher in one or more courses at a Regional Occupational Center.

Title of the Study

"Career Technical Education Instructors' Perceptions of Adult Students' Academic Ability in Career Technical Education Classes"

Purpose of the Study

The purpose of this study is to examine how instructor expectations influence adult student academic achievement at a Regional Occupational Center in Southern California.

Potential Risks and Discomforts

The risks to the participants include discomfort with regards to answering questions about yourself and or your experiences. You may feel pressure to answer questions in a socially desirable way. You may withdraw your consent at any time and discontinue participation without penalty. You are not waiving any legal claims, rights, or remedies because of your participation in this research study. If you have questions regarding your rights as a research subject, contact Dr. Doug Leigh, chair of the Graduate and Professional Schools Institutional Review Board, at 310-568-2389 or at doug.leigh@pepperdine.edu.

If you decide to participate, you will be required to take an online survey that consists of 14 open-ended questions. Go to https://qtrial.qualtrics.com/SE/?SID=SV_3DZ9w49Soo4NnoN from any computer or electronic device that has access to the internet. The survey will take approximately 20-30 minutes. Directions for completing the survey are available in the Career Center. Your informed consent is required for participating in this study. You must read the informed consent statement on the survey welcome page. In order gain access to the survey questions, you must check the informed consent box. All survey responses will be kept anonymous. You may refuse to answer any question that you do not want to answer and still remain in the study. No information that can identify you will be published in the results of this study. Participation in this study is strictly voluntary. If you volunteer to be in this study, you may withdraw at any time without consequences of any kind. Participation or non-participation will not affect your grade or any personal consideration or rights you usually expect. All participants will receive a California Lottery Scratcher Ticket. After completing the survey, print out the final page which states "Thank you for your participation" and bring it to the Career Center. A staff member will exchange that page for a free lottery ticket. You have until (insert date) to complete the survey. If you would like to receive the study results, print out the "Request for Study Results" page. Then, write your email address in the space provided. Submit this form along with the "Thank You" form. You will place the "Request for Study Results" form in a blank envelope and seal the envelope before submitting it to the designated staff member. Failing to leave your email address indicates that you would not like to receive the study results. If you have any questions, you may contact me at XXXXX@gmail.com.

Respectfully,

Atlas Helaire, III

APPENDIX I

Instructor Survey Directions

Thank you for taking the time to complete this survey. The survey consists of 18 open-ended questions that will take approximately 20-30 minutes to complete.

Directions:

- To complete the survey, log on to a computer (or any electronic device that has access to the internet and supports Qualtrics.com software) and go to https://qtrial.qualtrics.com/SE/?SID=SV_1X1m5tJpFep7wtT
  MAKE SURE THE DEVICE HAS THE ABILITY TO PRINT.
- Check the Informed Consent to Participate box. This indicates that you agree to volunteer in this study. You must check this box in order to access the survey questions.
- You will need to type your responses in the spaces provided to answer the questions.
- Do not write your name on any of the responses.
- You have the right to refuse to answer any questions on the survey.
- You may withdraw from this study at any time by exiting out of the survey.
- Print the final page of the survey and exchange it in the Career Center for your California Lottery Scratcher Ticket.
- If you would like to receive the results of this study, print out the "Request for Study Results" form. Then write your email address in the space provided. Place the form in the envelope provided by the designated staff member. Seal the envelope before submitting the form. Refusal to leave your email address indicates that you do not want to receive the study results.

APPENDIX J

Informed Consent

In order to participate in this study, you must read the following statement and give your informed consent by checking the box below.

Potential Risks and Discomforts

The risks to the participants include discomfort with regards to answering questions about yourself and or your experiences. You may feel pressure to answer questions in a socially desirable way. You may withdraw your consent at any time and discontinue participation without penalty. You are not waiving any legal claims, rights, or remedies because of your participation in this research study. If you have questions regarding your rights as a research subject, contact Dr. Doug Leigh, chair of the Graduate and Professional Schools Institutional Review Board, at 310-568-2389 or at doug.leigh@pepperdine.edu.

I understand that participation in this study is strictly voluntary. I am not obligated to answer all the survey questions, and I have the right to withdraw from this study at any time for any reason with no penalty. Participation or non-participation in this study does not affect my job status, my grades, or any personal consideration or rights I usually expect. I understand that none of my personal information will be published in this study. All of my responses to this survey will be anonymous.

○   I fully understand and give my informed consent to participate in this study

APPENDIX K

Instructor Survey

1. What type of instructional strategies do you use to deliver instruction?

2. How often do you group students for classroom activities?

3. When assigning group work, how do you determine the students to place in each group?

4. Who do you believe is more responsible for student learning, the instructor or the student? Explain why.

5. How do you encourage students to learn independently?

6. What types of instructional strategies do you use to introduce new concepts to students?

7. How do you make adjustments in your instructional strategies to accommodate students who do not understand the information the first time?

