A Study on Becoming an Alternatively Certified Career and Technical Educator

Kymberli Cotton-Flanagan

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WE HEREBY APPROVE THE DISSERTATION SUBMITTED BY

Kymberli Cotton-Flanagan

ENTITLED A Study on Becoming an Alternatively
Certified Career and Technical Educator

AS PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE

DEGREE OF Doctor of Philosophy

Educational Leadership, Research and Technology (Department)   Dissertation Review Committee Chair

Educational Leadership (Program)   Dissertation Review Committee Member

APPROVED

Dean of The Graduate College   Date April 2011
This mixed method study examined the perspectives of twelve practicing high school CTE teachers engaged in a newly approved university model for alternative certification.

Using Creswell’s (2008) Sequential Exploratory Design and the lens of adult learning theory as established in Knowles’ (1970) Theory of Andragogy, this study examines how participants in this CTE alternative certification program, describe their experiences as related to the assumptions of adult learning. Relationships between participant’s adult learning preferences and the extent to which they experienced their program were also examined.

While literature on alternative certification theories and implications is available, specific research on the use of alternative certification in CTE is lacking. Using work recognized by the National Center for Alternative Certification, study participants described their experiences as related to known best practices in alternative certification: the roles of advising and mentorship, use of a cohort model, and training received in quality pedagogical and classroom management practices.

Analysis of the data revealed that: (1) The majority of the participants would not have become a certified teacher if this program had not been available; (2) Participants
were all working in non-education jobs prior to entering education; (3) Participants subscribe to all assumptions of adult learning theory, wavering in only a few areas; (4) Use of a cohort model contributed to the success of the participants; (5) Program structure and format was key to attracting the participants to the program; and (6) That these adult learners were less inclined to need the same preparation in classroom management as traditionally trained teachers.

Overall this study supports research on the learning preferences of adults, and that as adults, various components of program design are critical to the adult learner. The findings further add to the literature by providing practice-based examples in support of how adults learn, and that alternative certification programs can help moderate teacher shortages in CTE. Additionally, the study offers a snapshot of what practices are desirable in an alternative certification program, and includes advice on such features to those involved in the instructional design and administration of such programs for adult learners.
A STUDY ON BECOMING AN ALTERNATIVELY CERTIFIED CAREER AND TECHNICAL EDUCATOR

by

Kymberli A. Cotton-Flanagan

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Faculty of The Graduate College
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Advisor: Louann Bierlein-Palmer, Ed.D.

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Lastly, I will point out the rarely used hyphenated version of my name on this. I began this process as a Cotton, and finish as a Flanagan. This could not have happened without the “hyphen” between the two, which I see as the patience, love and support
Acknowledgments – Continued

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CHAPTER I

INTRODUCTION

Education is an important part of the societal fabric of the United States and the role of educators has increasingly changed, setting the stage for high stakes accountability (Heinen & Scribner, 2007). Such changes have affected supply and demand, and debate continues over both traditional and alternative preparation methods of teachers and addressing the shortages most states are facing (American Association of State Colleges and Universities [AASCU], 2005). Issues specific to each state have driven reforms in the public school sector that literature suggests necessitates teacher preparation reform as well (American Association of Colleges for Teacher Education [AACTE], 2009).

In the new millennium, a seeming “perfect storm” has come together to create teacher shortage problems which Gardner, in his seminal work “A Nation at Risk” (1983) could not have predicted. Many states in the U.S. today deal with large growths in student enrollment due to the baby boomlet and increases in immigrant students, as well as reduced government funding (Piotrowksi & Plash, 2006; Suell & Piotrowski, 2007). Compounding the issue was a predicted teacher shortfall of approximately 2.2 million predicted for 2010 (Hussar, 1999; Luckens, Lyster, & Fox, 2004). Such a shortfall is caused by attrition and retirements (Salvador & Wilson, 2003), as nearly a third of all teachers leave teaching within the first three years on the job (Piotrowski & Plash, 2006),
and for those who stay, K-12 teachers in the U.S. tend to be older than the general workforce (Suell & Piotrowski, 2007).

The Obama administration has highlighted teacher recruitment as a top priority for improving K-12 education as well (DeWitt, 2010). Education Secretary Arne Duncan has noted the impending exodus of the aforementioned baby boomers from the teaching profession over the next decade.

This predicted teacher shortfall is particularly true for the area of Career and Technical Education (CTE). According to the U.S. Department of Education’s Office of Vocational and Adult Education (2009), most high school students take at least one career and technical education course, and one in four students take three or more courses in a single program area. One-third of college students are involved in career and technical programs, and as many as 40 million adults engage in short-term postsecondary occupational training. Research has shown CTE to be critical component in meeting the needs of students in academic achievement, career exploration, career preparation, and leadership development (Association of Career & Technical Education [ACTE], 2008). CTE is responsible for helping all students acquire challenging academic and technical skills, and being prepared for high-skill, high-wage, or high-demand occupations in the global economy. Further, students enrolled in CTE programs have the opportunity to acquire the skills that prepare them for successful career entry, advancement or continuing education (Gray, 2002). Yet there is a shortage of CTE teachers in the United States (Conneely & Uy, 2009). Further, Secretary Duncan has recently called for an emphasis of CTE courses within the curriculum as we improve K-12 education (DeWitt, 2010).
To address teacher shortage issues for CTE and many other subject areas, most states have put into place alternative certification programs which move non-traditionally trained teachers into public schools. These programs are referred to by many different names, such as alternative teacher certification (ATC); alternate routes to certification; alternative certified teacher, and alternative certified teacher program. Despite the different titles, the identifying characteristic of all such programs is that each provides a path to teacher certification (and thus to a job in the classroom) which skirts the traditional model of pre-service preparation (Hawley, 1992). For the purposes of this study and for clarity, the term Alternative Teacher Certification (ATC), will be used when referring to any alternative teacher certification program or policies. Regardless of the names, these ATC programs emerged during the 1980s as a response to concern about decreased teacher supply and uneven teacher quality (Hawley, 1992).

The first of such alternative certification programs began in New Jersey in 1984 (Klagholz, 2000), and was prompted by a perception of poor quality among the graduates of traditional teacher education programs. This perceived problem was not unique to New Jersey as evidenced by the proliferation of similar alternative certification programs throughout the nation, as many policy makers became concerned that the traditional model of teacher preparation was not serving us well (Fraser, 2001).

During the same time alternative certification programs were beginning in the 1980’s, a seminal report, *A Nation at Risk* (Gardner, 1983) called for more rigor in core subject matter (e.g., science and math) to ensure that high school students were properly prepared for college and the increasingly competitive global market. That study, framed as a report to the Secretary of Education, led to (among other things) an increased focus
on academic rigor in the nation’s high schools (Stone, Kowske, & Alfeld, 2004). For example the national average for credits needed for a high school diploma in 1982 was 22 credits, but this number had gradually crept to 26 by 2000 (Stone et al., 2004). Not coincidentally, the number of high school courses offered in CTE decreased during that time period.

The pendulum began to swing back with the introduction of the U.S. Department of Labor’s 21st Century Workforce Initiative in 2001, which spawned a variety of activities often referred to as “The School-to-Work” Movement. This initiative’s mission is to ensure that all American workers have the opportunity to equip themselves with the necessary tools to succeed in their careers and in whatever field they choose in this new and dynamic global economy. America’s 21st century workforce needs to adjust to many economic changes, including a fundamental transformation for all industries and increasingly require higher skills sets and higher education to provide the foundation for life-long learning (U.S. Department of Labor, 2009).

The School-to-Work movement brought renewed focus on vocational education, motivating states to expand work-based learning within CTE. CTE encompasses many career and subject areas, including technical and industrial, business, consumer sciences and technology, and instructors in CTE traditionally come from two different backgrounds. Technical & Industrial (T&I) instructors tend to come from industry, with nearly half without a college degree (Lynch, 1996), while those teaching in other CTE subject areas usually possess at least a bachelor’s degree.

Overall, there is a recognized state and national shortage of CTE teachers in certain school districts and by subject areas, while at the same time the number of teacher
preparation programs for CTE teachers has decreased (ACTE, 2010). This is exacerbated by increased job opportunities for high school graduates in CTE subject areas. For example, four of the top ten jobs which are expecting a continued shortage in available workers through 2016 are ones which would likely find a large pool of candidates in high school CTE courses: health care technician, mechanic, general technician and machine operator (U.S. Bureau of Labor Statistics, 2006). A second example of an industry enjoying significant growth is the hospitality industry, many of the jobs within which would be CTE-related (U.S. Dept of Labor, 2005). Yet again there is a great disparity between the supply of workers and the demand for employees in the hospitality industry (Barron & Maxwell, 2007), and a shortage of CTE teachers to help prepare these future workers.

**Problem Statement**

Alternative teacher-certification programs have been created to recruit, select, train, and certify individuals to teach in schools that need teachers in specific subjects and grade levels (Feistritzer, 2010). Alternate routes have been derided by some as substandard, and merely fast-track ways of getting warm bodies into classrooms (Stafford, 2009). However, about one-third of new teachers hired in this country are coming through some 600 programs that have been implemented under the umbrella of 125 state alternate routes to certification (Feistritzer et al., 2010). Indeed recent initiatives such as *Race To The Top* (RTTT) have promoted comprehensive education reform in several different categories, one of which calls for the action to increase the number of great teachers and administrators (Michigan Department of Education [MDE], 2010). One such recognized route as doing so is alternative teacher certification.
Debate over the pros and cons of alternative certification often obscures the programs' variety and complexity, treating them as though they are uniform without considering the particular context, design, and program elements (Dill, 1996). Much of CTE-related alternative certification research is applied in nature and often exploratory (e.g., Ruhland & Bremer, 2003). In fact the Ruhland and Bremer study is one of the key studies on alternatively certified CTE teachers, and since their work in 2003, little has been done to address their call for further research into this small but growing group of educators.

The need for CTE teachers in the public schools is acute, with the result often being schools simply dropping CTE offerings from their curricula when the school is unable to find an instructor (ACTE, 2009). CTE teacher education today requires candidates be able to exhibit some level of academic pedagogy, career experience as well as often times possessing at least some postsecondary education (Walter & Gray, 2002). Thus university training for CTE teachers becomes a very important component of the process of alternative certification. Alternatively certified CTE teachers often do not go through the same number of university courses or classroom preparation pre-service as do traditionally trained teachers, in part because 97% of them are teaching as the teacher-of-record while undergoing their teacher training (Feistritzer, 2010). Subsequently, whatever training and pedagogical instruction they do receive is perhaps more important.

While much work has been done investigating the preparation and training of teachers from traditional programs, the literature is scarce in terms of the process by which alternatively certified teachers’ formal preparation happens. A review of the literature indicates that most research is focused on how prepared alternatively certified
CTE teachers feel they are to do their job (e.g., Ruhland & Bremer, 2003), or upon retention/attrition (e.g., Stein, 2002; Salvador & Wilson, 2003; Plash & Piotrowski, 2006). An investigation of the process and effective practices is “an area that would yield valuable information for program design and continuous improvement” (Stafford, 2010, p. 3). Therefore my study is one of the first to look at alternatively certified teachers’ perceptions of the process of alternative certification, and is designed to look at the relationship between the alternative certification preparation and how theories on adult learning affect that process. This is important because studies which look at attrition and preparedness consider the respondent’s perception of her/his motivation to teach, subject knowledge, or school location (among many variables) (National Center for Education Information [NCEI], 2007). My study takes a different approach by investigating how the respondent feels about the process of becoming a certified teacher as an adult learner, having previous professional work experiences and in most cases one or more years of actual teaching under some emergency temporary authorization.

Most studies of alternative certification are conducted in a framework of comparison to traditional teacher preparation, and most often consider constructs such as retention, mentoring, competency and student achievement (Suell & Piotrowski, 2007). Within the framework of such studies, comparisons are often made within a given state, thus allowing for more valid comparisons of outcomes (given the homogeneity of the public school system). Ruhland and Bremer (2003) were one of the first researchers to investigate on a national level the differences between alternatively certified and traditionally certified teachers. In their study however, they classified teachers as either alternative or traditional. This ignores the research which shows that there are a wide
variety of programs/routes that teachers can take to certification (Feistritzer, 2010). My study takes a unique and previously un-researched view of the alternative certification process for CTE teachers by examining the perceptions of those currently enrolled in an alternative certification program within a state (in this case Michigan), while already hired to work as a classroom teacher.

My study investigates alternatively certified teachers’ perceptions of being taught various classroom management factors (including both behavior management as well as classroom structure/ policy management), which have been found to be important but under-researched for those entering CTE teaching. Regularly, CTE teachers are permitted to begin teaching under what states have developed as some form of emergency certification. In such instances, the teacher’s work experience and potential for success in the specific CTE area are presented to the state by the sponsoring school district. In Michigan, once these authorizations are provided, the teacher has six years to complete a teacher certification program at a state approved university. My study examines what such teacher candidates feel about the process of alternative certification in terms of advising, various aspects of classroom management, pedagogical training, and the support mechanisms built into their college program. Each of these factors has been found to be important areas for both traditionally trained teachers as well as alternatively certified teachers (AACTE, 2010). By considering the impact of adult learning theory on participants’ overall feelings about the process, my study adds to the body of knowledge on alternative certification of teachers, both academic and vocational, by examining the connection between adult learning theory and the alternative certification process.
Conceptual Framework

My study examines the feelings of perceptions of adult learners regarding their alternative certification process, and Malcolm Knowles’ Theory of Andragogy (1980) is helpful in understanding the motivations and mindsets of such adult students. Additionally, data as drawn from a National Center for Alternative Certification [NCAC] (2008) recognized study on best practices, serves as the source for characteristics of effective alternative certification programs, as well as other research studies as noted in this section. Examining those practices through the lens of adult learning theory is the focus of my study. Figure 1 offers a visual overview of the core pieces of the study, which are summarized in two subsections to follow, and detailed more within Chapter II.

Figure 1. Conceptual model of study.
**Alternative Certification Best Practices**

Research on characteristics of effective ATC programs found that, among several variables, effective programs provide carefully constructed and timely coursework tailored to candidates’ backgrounds and provide trained mentors who have the time and resources to meet with candidates (Humphrey, Wechsler, & Hough, 2008). Additionally, other research found that equally as important is high quality training in pedagogy, classroom management, and human development (Duhon-Haynes, Augustus, Littleton, & Larmer, 1998).

The first of the effective practices examined in my study is advising. Because advising is seen as one of the components of student satisfaction with college (Benjamin & Hollings, 1995), examining components of the advising process with a focus on effective practice is important.

Adult students have unique needs, especially if they are employed. Among these needs are institutional flexibility in curricular and support services, academic and motivational advising supportive of their career goals, and practices that recognize work based learning that has already been achieved (Council for Adult and Experiential Learning, 2000). My study focuses on the differences between prescriptive advising and developmental advising, and which of these is the preferred method for the alternative certification participants. Consistent with theories of adult learning, developmental advising honors flexibility and supports career goals and long-term academic plans. Prescriptive advising, on the contrary, is directive and indicates specific courses and sequences which must be met (often true of another aspect of my study, cohort models).
Both forms of advising and the relationship to the study will be discussed further in Chapter II.

A second effective practice component to be examined is *mentoring*. Given the importance programs place on mentoring, limited contributions are found in the literature, particularly when the mentoring is focused on the role of the college or university, as is the case with this study. Frequent mentoring is an important factor in teacher-reported growth; although, which specific aspects of mentoring are most important are not highlighted in the NCAC study. In a 2002 study, Ruhland and Bremer found that the need for personal support, whether in the form of a mentor or a peer support group, was clear in the comments of all new teachers studied. This support from other education professionals was seen as key to staying in the teaching profession by the same participants. Flint (1999) in his study of the Adult Learning Focused Institution (ALFI) found that student satisfaction was impacted by the degree to which faculty members engaged in ‘coaching’ their students on matters academic and otherwise. ALFI faculty utilized a variety of both high-tech and low-tech options and resources to achieve good results, from e-mail and listservs to the telephone and face-to-face counseling in faculty offices.

Due to the nature of my study, and the fact that the participants are practicing teachers, little can be done on the part of the ProMoTEd program to influence the public school/teaching site mentoring practices. Instead, the embedded mentoring process within the ProMoTEd program can be evaluated and is one focus of my study. The frequency of mentoring activities, the time available for the student participant and developmental support are examined.
Another effective practice to be studied is the use of cohorts. Recent initiatives in teacher education have experimented with cohorts as a way to create supportive ties among peers, mutual intellectual support, and a sense of professionalism (Seifert & Mandzuk, 2006). Cohort-oriented programs of teacher education seem to have borrowed or extended ideas from literature that supports the justification of such models. The creation of mutual intellectual and academic stimulation can often be found in the sharing of materials and peer-led critiques of ideas. Although the creation of cohort models had originally fallen outside the world of teacher education, the formation of supportive social ties and lasting professional contacts has a great impact (Siefert et al., 2006). These supportive social and professional ties are also widely accepted as a remedy for the sometimes isolating nature of being in the classroom (Jarzabkowski, 2002).

My study seeks to understand the role cohorts provide to inform best practices for the alternative certification of vocational teachers. An understanding of how the functionality of the cohort fosters collaboration and skills needed by teachers, and the impact of community with those in similar employment situations can further inform future program design in alternative certification.

Viewed in totality, an additional effective practice examined is overall coursework. Coursework should be carefully crafted and well-timed in a sequence that is relevant to those challenges facing alternative certification candidates (Ruhland & Bremer, 2002). Conversely, the coursework should be both supportive of the challenging environments these practicing teachers face (Humphrey et al., 2008). Knowles (1984) further noted that instruction should be task-oriented instead of memorization, creating learning activities that are in the context of common tasks the adult learner would indeed
perform. In his recommendations for applying the assumptions of adult learning theory, Knowles asserts that instruction should take into account the wide range of different backgrounds of learners, and for that reason, learning materials and activities should allow for different levels/types of previous experiences. Overall coursework in the contexts of being well timed, supportive and carefully crafted throughout the ProMoTEd program are examined in this study.

Another effective practice looks at the importance of instruction in pedagogy. It is clear that some teachers in alternative preparation programs are entering the classroom without having the opportunity to learn how to teach. (Johnson, Birkeland, & Peske, 2003). One of the most commonly debated topics regarding teacher preparation, the extent to which pedagogical skills and knowledge are necessary (Education Commission of the States, 2003), is still of issue. Kennedy (1999) observed a mismatch between teacher preparation programs and the 'real world' of classrooms and suggested, along with Darling-Hammond and Sykes (1999) who noted new and innovative pedagogies being needed.

Instruction on teaching methods, instructional technologies, learning styles and practices used in CTE are studied both in the context of how well instruction in each of the aforementioned areas was perceived by the ATC candidate, as well as the usefulness in applying it in their classrooms as practicing teachers. Later in this section, further discussion on adult learning theory and the subsequent assumptions reveals that adult learners learn best when they are able to problem-solve and apply new knowledge in a timely fashion (Knowles, 1980).
A final effective practice examined in this study is instruction in *classroom management*. Classroom management has long been an important skill for teachers, especially new ones, to master. The broad term "classroom management" is used to describe the many activities which occur in a classroom and/or school (Martin & Shoho, 1999). These activities entail several aspects of the classroom, including instructional management (e.g., structuring daily routines, monitoring seated work), behavior management (e.g., dealing with disruptive students, setting rules,) and people management (e.g., how the teacher sees the student as persons, how the teacher helps the student develop, etc.) (Martin & Shoho, 1999).

Yet, little has been done to examine aspects of classroom management with ATC teachers (Sokal et al., 2003). This is particularly problematic since teachers in general, regardless of preparation, consider classroom management to be one of the most (and in some cases the most) important aspects of their jobs (Martin & Shoho, 1999; Sokal, 2003; Stone et al., 2000). Instruction on both the instructional management strategies and behavioral management strategies within the ProMoTEd program are examined in this study. As with the other components of ATC best practices, classroom management are assessed in my study via the students’ perceptions of instruction received and the usefulness of the content in their own classroom.

**Assumptions of Adult Learning Theory**

The central question of how adults learn has occupied the attention of scholars and practitioners since the founding of adult education as a professional field of practice in the 1920s (Merriam, 2001). While many have offered models and theories, there is still not one collective approach to how adults learn. If the collective body of such effort
were displayed, a mosaic of sorts would appear. In that, two central regions would occupy the greater body of information and those regions would represent andragogy and self-directed learning (Merriam, 2001). It is the staying power of these bodies of work that sustain our understanding of adult learning theory.

Turning now to the second aspect of my study, let us further look at some conceptual aspects of adult learning theory as noted above. Andragogy, as defined by Knowles (1980), is the process by which adults learn best and is held in comparison to pedagogy, the instruction of children. Citing four basic assumptions, Knowles’ work centers around the motivations and experiences that an adult approaches the learning process with, and how instruction rooted in this understanding better serves the audience it is designed to serve.

The assumptions, upon which andragogy is founded, recognize that as adults move from dependency to self directedness while learning, they draw upon their reservoir of experiences for learning, they are ready to learn particularly when they assume new roles, and that they want to solve problems and apply new knowledge immediately. It is these characteristics that Knowles ascertains sets the adults apart from children in the process of learning. My study seeks to understand how these assumptions relate to an adult-centered process like alternative certification.

The first of Knowles’ assumptions is that learners become increasingly self-directed as they mature. Tough (1967; 1971), building on the work of Houle (1961), provided the first comprehensive description of self-directed learning as a form of study. The uncovering and documenting of this type of learning—learning that is widespread, that occurs as part of adults’ everyday life, and that is systematic yet does not depend on
an instructor or a classroom—generated one of the major thrusts of research in the field of adult education (Merriam, 2001). How one actually works through a self-directed learning experience has generated a number of models of the process. The earliest models proposed by Tough (1971) and Knowles (1975) are the most linear, moving from diagnosing needs to identifying resources and instructional formats to evaluating outcomes.

Appearing at about the same time, andragogy and self-directed learning were the first two attempts by adult educators to define adult education as a unique field of practice, one that could be differentiated from learning in general and childhood education in particular. Ironically, both have been criticized for a blinding focus on the individual learner while ignoring the context (in this case alternative certification) in which it occurs. Both of these “pillars” of adult learning theory will continue to engender debate, discussion, and research, further enriching the greater understanding of adult learning.

The second of Knowles’ (1980) assumptions recognizes that as a person matures he accumulates a growing reservoir of experience that becomes an increasing resource for learning. It is this experience that substantiates the subject matter knowledge that is rich in adult learners. Instruction that is rich in application exercises based in the candidate’s field is the domain in which they will operate most comfortably (Knowles, 1984). Appropriately, this applies to my study as ATC candidates in CTE have commonly spent numerous years, often an entire career, in the CTE area of expertise in which they teach. Instruction in the application of skills obtained in the field is the goal of the ATC program.
The application of new knowledge, according to Knowles’ (1980) Theory of Andragogy, happens best for adults when they assume new roles. As the third of the four assumptions, the practicing teachers in the ProMoTEd program are poised to do just this. Adult learners have a readiness to learn (Knowles, 1980), and people become ready to learn something when they experience a need to learn it in order to cope more satisfyingly with real-life tasks and problems, such is the case in their teaching practice.

Lastly, the fourth of the assumptions reminds us that adult learners are able to apply new knowledge and problem solve in a timely manner (Knowles, 1980). Learners see education as a process of developing increased competence to achieve their full potential, necessitating lessons that are rooted in problem solving and performance versus simply facts.

Examination of the characteristics of effective alternative certification through the lens of adult learning theory and its assumptions can yield a rich understanding of how the adult learner participants experience the process of becoming an alternatively certified vocational teacher.

**Research Questions**

My research utilized a mixed method study to examine the alternative certification training of CTE teachers in the context of Malcolm Knowles’ Theory of Andragogy (1980). Further, my study also examined the process which the candidates go through as measured against alternative certification best practices, as deemed effective by the National Center for Alternative Certification. The following general research questions, guided this study:
1. Using the lens of adult learning theory, how do participants in a CTE alternative certification program in which they are also practicing teachers describe their experiences as related to:
   a. being self directed;
   b. being able to draw on their reservoir of experiences;
   c. being able to apply new learning as they assume new roles; and
   d. being able to problem solve and apply new knowledge in a timely fashion?

2. How do such participants describe their experiences as they relate to known best practices in alternative certification, including:
   a. program structure (e.g., overall coursework, advising);
   b. availability of a university mentor;
   c. being within a cohort model; and
   d. training in quality pedagogical and classroom management practices.

3. What relationships exist between participants’ adult learning preferences and the extent to which they experience various aspects of their alternative certification program?

4. How do such participants overall describe the strengths and weaknesses of their experiences within this CTE alternative certification program?

**Background**

The setting for this case study is a mid-sized university in Michigan. Recently, in response to federal initiatives such as *Race to the Top*, Michigan has enacted legislation to create high-quality alternative routes to certification for both teachers and
administrators with a goal of boosting the quality of teachers and administrators by attracting more of the best and brightest into education (Duncan, 2009). One such recently enacted program is housed at this mid-sized university and is the focus of this study.

As one of only five institutions in the state offering certification in the teaching of Career and Technical Education, this university houses the Michigan Center for Career and Technical Education, which is responsive to national issues and trends often leading statewide efforts in CTE. The university had an enrollment of about 13,087 during 2009/2010, and its mission statement reflects a goal of preparing students to be responsible citizens who are lifelong learners.

In the summer of 2008, the Department of Career & Technical Education in the College of Education and Human Services created and piloted a program titled ProMoTEd (Professional Modularized Teacher Education). ProMoTEd is a program designed to offer working students, commonly those working as teachers under some form of emergency certification, a unique opportunity to earn a Bachelor of Education degree in Technical Education and/or possibly a Secondary CTE Certification. Students complete the professional education course sequence using a blended instructional design that includes intensive direct instruction, on-line education and project-based learning. All courses are offered in one credit modules.

The program is run in cohorts which begin with an intensive two-week summer session in face-to-face format. The program continues in the Fall and Spring semesters with course work offered in an on-line format and field experiences. Students then return to campus for another two week intensive summer session for additional face-to-face
course work. Although the students are working full time as teachers, once they have completed all other requirements for graduation, they then must enroll in their state-required directed teaching experience, along with a seminar to complete their degree requirements.

By the summer of 2010, the program, approved as a method of alternative certification by the Michigan Department of Education, had witnessed its first cohort’s completion of the initial program phases, which allowed participants to receive an Interim Occupational Certificate (the minimum requirement for teacher licensure). In addition, another cohort group of twenty students began the ProMoTEd program in the summer 2009, and this group, having completed the first year of their program, are the focus of my study.

Overview of Research Methodology

A mixed method approach was employed using survey and focus group methods. Naturalistic data was collected and my role was to lead the participants through a process of responding to a survey instrument as well as focus group discussions on emerging topics extracted from the initial survey responses. Participants began this process by completing a narrative questionnaire during the summer semester of the second year of their ProMoTEd program. This was followed by focus group discussions. Chapter III provides detailed information on the methods used in this study.

Study Limitations and Delimitations

The findings from my study are expected to contribute the body of knowledge on alternative certification programs in both traditional and vocational education. Because of low number of participants (N), the ability to draw descriptive or inferential
conclusions from the data in larger studies could prove problematic. Because a relatively small "n" may affect statistical significance, the low "n" of this study limits the ability to draw valid conclusions as compared to larger certification trends.

Summary of Chapter I

My study explores the alternative certification experience in Career and Technical Education. The study examines the perspectives of students having completed one year of an alternative teacher certification program, and are returning for the second (final) summer of the program. The study measures their beliefs/perceptions on the process of becoming alternatively certified while working as a teacher, as examined through the lens of adult learning theory. Contributing to the knowledge base of research and further informing design and function of similar programs in an effort to address the teacher shortage issues in CTE, is the desired outcome of my study.

Following this introductory section, the literature is reviewed in depth within Chapter II. This review includes operational definitions of all included constructs and concepts. This is followed by sections on alternative certification, adult learning theory, career and technical education, the constructs of advising, classroom management, program structure, and support mechanisms.
CHAPTER II

REVIEW OF THE LITERATURE

This chapter discusses many aspects that demonstrate why my study was needed, as well as provide foundational background that constructs the framework in which the research was conducted. The materials examine Alternative Certification, CTE and further research in the area of adult learning theory, in addition to the assumptions of Theorist Malcolm Knowles. Further discussion is provided on the subsets that frame the study: advising, classroom management, pedagogical practices, mentoring, and the use of cohort groups as part of the alternative certification process.

Alternative Teacher Certification

Historical Foundations

Historically, a formal education had been reserved for only a small section of society, those wealthy enough to afford paying for their children’s education. In the United States this has been true up until the 19th century, when free public schools were established here (Dial & Stevens, 1993). According to Dial and Stevens (1993), the only requirements for teachers at that time focused on the possession of values and morals reflective of the community hiring the person to teach. Teacher preparation on a formal basis began to emerge in the mid 19th century (McCaslin & Parks, 2002), and undergraduate teaching programs followed in the latter part of that century. These college-based programs were formed as the land-grant institutions grew in the United States (Dial & Stevens, 1993). In the early-to-mid 20th century teaching began to be
considered a professional field of study, with formal policy recommendations that teachers become proficient in the subject matter they are teaching (Pushkin, 2001).

The decision on who could teach in a public school also changed over the past two-hundred years. The earliest teachers in the U.S. were ministers and priests, and thus the decision of who taught in the “schools” was made by those church leaders (Dial & Stevens, 1993). In later years and with the advent of public education, decisions were made by local committees. By the end of the 19th century, local committees were being replaced by state licensing boards, with more uniform standards and requirements being established for prospective teachers. The certification of teachers emerged as a separate requirement for being a professional teacher.

According to Bartlett (2002), licensure involves an official recognition by a state agency that a person meets state-mandated requirements. Certification is the possession of qualifications beyond just rudimentary licensing requirements, with said certification being granted by a non-governmental agency or association. What has evolved in most states is an almost symbiotic relationship between certification-granting agencies (e.g., Colleges and Universities) and state government agencies (e.g., State Department of Education). One cannot get licensed to teach without certification, and one cannot get certified except through a certification-granting agency’s approved method or institution. Some have referred to this situation as a de facto monopoly on education and certification (Heinen & Scribner; 2007, Hess, Rotherham & Walsh, 2004).

With the “Baby Boom” came a growth in public school enrollment from the 1960s through 1980s. With this expansion came increased pressures on school systems, compounded by retirement rate increasing for public school teachers (Suell & Piotrowski,
2007). At the same time, there were some stakeholders who were becoming disillusioned or at least concerned with the quality of teachers emerging from traditional teacher education programs in the nation's colleges (Klagholz, 2000). New Jersey was the first state to identify what it characterized as “…poorly educated graduates…” from its college education programs (Klagholz, 2004, p. 3).

To address this seeming shortcoming, New Jersey dealt with the issue in two ways: by improving undergraduate teacher preparation, and in 1984 creating what they termed the “Provisional Teacher Program.” This provisional program became better known as the “alternate route,” and established the first program in the nation which provided a pathway to teaching other than through a traditional teacher education department (Klagholz, 2004). By the late 1980s there were eight states reporting methods of certifying teachers other than through a regular teacher education program, and today all states offer some type of alternative certification program for teachers. An estimated 430,000 people have been certified to teach through alternative routes since 1985 (Fiestritzer, 2009).

Although New Jersey’s motivation for creating its “alternate route” method for certification was based on teacher quality, the growth in alternative teacher certification programs (ATC’s) across the nation have been in response to many different stimuli. Teacher shortages in almost every state have been occurring for at least the last decade. Various sources pegged the need for teachers by 2010 as anywhere from 1.7 to 2.7 million compared to those needed in 2000 (Hussar, 1999; Luekens et al., 2004). These shortages have been brought on by several factors, including: a larger number of K-12 teachers retiring than would be expected compared to the general workforce, as they are
significantly older as a group (Suell & Piotrowski, 2007); attrition rates being higher and retention rates lower than what is needed to maintain the teacher workforce (Salvador & Wilson, 2003; Piotrowski & Plash, 2006); enrollment growth in urban areas fueled partially by immigrants (Shen, 2000); and greater attrition rates in underserved areas, both urban and rural (Darling-Hammond, 2001; Stein, 2002).

ATC programs have been hailed as an answer to many of these articulated problems. ATC has been posited to help address teacher shortages in general by getting teachers into schools in a shorter time period than the traditional programs (Luckens et al., 2004; Suell & Piotrowski, 2007). In response to greater needs in urban schools (due to immigration and teacher attrition), ATC has been put forward as a means to recruit more minorities and men to K-12 teaching (Shen, 2000). Alternative methods have also been proposed as a means to improving teacher quality by recruiting teachers who hold bachelor degrees in specific academic subjects (e.g., math, biology, etc.). This proposed outcome has gained traction since 2002, as one NCLB mandate was for all teachers in core academic subjects to have been “highly qualified” by 2006 (Heinen & Scribner, 2007).

Quality and Results of ATC Programs

Nationally, ATC programs vary widely by state and often within states (Heinen & Scribner, 2007). Approaches range from emergency certificates, requiring little or no formal training, to programs deeply embedded within traditional university education programs (Reichardt, 2002). By and large ATCs vary in length of program, delivery mode and candidate population (Rosenberg & Sindelar, 2005). Course delivery is also
different for ATC, as the administration of ATC programs continues to be the biggest difference in providers of ATE programs (Feistritzer, 2009).

As outlined in Figure 2, nearly half of ATC programs are administered by a college or university. Community colleges, a fast-growing newcomer in this field, administer six percent. School districts, regional service centers, and schools administer about one-fourth (24 percent) of alternate route programs. State agencies administer about six percent; various consortia, four percent; and "other" about 14 percent. The "other" category included mostly collaborations and a handful of private companies and online providers (Feistritzer, et al., 2009).

Figure 2. Entities with primary administrative responsibility for alternate route programs.

Note. Adapted from “Administrative Responsibility for Alternate Route Programs,” National Center for Alternative Certification, 2009.
The differences and variations in program delivery have led many to question not only the value of ATC candidates, but also their pedagogical quality compared to traditional teacher preparation programs (Xu et al., 2003). Since their inception, ATC has been controversial (Suell & Piotrowski, 2007). Those opposed to ATC often do so based on the limited amount of classroom or pedagogical preparation. These critics argue that only through traditional preparation programs (i.e., four-year teaching programs) can teacher candidates acquire the skills and experience necessary to be an effective teacher (Fletcher & Zirkle, 2008, Koballa, Glynn, Upson, & Coleman, 2005).

Whether or not ATC programs have been successful in addressing the pedagogical and hiring goals which proponents have argued is debatable. This is because the research has produced mixed results (Suell & Piotrowski, 2007; Zeichner & Schulte, 2001). ATC programs have indeed provided many teacher candidates an expedited path to the classroom, in shorter time periods than would have been needed in traditional settings. This has brought many talented individuals into the classroom who would have otherwise not have become teachers (Humphrey & Wechsler, 2007). These are the individuals who often have college degrees in relevant core subjects, work experience and maturity, but lack traditional training. Some research has shown that these individuals indeed show competencies which are similar to traditionally-trained teachers (Stone, 2000), others have found that teacher effectiveness depends more upon pedagogical knowledge than content knowledge/expertise (Torff & Sessions, 2005). Suell and Piotrowski (2006) found no significant differences in student achievement based on teacher preparation or certification.
In terms of the pools from which teaching candidates are drawn, ATC candidates tend to be quite different from traditional teacher education students (Rosenberg & Sindelar, 2005). Research collected by the National Center for Education Information (NCEI) and the National Center for Alternative Certification (NCAC) from 1983-2009 shows that teachers obtaining certification through alternative routes are: coming into teaching from other careers, older, more ethnically diverse, more likely to be men, more willing to teach in difficult to staff schools, such as inner cities and outlying rural areas, and teach subjects and grade levels where the demand for teachers is greatest (NCAC, 2009).

ATC programs have been very effective at attracting both minorities and men to teaching, a stated goal and proposed strength of such programs (Shen, 1998; 2000). These outcomes have helped to mitigate the teacher shortfalls in urban schools. Yet research has been mixed on the long-term effects of ATCs in these areas. Stein (2002) found that attrition rates in urban areas are highest for ATC teachers. Yet Gerson (2002) found that overall attrition rates seem to be no different for ATC teachers compared to traditional teachers. But age seems to play a role in attrition rates, as older ATCs are more likely to remain in teaching than their younger counterparts (Morris, 2002). Lastly, although some researchers argue that ATC will attract successful professionals wishing to teach and/or give back to society (Hess et al., 2004, USDE, 2003), research shows that those moving from industry to teaching via ATC tend to come as recent college graduates, as well as career switchers to early retirees from the military and other occupations (Feistritzer, 2009).
The mixed results of research on ATC programs calls into question any decisions made by policy makers in today’s educational settings. That is, there does not seem to be enough definitive data regarding ATCs in terms of quality and effectiveness with which to make informed decisions. While my study did not seek to measure the quality or effectiveness of individual teachers, it does seek to inform limited literature on process. Through evaluation of program design factors within routes to alternative certification, recommendations can possibly inform policy makers.

**Career and Technical Education**

**Background**

Career and Technical Education teachers are those with the public school system who teach what had historically been referred to as “vocational” subjects including areas such as agriculture, trades and industry (Gray, 1989). Trade and industry (T&I) education (e.g., electronics, wood working, machine shop) for example, has been a part of public schools for over 75 years (Crawford-Self, 2001). Yet, CTE includes much more than just T&I, reflecting the changes in the US economy over the past four decades. CTE now includes programs such as business, health care, technology and marketing among others. Not surprisingly, business programs followed by technology and communications are the CTE programs offered by the most high schools (Stone et al., 2004). Current course offerings reflect the growth in careers requiring business knowledge, as well as those in technology areas such as computers and networking. Areas which are tabbed for future job growth include hospitality, health care and child care which in 2000 were all offered by more than twenty-five percent of all high schools (Stone, Kowske, & Alfred, 2004). In 2009, according to the U.S. Department of Education’s Office of Vocational and Adult
Education (OVAE), most high school students take at least one career and technical education course, and one in four students take three or more courses in a single program area.

CTE teachers make up approximately twenty-five percent of all public school teachers at the secondary level, with about eighty percent of those teaching in comprehensive high schools (Walter & Gray, 2002). The other twenty percent teach in separate vocational/technical centers. Teachers in CTE come from a variety of pedagogical backgrounds and teach many different subjects.

Mission of CTE

Walter and Gray (2002) disaggregate the mission of CTE programs in the nation’s public school systems as having multiple distinct variations, including: traditional, tech prep, education through occupation, and work/family/community. Understanding each of these “missions” is important to further understand the variety of CTE programs which exist, making a one-size-fits-all approach to studying CTE difficult. This is in contrast to the core academic subjects (e.g., mathematics, science, and writing) which are focused on preparing students for college. CTE missions include preparing students for trades, two-year technical schools, two-year colleges, four year baccalaureate programs. It is also important to understand not only the goals and mission, but upon what criteria each mission is assessed to determine outcomes.

The traditional mission of CTE is preparing high school students to enter the working world upon graduation. Assessing the effectiveness of programs with this mission is based upon job placement, annual earnings and job retention of graduates (Walter & Gray, 2002). The tech prep mission, also referred to as a “2+2” program
involves an articulation agreement with a postsecondary organization (e.g., community college, technical college). Through this articulation students prepare while in high school and through a two-year program post-high school, to receive an associate’s degree or other certificate in a technical field of some sort. Assessment considers transition to the postsecondary institution, without academic remediation, graduation and employment in the technical field. The education through occupation mission weaves together the academic and vocational tracks, seeing this combination as the foundation for secondary education (Grubb, 1997). Outcome assessment for this mission tends to be more academic related, with career exploration a tangential outcome (Bragg, 1997). Finally, the work-family-community (WFC) mission is for individuals through vocational development, to be able to integrate work, family and community (Copa & Plihal, 1996). Outcomes are assessed through academic goals, but also retention and graduation without remediation.

Regardless the specific programs or missions of a state, district or school, today’s CTE has evolved from a limited number of vocational programs available at the turn of the 20th century into a broad system that encompasses a variety of challenging fields in diverse subject areas which are constantly evolving due to the changing global economy. Today, CTE provides students: (a) academic subject matter taught with relevance to the real world, (b) employability skills, from job-related skills to workplace ethics, (c) career pathways that link secondary and postsecondary education, (d) second chance education and training and, (e) education for additional training and degrees, especially related to workplace training, skills upgrades and career advancement (ACTE, 2010).
It is clear from the literature that CTE covers a considerable range of subjects, teacher preparation methods, and overt missions. This diversity occurs within states, and across states as well as within subjects and across subjects. With the NCLB Act of 2001, public schools in the US have increased their focus on academic subjects in an effort to comply with these new federal standards. CTE, notwithstanding, has experienced an increased focus on academic integration in courses to remain a viable option in schools (ACTE, 2009). Without the increased academic focus, CTE courses are often eliminated from the course catalog. Because of this new focus, there seems to be even greater stress placed upon these diverse CTE teachers, with greater academic demands for pedagogy (McCaslin & Parks, 2002). This adds to the justification for renewed and intense inquiry into the preparation process of CTE teachers, the focus of my study.

**Theoretical Foundations**

Because CTE teachers are often adults who worked in a profession prior to becoming such a teacher, an important aspect of understanding the perceptions of becoming an alternatively certified CTE teacher is Malcolm Knowles’ Theory of Andragogy and subsequent adult learning theories.

**Malcolm Knowles**

Because my study seeks to understand the feelings of/perceptions of the process from adult learners, the theory of andragogy is helpful in understanding the motivations and mindsets of the adult student. Andragogy is a theory of adult education that advocates a learner-centered approach to teaching. It was introduced in the 1970’s and holds four major assumptions: that the adult learner is self directed; that the adult learns by relating past experiences and building on what they can do; that the adult learner is in
the mindset to learn and assume new positions and responsibilities; and that the adult learner solves problems better by applying to a new situation (Knowles, 1980).

Assumptions on andragogy cite that adults in transition want to know what they need to be successful as they move from one situation/status to another, and although some may enjoy learning for its own sake, most are practice and learn because they want to acquire new knowledge and skills (Lieb, 2001).

In his 1980 seminal work, Malcolm Knowles became one of the foremost theorists in adult learning. His model of assumptions about adult learners is often compared to and held against pedagogical models for teaching children. In making this comparison, Knowles claims that we gain two alternative (versus similar) models for testing any assumption and its ‘fit’ with particular situations. The availability for comparison of andragogical and pedagogical models is most useful when “not viewed as dichotomous, but rather as two ends of a spectrum, with a realistic assumptions in a given situation falling between the two ends” (Knowles, 1989, p. 2).

The examination of how children differ from adults in learning could be easily illustrated by close attention to a comparison of pedagogy and andragogy. In further understanding Knowles’ Theory of Andragogy, it is helpful to understand the assumptions in which they are based. The first of the assumptions is that adults are self directed and move from dependency to self directedness in learning. This concept of the learner explains that during the process of maturation, a person moves from dependency toward increasing self-directedness. This happens at different rates for different people and in different dimensions of life. It further argues that adults have a deep psychological
need to be generally self-directing, but they may be dependent in certain temporary situations (Knowles, 1980).

The second assumption acknowledges that adults draw upon their reservoir of experiences for learning in their roles as learners. Knowles (1980) asserts that as people grow and develop, they accumulate an increasingly rich resource for learning—for themselves and for others. Furthermore, people attach more meaning to learning's they gain from experience than those they acquire passively. Accordingly, the primary techniques in education are experiential ones—laboratory experiments, discussion, problem-solving cases, field experiences, etc.

The third assumption contends that adults are ready to learn particularly when they assume new roles, reminds us that adults are goal-oriented. This readiness to learn occurs when the adult experiences a need to learn in order to cope more satisfyingly with real-life tasks and problems (Knowles, 1980). Educators can be effective in helping the adult learner discover what it is that they need to know, and further organize learning activities around life-span application categories and sequencing with the learners readiness to learn (Leib, 2001).