8. How important is your feedback to student success in your class?

9. What methods do you use to provide feedback to students?

10. How often do you give students feedback on their work (daily, weekly, bi-weekly, once a month, as needed)?

11. How do you determine when it is time to give students feedback on their work?

12. How do you establish classroom norms?

13. How do you respond to students who disrupt the class?

14. List the types of assessments you use to monitor student progress. Some examples are multiple choice, open-ended questions, projects, essays, and speeches.

15. What types of test/assessments do you use most often to assess students?

16. How often do you assess students?

17. Describe the training program you went through to receive your CTE credential.

18. List the professional development activities in which you have participated.

APPENDIX L

Student Survey Directions

Thank you for taking the time to complete this survey. The survey consists of 14 open-ended questions that will take approximately 20-30 minutes to complete.

Directions:

- To complete the survey, log on to a computer (or any electronic device that has access to the internet and supports Qualtrics.com software) and go to: https://qtrial.qualtrics.com/SE/?SID=SV_3DZ9w49Soo4NnoN
  MAKE SURE THE DEVICE HAS THE ABILITY TO PRINT.
- Check the Informed Consent to Participate box. This indicates that you agree to volunteer in this study. You must check this box in order to access the survey questions.
- You will need to type your responses in the spaces provided to answer the questions.
- Do not write your name on any of the responses.
- You have the right to refuse to answer any questions on the survey.
- You may withdraw from this study at any time by exiting out of the survey.
- Print the final page of the survey and exchange it in the Career Center for your California Lottery Scratcher Ticket.
- If you would like to receive the results of this study, print out the "Request for Study Results" form. Then write your email address in the space provided. Place the form in the envelope provided by the designated staff member. Seal the envelope before submitting the form. Refusal to leave your email address indicates that you do not want to receive the study results.

APPENDIX M

Student Survey

1. What type of instructional strategies does your instructor use to teach?

2. How often does your instructor group students for classroom activities?

3. How often does your instructor assign group work?

4. Who does your instructor believe is more responsible for student learning, the instructor or the student? Explain why.

5. How does your instructor encourage students to learn independently?

6. What types of instructional strategies does your instructor use to introduce new concepts to students?

7. How does your instructor make adjustments in his/her instructional strategies to accommodate students who do not learn the information the first time?

8. What methods does your instructor use to provide students feedback?

9. Do you believe your instructor provides enough feedback for students to do well in class? Explain.

10. How does your instructor communicate his/her expectations for classroom behavior?

11. How does your instructor respond to students who disrupt the class?

12. List the types of assessments your instructor uses to assess students. Some examples are multiple choice, open-ended questions, projects, essays, and speeches.

13. List the types of activities your instructor uses most often to grade students.

14. How often does your instructor assess students?

APPENDIX N

Request for Study Results

If you would like to receive the results of this study, print this page. After printing the page,

write your personal email address in the space provided below. When you submit the "Thank

you" page to redeem your California Lottery Scratcher Ticket, there will be envelope available

for you to place this form. Insert this form and seal the envelope. Then give the envelope to the

staff member along with the "Thank you" page. This information will only be used to send you

the results of this study. Only the researcher will have access to your email address. You are not

obligated to give this information. However, failure to provide your email address indicates that

you are not interested in receiving the study results. None of your personal information will be

included in reporting the research data.

Email Address

APPENDIX O

Survey Thank You Page

THANK YOU

This concludes the survey. Thank you for your participation in this study!

Print this page and take it to the Career Center at the study site. To show my appreciation for your participation, a staff member will exchange this form for a California Lottery Scratcher Ticket.

Thanks again for your participation.

APPENDIX P

Spreadsheet to Code Survey Responses

What type of instructional strategies do you use to deliver instruction?
- Instructor 1's response   - Instructor 2's response
How often do you group students for classroom activities?
- Instructor 1's response   - Instructor 2's response
When assigning group work, how do you determine the students to place in each group?
- Instructor 1's response   - Instructor 2's response
Who is more responsible for students learning, the instructor or the student? Explain why.
- Instructor 1's response   - Instructor 2's response
How do you encourage students to learn independently?
- Instructor 1's response   - Instructor 2's response
What types of instructional strategies do you use to introduce new concepts to students?
- Instructor 1's response   - Instructor 2's response
How do you make adjustments in your instruction to accommodate students who do not understand the information the first time?
- Instructor 1's response   - Instructor 2's response

APPENDIX Q

Superintendent's Permission to Conduct Study

TO: Dr. Christine Hoffman

FROM: Atlas Helaire, III

DATE: May 15, 2012

SUBJECT: Superintendent's Permission to Conduct Study

Dear Dr. Hoffman,

My name is Atlas Helaire, III, and I am a doctoral student at Pepperdine University. I am conducting my dissertation research in partial fulfillment of the requirements for the doctorate degree in the Educational Leadership, Administration and Policy (ELAP) program. The purpose of the research is to examine the impact of Career Technical Education instructor expectations on high school student achievement. This letter is to request permission and assistance in conducting the study at the Regional Occupational Center in which you serve as superintendent. The information gathered will be included in my final report and can be shared with your community throughout the research process beginning May 2012 and ending in May 2013. These dates are subject to change and contingent upon IRB approval of this study.