Finally, in Knowles’ (1980) fourth assumption we are reminded that adults are relevancy oriented. When learning, adults want to solve problems and apply new knowledge immediately. Adult learners see education as a process of developing increased competence to achieve their full potential in life (Knowles, 1980). They want to be able to apply whatever knowledge and skill they gain today to living more effectively tomorrow. Accordingly, learning experiences should be organized around
competency-development categories (Knowles, 1984). Leib (2001) also summarized that adults are performance centered in their orientation to learning.

As the assumptions have illustrated, Knowles’ theory of Andragogy is an attempt to differentiate the way adults learn from the way children learn. Consequently, andragogy means that instruction for adults needs to focus more on the process and less on the content being taught (Kearsley, 1996).

**Adult Learning Theory**

There is substantial literature addressing adult learners. It has been studied extensively and like Knowles’ pioneering work, has commanded explanation. Various adult learning theories have been explored to give us a better understanding of life’s course and how such theories provide a lens through which experiences can be examined (Clark & Cafferalla, 1999).

Adult learning theory has sustained decades of review, but only in the twentieth century did the concept crystallize. Adulthood as a condition had been simply assumed (Clark & Cafferalla, 1999), and as a process needs better understanding. At the center of the debate for some is the question of when someone actually becomes an adult. Merely age cannot define development as an eighteen-year-old raising a family or fighting in war is vastly different from the college student being supported by their parents. This debate being significant, chronological age is still the common convention used by most theorists.

Various learning methods and models are suggested in the literature to poise greater effect on adult learners. Within the context of CTE, adult learners are the target audience for CTE teacher preparation (Hernandez-Gantes, 2009). Promising theoretical
conceptions of how people learn including transformative learning, contextual teaching and learning principles and holistic views on adult development and learning have begun to emerge in the last decade (Hoare, 2006; Merriam, 2001), having previously coexisted as independent theories. As Knowles (1980) discussed in his seminal work, andragogy has been a prominent learning theory used in adult education based on the premise of stages of development and noting the unique characteristics of adults as compared to children.

While there is no comprehensive theory that can be applied to all learning situations, contextual and self-regulated instructional strategies have gotten more attention in recent years. Cercone and Merriam (2008) note “contextual teaching and learning, self-regulated learning and transformational learning appear to carry promising implications for online adult learning” (p. 149). Complimenting the assumptions of Knowles, experiential learning emphasizes a clear relationship between new knowledge and information, connections to previous experience and the connections relevant to such. In turn, contextual teaching and learning gives the body of knowledge gained through context as a meaning making factor in the learning process (Hernandez-Gantes, 2009).

When learners engage in real-world scenarios, a better opportunity for them to relate is created by virtue of previous experience. Professional and well as personal variables can be both relied and built upon (Bransford, Brown, & Cocking, 2000). Implications of these theoretical concepts can serve as a foundation of our knowledge on adult learning process and can inform curriculum design and development, online learning and the related use of technology (Cercone, 2008; Hoare, 2006). Additionally, contextual learning, transformational learning and self directed learning have been
consistently highlighted in adult education as promising conceptions with the potential to influence curriculum development (Partlow & Gibbs, 2003). In my study, these learning theories informing program design and function for the adult learner are of interest.

**Alternative Certification and CTE Teacher Preparation Salient Issues**

What is the difference between a teacher who fails at teaching and one who succeeds? Those who define their teaching experiences as failures most often ascribe it to a lack of preparation in their teacher education programs (Britt, 1997; Goodnough, 2000). Thus it is perhaps the preparation process at which the root of teaching issues such as attrition rates, poor student performance and other hot-button issues lay. There are many different aspects involved in teacher preparation, although the scope of this study is such that not all can be addressed adequately. For this study, five important factors impacting teacher preparation are considered: advising, classroom management, pedagogical practices, mentoring and the use of cohort models.

**Advising**

One of the first contact points for incoming college students are advisors (at a college, department or program level), and this is also true of those seeking ATC. Advising is seen as one of the components of student satisfaction with college (Benjamin & Hollings, 1995). Quality advising for ATC candidates is particularly important as a basis for determining the direction and form of their learning as teachers (Brouwer, 2007). Advisors vary by program and college based on the advising model used. Some programs or colleges utilize a centralized advising system, where advisors have depth of knowledge in procedures, general education requirements and major requirements. Other programs utilize faculty, whereby their expertise may tend to center on the program or
subject which they teach (Person, Rosenbaum, & Deil-Amen, 2006). No matter the
advising method, the importance of the advising role is often underplayed for incoming
students (Brouwer, 2007).

Advising likely takes on an even more important role for ATC candidates. Yet
this is an under-researched factor in the ATC literature. By definition, ATC students are
non-traditional, in that a traditional college student fits the 18-22, undergraduate model
(Giancola, Munz, & Trares, 2008), thus placing most ATCs firmly outside of this
paradigm. ATC candidates vary widely, as previously established by the literature. For
the purposes of this study it is posited that they are more likely to fit one of two other
student groups: adult learners or graduate students. Adult learners are those who are older
than their “traditional” college peers, although according to the USDE (2002), over 70%
of undergraduates are nontraditional. Indeed, Berker and Horn (2003) found that nearly
30% of all undergraduates are working adults. Graduate students are also past the
traditional undergraduate age range, with the typical graduate student being in their 20s to
30’s (Knox, Schlosser, Pruitt, & Hill, 2006).

Adult learners are different from traditional learners in a number of ways
(Giancola, 2008; Kasworm & Pike, 1994). They bring with them work experiences,
diverse sociocultural roles (e.g., spouse, parent, boss) that are different from the
traditional student (Kasworm, 2005). The adult learner’s experiences strongly impact his
college perceptions (Donaldson & Graham, 1999). Crockett and Crawford (1989) found
that a student’s personality characteristics will impact the advising experience, thus
impacting the entire learning experience. Thus, there is a link between an adult learner’s
perception of advising and the effectiveness of program instructors. Giancola et al.,
(2008) found a strong correlation between a student’s satisfaction with the overall advising process and their satisfaction with the effectiveness of overall instruction.

Polson (1994, p. 22) posited that adult learners needed someone within the college who “cares.” Adult learners therefore benefit more than traditional students from what Bland (2003) characterizes as developmental advising. In developmental advising, the advisor is more engaged as is the student. Table 1 compares the traditional (prescriptive) model of advising with the developmental model.

Table 1

Developmental vs. Prescriptive Advising

<table>
<thead>
<tr>
<th>Method</th>
<th>Advising Concepts</th>
<th>Advising Goals</th>
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<tbody>
<tr>
<td>Prescriptive</td>
<td>Unidirectional Communication</td>
<td>Solves Problems</td>
</tr>
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<td></td>
<td>One Time Event</td>
<td>Register for classes</td>
</tr>
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<td></td>
<td>Empowers Advisor</td>
<td>Identifies Resources</td>
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<tr>
<td></td>
<td>Prescribes limitations</td>
<td></td>
</tr>
<tr>
<td>Developmental</td>
<td>Bidirectional Communication</td>
<td>Evaluates Life/Career Goals</td>
</tr>
<tr>
<td></td>
<td>Ongoing Process</td>
<td>Develops Academic Plans</td>
</tr>
<tr>
<td></td>
<td>Empowers Student</td>
<td>Facilitates Opportunities</td>
</tr>
<tr>
<td></td>
<td>Encourages Give and Take</td>
<td></td>
</tr>
</tbody>
</table>

Note. Adapted from Bland, 2003.

ATC candidates are not likely to be in college to “explore” careers and majors. CTE candidates are even less likely to be unsure of their academic and career goals. The CTE candidate pursuing an alternative certification is even more likely to have come from a professional field, and make a conscious decision to pursue teaching (Stone et al., 2004). Thus, leading us to believe that ATC candidates and, in particular CTE candidates,
would benefit more from Bland’s (2003) developmental advising model, where one of the keys is ongoing communication between student and advisor.

To that end, the literature supports a more bi-directional, holistic approach to advising than the uni-directional, prescriptive approach of which has long been the model in academe (Bland, 2003; Knox, 2006; Schlosser & Gelso et al., 2001).

**Classroom Management**

Through the ATC program, CTE teachers receive a somewhat shorter version of instruction in (often) both subject matter and teaching skills (Suell & Piotrowski, 2007). Stone (2000), in her study of teachers trained via an alternative route in preparation of California’s class size reduction initiatives, found that ATC teachers listed curriculum development, teaching strategies and classroom management as important areas of preparation for the classroom. A large number of teachers (new and experienced) are most concerned with the classroom preparation provided in their teacher education programs (Britt, 1997; Goodnough, 2000).

Classroom management is a broad term used to describe the many activities which occur in a classroom and/or school (Martin & Shoho, 1999). These activities entail several aspects of the classroom, including instructional management (e.g., structuring daily routines, monitoring seated work), behavior management (e.g., dealing with disruptive students, setting rules) and people management (e.g., how the teacher sees the student as persons, how the teacher helps the student develop) (Martin & Shoho, 1999).

Research on classroom management and traditionally trained teachers appears often in the existing literature, but little has been done to examine aspects of classroom management with ATC teachers (Sokal et al., 2003). This is particularly problematic
since teachers in general, regardless of preparation, consider classroom management to be one of the most (and in some cases the most) important aspects of their jobs (Martin & Shoho, 1999; Stone, 2000; Sokal et al., 2003). In the K-12 arena, classroom management has been characterized as having the most impact on student achievement (Protheroe, 2004). New teachers consider it to be one of the most important issues they deal with, and see it as an ongoing area where they need help from mentors and colleagues (Meister & Melnick, 2003).

The manner in which teachers practice classroom management can be broadly classified into three categories, which represent a range from high to low teacher control (Sokal, 2003; Wolfgang et al., 1995). Low teacher control manifests in the noninterventionist classroom model, and student teachers are more likely to choose this strategy than experienced teachers (Martin & Baldwin, 1993). With this strategy, the teacher allows the students to modify his own environment, as they have innate needs requiring expression (Sokal et al., 2003). Intermediate levels of teacher control in the classroom are expressions of an interactionist model of classroom management, balancing the student’s effects on the class environment with the environment’s effects on the individual student (Sokal et al., 2003). This strategy is often adopted by pre-service teachers who believe that education is a partnership of equality (Hollingsworth, 1989) and friendship (Chan, 1999) among teachers and students. At the far end of the spectrum, high levels of teacher control reflect an interventionist method (Canter, 1992). Teachers who utilize this strategy are focused on the environment’s effects on individual students, and take a teacher-centered approach to classroom management (Adams & Marstray, 1981). Martin and Baldwin (1993) found that this approach was more likely to
reflect that of experienced teachers, while Laut’s (1999) research showed that novice teachers more frequently adopted this style than those with longer tenures.

When comparing ATC teachers and traditionally trained teachers, it is important to note that both groups differ from novice or student teachers on one key variable: age. Martin and Shoho (2000), in their study of 388 practicing teachers, investigated classroom management percepts between the groups. Through the use of the ABCC (Attitude Belief Classroom Control) survey instrument, they posit that differences in classroom management strategies and attitudes are most likely to be based on the fact that ATC and traditionally trained teachers are older than novices. Thus comparisons may be more germane and insightful when they exclude student and novice teachers. Regardless of age teachers will utilize characteristics of these different control strategies depending on the situation, but each is more likely to use one approach more frequently than others (Wolfgang, 1995). The strategy used is likely a result of the strategies taught or demonstrated within the ATC teacher’s teaching instruction during the certification process. While classroom management attitudes tend not to change much over the course of a traditional teacher education program (Chan, 1999), recent survey research of three groups of teachers (n=82) associated with the same two-year alternative certification program has shown that ATC teachers attitudes may change over the course of the ATC process (Sokal et al., 2003). This is particularly the case of these practicing teachers that are putting the theories and practice into action.

Classroom management is important enough in today’s public school setting to be considered a separate factor when studying ATC programs. We know little about the
perceptions that ATC teachers have regarding the preparation they have received in classroom management during the ATC process, which is of interest in my study.

**Pedagogical Practice**

One argument for utilizing ATC programs in CTE fields has been the idea that candidates with extensive industry experience can be attracted to the teaching profession (Hess et al., 2004). For example, a hotel industry veteran might be recruited to teach hospitality and restaurant management courses in the public schools. This is the model in many states, where professional experience is coupled with college coursework in pedagogy to move much-needed CTE teachers into the classrooms. The coursework and quality of instruction in pedagogical practices is of further interest in my study.

One of the most commonly debated topics regarding teacher preparation in the last decade has been the extent to which pedagogical skills and knowledge are necessary (Education Commission of the States [ECS], 2003). In previous studies, a mismatch was observed between teacher preparation programs and the ‘real world’ of classrooms. Kennedy (1999) suggested, along with Darling-Hammond and Sykes that same year, that new and innovative pedagogies were needed.

Pedagogy was originally developed in the monastic schools of Europe in the Middle Ages. Assumptions regarding learning and learners overall were based on the observations of the monks, in the teaching of simple skills to children (Knowles, 1984). Later, this tradition was further adopted by even the secular schools in Europe and America in the 18th and 19th centuries.

The term Pedagogy was derived from the Greek work “paid,” meaning child, and “agogos,” meaning leading, therefore known as leading and teaching children (Chadwick,
Hargraves, McAuliffe, & Winter, 2009). The art of leading and teaching children has become a model that focuses on content. At the basis of concern within the model is the transmission of information and skills. It assumes that the teacher makes the needed assessment and decisions in advance of what knowledge needs to be transmitted. Building on the assessment of needed information and knowledge is the arrangement of the body of knowledge (or content) to be taught. This content is then organized in logical units and the teacher then develops the most efficient means possible for delivering the content. There are several means of delivery available to the teacher, with developmental theories that support each. Lectures, readings, laboratory exercises, films group work for example, might collectively be chosen by the teacher to transmit the information. The functional delivery and sequencing of the material into units facilitates the transmission of knowledge, which the theory of pedagogy is based (McAuliffe, 2009).

Further literature and discussions on pedagogy become centered on learning styles, motivation and barriers to effective learning. Developmental process theories too, affect the distinction of learning style preferences and dominate the literature on pedagogy. Implications of each leave implications for instruction (Leib, 2001). In so much that we seek to discover ways to teach, we recognize that there are as many ways to learn. Just as people do not all see the world in the same way, Leib further states there are several different preferences for how, when, where and how often to learn. Research on pedagogical practices often explores instructional strategies and how they can accommodate different learning styles. It is these instructional strategies that this study hopes to learn the importance of in the process of becoming an alternatively certified CTE teacher. Characteristics of effectiveness in ATC programs, as highlighted by the
National Association for Alternative Certification (NAAC) highlight the ATC candidate’s knowledge of how to teach as an important program component.

That knowledge of actual teaching, in this case, encompasses both subject matter knowledge and how to teach that subject matter, the first of which is not a focus of this study. Literature on the knowledge of how to teach was not matched to respective teacher preparation curricula of various programs (Humphrey & Wechsler, 2008). The literature provided limited support for the conclusion cited in effective practices regarding preparation in pedagogy contributing to effective teaching (ECS, 2003).

**Mentoring**

With a heavy emphasis on on-the-job training, most alternative certification programs attach great importance to mentoring (Schreiber-Dill, & Stafford-Johnson, 2010). Mentoring additionally is a characteristic of effective ATC programs as noted by the NAAC, as embedded within the teacher preparation program. Findings conclude that the role of a college/university mentor is under researched in terms of teacher education. Conversely the role of the on-site mentor is more easily accessible. In a study analyzing seven alternative certification programs at both the program and participant level, frequent mentoring was seen as an important factor in teacher reported growth in various areas of teaching skills and knowledge (Humphrey & Wechsler, 2008), but did not appear to be a factor in other outcome areas including knowledge for teaching. By no means conclusive, research on mentoring shows it as being an effective strategy when dealing with attrition and the improvement of teacher quality (Lopez, Lash, Schaffner, Shields, & Wagner, 2004). In this study, College of Education faculty mentors were queried using an open ended response questionnaire. Results found that 70% (n=38) felt they, as
mentors, benefited from the process. In another study, evaluation was done of mentors in the New Teacher Project in Santa Cruz, California. The mentors, experiencing the New Teacher Project in groups of 15, reported that mentoring offers veteran teachers professional replenishment and contributes to the retention of teachers (Moir & Bloom, 2003). What is missing is a concerted effort by teacher preparation programs themselves to embody effective mentoring albeit historically viewed as a partnership with the school (site) based mentor (Lopez, Lash, Schaffner, Shields, & Wagner, 2004).

A study by the Education Commission of the States concluded in 2003 that 'high quality field experiences also appear to share several characteristics, among the most common is strong supervision by well-trained teachers and university faculty.’” (Summary of findings, p. 2). The role of university personnel in both traditional and ATC programs is not clearly researchable, with frequency of observation being the key component.

**Cohort Models**

Individuals new to the teaching profession must be encouraged and supported through inquiry and pedagogical change (Ball & Cohen, 1999). The cohort form of group learning has become increasingly attractive to administrators, instructors, and participants in adult education (Imel, 2002). In their review of the literature, Barnett and Cafferella (1992) found that studies of student cohorts in teacher education indicate that cohorts can enhance the power of a teacher education program.

Cohorts are usually defined as groups of students who enroll at the same time and go through a program by taking the same courses at the same time, a process that is sometimes referred to as lock step (Chairs et al., 2002; Reynolds & Hebert, 1998).
order to use cohorts effectively, it is important to understand how they operate. The healthy collaborative communities intended are best understood from both the student and instructor perspective, and challenge the group as both members of the cohort and individuals. A cohort structure does not insure that a cohort will succeed (Norris & Barnett, 1994). Cohorts that are most effective find positive collaboration as a norm. Positive collaboration is said to be task oriented, respectful of each other and find little overt tension (Ross, Stafford, Church-Pupke, & Bondy, 2006). The fostering of development and trust are needed for the free expression of various viewpoints and participation in discussions without fear. Cohorts must be purposefully formed and structured if they are to succeed as environments that foster learning and development (Imel, 2002).

A study published by the Journal of Technical and Special Education in 2006 made particular note of participant responses that identified the structure that of a community/family. The participants found that the cohort enabled them to develop relationships with faculty and peers that will serve as resources in their professional lives, in addition to the students feeling they had learned more in cohort classes, that the structure helped them frame and understanding of the teaching profession as a whole (Mello, 2003). As noted here, the literature is ample in the benefits derived from the use of a cohort model.

Academic support and psychological safety and support are two additional such benefits. Academic support is found in several ways within cohort groups. Students find this support in the use of study groups, as well as resources in their peers for the
clarification of content or missed understandings. Because of the close nature of the group, natural camaraderie helps elicit an informal pressure to be present and on task.

Psychological safety and support provided by a cohort help even the most inhibited students to ‘loosen up and open up’ (Ross, Stafford, Church-Pupke, & Bondy, 2006). Students in the aforementioned study also noted the comfort and ease present that facilitated off-topic discussions on such things as heritage, religious beliefs and race that they might not have been otherwise comfortable enough with other peers to discuss. The familiarity and psychological safety of the cohort enabled the students to draw on the diversity of the group to inform the group, in this case building the empathy, compassion and awareness that would be needed in their classrooms.

It is worth noting that not all highly functioning cohorts are utopian in nature (Goss, 2007). In fact, the closeness can also prohibit the student from having an objective view of people outside of the cohort. Newcomers to such groups as well will find a conflict in understanding the norms of the group and the perceived norms of other teacher education students outside of the group. Often times, cohort members themselves will find that the group has a lifespan that can be achieved, when they have been together long enough to interact productively and find benefit in collaboration with other students to garner fresh new ideas.

The literature provides evidence that cohort members have the skills and dispositions that characterize effective collaborative groups. Studies of effective groups have revealed that members have good communication skills, share common goals, accept differences, respect one another, and are willing to work in a group (Hart, 1997; Maznevski, 1994; Simon & Sturmer, 2003). The skills needed by effective cohort
members are similar to the collaboration skills students will need in school contexts. The understanding of how an effective cohort functions helps teacher educators further develop their own programs and assist their students learn the collaboration skills necessary as exemplary teachers of diverse learners (Ross, Stafford, Church-Pupke, & Bondy, 2006).

**Summary of Chapter II**

The literature points to adult learning theory as an indicator for success in program planning, teaching and motivation of adult learners, but fails to illustrate how that comes to pass within ATC programs in which adults are enrolled. Alternative teacher certification is prominent in Career and Technical Education; however the process by which this occurs differs from state to state and is not clearly documented in the literature. CTE subject areas rely heavily on subject matter knowledge in the specific field or career that is to be taught. Alternative Certification programs have focused primarily on outcomes in student preparedness and lack in literature about both process and the perceptions of those enrolled. Subsets of the process including advising, classroom management, pedagogical practices, mentoring and the use of cohort models are supported by the NCAC as effective characteristics of alternative certification, but is unclear in the literature how this actually occurs within the process of becoming alternatively certified. My study explores one program within a school of education and those students participating in an ATC program designed for adult learners.
CHAPTER III

METHODOLOGY

While there has been a great deal of research done on alternative teacher certification, literature on the process of becoming alternatively certified was found to be lacking prior to this study. The purpose of this study is to examine how participants within a Career & Technical Education (CTE) alternative teacher certification (ATC) program experience the process, both as adult learners and practicing teachers. Malcolm Knowles’ (1980) Theory of Andragogy (adult learning theory) serves as the conceptual framework through which the study is examined. This chapter presents the methodology used for this mixed method study.

Research Design

Mixed method studies are appropriate for use when a researcher seeks both quantitative and qualitative data within a study (Creswell, 2008), and when results from one method can help develop or inform the other method (Greene, Caracelli, & Graham, 1989). Mixed method approaches are found to be desirable when the data collection is sequential, concurrent and transformative, and find their roots in psychological studies dated back to 1959 (Creswell, 2008).

Such is the case in this study, where sequential, concurrent and transformative data was desired. Initially, qualitative data desired for this study was obtained through the use of a cross-sectional survey instrument. Survey instruments are useful in the collection of exploratory, descriptive, explanatory, or evaluative research and prove to be
an effective way to gather data about individual perceptions (Dillman & Salant, 2008).

Qualitative data desired for the study was gathered through the use of focus groups. Audio recorded focus groups were able to yield rich narrative research, where the researcher was able to further study the experiences of the participants as both students and practicing teachers. Narrative data combined views from the participants setting the stage for discussion related to the literature reviewed.

Once the quantitative data had been collected, statistical means, frequencies and correlations were analyzed. Formal statistical correlations were not possible due to the limited number of participants in this study, but thematic correlations were highlighted and the researcher was able determine if the data supports, expands upon or refutes the literature or known theories (McMillan, 2008).

As noted in Creswell (2008), the second strategy of inquiry, qualitative means, was collected sequentially to best understand the research problem. Figure 3 visually illustrates the procedures of this Sequential Exploratory Design.

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<th>QUANTITATIVE</th>
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<tbody>
<tr>
<td>QUAN → QUAN → Qual</td>
<td></td>
<td>Qual → Qual → Interpretation</td>
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<tr>
<td>Data Collection</td>
<td>→</td>
<td>Data Collection</td>
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<tr>
<td>Analysis</td>
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*Figure 3. Sequential exploratory design.*

*Note.* Adapted from Creswell, 2008, p. 213.

**Research Questions**

The purpose of this study is to understand the experience of becoming an alternatively certified vocational (CTE) teacher, and the process through which the participants go. As a result, the study focused on the following questions:
1. Using the lens of Adult Learning Theory, how do participants in a CTE Alternative Certification Program in which they are also practicing teachers describe their experiences as related to:
   a. being self directed;
   b. being able to draw on their reservoir of experiences;
   c. being able to apply new learning as they assume new roles; and
   d. being able to problem solve and apply new knowledge in a timely fashion?

2. How do such participants describe their experiences as they relate to known best practices in alternative certification, including:
   a. program structure (e.g., overall coursework, advising);
   b. availability of a university mentor;
   c. being within a cohort model; and
   d. training in quality pedagogical and classroom management practices.

3. What relationships exist between participants’ adult learning preferences and the extent to which they experience various aspects of their alternative certification program?

4. How do such participants overall describe the strengths and weaknesses of their experiences within this CTE Alternative Certification program?

**Population and Sample**

The population for this study was defined as candidates in an alternative certification program in Career and Technical Education (CTE) that had been approved by the state of Michigan. To select the sample, the study utilized purposive sampling
methods. A purposive sample, also referred to as a convenience sample, is one chosen by the researcher because the elements of the sample meet the needs of the researcher and/or study (Churchill & Iacobucci, 2002). This sample therefore included practicing teachers in any district of the state who have been authorized to teach under some form of emergency certification while undergoing their teacher certification program requirements. Further, these teachers were enrolled in and returned for a second year in the ProMoTEd alternative certification program at Ferris State University. It excluded any teachers gaining certification through other Ferris State University programs. The population also did not include alternative certification candidates who do not teach CTE subjects or who are in pre-service programs. For the purpose of this study, candidates who teach at least one CTE course per academic year were considered to be within the population frame. The study was conducted with the participants in the second year cohort within the ProMoTEd program described above.

Instrumentation and Data Collection

The survey used in quantitative data collection was developed by the student researcher with the assistance of the primary investigator. The survey (Appendix A) included the following: ten questions about demographic variables and personal attributes that allow the researcher to provide narratives for the participants; seven multiple choice, short answer and Likert scale questions on the advising process of the program as experienced by the participant; eight multiple choice, short answer and Likert scale questions on the aspect of mentoring as experienced by the participant; six Likert scale and short answer questions on the use of cohort models in the program; thirteen Likert scale questions assessing level of instruction and usefulness in teaching practice
for pedagogical practices and classroom management; seven Likert scale questions pertaining to overall coursework and finally, fourteen questions on adult learning theory that are founded in Malcolm Knowles' (1980) Theory of Andragogy.

For questions requesting response by scale, respondents were asked to provide a ranking for each question based on a Likert scale with a range of 1-6, with the occasion of 1-7 where a response of 'not applicable' was an option, such as the case with mentoring. On the 6 point scale, respondents selected one of the following responses that corresponded with a number on the scale as follows: (1) strongly disagree, (2) moderately disagree, (3) slightly disagree, (4) slightly agree, (5) moderately agree, and (6) strongly agree.

The collection of data began by identifying the participant pool from the students in the ProMoTEd Alternative Certification program. Students who were currently in teaching positions while completing the ProMoTEd program were specifically identified. The researcher initiated the process of participant selection by contacting the School of Education Director to obtain that office’s assistance in the process. The Director was asked to provide the list of ProMoTEd program participants who are also actively teaching. The recruitment script was read to these potential subjects by the instructor while in class during the two-week intensive session on campus. The recruitment script also served as invitation for them to participate in the study. Those who were interested were invited to participate in the initial phase the study at the university where they reviewed the consent document before deciding whether or not to participate further. The twelve qualifying subjects all decided to participate and signed the consent forms. The initial survey administration took place at that same time after the students had an
opportunity to review the interview questions. Two focus group sessions were conducted one week later. Each focus group had six participants and lasted approximately 60 minutes.

Two kinds of data were collected for this mixed method study, both quantitative (survey) and qualitative (focus group). The survey took place in a classroom determined by the College of Education, with that session lasting approximately 30 minutes. The focus groups took place again, within a classroom in the College of Education, with each session having been audio taped to guarantee accuracy of records, permitting the researcher to focus on the students and his or her responses. Following the focus groups, the researcher promptly obtained transcripts of the sessions, and was able to review the written record to permit any follow-up questions or comments. Likewise, the researcher invited the students to review the written record in the two weeks following the final focus group to ensure accuracy. Additionally this opportunity facilitated any follow-up questions or comments by the participant.

Themes from the quantitative data were gathered and focus group questions were developed (Appendix B). Electronic and written transcripts of the focus group sessions have been stored in a locked filing cabinet in the office of the researcher, and will remain there for one year following the completion of the study. The written transcripts will be stored on the campus of Western Michigan University for at least three years. The audio transcripts were destroyed once the transcription process had been completed. A written record was produced and the participants, by declining the offer to review for accuracy, have confirmed they are confident that the written transcript accurately reflects her comments during the interview.
In accordance with Human Subjects Institutional Review Board (HSIRB) regulations in the collection of data, steps were taken to protect each subject’s identity. This involved the use of pseudonyms for each participant created by gender such as “Abby,” “Barb,” “Andy” and “Brett.” Because gender, race and subject area will be identified, the information will still be considered confidential but not anonymous. Each student was informed of the fact that they were free to depart from the study at any point, and an explanation of the data collection and storage process would be provided. The surveys and focus group transcripts were taken straight to the researcher’s home each day and locked in a secure office. Upon conclusion of the study, the data will be stored on a thumb drive and transported from the school/home office to WMU via the researcher.

**Limitations and Delimitations**

Because this study was conducted in the state of Michigan, the applicability of this study is therefore delimited to like programs offering alternative certification involving similar certification regulations and laws. The scope of this study is further delimited by:

1. **Population**: The study excludes any data on the process of becoming alternatively certified for teachers in traditional academic tracks. Therefore, the outcomes of this study cannot be presupposed to generalize to all alternative certification programs.

2. **Theoretical Framework**: The use of Knowles’ Theory of Andragogy as the theoretical framework for this study is also a possible delimitation. Knowles’ work was selected based on its genesis in the development of adult learning
theory and the extensive use of his assumptions in adult learning but may not
be exhaustive of all assumptions in adult learning.

Some limits of the study affect applicability of the findings to a broad national audience
and other stakeholder groups. These limitations include:

1. The data obtained for the study, through both survey and focus group were
dependent on honest self-reflection by the respondents. This limitation may
introduce some undeterminable bias into the data collected.

2. This group is inherently small. The limited number of participants could
undermine the ability to generalize to general populations.

3. Other educational options exist nationally for alternative certification. A more
complete study including other routes to certification for practicing teachers
could include these options.

4. The circumstances in which the initial phase of data collection occurred, and
were outside the control of the researcher may have led to inconsistencies in
responses in both forms of data collection. The participants endured a long
wait upon completion of classes on the day the survey was administered.

Because of this, many felt rushed and inconvenienced.

Data Analysis

Data analysis was done in two phases. Immediately following the administration
of the survey, the first step of data analysis occurred. Raw data were coded by the
researcher and then put into spreadsheet form for analysis using statistical software
(SPSS). Frequency and descriptive analysis was performed on the survey variables and
varied according to research question. Additionally, open ended questions were used to
examine demographics not related to particular research questions, but for descriptive reporting of participants. All open ended questions asked were categorized and reviewed for overall themes which further informed the focus group questions.

Upon the conclusion of the focus groups, data collected were transcribed using both Dragon Naturally Speaking transcription software and the use of a professional transcriptionist. Those transcripts were later analyzed in correspondence with each of the research questions. Measures for each of the research questions are reported in Chapter IV.

The researcher followed appropriate methods of analysis to gain a deeper understanding of the experience of these students and the factors influencing their process of becoming an alternatively certified vocational teacher.

**Research Question 1 Analysis**

Research question one asked how participants in a CTE Alternative Certification program were able to describe their experiences using the lens of Adult Learning Theory and the assumptions which guide that theory.

To address this research question, frequencies and means were calculated on the questions that directly related to the assumptions of Adult Learning Theory. Participants were asked to rank the accuracy of statements provided based on those assumptions in addition to having the participant rank the level to which they felt the ProMoTEd program supported them as an adult learner in each of those statements.

**Research Question 2 Analysis**

Research question 2 examined how participants would describe their experiences as they relate to known best practices in alternative certification. Sub-components of program structure (e.g., overall coursework and advising), mentoring, being within a
cohort model and instruction in pedagogical and classroom management practices were divided into respective categories and measured separately. In each of the below sub-components, frequencies and means were calculated for analysis.

To quantitatively address this question with regard to advising, the participants were asked to choose the most accurate statements that described their experiences with advising in the ProMoTEd program. There were seven questions total, two of which addressed aspects of prescriptive versus developmental advising. Another question inquired as to the frequency of which they have met with an advisor. Three questions addressed the quality of information and support they received from the advisor, and the final question asked them to describe their overall experience with advising to include both positive and negative aspects. No further questions were asked in the focus groups with regard to advising.

To address overall coursework as related to program structure, seven survey questions were asked of the participants. All designed using a Likert scale, the participants were asked to rank the degree to which they agreed or disagreed with statement about the intentional design of the program. Two questions assessing the use of 1 credit program modules were asked. Timeliness of course assignments and the helpfulness of course content were asked. Further, the participants were asked to identify if they agreed / disagreed that the program had helped them realize areas that they still needed to develop. Final questions addressed the level to which the participant felt they were required to integrate subject matter knowledge into various assignments and sequencing of required courses were asked. In response to themes that emerged, follow up questions were asked in the focus groups regarding timeliness of course assignments
and sequencing were asked. During discussion, the topic of one credit modules were
briefly discussed, although no specific questions were asked of the respondents on this
topic.

With regard to mentoring, the participants were asked to respond to eight survey
questions that addressed the use of a faculty mentor at the university and within the
ProMoTEd program. Five of the questions required the participants to rank on a Likert
scale the degree to which they agreed or disagreed with statements measuring
availability, communication and effectiveness of the faculty mentor. Two additional
questions addressed the frequency of interaction with the mentor, both in general and for
field observations. A final question asked them to describe their overall experience with
mentoring, including both positive and negative aspects. Due to inconsistencies with
responses in the quantitative addressing of these questions, further questions were
developed for the focus group that addressed mentoring. Rich discussion on mentoring
further informed the following topic of cohort models as well.

To quantitatively measure the participant’s feelings about the use of cohort
models, six questions were asked. Five of the six questions were designed to have the
participant rank in Likert scale fashion, the extent they agreed or disagreed with
statements about cohort models. Statements included the support they felt the received in
their role as both a teacher and a student, the ability/frequency to which they sought
assistance from the cohort, pacing and course completion with the cohort model, and the
overall sense of continued communication they expected to have with the cohort
members upon graduation. Another Likert scale question asked the level to which they
felt being part of a cohort was a positive experience and finally, the participants were
asked to describe their overall experience with the use of the cohort model, including both positive and negative aspects. As noted above, further discussion in the focus groups informed this topic.

There were thirteen questions used to address Pedagogy & Classroom management. The questions were designed to measure two things, both how much the participant felt they had learned about the identified issues in the questions and the actual usefulness of being able to put what they have learned about the respective issues into immediate practice as a current teacher. Again, using a Likert scale design, issues identified and asked included: instruction on various teaching methods, instruction on writing lesson plans, instruction on use of instructional media, instruction on learning styles, instruction on effectively structuring daily activities, instruction on use of in-class time for learning, instruction on designing a curriculum that supports benchmarks and standards, instruction of how to effectively deal with disruptive students, instruction on effective consequences for inappropriate behavior. Further questions on instruction addressed learning how to help students develop academically, how to help students develop as people and overall instruction on how to best understand students. A final question queried the amount and usefulness of instruction in encouraging the development of their (participants) own view on education. Because themes did arise from information on this topic, it was further measured in focus groups.

Research Question 3 Analysis

Research question 3 addressed what relationships (if any) between participants' adult learning preferences and the extent to which they experience various aspects of their alternative certification program. This question was addressed quantitatively in
similar fashion to Research Question 1. Frequencies and means were calculated on the questions that directly related to the assumptions of Adult Learning Theory. Participants were asked to rank the accuracy of statements provided based on those assumptions in addition to having the participant rank the level to which they felt the ProMoTEd program supported them as an adult learner in each of those statements. From a qualitative standpoint, while no specific questions were asked in the focus groups, most of the discussions on other variables included statements that began with “...and as adult learners.” Frequencies and means were used in addition to the narrative data in focus groups to measure this question.

Research Question 4 Analysis

Research question 4 asked how the participants would describe the strengths and weaknesses of their experiences overall within the ProMoTEd program. This question was measured qualitatively with each participant discussing both a strength and weakness they perceived. Narrative data were studied for emergent themes.

Chapter III Summary

This chapter has presented the research questions and overview of the research design used for the study. Additionally, the population and sample have been discussed; data collection has been outlined to include the pilot study and survey administration. Delimitations, limitations, and data analysis has been addressed. Chapter IV will now discuss the results found in the measures for each of the research questions.
CHAPTER IV

RESULTS

This chapter identifies the characteristics and backgrounds of twelve practicing CTE teachers enrolled in an alternative certification program designed to facilitate their state certification requirements. Additionally, the chapter presents findings from both quantitative and qualitative data collected from these participants. To protect participants' identities, the actual names of students have been replaced with pseudonyms throughout this chapter and the remainder of the dissertation.

The participants in the study were adult learners enrolled in the ProMoTEd alternative certification program at a university in northern Michigan. Each of the participants was also a practicing teacher, who had been issued some form of annual or emergency authorization to teach while completing the requirements for certification. The ProMoTEd program was designed under Michigan's guidelines to facilitate such a certification program. The program, which runs over the course of two years, utilizes a cohort model and one-credit instructional modules. The cohort group members used in my study were finalizing the requirements of their program, and were in residence for their second and final summer. Participant summaries are presented in the following section describing their present teaching positions, prior career experiences and motivation for becoming teachers.

Individual Participants

In total, data was collected from a total of 12 participants. The following is a brief description on each one.
Abby

Abby is a 37-year old white female who is currently a Nursing Careers high school teacher in the state of Michigan. She held an Associate’s Degree in the Science of Nursing prior to her admittance in the ProMoTEd program. Prior experience in teaching before assuming her current position included working as a Nursing Careers Paraprofessional at the secondary level. Her prior career / CTE area of expertise before entering education was in nursing for fifteen years.

Regarding her own motivation, Abby did not originally plan to become a teacher. After working as a Paraprofessional, she was offered a position as an instructor and it was this opportunity that made her seek this change in her life.

Information gleaned in prior review of the literature on both alternative teacher certification and adult learning theory led the researcher to then ask “Would you still be pursuing teacher certification if you didn’t already have a teaching position?” To which Abby responded; “No, I would still be working in the nursing field.” Finally, when asked what attracted her to this particular program, the aspects of program structure that interested her were the accelerated pace at which the program is offered, as well as the online component.

Andy

Andy is a 33-year old white male Automotive high school teacher in the state of Michigan. In addition to his work at the high school level, Andy is an adjunct instructor at the community college in the region he works. Because of his desire to have his work in secondary education to go from part-time to full-time, Andy is pursuing teacher certification.
Andy holds an Associate’s Degree in Automotive Service and worked as an Automotive Technician for over eight years. When asked what prompted him to seek this change in his life to education he responded “I enjoyed working with high school and college age students and I enjoyed learning about automotive trades and sharing what I had learned.”

As for what attracted Andy to the ProMoTED program, simply put, he appreciated the ‘quick way to get it [certification] done.” Unlike Abby, Andy insists that he would still be pursuing teacher certification if he hadn’t already had a job. He would continue in hopes of eventually landing a teaching job.

Beth

Beth is a 43-year old white high school teacher in an unspecified field. She chose not to respond to questions indentifying her prior career or teaching experience, but did note that she held an Associate’s Degree prior to admittance in the ProMoTED program.

When asked what made her seek this change in her life to the field of education, she responded “I enjoy working with younger adults and teaching them about the medical field.” Like Abby, Beth also indicated that she would not be pursuing teacher certification if she did not already have a teaching job. As for which aspects of the program attracted her to ProMoTED, she appreciated “the ability to do most school work online.”

Brett

Brett is a 41-year old white male Culinary high school instructor. He reports having three years prior experience in education as a ‘teacher tech’ as well as his work in
the Hospitality industry as a Pastry Chef. Brett also holds an Associate's Degree in Applied Science prior to his admittance into the ProMoTEd program.

Upon inquiring as to what made him seek this change in his life, into the field of education he stated "It is my passion. I wanted to do something in my life." As to why he was attracted to/chose the ProMoTEd program he states basically 'to keep my job." Like several of his peers, Brett also confirms that if it were not for his already having a teaching position, he would not be pursuing teacher certification.

Cara

Cara, a 48-year old white Health Science high school teacher, worked as a Registered Nurse (RN) for 23 years prior to a career in education. Her experience as a Health Educator in the Home Care setting working with adults was the only experience she had dealing with education prior to her current position. She holds an Associate's Degree in Nursing.

When asked to discuss what made her seek this change in her life, becoming a certified teacher, she says "I felt that I had accomplished my goals in my then nursing position. I was offered a teaching position that better suited my family and long term goals and I decided to start a new career." While she had already started taking classes toward her BSN (Bachelor of Science-Nursing) prior to accepting her current teaching position, she says she would not be pursuing teacher certification if it were not for her job. She says instead "I probably would have pursued Nurse Practitioner instead."

Cara asserts that she was "attracted to the ProMoTEd program because it was a shorter program and the majority of it was online."
Charlie

Charlie, a 42-year old white Electrical high school teacher, had 20 years experience as an Electrician before becoming a teacher. In addition, he previously worked as a Controls Technician, Project Manager, Department Head and Business Owner.

His work as an adjunct instructor of Electrical Apprentices at a community college serves as his prior experience with teaching. In addition to a high school diploma, Charlie holds an Electrical Journeyman’s License.

As for what made him seek this change in his life to secondary education, he says “It felt as though it should be the natural progression of my life experience,” although he is uncertain if he would be pursuing teacher certification if he did not currently have a teaching position. He says “probably, yes because I enjoy it.” Like several of his peers, Charlie was attracted to the time accelerated pace of the ProMoTEd program.

Dan

Dan, a 44-year old white Engineering Technology high school teacher, did not have any previous experience in education before accepting his teaching position. He had served as Vice President of an Engineering Consulting firm prior to switching careers. Dan holds an Associate’s Degree in Applied Science.

“Industry downsizing” is the factor that made Dan seek this change in his life. He says he would not continue to seek teacher certification if he did not have his current teaching position as “positions are not easily available.” The aspect of the ProMoTEd program that attracted him was the accelerated time frame.
Dee

Dee is a 51-year old white Culinary Arts long-term-substitute teacher. As a long-term-sub she holds primary responsibility for instruction and class operations. She reports prior experience in teaching in both industry and secondary education. While working in the Hospitality industry, she conducted training for the staff where she worked for 26 years as a Hospitality Banquet Director. After leaving the industry, she served as a Culinary Arts Paraprofessional. While she had “some college education” prior to admittance in the ProMoTEd program, she did not hold any degrees or certifications.

Seeking this change in her life to become a certified teacher, Dee explains “I truly thought I was stepping out of a more than full time job, less stress, time, etc., kind of a ‘semi-retirement’; however once I started working in the classroom I was encouraged to get my teaching degree. I found out that I loved teaching in the classroom, and am excited to begin my new career.”

When asked about whether she would still be pursuing teacher certification if she did not already have a teaching position Dee notes “no, I would not still be pursuing teacher certification.” She also adds:

I think most of the people that teach CTE have gained a wealth of experience in their field, and did not plan to teach. I do not believe I would have gone back to school while working full time in my previous job; it would have been too demanding, almost impossible.

As for the aspects of the ProMoTEd program that attracted her she offers:

I tried to work through [another Michigan university], however they did
not have a program that would fit my needs. [This university] offered ProMoTEd which provided me the ability to put my work experience together with the MOCAC (Michigan Occupational Competency Assessment Center) test, thus making the process much faster.

Ed

Ed, a 44-year old white male, works as an Automotive high school teacher. While he did not have any previous formal work experience in education, he did work in the Automotive industry for 21 years. He held an Associate’s Degree before admittance into the ProMoTEd program.

Due to medical reasons Ed sought this change in his life. He adds that if it were not for his current teaching position, he would not be seeking teacher certification. The aspects of the ProMoTEd program that attracted him to enroll were “that it was easy and quick.”

Frank

Frank, worked as a Paraprofessional in a welding class before accepting his current position as a high school Welding teacher. He is a white, 49-year old former Aero-Space Welder. While Frank did not identify a specific degree held, he pointed out that he completed all necessary ‘core classes’ before entering the ProMoTEd program.