I will identify instructors and students who will be asked to participate in completing a survey. I will then share the purpose of the study and explain why the participants and the particular site were chosen with all participants. Surveys will be scheduled at mutually convenient times for the participants. Participants' identities will remain confidential throughout the study. Pseudonyms will be used to protect the identity of all participants. All data will be locked and secured. Participation in this study is voluntary. Participants who decide to participate are free to withdraw their consent or discontinue participation at any time.

I am certain that the results of this study will provide data that will benefit your Regional Occupational Center in understanding how establishing high expectations improves high school student completion rates in Career Technical Education courses.

If you have questions concerning this research, please direct them to Atlas Helaire, III, at (XXX) XXX-XXXX or mrhelaire@gmail.com or you may contact my dissertation chair Linda Purrington, Ed.D. linda.purrington@pepperdine.edu.

Your signature indicates that you have read and understood the information provided above, that you willingly agree for me to participate in this study, and that you have received a copy of this form.

Respectfully,

_____

Atlas Helaire, III

I hereby consent to my school district's participation in the research described above.

_____
Name of School

_____
Please Print Superintendent's Name

_____
Superintendent's Signature

_____
Date

APPENDIX R

IRB Approval

PEPPERDINE UNIVERSITY

Graduate & Professional Schools Institutional Review Board

March 21, 2013

Atlas Helaire III

Protocol #: E0213D16
Project Title: Career Technical Education Instructors' Perceptions of Adult Students' Academic Ability in Career Technical Education Classes

Dear Mr. Helaire,

Thank you for submitting the revisions requested by Pepperdine University's Graduate and Professional Schools IRB (GPS IRB) for your study, *Career Technical Education Instructors' Perceptions of Adult Students' Academic Ability in Career Technical Education Classes*. The IRB has reviewed your revisions and found them acceptable. You may proceed with your study. The IRB has determined that the above entitled project meets the requirements for exemption under the federal regulations 45 CFR 46 - http://www.nihtraining.com/ohsrsite/guidelines/45cfr46.html that govern the protections of human subjects. Specifically, section 45 CFR 46.101(b)(2) states:

(b) Unless otherwise required by Department or Agency heads, research activities in which the only involvement of human subjects will be in one or more of the following categories are exempt from this policy:

Category (2) of 45 CFR 46.101, research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless: a) Information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and b) any disclosure of the human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation.

In addition, your application to waive documentation of consent, as indicated in your **Application for Waiver or Alteration of Informed Consent Procedures** form has been **approved**.

Your research must be conducted according to the proposal that was submitted to the IRB. If changes to the approved protocol occur, a revised protocol must be reviewed and approved by the IRB before implementation. For any proposed changes in your research protocol, please submit a **Request for Modification Form** to the GPS IRB. Because your study falls under exemption, there is no requirement for continuing IRB review of your project. Please be aware that changes to your protocol may prevent the research from qualifying for exemption from 45 CFR 46.101 and require submission of a new IRB application or other materials to the GPS IRB.

A goal of the IRB is to prevent negative occurrences during any research study. However, despite our best intent, unforeseen circumstances or events may arise during the research. If an unexpected situation or adverse event happens during your investigation, please notify the GPS IRB as soon as possible. We will ask for a complete explanation of the event and your response. Other actions also may be required depending on the nature of the event. Details regarding the timeframe in which adverse events must be reported to the GPS IRB and the appropriate form to be used to report this information can be found in the *Pepperdine University Protection of Human Participants in Research: Policies and Procedures Manual* (see link to "policy material" at http://www.pepperdine.edu/irb/graduate/).

6100 Center Drive, Los Angeles, California 90045 ▪ 310-568-5600

Please refer to the protocol number denoted above in all further communication or correspondence related to this approval. Should you have additional questions, please contact me. On behalf of the GPS IRB, I wish you success in this scholarly pursuit.

Sincerely,

Doug Leigh, Ph.D.
Chair, Graduate and Professional Schools IRB
Pepperdine University
Graduate School of Education & Psychology
6100 Center Dr. 5th Floor
Los Angeles, CA 90045
Doug.Leigh@pepperdine.edu
W: 310-568-2389
F: 310-568-5755

cc: Dr. Lee Kats, Vice Provost for Research and Strategic Initiatives
        Ms. Alexandra Roosa, Director Research and Sponsored Programs
        Dr. Linda Purrington, Graduate School of Education and Psychology