Frank says that the “state requirement” is what has made him become a certified teacher and seek this change in his life. As for what most attracted him to ProMoTEd, Franks offers; “the opportunity to complete education classes in a timely manner.” Additionally, because he is “not happy with the direction that Career & Technical
Education is going,” Frank would not be seeking teacher certification if it were not for his current position.

**Glen**

Glen is a 50-year old white male Construction Trades high school teacher. Having previously worked as a carpenter for “25+ years,” he accepted a teaching job offer and then transitioned into education. That offer was what made him seek this change in his life.

Having obtained a B.B.A from another Michigan university prior to admittance into the ProMoTEd program, Glen gained previous teaching experience in his church for twenty years.

The accelerated aspect of the ProMoTEd program most attracted Glen. Also he adds “the courtesy with which the faculty and staff treated me” was also an attraction. Because teacher certification is required to maintain his current position, Glen adds that he would not otherwise being pursing certification, claiming it is “too expensive and time consuming.”

**Harry**

Harry works as a Power Technology high school teacher. He is a 51-year old white male who previously worked in positions ranging from mechanic to engineer for 30+ years. Harry was able to gain some experience in teaching while conducting company training. Similar to several of his peers, Harry held an Associate’s Degree prior to joining the ProMoTEd program.

When asked what prompted him to seek this change in his life, Harry responds; “my children were now out of college (and) I wanted to contribute to students as many of
my past teachers had done for me." Because teacher certification was "not necessary in past positions," Harry does not believe that he would be pursuing teacher certification if it were not for his current teaching position. As a result, the main attraction to the ProMoTEd program, he says, is that it "gets the job done fast."

**Summary of Participant Characteristics**

Although Chapter V presents a detailed description of themes and experiences, it is helpful within the current chapter to summarize some of the individual characteristics shared amongst the participants. To aid this summary, Table 2 provides a demographic profile for each of the participants in the study.

Of the twelve participants, four were female and eight were male. The average age of the participants was 44-years old, with the youngest being 33 years old and the oldest being 51 years old. Nine of the twelve held a previous degree, eight of which were an Associate of Applied Science degree, and one Bachelor of Business Administration degree. With the exception of one non-responder, participants have all spent time working in the fields in which they now teach. Eight of the twelve had some previous teaching experience, albeit via training, classroom or community service.

In discussing what made them seek this change in their life, three directly reported that they had been offered a position. Three noted they enjoyed working with and wanted to contribute to students and young adults. Three others note more of an altruistic reason, citing a new found passion or life goals. Two participants responded that it was due to unforeseen medical/industry downsizing reasons while only a single respondent noted 'state requirement,' which can be assumed is in response to a position offered.
<table>
<thead>
<tr>
<th>Name</th>
<th>Age</th>
<th>Race</th>
<th>Gender</th>
<th>Prior Career</th>
<th>Prior Teaching Experience</th>
<th>Prior Degree Held</th>
<th>Sought Change</th>
<th>Attracted them to ProMOted</th>
<th>Still Seek Certification if not for current position?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abby</td>
<td>37</td>
<td>White</td>
<td>F</td>
<td>Nurse</td>
<td>Yes</td>
<td>A.A.S.</td>
<td>Offered Position</td>
<td>Enjoyed working with students</td>
<td>Accelerated/Online Quick No</td>
</tr>
<tr>
<td>Andy</td>
<td>33</td>
<td>White</td>
<td>M</td>
<td>Auto Tech</td>
<td>Yes</td>
<td>A.A.S.</td>
<td>Offered Position</td>
<td>Enjoy working with younger adults</td>
<td>Majority Online No</td>
</tr>
<tr>
<td>Beth</td>
<td>43</td>
<td>White</td>
<td>F</td>
<td>Not identified</td>
<td>No</td>
<td>A.A.S.</td>
<td>Offered Position</td>
<td>More in life</td>
<td>To Keep Job No</td>
</tr>
<tr>
<td>Brett</td>
<td>41</td>
<td>White</td>
<td>M</td>
<td>Pastry Chef</td>
<td>No</td>
<td>A.A.S.</td>
<td>To Keep Job</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Cara</td>
<td>48</td>
<td>White</td>
<td>F</td>
<td>Registered Nurse</td>
<td>Yes</td>
<td>A.A.S.</td>
<td>Offered Position, matched goals</td>
<td>Natural Progression of Life</td>
<td>Time Accelerated Uncertain</td>
</tr>
<tr>
<td>Charlie</td>
<td>42</td>
<td>White</td>
<td>M</td>
<td>Electrician</td>
<td>Yes</td>
<td>No</td>
<td>Natural Progression of Life</td>
<td>Time Accelerated</td>
<td>Accelerated Time Frame Ability to get credit for work experience with MOCAC Easy &amp; Quick No</td>
</tr>
<tr>
<td>Dan</td>
<td>44</td>
<td>White</td>
<td>M</td>
<td>Engineer</td>
<td>No</td>
<td>A.A.S.</td>
<td>Natural Progression of Life</td>
<td>Experience Industry Downsizing</td>
<td>Accelerated Time Frame Ability to get credit for work experience with MOCAC Easy &amp; Quick No</td>
</tr>
<tr>
<td>Dee</td>
<td>51</td>
<td>White</td>
<td>F</td>
<td>Banquet Director</td>
<td>Yes</td>
<td>No</td>
<td>Natural Progression of Life</td>
<td>Experience Industry Downsizing</td>
<td>Accelerated Time Frame Ability to get credit for work experience with MOCAC Easy &amp; Quick No</td>
</tr>
<tr>
<td>Ed</td>
<td>44</td>
<td>White</td>
<td>M</td>
<td>Automotive</td>
<td>No</td>
<td>A.A.S.</td>
<td>Medical Reason</td>
<td>State Requires</td>
<td>Timely Accelerated aspect and courtesy of faculty/staff Fast</td>
</tr>
<tr>
<td>Frank</td>
<td>49</td>
<td>White</td>
<td>M</td>
<td>Welder</td>
<td>Yes</td>
<td>No</td>
<td>B.B.A</td>
<td>Offered Position</td>
<td>Timely Accelerated aspect and courtesy of faculty/staff Fast</td>
</tr>
<tr>
<td>Glen</td>
<td>50</td>
<td>White</td>
<td>M</td>
<td>Carpenter</td>
<td>Yes</td>
<td>No</td>
<td>B.B.A</td>
<td>Offered Position</td>
<td>Timely Accelerated aspect and courtesy of faculty/staff Fast</td>
</tr>
<tr>
<td>Harry</td>
<td>51</td>
<td>White</td>
<td>M</td>
<td>Mechanic/Engineer</td>
<td>Yes</td>
<td>A.A.S.</td>
<td>Contribute to students</td>
<td>Timely Accelerated aspect and courtesy of faculty/staff Fast</td>
<td>No</td>
</tr>
</tbody>
</table>
In measuring what aspects of the ProMoTEd program attracted them to enroll, eight of the twelve participants note the time accelerated/quick feature of ProMoTEd. Three made mention of the online aspect and one simply did so to ‘keep [his] job,” One participant also noted the ability to get credit for life experience through the use of the MOCAC (Michigan Occupational Competency Assessment Center) test that expedites course requirements in lieu of life experience.

Finally, it is important to note, ten of the twelve participants reported they are only seeking teacher certification because of their current teaching position, and without that position, they would not be pursuing this path. One respondent said he would still pursue the path in good faith, while another was uncertain.

**Data Collection and Results**

Data collection was designed in accordance with a sequential exploratory design and therefore occurred in two ways. First was the administration of a survey, followed by focus groups which were informed by the survey results.

The survey was administered in person and in hard-copy form. It contained 93 total questions that were divided into sub-categories designed from my research questions, as well as the demographic profile data previously discussed in this chapter. Key elements queried issues related to advising, mentoring, use of cohort groups, pedagogy and classroom management, overall coursework, and adult learning theory. Respondents were asked to quantitatively respond to statements that most accurately described their experience, perceptions, and beliefs about their participation in the ProMoTEd program. Frequencies and means were calculated, which allowed the
Adult Learning Theory (Research Question #1) Findings

With regard to research question #1, survey data examined the participants’ experiences with their CTE Alternative Certification program (ProMoTEd) as related to the assumptions of adult learning theory. Quantitative questions inquired as to participants’ self reported agreement with statements about adult learners, as well as how well they felt the ProMoTEd program supported that aspect of their learning. Specifically, research question one explored the use of adult learning theory to describe how the participants in the CTE alternative certification program described their experiences as related to; (a) being self directed, (b) being able to draw on their reservoir of experiences, (c) being able to apply new learning as they assume new roles, and (d) being able to problem solve and apply new knowledge in a timely fashion.

In total, twenty-eight questions were asked on fourteen different issues related to adult learning. Each of the topics were identified as a separate dependent variable. Each dependent variable in the survey then equated to two variables in the statistical data: one for self-reported agreement with the variable, and one for the extent they felt the ProMoTEd program design supported that variable. The dependent variables were designed based on the literature which supports the assumptions of adult learning theory. Table 2 illustrates the percentages and means for the 14 items related to adult learning, as ranked from highest to lowest mean for “extent true” about a given percent within a given category. The division of subcategories within Table 3 should be noted as having followed the same division within research question one.
Table 3

Response Percentages and Means for Adult Learning Theory – Total Sample (n = 12)

<table>
<thead>
<tr>
<th>Survey Items</th>
<th>“Extent True” of Learner</th>
<th>ProMoTEd Supported This Concept</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Somewhat Not True (%)</td>
<td>Somewhat True (%)</td>
</tr>
<tr>
<td>Share</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Responsibility for Learning Objectives</td>
<td>Enjoy Discovering on My Own</td>
<td>0.0</td>
</tr>
<tr>
<td>I am Self Directed</td>
<td>0.0</td>
<td>16.7</td>
</tr>
<tr>
<td>Enjoy Projects to Lectures</td>
<td>8.3</td>
<td>8.3</td>
</tr>
<tr>
<td>Recognize Previous Learning Contributing</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Reservoir of Experience for Resource</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Often Re-Evaluate Assumptions</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Item</td>
<td>Not Supported (%)</td>
<td>Somewhat Supported (%)</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>-------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>Openness</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Problem Solving</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Apply Information</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>More Than Facts</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Knowledge</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Learn Best by</td>
<td>0.0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

Note: Mean is calculated on a 4.0 scale with 1.0 = usually not/true supported and 4.0 = usually true/strongly supported.
As noted in the first subset of Table 3, in measuring various aspects of being self-directed as related to adult learning theory, all of the respondents agreed that on some level (somewhat/usually true respectively), it is true that they describe themselves as having a shared responsibility for the course learning objectives. To wit, all (12 of 12) respondents felt the ProMoTEd program supported (16.7%) or strongly supported (83.3%) this shared responsibility. Agreeably, all (12 of 12) respondents report that discovering things on their own is enjoyable. Half (6) of the respondents said self-discovery was usually true of them, while the remaining 6 (or 50%) called it sometimes true. Of the 12 participants more than half (58.3%) agreed the ProMoTEd program supported this.

When asked the extent to which they feel it is true that they are self-directed (83.3%) and 91.7% (or 11 of 12 respondents) felt the ProMoTEd program supported or strongly supported those who are self-directed. This finding is consistent with the query on enjoying projects to lectures. The same (83.3%) of those that were reportedly self-directed also enjoy projects to lectures where they have the ability to be more self-directed in the application of that knowledge.

A finding that is somewhat counter intuitive is that self-directed, mature teachers would be more apt to do projects where they can work at their own pace, be creative, etc., rather than sit and be lectured to. In this sample, six of the respondents (50.0%) say that for them this statement is usually true of them, while 16.7% (or 2 of 12) report it as somewhat not true. All of the respondents felt, to some extent, that the ProMoTEd program supported being self-directed. Half (or 6 of 12) felt it was strongly supported, while 41.7% (or 5 of 12) considered it only supported. One respondent (8.3%) reported it
only to be somewhat supported by the program. Further discussion of these subset findings as related to the literature will be addressed in Chapter V, but one theme was further investigated in the focus groups.

During the focus group, the discrepancy with the literature regarding project-based learning versus lecture was pointed out, and further discussion brought insight to this issue. While the respondents understood the point of project-based learning, they often felt it became busy work, because they are all very busy as practicing teachers. At this time, having to do additional projects to demonstrate mastery of the content was burdensome. The question posed to them in the focus group specifically inquired about them not necessarily enjoying projects to lectures. The researcher asked; “Is this because it is just more homework” or “because your preferred learning style is lectures” or “are both of these statements true.” A response by Dan included:

Because of my, or our experience, if you give me a concept and a theory I can apply it. As opposed to the kids I teach, I want to give them a project so they can apply these concepts and theories....To do a whole project is kind of reinforcing our previous learning, we really don’t need that at this point. We need theory, we need the how-to and why this works, and then we can run with it. I don’t want a whole project.

Glen agreed with Dan, adding;

We have experiences that we draw on in our minds to visualize this would have worked when I had ‘this’ situation. We go back to those things, the experiences we already have. We don’t have to experience it again, we’ve already experienced it and now we know where our mistakes may have
been or things we could have done better, where a young person coming out of high school, coming into college, they have to do the project, period. Just for experience…I think Dan is correct that we don’t need to do that. We can do the lecture, we can go through it, we can look at the worksheets, things of that nature and move forward.

Regarding lecture-based learning, Abby wanted to add to the perspective when she notes: For taking my college classes, I’ve always had the lecture, and I was very skeptical about taking online class and not having that. And it has proven, actually, to be an advantage for me- not having to sit through and be guided through everything. I feel we can guide ourselves as adult learners.

Cara agreed that both statements were somewhat correct, in that projects typically mean more homework, while lecture is her preferred learning style.

…I do actually get more probably out of a lecture than a project and I’ve found the projects to be very, very time intensive….When you’re trying to balance a full-time job and a family full time and this program full time it’s difficult to find that much time to put into a project…So, I think that is probably why (we don’t enjoy projects to lectures), not that I don’t like the outcome when it’s done, but the experience itself of having to put it all together is stressful.

Andy elaborated on the idea that projects typically mean more homework adding: Teaching and working, it’s more beneficial to have the information that I can use rather than me go out and acquire all the information to put in a project so that I can use it. It’s difficult. It’s time consuming, I mean, you
have a lot of constraints on your time... And in some respects by giving us the information I can use, I can apply it and try it out, whereas, if I put this big project together, I'm spending all my time trying to put stuff together rather than implementing what I have learned, and it's tough... I would much rather sit in a lecture or some kind of interactive learning thing than put together this big portfolio... Don't get me wrong, I like the fact that I did it, and it's going to be useful in the future and there are certain circumstances where I really enjoyed doing it, but it's a huge stress... It keeps me up at night at times.

Beth shared that while she herself likes projects versus lectures:

I just think that the projects we have done are a little bit too much in-depth. I mean, if maybe they were cut in half you can get that - just as much information out... but they were more on the rigor, which is great, but I think all of us in our program, most of us are teaching, subbing, whatever, I'd like to have seen it been able to apply a little bit more relevance... it was a scientific research thing, a little over the top.

Brett added to the discussion on the preference of projects to lectures (or vice versa) adding:

Another thing you have to remember is that these are online classes. We got a little bit of information on it the first day, when everything else was coming at us that first day also... And then when you get back some of the projects, we didn't get information on the projects, and we don't have a person we can call up and say - or come to the next class and ask
questions... I like projects too, but these projects were very hard to understand and even when we (reached out) to the cohort we were all in unison to say we really didn’t know what (the instructor) wanted.

Finally, concluding the discussion, Harry added:

We’ve all been doing this out in our field, to where if someone’s out there doing a lecture or giving us some information, we’re processing in our minds right away, “oh, I can use this, I can use this,” and then we go out and do our project in the actual field and apply it to where maybe that is just a little more relevance to us that way.

In the second subset of Table 3, which focused on adult learners being able to draw on their reservoir of experiences, all of the respondents reported it true that they recognized previous learning as having contributed to their experience. While only 16.7% (or 2 of 12) found it somewhat true, 83.3% (or 10 of 12) found it more usually true. Moreover, one respondent (8.3%) felt the ProMoTEd program only somewhat supported any previous learning as a contributing factor to his/her experience. The remaining 11 respondents felt the program either supported (16.7% or 2 of 12) or strongly supported (75% or 9 of 12) previous learning as a contributing factor to the experience.

Further query in subset 2 of Table 3 illustrated that all (12 of 12) respondents also draw on a reservoir of experience in addition to previous learning. Five of the respondents (or 41.7%) reported it being somewhat true, while the remaining seven (or 58.3%) reported it usually true. Similarly to previous learning, previous experience was reported in a broader range when it came to the level to which the respondents felt the
ProMoTEd program reportedly supported the use of that reservoir of experience for success in the program. One participant (8.3%) reported that ProMoTEd only somewhat supported this, while 6 (or 50%) felt it was merely supported. Five respondents (or 41.7%) however, felt ProMoTEd strongly supported the use of a reservoir of experience as a resource.

Finally, inquiry regarding past experience as it plays a role in adult learning further illustrated that application of previous learning and experience often led participants to re-evaluate their assumptions as they experienced the ProMoTEd program. All twelve of the respondents reported it being either somewhat (50%) or usually (50%) true that they engaged in this re-evaluation. Consistently, the twelve reported that the ProMoTEd program either supported (5 of 12) or strongly supported (7 of 12) their re-evaluation of such assumptions. It can be argued that having this rich level of experience allows for reflection on the information being learned.

As summarized in Table 3, the third subset of research question number one focused on the participants description of their experiences as related to ‘being able to apply new learning as they assume new roles.’ All of the respondents reported appreciating the multiple/diverse views they were receiving. Four (or 33.3%) reported this as being somewhat true of them, while 8 (or 66.7%) said it was usually true of them. When asked the level to which they felt the ProMoTEd program supported the acquisition of multiple/diverse views, 41.7% (or 5 of 12) reported it as being only supported, while 58.3% (or 7 of 12) reported it as being strongly supported. My query continued regarding adult learning theory, and information on the application of knowledge was explored. One respondent (8.3%) reported it somewhat not true that
he/she learns best when applying knowledge. Conversely, 33.3% (or 4 of 12) reported it as somewhat true, and 58.3% (or 7 of 12) claimed it to be usually true. Facilitating the application of knowledge for learning by the ProMoTEd program was reported similarly. 8.3% (or 1 of 12) of the respondents found it to be somewhat supported, while 4 of 12 (or 33.3%) said it was supported. Seven respondents (or 58.3%) reported the application of knowledge as being a strongly supported aspect of the program. In relation to the research on adult learning theory that addressed adult learning preferences, the survey queried the level to which respondents reported appreciating facts versus explanations. All of the respondents (12 of 12) reported it to be true that more than facts, they appreciated explanations. Within that scale, 25% (or 3 of 12) agreed it was somewhat true, while 75% (or 9 of 12) reported it usually true that they appreciated explanations versus mere facts. The entire group (12 of 12) reported that the ProMoTEd program supported their appreciation of explanations. Half (6 of 12) felt it was supported, while the other half (50%) argued it to be strongly supported.

The final subset of Table 3 addressed the extent to which respondents reported being able to ‘problem solve and apply new knowledge in a timely fashion.’ Three survey items were designed to assess this, with the first addressing concepts that interested the respondents most. When asked the extent to which respondents reported agreement that they are ‘most interested in things with immediate relevance,’ 91.7% (or 11 of 12) reported this as usually true. One respondent (8.3%) reported it as only being somewhat true of them. Elaborating on their level of interest with things with immediate relevance, the participants were then asked the level to which they felt the ProMoTEd program supported the concept. Eight of the twelve respondents (or 66.7%) felt it was
strongly supported. Three participants (or 25%) agreed it was supported, while one (8.3%) reported it as only somewhat supported.

Based on adult learning theory literature, assessing the extent to which the participants agreed they learn best with problem centered issues was queried next. Of the 12 respondents, 7 (or 58.3%) reported that to be usually true, while 4 (or 33.3%) said it was somewhat true. One participant (8.3%) reported it to be somewhat not true. Further evaluation of ProMoTEd program design was queried when assessing the level to which respondents felt ProMoTEd supported their learning via problem centered issues. All of the respondents reported ProMoTEd as supporting problem centered learning with 41.7% (or 5 of 12) further reporting it as strongly supported.

In the last survey construct dealing with adult learning theory and the application of learning in a timely manner, participants were asked the level to which they felt they themselves ‘promoted dialogue and openness.’ Four of the twelve respondents (or 33.3%) reported this as usually true of them, while 5 of 12 only reported it as somewhat true. Finding the promotion of dialogue and being open less true of them, 3 of 12 (or 25%) of the respondents reported the statement as somewhat not true of them. The extent to which the participants felt the ProMoTEd program supported this concept was reported as follows; 6 of 12 (or 50%) agreed that ProMoTEd did support dialogue and openness; the other 50% reported it as strongly supported by the program.

Clearly, the inter-connectedness of research question number one and its sub components themselves provides a rich theme. The qualitative responses given in the focus groups touched on all aspects of the question as adults learners: (a) being self directed (b) being able to draw on their experiences, (c) being able to apply new learning
as they have assumed new roles, and finally, (d) being able to problem solve and do things in a timely manner.

**Alternative Certification Practices (Research Question #2) Results**

Research question number two asked to what extent participants would describe their experiences as they relate to known best practices in alternative certification. To address this question, participants were asked several questions related to program structure (e.g., advising, overall coursework), the use of a university mentor, being within a cohort model, and their training in pedagogical and classroom management practices.

**Advising: First construct of research question 2.** For the first subset of research question #2 that addressed advising, the survey instrument asked participants to identify which of the statements provided most closely matched their experience with advising and its related aspects. Illustrated in Table 4, participants were asked which of the following statements most closely reflected their overall advising experience. Options for response included: (a) the advisor told me exactly what to take, (b) the advisor and I discussed options and matched them with my career goals, (c) I have not met with an advisor and, (d) other (explain).

### Table 4

*Participants' Description of Overall Experience with Advising by Percentage (n=12)*

<table>
<thead>
<tr>
<th>Advisor told me exactly what to take: n (%)</th>
<th>Advisor and I discussed options matched with my goals: n (%)</th>
<th>I have not met with an Advisor: n (%)</th>
<th>Other (explain): n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 (33.3)</td>
<td>6 (50.0)</td>
<td>0 (0.0)</td>
<td>2 (16.7)</td>
</tr>
</tbody>
</table>

**Note.** Responses for “Other (explain)” for the two respondents were, 1. “Little was explained to me,” and 2. “The advisor discussed ProMoTEd and I still am trying to get credit for past Associate Degree and other courses taken.”
Half of the respondents (n=6) responded that ‘the advisor and I discussed options and matched them with my career goals” which would be consistent with the premise of developmental advising. A third (n=4, 33%) of the respondents expressed that the ‘advisor told them exactly what to take’ which is more consistent with prescriptive advising. While nobody responded that they had not met with an advisor, 16.7% of them (n=2) did select the “other” option, adding comments: “little was explained to me” and “the advisor discussed ProMoTEd and I still am trying to get full credit for past Associates degree and some other courses taken.”

As for frequency of meeting with an advisor, Table 5 illustrates that 75% (n=9) of the participants had met with an advisor at least twice, and as high as three or more times. One quarter (n=3) of the respondents had only met with an advisor once.

When asked what aspect of advising the participants most appreciated, 58.3% (n=7) of them stated “it was direct and to the point” while only 16.7% (n=2) felt it allowed for flexibility and growth. The option of “Other/explain” was chosen by a quarter of the group (n=3); and voiced comments including: “they were courteous,” “some of it was vague because I am still working on basics at the community college,” and “it lacked info.” Table 5 visually illustrates these findings.

The survey also included three questions that assessed the level to which the participants agreed with statements regarding advising. The Likert scale questions were on a 6 point scale with a 7th option for “N/A, No Advisor.” Table 6 illustrates the findings for questions addressing advisor actions including; “The advisor was interested in my career goals,” “The advisor gave me the direction and tools needed to effectively
navigate my program,” and “The advisor was helpful in explaining the needed state certifications, and directed me to appropriate resources for those certifications.

Table 5

*Participants’ Most Appreciated Aspect of Advising (n=12)*

<table>
<thead>
<tr>
<th></th>
<th>I have not received advising n(%)</th>
<th>Direct and to the point n(%)</th>
<th>Allowed for flexibility and growth n(%)</th>
<th>Other (explain)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participants’ Response</td>
<td>0 (0.0)</td>
<td>7 (58.3)</td>
<td>2 (16.7)</td>
<td>3 (25.0)</td>
</tr>
</tbody>
</table>

Note: “Other (explain)” comments for three respondents were: 1. “They were courteous;” 2. “Some of it was vague because I am still working on basics at the community college;” and 3. “It lacked info.”

Table 6

*Participants’ Feelings on Statements Regarding Advising (n=12)*

<table>
<thead>
<tr>
<th>Advisor</th>
<th>Strongly Disagree n (%)</th>
<th>Somewhat Disagree n (%)</th>
<th>Disagree n (%)</th>
<th>Agree n (%)</th>
<th>Somewhat Agree n (%)</th>
<th>Strongly Agree n (%)</th>
<th>N/A - No Advisor n (%)</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>interested in my career goals</td>
<td>0 (0.0)</td>
<td>1 (8.3)</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
<td>4 (33.3)</td>
<td>6 (50.0)</td>
<td>1 (8.3)</td>
<td>5.18</td>
</tr>
<tr>
<td>provided tools needed</td>
<td>0 (0.0)</td>
<td>1 (8.3)</td>
<td>0 (0.0)</td>
<td>1 (8.3)</td>
<td>4 (33.3)</td>
<td>5 (41.7)</td>
<td>1 (8.3)</td>
<td>5.09</td>
</tr>
<tr>
<td>provided information on needed</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
<td>3 (25.0)</td>
<td>5 (41.7)</td>
<td>4 (33.3)</td>
<td>0 (0.0)</td>
<td>5.08</td>
</tr>
</tbody>
</table>
Of interest is that in two of the three questions listed in Table 6, one participant voiced that the question did not apply since he/she did not have an advisor. However, the same person later chooses an option that an advisor was helpful in explaining the needed state certifications and directed them to the appropriate resources for those certifications.

In all other instances, the majority of the participants (n=10, n=9, n=9, respectively) were in agreement that the advisor was interested in their career goals, provided tools necessary to effectively navigate their program, and provided needed information on state certifications.

While there were no specific themes from the survey data that warranted follow-up questions in the focus groups regarding advising, the participants were offered an opportunity to share their experience with advising as provided by the University regarding the ProMoTEd program, including both positive and negative feelings about the process. All of the respondents (n=12) chose to respond and I have presented those responses Appendix G, in addition to a few comments here. Most comments noted the improved communication from the advisor over the course of the program. Several others noted that they were very satisfied with services provided with advising. Specifically, Cara shared:

My advisor was timely in responding to questions and concerns and she took an active role in securing a spot for me in a class that I required but could not seem to get in to. Aside from this, I do feel there should be more support somewhere for the graduation clearance process.

Dan was clear to differentiate between specific advising to the ProMoTEd program versus that for all of the coursework needed elsewhere at the university (pre-
requisites), wishing it could all be "as cut and dry as they have made it for the ProMoTEd program." Further aspects of those comments will also be used in the Chapter V discussion.

**Overall coursework: Continued first construct of research question 2.** Next, the sub-component of program structure queried was 'overall coursework.' This was measured both in the survey and in the focus groups. The survey responses revealed several positive aspects of the program as experienced by the participants. In broad categories of course scheduling, sequencing and the effect it had on the development of the participants as CTE teachers, data was discovered that can provide insight into the design of similar programs. Results are illustrated in Table 7.

The intentional design of the program was measured as it affected all courses within the ProMoTEd program. Questions on program design specific to my study addressed the implementation of subject matter knowledge into assignments across the curriculum, the course content within the program, and the extent to which the content being taught was helpful to the development of the CTE teachers. Further query was done on the sequencing of the modules/courses in the two year block as being helpful to practicing teachers, as well as the use of the more broken down modular system to aide success. The scheduling of said modules was also addressed in the survey.

Lastly, within the construct of overall coursework, the extent to which the participants felt the coursework was timely and manageable was surveyed. All of the information gleaned from this construct on the overall design/structure of the program and the related coursework provided rich conversation in the focus group sessions and will be reported following the survey analysis of this subset.
Table 7

Respondents' Perceptions/Beliefs About Overall Coursework in Classes Taken by Percentage (n=12)

<table>
<thead>
<tr>
<th>Perception/Belief</th>
<th>Strongly Disagree n (%)</th>
<th>Somewhat Disagree n (%)</th>
<th>Disagree n (%)</th>
<th>Agree n (%)</th>
<th>Somewhat Agree n (%)</th>
<th>Strongly Agree n (%)</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integration of subject knowledge needed throughout program</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
<td>3 (25.0)</td>
<td>5 (41.7)</td>
<td>4 (33.3)</td>
<td>5.08</td>
</tr>
<tr>
<td>Course content helpful in development as CTE teacher</td>
<td>0 (0.0)</td>
<td>1 (8.3)</td>
<td>1 (8.3)</td>
<td>1 (8.3)</td>
<td>4 (33.3)</td>
<td>5 (41.7)</td>
<td>4.97</td>
</tr>
<tr>
<td>Program highlighted areas I need to develop</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
<td>4 (33.3)</td>
<td>5 (41.7)</td>
<td>3 (25.0)</td>
<td>4.97</td>
</tr>
<tr>
<td>Sequencing helpful and supportive of needs as a practicing teacher</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
<td>4 (33.3)</td>
<td>5 (41.7)</td>
<td>6 (25.0)</td>
<td>4.97</td>
</tr>
<tr>
<td>Learning in 1 credit modules helpful for success</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
<td>3 (25.0)</td>
<td>3 (25.0)</td>
<td>1 (8.3)</td>
<td>5 (41.7)</td>
<td>4.67</td>
</tr>
<tr>
<td>1 credit modules effectively scheduled</td>
<td>0 (0.0)</td>
<td>1 (8.3)</td>
<td>1 (8.3)</td>
<td>2 (16.7)</td>
<td>5 (41.7)</td>
<td>3 (25.0)</td>
<td>4.67</td>
</tr>
<tr>
<td>Course assignments timely &amp; manageable</td>
<td>1 (8.3)</td>
<td>2 (16.7)</td>
<td>3 (25.0)</td>
<td>2 (16.7)</td>
<td>3 (25.0)</td>
<td>1 (8.3)</td>
<td>2.58</td>
</tr>
</tbody>
</table>

Note. Mean is calculated on a 6.0 scale with 1.0=strongly disagree and 6.0= strongly agree.
To some extent, all respondents agreed that the ability to integrate subject matter knowledge was needed on some level within the program. While 25% (or 3 of 12) respondents agreed with that statement, slightly more (41.7%, or 5 of 12) somewhat agreed with that statement. A smaller, 33.3% (or 4 of 12) strongly agreed that such integration of subject matter knowledge was required.

When asked about course content and the level to which participants agreed with statements about their belief that course content has been helpful in their continuous development as CTE teachers, responses highlighted most sections of the Likert scale. Although none (0%) of the respondents strongly disagreed with the statement, 1 of the 12 (or 8.3%) reported that he/she somewhat disagreed with the fact that it had been helpful, and another 1 of 12 (8.3%) disagreed. The largest group (10 of 12, or 83.3%) agreed that it had been helpful to their development, to varying degrees. One (8.3%) reported agreeing that it had been helpful in his/her development, while 33.3% (or 4 of 12) somewhat agreed, with the remaining 41.7% strongly agreeing that the course content had been helpful to them in their development as a CTE teacher. Important to note that 25% (3 of 12) responded with something less than ‘agree’ with the statement, thus showing that there are some here who feel that the content in the program is less than helpful overall in their development (or job as) a CTE teacher.

The next question regarding overall coursework addressed the extent to which the participants agreed with the statement ‘the program (coursework) highlighted areas that I need to develop’ as a CTE teacher. All of the respondents (12 of 12) agreed on some level with this statement, with the largest group reporting to ‘somewhat agree’ (41.7%).
58.3 %, or 7 of 12 agreed or strongly agreed with the statement (33.3%, 25% respectively).

The sequencing of courses, as explicitly designed by the ProMoTEd program was queried next. The participants were asked the level to which they agreed or disagreed with the statement; 'the overall program structure of some courses the first summer, and then courses through the year, ending with specific courses this final summer has been a good way to support me as a practicing teacher.' The largest response, 41.7 (or 5 of 12) reported as somewhat agreeing with the statement. While 33.3% (4 of 12) agreed, three respondents (or 25%) strongly agreed that the sequencing helped them.

While the responses here were favorable, further inquiry on the intended design was probed in the focus groups. The question was asked of the group "How have you experienced the intentional design of the program and was the sequencing helpful for you overall?" Harry reported having no idea about the specific design or sequencing, and Charlie agreed adding "I don't think that anything was out of order." To that Charlie added:

What I liked was the fact that we took the classes in conjunction with each other, that it wasn't segmented out, they worked together, because a lot of the classes gave me ideas for one of the other classes assignments that we were doing. And, it helped with assignments that we were doing at the same time...So the fact that the six credits- say one from six different classes-you're doing six classes at a time, but it's one credit of each one...and that structure, I think, helped more than doing two classes, three credits each for a term and then going into another term.
Dan supported Charlie’s response adding;

They told us when we started that everything would kind of come together, and I do feel that way at the end of this (now) that the courses they’re talking to us now (about) are utilizing the things we learned in the previous courses and I can see a convergence of the theories and methods in these final courses. I can see everything coming together from them all.

While Dan and Charlie responded from more of a ‘macro’ view of the program, Harry and Andy were more specific about how each of the instructors handled things that affected their belief on the intended design of the program. Harry elaborated;

While I guess I had no idea about their specific design and the sequencing and everything, it was a lot of work, and I guess I didn’t even perceive any at all of these strategies of everything. (But) they kept you busy every day, you had to do something.

Andy added to what Harry had to say about being kept busy by sharing;

Some instructors did it very well. I would say some are – like- had it laid out in such a way that you could kind of click right through it. If you were late on a week it wasn’t a big deal, I mean you could kind of, you know… for the most part we’re all instructors and we all have times over Christmas where we could get a lot done where at the end of the school year it’s difficult because we got other responsibilities, so they did it pretty well that way.

With specific courses, Andy added:

Some of the time some of the instructors did get a little loaded in one
credit over another, but at the same time I don’t think we didn’t have an instructor that wasn’t willing to work with us if we all said (this) is how we feel, they’re like, well we can switch things around because I mean we’ll have to do it for you, so even though things didn’t always fit perfectly they accommodated. I think they were willing to listen in a huge way because from the first cohort to this-the last cohort to this cohort, I feel like things have gone pretty smoothly for us. I mean, don’t get me wrong, it’s a whole lot of work and when you start out you’re looking at the work saying, ‘can’t do it’, but you just got to remember the last people did it..Somehow they did it, so I got be to be able to do it somehow.

In an attempt to further inform the sequencing of the program from a design perspective, I asked “Were there any classes that you didn’t get until this summer that would have really been a lot more helpful last summer, or things that you got too late in the program that you would have preferred (or benefited from) earlier?”

Several respondents acknowledged one particular sequence of topics as being somewhat mismatched for their practice as teachers. Examples of this discussion include a response that started the discussion from Frank;

I was kind of hoping to learn more about adolescents in the fall than early childhood development- so something to help me immediately in the classroom, that was the only thing, Learning lessons; absolutely. Did I learn a lot; absolutely. But the time when the new kids were coming and the class was starting, some strategies in adolescents at that time would have been helpful for me.
Upon reflection, Cara was in agreement, adding:

That’s a good point. I didn’t really think about that, but the relevancy for us in what we do is not really in the early-infants, toddlers, that kind of thing. Probably our time could have been better spent just going right into the early adolescence phase of it, sort of a backward design kind of thing.

An unidentified respondent (on recording), further elaborated, adding;

I think a lot of us (non-traditional students) being parents, we learned all the childhood stuff and we’re just learning adolescence, at least for my kids. I wanted – to me it was like, yeah that’s common sense stuff I already learned and we should be focusing on the students we have.

Dee responded, addressing and agreeing with each of the aforementioned statements, however adding; “Although I felt it (childhood development) was interesting information, I would have rather spent more time learning how to motivate teenagers and context like that.”

Interestingly, Abby offered a different perspective. She disagreed with much of what had been said disagreeing with Dee and further stating;

I actually disagree with that, Dee. The reason I do is because I think it’s really important to see that if a child does not develop appropriately during those early years, how it can affect them in adolescence…and so for me it was, I have young kids, I know a lot of that stuff, but why are they the way they are? A lot of it has to do with the experiences they had when they were a child, so I thought it was still very useful.
Charlie agreed with Abby, but noted that he had completed that class prior to the ProMoTED program and that made a big difference. He said having it as a base helped his workload in adolescent development and suggested “that the early childhood (class), that someone do that separate before they come.”

Further discussion on the intentional design of the program, as highlighted in this subset of research question #2 on overall coursework brought up characteristics that were unique to an online/hybrid program. This information, while not reviewed in the literature, nor probed in the survey, addressed issues that serve as beneficial to the instructional design regarding adult learners, and will be discussed in Chapter V.

The next subset of overall coursework, as illustrated in Table 7; is regarding whether learning in 1 credit modules was helpful to the success of the participants. The survey asked to what extent the participants agreed that ‘learning in smaller 1 credit course modules has been helpful to my success in the program.” Nearly half (41.7%) of the respondents (or 5 of 12) strongly agreed with this statement. Fewer, 25% (3 of 12) agreed and 1 of the 12 (8.3%) somewhat agreed. Interestingly, 25% (again, 3 of 12) disagreed. There were no further questions regarding the use of 1 credit modules addressed in the focus group because the majority reported that they agreed that they (1 credit modules) were helpful. While the fact that 25% disagreed that it was helpful, no respondents chose to address this as either a strength or weakness of the program as discussed later in this chapter.

In the second to last subset of overall coursework in research question #2, a follow up question on the use of 1 credit modules was queried. The participants were asked to what extent they agreed or disagreed with the statement “The 1 credit course
module offerings have been scheduled effectively and are available as needed." One respondent (of 12) somewhat disagreed with the statement, while the remaining 11 respondents agreed on some level. Five respondents (or 41.7%) somewhat agreed that the 1 credit course module offerings have been scheduled effectively and are available as needed, while 16.7% (or 2 of 12) agreed. Reporting that they strongly agree, 25%, or 3 of 12 too felt that they were scheduled effectively and available as needed. There was no further follow up or query on this topic in the focus groups.

As a final subset on the topic of overall coursework design as a best practice in alternative certification, respondents were asked if they felt the course assignments were timely and manageable. To measure this, the survey asked the extent to which the participants agreed or disagreed with the statement “Course assignments have been timely and of a manageable pace while I teach.” This specific question found a cohort divided. Half of the respondents agreed (on some level) with the statement, while the other half disagreed on some level.

One respondent (8.3%) strongly disagreed that the course assignments were timely and of a manageable pace while teaching, and another three (or 25%) disagreed as well. Two others (16.7%) responded that they did somewhat disagree that they were timely and manageable while teaching. Conversely, 25% (or 2 of 12) somewhat agreed with the statement, and two more agreed that they felt that course assignments were timely and manageable. One participant (8.3%) strongly agreed that the course assignments were timely and manageable.

Because this variable in Table 7 was the only one which was not in a positive direction (mean=2.58), the theme that the respondents in general did not feel that their
course assignments were given in a timely/manageable fashion was further probed. Because the theme suggested that this divided response was likely due to the time pressures under which the respondents operate, discussion in the focus groups asked: “Did the coursework not feel timely or manageable perhaps because of your having a separate academic year as a practicing teacher?”

Dee responded first, noting that it goes back to discussion on enjoying projects to lectures and what’s manageable, as discussed in research question #1 on adult learning. She adds:

Everyone might not agree with me because everyone learns differently, but I think projects are harder to understand what they want us to do because they want to give you a broad spectrum but we, at times, for like the ‘expert project’ we didn’t, because we’re online learners and you’re not in that classroom every day, you get a lot from a teacher in lecture as to how/what they want, and so I feel that there was a lot of question about these projects I just…it’s hard to do online.

Ed elaborated about why they did not feel manageable in scope due to how things are facilitated, adding;

I think that their (instructors) directions could have been a little more clear to understand is what she is saying. Because were…there’s a lot of us re-doing our expert projects now because the way it was explained to us and now how she (the instructor) actually expects it.

Charlie further explains the timely/ manageable nature of the coursework as a function of online learning sharing:
I think it would probably be a good idea for teachers that are teaching online, professors from the college, if they were given guidelines as to how to write instruction because written instruction is very difficult to provide someone, 1) due to their reading ability and 2) the assumption that you know what you’re talking about so when you write it down everybody else knows. It might be a good idea for any instructor that’s going to teach a class online learn how to write instructions. Many people don’t detail them enough to make it so people understand.

Further, Charlie asked to respond to the original question on workload/ due dates (as opposed to his elaboration on both Ed and Dee’s responses):

Because I am, and I think many others are, procrastinators, we wait until the due dates. If the professors with all the difference classes would look at their due dates and say ‘we shouldn’t put all of that in the same week,’ it might not be a bad idea. Or when the cohort enters Ferris that they’re given a structure of how to organize their own stuff because maybe we don’t all organize the same, but if there are some options to that structure which was provided by the cohort before us, the options they got us together and talked about.

While Charlie’s response invoked numerous topics that would have digressed from the follow up from the survey, getting to the heart of the matter for those that disagreed that coursework was timely or manageable, opposing viewpoints were elicited. With that, Abby interjected;

I somewhat disagree with Charlie. I don’t think that the workload was
unreasonable, but for people who procrastinate and put off their assignments it is going to be unreasonable. They are going to feel that way. I did not necessarily feel that because three assignments were due in one week that it was going to be an issue for me because I already did the assignment two weeks prior. If you’re on top of it, it is not an issue. If you procrastinate, then yeah, you’re going to have an issue, but that’s self management.

In trying to both acknowledge ‘self/time management’ and structure (design) of courses as both leading the divide of students that both agreed and disagreed with the timeliness and manageability of coursework, I asked one last question for clarification: “Did any of you find that the courses that seemed to be the heaviest in expectations and requirements fell at the worst times of your own academic year as practicing teaches?” Abby continued:

What I did feel is that some instructors were...like...I felt I was working on one class more than any of the others. They were all equal in credit hours, but some instructors were giving us so much work that it was 99 percent of my time was spent on just that instructor’s workload. And I did feel like in the fall, this particular instructor with his workload, was very...it was very difficult to keep up with everything that you’re working with and schoolwork.

Charlie interjected for clarification purposes:

With what I understand the 99 percent being for one instructor, but I think many people found the fall, which I didn’t find the fall to be as bad even
though that's football season and start up of classes, I found spring to be worse because I was tasked with changing my program around and having to do a lot of curriculum research and everything else on top of it...so I found the spring to be worse even though I think it was a less workload. I don't know if others agree with me or not.

I further asked “So, it depends on personal circumstances?” hoping for responses from both Charlie, Abby and others. Charlie quickly added; “yes, that’s what I am trying to point out, it depends on the person, what’s happening to the person.” Abby quickly interjected, “and Charlie, you didn’t have the instructor to which I refer, so you may have felt that the fall was a little more manageable.”

To the point about timeliness and manageability of the coursework, Dan called us back to the question at hand adding;

I would disagree with a Charlie and kind of agree with Abby. I don’t want any due dates, everything due at the end kind of thing because I need to manage my time. We’ve got a lot going on...the more flexibility I have and how I manage my time- so if you tell me I’ve got twelve assignments over the next 18 weeks, I’m going to know what my time is, what my schedule is, and get those twelve assignments done when it’s appropriate. I don’t like having a due date the second week, the third week, the fourth week. I think THAT would help manage.

Dee agreed with Dan, taking us back to the adult learning topic previously addressed adding;

That’s exactly what I was going to say. We’re adult learners, we’re
responsible people, and if you would just open those classes up...we all
have different schedules, and at this point in our life, if we're not going to
be able to be- what's the word...disciplined enough to manage our time
then we're not going to be successful. I didn't like that some of the
instructors just opened things up for a certain time. I would have much
rather said, oh my kids are doing this, my kids have a play this week, etc.
(sic), I am going to work really hard this week (since I have a lot going on
next week). So the stringent due dates are actually a disadvantage.
The whole group responded “yes” to Dee’s comments, leading me to ask “whereas
flexibility and due dates and assignments submission would be more helpful to you as
adult learners?” There was a resounding ‘yes!”

Further discussion suggested a way that this might be handled to help the
participants manage the workload and the timeliness of assignment submissions. Further
thoughts on this will be presented in the recommendations part of Chapter V. The above
discussion of Table 7 finalizes the program structure subset of research question #2,
leading us next to the data on the use of mentoring.

**Mentoring practices: Second construct of research question 2.** The second
construct of research question number 2 addressed the how participants have experienced
their program with regard to best practices in alternative certification regarding
mentoring. As noted in previous chapters, mentoring for the purpose of my study focuses
on the use of a university mentor (within the locus of control for those affecting program
design/structure). Consistently with that the phrase ‘use of a faculty mentor’ was used
when addressing questions specifically about the ProMoTEd program.
The survey elicited feedback in eight questions regarding mentoring. Respondents were asked to respond with their beliefs on the mentoring that was in place and available to them from the ProMoTEd program, will follow up in the focus groups. The survey findings are illustrated in Table 8 below.

Table 8

*Participants’ Perceptions/Beliefs Regarding Mentoring Available in Program by Percentage (n = 12)*

<table>
<thead>
<tr>
<th>Perception</th>
<th>Strongly Disagree n (%)</th>
<th>Somewhat Disagree n (%)</th>
<th>Disagree n (%)</th>
<th>Agree n (%)</th>
<th>Somewhat Agree n (%)</th>
<th>Strongly Agree n (%)</th>
<th>N/A – No Mentor n (%)</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>My mentor effectively communicate with me</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>5</td>
<td>4.86</td>
</tr>
<tr>
<td>My mentor provided assistance with problems</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>4.75</td>
</tr>
<tr>
<td>The use of a mentor has been beneficial for me</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>5</td>
<td>4.71</td>
</tr>
<tr>
<td>My mentor was available as needed</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>5</td>
<td>4.71</td>
</tr>
<tr>
<td>Feedback received from my mentor has been helpful</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>4.44</td>
</tr>
</tbody>
</table>

*Note.* Mean was calculated using the number of respondents that either 1) agreed with the statement on some level or 2) disagreed on some level. Respondents choosing the option of N/A, No Mentor were not calculated in the mean.
As noted above, in all instances, respondents reported that the information being asked of them was not applicable, as they did not feel they had a faculty mentor. When asked the extent to which they agreed that their faculty mentor had effectively maintained communication (including by phone, email or face to face), 5 of 12 (or 41.7%) reported N/A, no mentor. Of the remaining seven responses, one (8.3%) did respond that they somewhat disagreed with the statement, while another (1 of 12) or 8.3% actually agreed that a faculty mentor had effectively communicated with him/her. Two respondents (16.7%) somewhat agreed and 3 of 12 (25%) strongly agreed that a faculty mentor had effectively communicated with them.

With continued regard to mentoring, the participants were then asked the extent to which they agreed with the statement “my faculty mentor provided assistance with areas I struggled within my teaching.” Interestingly enough, in this instance, only 4 of the 12 (or 33.3%) reported N/A, no mentor (down from 5 in the previous paragraph). Of the eight remaining responses, 7 of 12 (or 58.3%) agreed on some level that a mentor had provided assistance with problems. Respectively, 3 of them (or 25%) somewhat agreed with the statement, 1 of the 12 (or 8.3%) agreed, and 3 others (another 25%) strongly agreed that a mentor provided assistance with problems. Finally, one respondent (8.3%) strongly disagreed that a mentor provided assistance with program areas he/she struggled with in their teaching.

The third highest mean in Table 8 came from the question addressing the use of a mentor within the ProMoTEd program. The survey question asked the extent to which the participant agreed with the statement; “the use of a faculty mentor has been beneficial while in the ProMoTEd program.” Consistent with the first category in Table 8, 41.7%
(or 5 of 12) respondents indicated that the question was N/A, no mentor. Of the 7 participants that reported a level of agreement (or disagreement), 3 of them (25% of total participants) strongly agreed that the use of a mentor had been beneficial for them. Another 2 (or 16.7% of total participants) agreed, and 1 (or 8.3% of total participants) somewhat agreed with the statement. One final participant (8.3%) reported to ‘somewhat disagree’ with the statement regarding the use of a mentor being of benefit to them while in the ProMoTEd program.

When asked on the survey “a faculty mentor (either appointed or self selected) was available to me, throughout the program,” 5 of the 12 respondents (or 41.7%) still indicated N/A, no mentor. Consistent with the above paragraph, of the 7 that reported some level of agreement/disagreement, 25% (or 3 of the total participants) strongly agreed that a mentor had been available to them as needed. Two respondents (16.7%) reportedly agreed a mentor had been available as needed and one other (8.3%) only somewhat agreed with the statement. Conversely, one respondent (8.3%) did somewhat disagree that there had been a mentor available to him/her throughout the program.

Table 8 also reports the variable that addresses the extent the participants agreed or disagreed that “the feedback received from the observation(s) (by a mentor) was helpful in your teaching practice.” Unlike in previous variables in Table 8, in this particular instance, only 3 of 12 (or 25.%) of the respondents chose the option N/A, no mentor. Of the 9 that did select a level or agreement/disagreement, 4 of the total respondents (33.3%) actually strongly agreed that the feedback they received from their mentor was helpful. One respondent (8.3% of total) also agreed and 2 (or 16.7% of respondents) somewhat agreed with the statement. Two additional respondents (16.7 %)
strongly disagreed that any feedback they received from their mentor had been beneficial. Variable 5 (noted above) shows that 22% (or 2 of 9) did not receive helpful feedback from their mentors, and 42% said that the questions were not applicable, as they had no mentor. This posits topics for discussion in Chapter V as well as contributing to the significant theme addressed in the focus groups.

The subject of mentoring, and the divide between those that reported as having an assigned/self selected mentor; and those that felt it was Not Applicable, was addressed in the focus group. The question I asked of the group;

Some of you indicated that you don’t feel you’ve had a mentor, while some of you feel that you kind of self selected and gravitated towards somebody who’s become a mentor. Answers from both groups of people are welcomed, so how has having a mentor helped or affected your program or how has the lack of a mentor being assigned affected your experience?

Abby started the discussion, stating;

I don’t really feel like I had a mentor, but I don’t really think that it has affected me negatively. I’m pretty self-sufficient and I...if I felt like I had some questions I would definitely have contacted people and felt like I would have gotten that response...so I don’t feel like I needed it necessarily.

Providing an interesting viewpoint, Glenn added;

I don’t feel we had a mentor but I feel a cohort acts as a mentor in and of itself...so I think the mentor aspect becomes trivial when you have a
cohort but I think the mentor thing gets taken care of through the cohort because of the cohort. Yea, (specific instructor), he was always available, so I guess he would have filled that role if I needed it.

Charlie agreed with Glenn, also adding the perspective of adult learners;

I agree that we bounced ideas off each other and I think being that we’ve already been in teaching positions for a time, that we had mentors at our schools when we started out and we’ve become independent teachers before we came to this program. I think that made a huge difference for us and the fact that because we’re adult learners we like to discover those things. We like to find those things out rather than have someone tell it to us...we want to discover it, just because of the way we are, being that we’re all educating at our age-more so then somebody coming in-and this is just an assumption- a young person coming in and saying, well how do I do this just so I can get it done...were not just interested in getting it done, we want to know the purpose, or what the reason is that we are doing it. Having a mentor just to tell you, well this is how you do it, I think we all kind of maybe shy away from that...and maybe I’m wrong but that’s just the feeling I get, we really don’t want someone to tell us just how to do it, but we want them to tell us what it means and how we can work through it.

Brett took the discussion further in the direction of what not having a mentor meant to him, and how it affected his experience in the program. Agreeing with Abby that he didn’t feel he had a mentor, he added;

I don’t believe that I had one, but I think it could have helped in
transitioning us from coming out of the (first) summer for these two weeks where there was a lot of confusion. At least with me, our first day…our 101 class we didn’t have needed passwords, we didn’t know how to get on the (university online learning vehicle), we didn’t have none of that ahead of time…at least that was for me. Some people did, some people didn’t. I know some instructors emailed us information, but we never got that information before we got here…and leaving here, if we understood a little bit more what was going to happen because we kind of, at least for myself, he this idea, when I left here it wasn’t going to be as these two weeks were…what we had to do, we leave here and I thought we would wait until the next (semester/module) to start up, but it wasn’t really like that.

While Brett’s response helped illustrate the way a mentor could have helped facilitate systematic issues of orientation, Harry turned the discussion to more of the day to day effects of the mentor role. He shares;

I guess I didn’t think that I had an actual mentor assigned or whatever either, but the last term, I guess I had a particular teacher (same as aforementioned), that made himself very available to us. He also did my class observations, so I probably had quite a bit of personal one-on-one kind of talking with him and everything. I found that to be very, very helpful to where if they could incorporate something a little bit more like that as a mentor (it would be a positive thing). That is as close to what I found as a mentoring program here in the program and it was very helpful.
Brett agreed that this same faculty mentor made himself available with phone numbers and if he wasn’t there and you left a message, he was quick to get back to you. He noted too that “some of the instructors, they’re very hard to get a hold of.” Cara agreed and expounded;

    I think what I would have liked to have seen is – some of the other online courses that I have taken, the instructors are available online for an hour or two hours on a specific day of the week during specific times, and they are there on the other end, so if you have questions and you don’t understand something, they’re talking right there with you...kind of like an instant messenger thing- but my biggest frustration with this program is if you had a question it would take weeks sometimes to get a response through email. It’s like they just never looked at it, so it was hard to get your questions answered...and then have to submit an assignment that you weren’t sure about because you just never knew when you were going to get a response.

Frank agreed with Cara and again, referred to the previously mentioned comments about the cohort acting as mentors. He reiterated that they would bounce questions and ideas of each other on the completion of assignments.

    Beth reflected that “having a mentor would have been great.” Adding that she felt it would have to be somebody that’s involved with the program, perhaps teaching, but that they are available. Further she added;

    I like what Cara said, (that they have dedicated time where they are available), even if it was like Friday...they, I think the instructors should
space it out a little bit. Like, if one has some conference time available on a Tuesday maybe have another one available on a Thursday, or whenever...skip every other day...but the mentor definitely has to know the program inside and out and be able to help you even with some of the other instructors things, the assignments and things like that.

While Andy agreed with what everyone had said, he noted another instructor that was very available as well. Specifically, after acknowledging that she could be difficult to get a hold of, “she always commuted to working it out- the issue- she’d get it resolved.”

Adding it was nice to know that he didn’t have to worry when there wasn’t communication, he broached another take on mentoring;

I think one thing that would make it nicer is if there was some kind of more of a video type thing. Email is nice, but email is, you know, you don’t have to respond on there, whereas if they get something up where we could do a webinar or we could all be in a cohort together and be part of something online for once a month or something like that by choice, but at least get together as a group online and talk it would be excellent.

Further support of the above conversations is illustrated below in Table 9 and Table 10, which will lend further understanding to the opinions above.

Table 9

*Participants’ Reported Frequency of Contact with a Faculty Mentor (n=12)*

<table>
<thead>
<tr>
<th>Participants’ Response</th>
<th>Never Met n (%)</th>
<th>Once a semester n (%)</th>
<th>2-3 Times a semester n (%)</th>
<th>Met more than three a semester n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3 (25.0)</td>
<td>4 (33.3)</td>
<td>2 (16.7)</td>
<td>3 (25.0)</td>
</tr>
</tbody>
</table>
Table 10

*Participants’ Reported Frequency of Classroom Observations by Mentor (n=12)*

<table>
<thead>
<tr>
<th>Participants’ Response</th>
<th>Never been observed by a Faculty Mentor n(%)</th>
<th>Observed once by a Faculty Mentor n(%)</th>
<th>Observed Twice by a Faculty Mentor n(%)</th>
<th>Observed Three or more times by a Faculty Mentor n(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4 (33.3)</td>
<td>0 (0.0)</td>
<td>7 (58.3)</td>
<td>1 (8.3)</td>
</tr>
</tbody>
</table>

As noted in Table 9, although some respondents (nearly 42%) had first asserted that they did not have a mentor, only 3 of 12 (or 25%) continue that assertion. Nine of the 12 respondents (75%) maintain they met with a faculty mentor at least once a semester (33.3%), 2-3 times a semester (16.7%), or having met more than three times a semester (25%). In Table 10, we see 4 of the 12 (33.3%) allege having never been observed by a faculty mentor, while 7 of the 12 (58.3%) contend that they were observed twice. One final respondent (8.3%) reports having been observed three or more times by a faculty mentor. Clearly the findings are inconsistent, requiring further discussion in Chapter V on the factors that might lead to the discrepancy in data.

Finally, in addition to the focus group discussion, the participants were asked to describe their experience with any mentoring provided as part of the ProMoTEd program, including both positive and negative perceptions of the mentoring process. Nine of the respondents (n=12, or 75%) chose to respond and I have presented those responses in Appendix H. Furthermore, aspects of those comments will also be used in the Chapter IV discussion.
Use of cohort model: Third construct of research question 2. The third construct of research question #2 addressed participant’s description of their experiences with alternative certification best practices as part of a cohort group. The survey elicited feedback in five questions regarding being part of a cohort. Respondents were asked to respond with their beliefs about the use of the cohort model in the ProMoTEd program. While the topic of cohorts is addressed further in research question 4 as a strength of the program, as well as in Chapter V, follow up in the focus groups was introduced. The survey findings are illustrated in Table 11, with additional feedback from the focus groups.

Table 11

*Respondents' Perceptions/Beliefs on Being a Part of a Cohort Group (n=12)*

<table>
<thead>
<tr>
<th>Perception / Response</th>
<th>Strongly Disagree n (%)</th>
<th>Somewhat Disagree n (%)</th>
<th>Disagree n (%)</th>
<th>Agree n (%)</th>
<th>Somewhat Agree n (%)</th>
<th>Disagree n (%)</th>
<th>Agree n (%)</th>
<th>Strongly Agree n (%)</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very positive experience</td>
<td>0 (0.0)</td>
<td>1 (8.3)</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
<td>4 (33.3)</td>
<td>7 (58.3)</td>
<td>5.33</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peers Supportive &amp; Empathetic</td>
<td>1 (8.3)</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
<td>1 (8.3)</td>
<td>3 (25.0)</td>
<td>7 (58.3)</td>
<td>5.17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Helped the program move at a good pace</td>
<td>0 (0.0)</td>
<td>1 (8.3)</td>
<td>1 (8.3)</td>
<td>2 (16.7)</td>
<td>2 (16.7)</td>
<td>6 (50.0)</td>
<td>4.97</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expect to continue communication with peers</td>
<td>1 (8.3)</td>
<td>0 (0.0)</td>
<td>2 (16.7)</td>
<td>2 (16.7)</td>
<td>3 (25.0)</td>
<td>4 (33.3)</td>
<td>4.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frequently sought assistance from peers</td>
<td>2 (16.7)</td>
<td>1 (8.3)</td>
<td>1 (8.3)</td>
<td>1 (8.3)</td>
<td>2 (16.7)</td>
<td>5 (41.7)</td>
<td>4.25</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
As noted in Table 11, survey questions addressed how participants described their experiences with alternative certification best practices with regard to cohort groups. When asked the extent to which the respondents agreed or disagreed with statements on the use of the cohort model, findings included that 91.6% (or 11 of the 12) somewhat or strongly agreed (33.3%, 58.3% respectively) that being part of a cohort group was a very positive experience for them. One participant (8.3%) somewhat disagreed with the statement.

Participants were asked how they felt their peers in the cohort were supportive and empathetic to their needs, since they too are both a practicing teacher and a student. Again, 11 of the 12, or 95% agreed, on some level, that their peers were supportive and empathetic. Three of the twelve respondents (25%) somewhat agreed with the statement, while one (8.3%) agreed. Moreover, 7 of the 12 (58.3%) strongly agreed that they felt their peers with supportive and empathetic.

When asked if the cohort model enabled them to move along with their program of study at a pace they were pleased, half (6 of 12, or 50%) strongly agreed that it had. Two of the 12 (16.7%) agreed, and two more (16.7%) somewhat agreed that the cohort helped them to move along at a pace that was pleasing. Conversely, two of the 12 (16.7%) disagreed on some level. One respondent (8.3%) disagreed, while the other (8.3%) strongly disagreed that the use of the cohort model helped them to move along.

Another survey item measured the extent to which the respondents agreed that they expected to continue their relationship with members of the cohort upon graduation. Nine of the 12 participants agreed, on some level, that they did expect to maintain such a relationship, with 33.3% (or 4 of 12) strongly agreeing and 2 of 12 (16.7%) agreeing.
Three of the 12 (or 25%) somewhat agreed. Three of the participants felt otherwise. Two of 12 disagreed and did not expect to continue their relationship with the members of the cohort upon graduation, and one (8.3%) strongly disagreed.

Lastly, a further question assessed how the participants reported seeking/utilizing assistance from his/her fellow cohort members. The survey question asked the extent to which they agreed or disagreed with the statement “I frequently sought assistance from my fellow cohort members at various times throughout the academic year.” While 41.7% (or 5 of 12) strongly agreed that they had, 16.7% (or 2 of 12) agreed, and another 2 (16.7%) somewhat agreed. Not as eager, 4 of the 12 (or 33%) disagreed on some level, with one (8.3%) disagreeing, one (8.3%) somewhat disagreeing, and two (16.7%) strongly disagreeing with the statement about seeking assistance from their peers.

For several variables, some disconnect is noted. If peers were so supportive and empathetic, why did 4 of 12 of them (or 33.3%) not frequently seek assistance from them? The range of possibilities will be further addressed in Chapter V, but felt much too delicate an issue to point out in the focus groups for a relatively insubstantial finding. Below, general feedback that was elicited about the cohort model in the focus groups is presented.

Although there were no strong themes about cohorts, the aforementioned discussion on mentoring in the focus group led me to probe how the use of the cohort model affected/impacted the participants experience with ProMoTEd. Abby began the discussion sharing;
I really feel like if we didn’t have a cohort, and actually met each other and were able to call each other or email each other for questions, I think a lot of us probably would not have been as successful as we have been.

While the entire group expressed agreement, Dan went on to add:

I think the way the university treated us as a cohort, being able to address us as a group; match our needs as a group, that worked out really well. They really took care of us, and really organized everything. Those little steps that you do as an individual, going through a college degree program we didn’t have to do those things, they did it for us.

Charlie laughed, continuing;

When we came here our first year, we had to go do the ropes course, and we were all a quite skeptical, but I think most of the comments that I heard later about the ropes course is that is actually did bring us together and helped us to know each other and understand each other and know what we could help each other and we could ask for help. I think the ropes course really was an element that was a good idea to being with a cohort, even though it seemed kind of silly at first and dangerous for some!

Further discussion on the cohort groups as a strength of the program will be reported in the data on research question #4, and reflected upon in Chapter V.

**Instruction in pedagogical and classroom management practices: Final construct of research question 2.** The fourth and final construct of research question 2 addressed how participants describe their experiences with best practices in alternative
certification as related to training in quality pedagogical and classroom management practices.

Regarding the participant's description of their experiences with alternative certification best practices regarding instruction in Pedagogy and Classroom Management, the survey elicited feedback in thirteen questions regarding the instruction they received. Respondents were asked to respond with their beliefs about instruction in Pedagogy and Classroom Management as well as how useful they feel the instruction has been in their day-to-day work as practicing teachers. Survey findings prompted further investigation in the focus groups and are reported. Initial survey findings are illustrated in Table 12, with additional feedback from the focus groups. The items are ranked from highest to lowest mean based upon their response regarding how much instruction they received on the topic, and then further ranked by the usefulness mean when the instruction means were a tie.

While the differences in pedagogical practices and classroom management are distinct in the literature, it is not as clear when we examine day-to-day functioning of the program. As noted in Table 12, six questions were asked regarding pedagogy and another seven on behaviors associated with the managing of a classroom. As noted in Chapter II, classroom management does not simply imply managing difficult students or issuing consequences for inappropriate behavior, but rather other tasks such as the appropriate use of class time, helping students develop both academically as well as developing as people, etc.
Table 12

Response Percentages and Means for Pedagogy and Classroom Management — Total Sample (n = 12)

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Instruction on:</th>
<th>Usefulness of:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not Much (%)</td>
<td>Somewhat (%)</td>
</tr>
<tr>
<td>Writing Lesson Plans</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>My Own View of Students' Education Better</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Understanding My Students</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Helping Students Develop Academically</td>
<td>0.0</td>
<td>16.7</td>
</tr>
<tr>
<td>Curriculum Design</td>
<td>0.0</td>
<td>8.3</td>
</tr>
<tr>
<td>Learning Styles</td>
<td>0.0</td>
<td>16.7</td>
</tr>
<tr>
<td>Various Teaching Methods</td>
<td>0.0</td>
<td>16.7</td>
</tr>
<tr>
<td>Use of In-Class Time</td>
<td>0.0</td>
<td>8.3</td>
</tr>
<tr>
<td>Helping Students Develop as People</td>
<td>0.0</td>
<td>8.3</td>
</tr>
<tr>
<td>Using Instructional Media</td>
<td>0.0</td>
<td>16.7</td>
</tr>
<tr>
<td>Structuring Daily Activities</td>
<td>0.0</td>
<td>8.3</td>
</tr>
<tr>
<td>Dealing w/ Disruptive Students</td>
<td>0.0</td>
<td>50.0</td>
</tr>
<tr>
<td>Consequences for Inappropriate Behavior</td>
<td>0.0</td>
<td>41.7</td>
</tr>
</tbody>
</table>

Note. Each dependent variable in the survey equates to two variables in the statistical data, one for level of instruction the respondent felt they received and one for usefulness in day to day operations as a practicing teacher. Mean is calculated on a 4.0 scale with 1.0 = not much/hardly useful and 4.0 = lots/extremely useful.
The topic with the highest mean with regard to instruction was on writing lesson plans, which for the purpose of this study is a pedagogical practice. When asked: 'how much have you learned about writing lesson plans' all (12 of 12) respondent felt they had received either 'sufficient' or 'lots' of instruction (41.7% and 58.3%, respectively). The usefulness of that instruction supported the notion that it was helpful, with 8 of 12 (or 66.7%) reporting it to be very useful and 4 of the 12 (33.3%) saying extremely useful.

When asked about instruction that has been received that helped the participants own view of student education, the group again reported receiving either 'sufficient' or 'lots' of information (50% each, or 6 of 12). How useful they felt that was in their day to day teaching varied. 41.7% (or 5 of 12) said it had been extremely useful, 50% (or 6) only felt it was 'very useful.' One respondent (8.3%) found it to only be 'somewhat useful.'

Line item 3 on Table 12 reports the topic with the third highest mean, another category of classroom management. When asked how much instruction they felt they received to facilitate a better understanding of their own students, 66.7% (or 8 of 12) felt it had been sufficient. The remaining 4 respondents (or 33.3%) reported having received 'lots.' Equal distribution (66.7%, 33.3%, respectively) was reported on how useful they felt it had become in their day-to-day practice (Very Useful, Extremely Useful).

The fourth item again examines a classroom management topic. Having been asked how much instruction they felt they received in helping students develop academically, half of the respondents (6 of 6) said 'Lots.' Four (33.3%) felt it had been 'sufficient,' while 2 of 12 (or 16.7%) felt it was only 'somewhat sufficient.' Similarly, when applying this same topic to their day-to-day teaching practice, half (6 of 6 or 50%)
said what they had learned about helping students develop academically had been extremely useful, while another 41.7% (or 5 of 12) felt it was very useful. One respondent (8.3%) found the instruction in helping students develop academically to be somewhat useful.

The findings in Table 12 for the fifth item continue on the topic of instruction in pedagogical practices. The item reporting the highest mean in pedagogy was in curriculum design. When asked about the amount of instruction they had received in curriculum design, 41.7% (or 5 of the 12) reported ‘lots,’ while 50% (or 6) reported it as having been ‘sufficient.’ One respondent felt the instruction in curriculum design had been somewhat sufficient. Although they had received the instruction, the group had experienced varying degrees of usefulness in their day-to-day teaching. 41.7% (or 5 of 12) found it somewhat useful, while half (or 50%) found it very useful, only 33.3% (or 4 of the 12) found it extremely useful. Conclusions that can be drawn from this will further be discussed in Chapter V.

The sixth item continued the focus on pedagogical practices. On the subject of learning styles, the participants were asked how much instruction they had received regarding this. With a mean of 3.25, five of the twelve respondents (41.6%) felt they had received ‘Lots’ of instruction on the various learning styles, and another 41.6% (5 of 12) reported receiving sufficient instruction on the topic. Two final respondents (16.7%) felt however that they had only received somewhat sufficient instruction. A lower mean (2.83) was recognized when asked how useful said instruction was to them in their day-to-day practice. Having found it extremely useful was only 4 of the 12 (or 33.3%) of the
respondents. Half (6 of 12) found it very useful, while another 2 of 12 (or 16.7%) reported it being somewhat useful.

The seventh item reported in Table 12 continues the focus on pedagogical practices and involves the use of various teaching methods. When asked about the instruction they had received on those various methods, a mean of 3.17 was distributed as follows: 33.3% (or 4 of 12) felt they had received ‘lots,’ while half (6) felt it had been ‘sufficient.’ The remaining 2 (of 12) respondents (16.7%) found it to be ‘somewhat sufficient.’ A higher mean of 3.25 was reported for how useful the instruction on various learning styles had been for the participants in their day-to-day teaching practice. Having found the instruction extremely useful were 41.7% (or 5 of 12) of the respondents. Another 5 (or 41.7%) agreed that it was very useful, while two participants (16.7%) found it only somewhat useful. Connections between instruction reportedly received and the helpfulness of it will be further discussed as well in Chapter V.

The use of instructional media is the eighth item on Table 12. Again, this instructional practice focuses on pedagogy. With an overall mean of 3.17, 33.3% (or 4 of 12) felt they had received ‘lots’ of instruction in this area. Half (or 6) of the respondents reported having received a sufficient amount of instruction, while another 2 of 12 (or 16.7%) found it to only be somewhat sufficient. Similarly, a mean of 3.16 was recognized when addressing the usefulness of the instruction on various instructional media methods. One quarter (3 of 12, or 25%) found the instruction to be extremely useful in their day-to-day practice, while 66.7% (8 of 12) found it very useful. One respondent (8.3%) felt it was somewhat useful in his/her day-to-day teaching.
The remaining items on Table 12 take the focus back to classroom management practices. When asked about how much instruction they felt they had received in structuring daily activities, there was a reported mean of 3.17. Twenty-five percent (or 3 of 12) felt they had received ‘lots,’ while 66.7% (or 8 of 12) reported it as being sufficient. One final respondent (of 12, or 8.3%) reported it as being ‘somewhat sufficient.’ A mean of 2.67 on usefulness of instruction on how to schedule daily activities in their classes was reported. While they all reported it as being useful on some level, 25% (or 3 of 12) found it extremely useful, 66.7% (or 8) found it very useful day-to-day, while 1 (8.3%) found the instruction they had received as somewhat useful.

The tenth item on Table 12 examines instruction received by the participants on the use of ‘in-class’ time. With a mean of 3.17, 25% (or 3) reported they felt they had received ‘lots’ of instruction, while 66.7 (or 8) reported it as being sufficient. One respondent (8.3%) felt they had only received a ‘somewhat sufficient’ amount of instruction in the use of in-class time. A higher mean (3.25) was reported on the usefulness of the instruction in the daily practice of these teachers. All of the respondents found it either ‘very’ or ‘extremely’ useful (75% and 25%, respectively). It can be assumed that they are divided in the amount of instruction they believe they received, they have all found it to be quite useful.

Item eleven on Table 12 continues to focus on classroom management techniques, addressing how the teachers manage the classroom to help the students develop as people. Chapter II addresses the ways in which they develop as people (i.e., soft skills, professionalism, maturity) versus the academic development noted in Item 4 on Table 12. Similarly to the previous two items, a mean of 3.17 was reported by the participants on
the amount of instruction they felt they had received on how to facilitate this development. While 25% (or 3) of the respondents felt the coursework provided ‘lots’ of instruction, 66.7% (or 8) found it to be only a ‘sufficient’ amount. Another (8.3% or 1 respondent) only found it to be ‘somewhat sufficient.’ Regarding the usefulness of whatever instruction they felt they had received, a higher mean (3.25) was reported. All of the respondents found it either ‘very’ or ‘extremely’ useful in their day-to-day teaching practice (75% [9] and 25% [3], respectively).

The final two items on Table 12 were interestingly grouped together in classroom management. Having been the only items to address classroom management techniques regarding disruptive/inappropriate behavior, the lowest means were reported in the amount of instruction the participants felt they received. Only slightly higher were the means on the usefulness of the instruction they reported they did receive. Those findings are reported below from the survey findings and warranted follow up in the focus groups which follows.

With a mean of 2.67, when asked the amount of instruction they report receiving specifically dealing with disruptive students, only 16.7% (or 2 of the 12) felt they had received ‘lots.’ Four of the twelve (33.3%) felt they received sufficient instruction and half (6) only found it to be somewhat sufficient instruction. Slightly higher with a mean of 2.83, the participants reported what instruction had been received had been useful to them in their daily practice. Three (of 12, or 25%) found it to be extremely useful, while 33.3% (or 4) found it very useful. The remaining 5 of 12 (or 41.7%) said the instruction they felt they had received had only been somewhat useful. The discussion on behavior issues in the classroom continued with the 13\textsuperscript{th} (final) item on Table 12.
Developing consequences for inappropriate behavior was the focus of the final query. With a reported mean of 2.67, only one (of 12, or 8.3%) felt they had received ‘lots’ of instruction on this. Half of the participants (6) felt they had received sufficient instruction on how to develop consequences for inappropriate behavior while only 41.7% (or 5) found it to be somewhat sufficient. Again, reporting a slightly higher mean (2.75) on the usefulness of whatever amount of instruction was reported. One (of 12, or 8.3%) found it to be extremely useful, while 58.3% (or 7) found what they had received very useful. Four of twelve (or 33.3%) said what they had received in instruction was only somewhat useful to them in their day-to-day teaching practice. Follow up on the fact that the two lowest means were reported in this category warranted follow up in the focus groups. The following is findings gathered in subsequent discussion.

While in the focus group, I noted to the participants that the results highlighted some strong opinions on perhaps a ‘perceived lack of instruction’ on dealing with disruptive students and developing consequences to inappropriate behavior. It was noted that while they did not claim there hadn’t been any, strong numbers tended toward only sufficient or somewhat sufficient instruction. Abby, shaking her head in agreement began the discussion stating:

I agree that there probably...in my opinion...there wasn’t enough on classroom management. However, as a teaching professional already, I feel like I already have good classroom management. If I was a person who was struggling in that area then I’d really feel like...that there should have been classes...but I don’t feel like I struggle in that area so it wasn’t an issue for me...but I can’t say that I really, looking back at all of our classes, feel that I got adequate training in that at all.
Dan continued, stating “I would ask the group if there was any instruction, because I don’t remember any.” Abby agreed, not able to recall any either. Dee interjected that she would say “yes, we had that classroom management workbook, unless not everybody had that class.” Charlie agreed with Dee and added:

We had it, but I had the instructor for that class previous with special needs…and when I took that special needs course, there was a lot to do with management along with the special needs, in that class, but it could have been a situation of different instructors. But I would add that I felt that through the system that we went through, we didn’t specifically ‘address’ the classroom management in the respect that we did a whole lot of things just on that but in the respect that when we looked at our lesson plans and how to keep them rolling smoothly and things of that nature, that all played into classroom management.

I reminded the group that in this instance I was referring to the disruptive/inappropriate behavior aspect of classroom management. Glenn then responded:

It’s making me wonder because I know to me that it wasn’t an issue because you know, you’ve been teaching a certain amount of years and if you haven’t got that down pat by now you’ve probably got some serious problems, you shouldn’t be teaching…I’m saying after about eight years if you don’t know how to manage a classroom you might want to look for a different career.

However, I reminded Glenn that not everyone there had been teaching that long, or they might not have training in appropriate techniques (versus self assumed techniques).

Glenn then added;
I see, but what I guess I am saying then maybe they should have a mandatory discussion forum for those teachers who are at three-five years and under and they can discuss all the things they know together instead of a college credit, just grab a cohort together when they’re here and say ‘you’ve got to meet at this for three hours and has this stuff out’, (which I think) would be a good way to handle it without costing anybody a lot of money.

Charlie added as a follow up to Glenn “there could be a spot for blogging/chat room, about classroom management, what would you do in this situation kind of thing…questions posed, they could have that.” I then asked the group:

Do you think it would be fair to say that as adults who have been working before they started teaching, as opposed to the typical twenty-two year old college graduate- that your life experience and your position in life kind of gives you that edge on handling discipline anyway?

To that, Abby, Ed and Dee and Charlie agreed. Continuing my inquiry I added;

Having raised children and/or just gotten to where you are…some of the research would say that’s a big reason why we need to really do a lot of alternative certification because you guys bring those strengths to the classroom that sometimes a traditional college graduate doesn’t have. Because they haven’t had the life experience yet, and you are non-traditional students. What is your response to that?

Charlie added an interesting point stating;

Traditional college grads have a disadvantage because they’re so close in age to the students (that they are teaching), whereas we look like mothers and fathers to
them which gives us an advantage, especially when it comes to discipline and that form of classroom management. They look at us and we’re more of an ‘adult,’ we’re not just older than them.

Ed agreed adding;

I also think that teachers that come right out of school continue that non-common sense approach to discipline seeing that they haven’t been out there in the field yet, doing what they are teaching like we are.

Frank wrapped up the discussion stating;

Absolutely, I mean, one of the things that we learned is that most of the kids we are teaching in our classes now were born in the early 1990’s. Things were pretty good back then, both parents working...these kids, good or bad, were probably handed a bunch of stuff throughout their life. Now let’s take a child who is born this year or last year and while parents will probably struggle for the next eight or nine years raising them, what’s that child going to be like when they reach high school? It’s a generational thing, an era and it’s tough.

Discussion focused back to the original question when Harry asked to respond;

I guess they gave us a lot of information, and everything as maybe to help us understand why kids might be doing what they were doing whether we were looking for what to do in these cases everybody is like a silver-bullet in those things....so I guess it’s just...it’s all specific to that incident (behavior) and everything. And, so many schools have their own behavioral programs and everything that you have to kind of follow that, so really I don’t know how well they’d be able to implement and be specific for every instance, that would be
pretty hard to do... so I guess just helping us understand why they're doing it and like I said give us some insight on it... helps us kind of relate a little bit better to them as to where we don't just like cop the attitude and everything escalates, so it was a help.

After consideration of the courses, Beth shared:

I think that the only part of classroom management that we actually got was in (names professor)’s class, so it was just when we met last year. Maybe what they could do differently is you learn about it, you read about the psych behavior problems and all of that through the whole year when you return for your second year, I think it would be nice instead of some of the things that we have been doing right now, that maybe if we actually had more on behavior classroom management while we were here.

Frank added,

As I’ve mentioned, most of us come out of the industry into education. We have a philosophy of what should be done to succeed in our industry, and we carry those skills inward into our classroom which form me made me a very rigid ‘this is, this is not’ kind of teacher... so I believe with the classroom management classes that we had last year we learned to what, smooth out our edges a little bit... and be maybe a little more flexible without still going over those lines. I’m not saying I didn’t have problems with classroom management, I think most of you will all understand that I had a very tough year, but I don’t think it’s because of the lack of skills that we acquire here, or the teaching philosophy that we came in with... I think it had to do more with the cuts in education, everybody putting a
dollar sign on a kids head and ‘how do we get the student in our building’ and
‘how do we keep the student in our building’ that maybe should not be there (at all)! We're afraid to let go of students, so the whole philosophy of what’s happening in education comes right down to the battlegrounds in our classroom to the point where, he really don’t have hand/eye dexterity, he isn’t a kinesthetic learner, he would probably fit better in another program, but I don’t want to lose any kids in my program so that kind of philosophy changes your classroom philosophy and management style... but it isn’t anything from the lack of knowledge that we’ve learned here.

Andy continued:

I think it’s difficult too... as they can teach a lot of different strategies in a lot of different ways to deal with behavior and classroom management, but beside the fact of just being able to teach you how to set up a classroom and prepare it, they’re never going to teach you every instance, only experience is going to dictate how you’re going to deal with stuff, I mean, you experience this and how you dealt with it, then think about it later, and (ask yourself) how I would have changed what I did, and it’s just that part of being a teacher.

Because the previous discussion on the survey begged the question if they were unsatisfied with the amount they received, the focus group discussion above helped to note that while there might have been areas that they would have appreciated more instruction, they feel confident in how they are handling things now. Specific recommendations and conclusions will be addressed in Chapter V.
Adult Learning Preferences (Research Question #3) Results

Research question number three examined what relationships exist between participants’ adult learning preferences and the extent to which they experience various aspects of their alternative certification program. While much of this information was reported out as an aspect of research question number one, which focused on adult learning theory, the specifics of the relationships for each participant are reported here, with summary statements. As previously illustrated in Table 2 of this chapter, group statistics by mean addressed the questions and were reported in our previous discussion, while now, each of the twelve participants will be reviewed individually with data from both the quantitative and qualitative inquiries.

Abby. As noted in Table 1, Abby is a white female nursing careers instructor. At 37 years old, Abby reported her prior career as having been in nursing for 15 years. She worked as a paraprofessional in nursing careers prior to her current position and holds an Associate Degree in the Science of Nursing. Abby reported that being offered her current position is what prompted her to seek certification and she appreciated the online and accelerated aspects of the ProMoTEd program.

When we asked her if she would still be pursuing teacher certification if she didn’t already have a teaching position, she said that ‘no, I would still be working in the nursing field.” The following is the analysis of the relationship to Abby’s adult learning preferences and how she feels she is experiencing the ProMoTEd program with examination of her survey responses. Figure 4 visually illustrates her responses.
"Abby" Responses for Adult Learning Theory

<table>
<thead>
<tr>
<th>Response</th>
<th>Extent True</th>
<th>ProMoTEd Supported</th>
</tr>
</thead>
<tbody>
<tr>
<td>Share Responsibility for Learning Objectives</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Take Active Role in My Own Learning</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Enjoy Discovering on My Own</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>I am Self Directed</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Enjoy Projects to Lectures</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Recognize Previous Learning Contributing</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Reservoir of Experience for Resource</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Often Re-Evaluate Assumptions</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Appreciate Multiple Diverse Views</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Learn Best by Applying Knowledge</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>More than Facts, Appreciated Explanations</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Most Interested in Things w/Immediate</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Learn Best w/Problem Centered Issues</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Promote Dialogue &amp; Openness</td>
<td>4</td>
<td>3</td>
</tr>
</tbody>
</table>

Figure 4. Responses on adult learning theory for Abby.

Note. Extent true scale; 1= usually not true, 2=somewhat not true, 3=somewhat true, 4=usually true. ProMoTEd supported this scale; 1= not supported, 2= somewhat supported, 3= supported, 4= strongly supported.

When asked about being self directed, Abby states that it is usually true of her. She reported that she feels the ProMoTEd program strongly supports that aspect of adult learning, the highest category in both responses. Another survey question supporting that self-directed subset of research question 1 queried the level to which they take an active role in planning monitoring and evaluating their own learning. Abby said that this was usually true of her, that she does take an active role and that she felt the ProMoTEd program strongly supported this practice.
Further, when asked about promoting dialogue and openness with her peers about teaching and learning, Abby disagreed, stating it was somewhat not true of her. Although she was not one to initiate dialogue, she felt the program supported her in this. The final question regarding the self-directed subset of research question 1 asked the participants to measure the extent it is true that as a student, they have a shared responsibility for meeting the learning objective in their courses. Abby felt this statement was somewhat true of her and that the program strongly supported this practice.

In the second subset of research question 1, the ability to draw on a rich reservoir of experience as a resource was measured. Abby agreed that it was usually true (the strongest response option) that she used her experience as a resource in her learning and that the ProMoTEd program design supported and acknowledged this reservoir of experience. As an adult learner, Abby also reported it to be usually true that the appreciated receiving multiple and diverse viewpoints as part of her learning. This practice too, she felt was strongly supported in her program.

In the third subset on adult learning in research question 1, the ability to apply new information as they assumed new roles was probed. Adult learning theory posits that adults learn best when in fact they are able to apply the new learning in the new role, instead of ambiguous application of possible future endeavors. Abby agreed that it is usually true (again, the strongest Likert response) that she is most interested in learning subjects that have immediate relevance to her job or personal life, a practice that she felt the ProMoTEd program strongly recognized and supported. To wit, she adds that it is usually true that she learns best when she is able to apply new knowledge to practical applications, which she felt was recognized and supported in the program.
At the time of the survey, Abby reported that it was only somewhat true that she often re-evaluates her assumptions about teaching and learning. While she did not actively engage in such a practice, she did feel that the ProMoTEd program supported this practice. Lastly, on the subject of doing projects versus lectures, Abby’s response differed from what the literature would posit. Abby said it is ‘usually not true’ that she enjoys projects more than lectures, but did feel that the program supported this.

The final subset on adult learning dealt with adult learners being able to problem solve and apply new knowledge in a timely fashion (as opposed to simply applying it to a new role). Abby reported that it is somewhat not true of her that she learns best when issues are problem centered. She did feel that this was supported in the program. While she did not report the notion that she learned best with issues that are problem centered, she did report it as being ‘usually true’ that she enjoys instruction that allows her to discover things for myself, with guidance and help provided when mistakes are made, a practice she also noted was supported by the ProMoTEd program.

More than just getting the facts, Abby reported that it is somewhat true of her that she appreciates explanations as to why things are being taught. Upon review of the focus group data received, there were several instances to draw from in measuring how, as an adult learner, Abby was experiencing the ProMoTEd program. One of the first comments came when she was asked how she was experiencing the program overall and she replied;

What I really like about the program is that it’s online so we still get to be with our families and it’s flexible. You can work on it when you have time because
being full-time employed and having young children it does take time, but I can
decide how to work it into my schedule.

This statement supported her earlier reporting that she is a self directed learner,
thus allowing the program design/format to be a positive experience for her. Further
comments that supported being a self directed learner were reflected in the focus group
discussion on the mentoring aspect of the program. Abby reported having not feeling
that she had a mentor, but that as an adult learner if she felt she needed assistance, she
would pursue that stating:

I don’t really felt I had a mentor, but I don’t think that has affected me negatively,
I’m pretty self-sufficient and if I felt like I had some questions, I would definitely
have contacted people and would have gotten a response.

Supporting the subset of being self directed, a response by Abby on the topic of enjoying
projects to lectures, Abby shared:

For my previous college classes I had lecture, so I was skeptical about taking an
online class and not having that…and it has proven, actually, to be an advantage
for me…not to have to sit through and be guided through everything. I feel like
we can guide ourselves as adult learners.

A final comment in the focus groups that supported the notion that adult learners
learn best when they can apply new information to new roles or in a timely fashion was
found in the discussion on the program design and sequencing of courses. The discussion
highlighted that the early childhood development course occurring before the adolescent
development course (which was theoretically sound), when several of her peers had noted
that they would have preferred the reverse order, needing something they could apply
right away, she disagreed and felt that she appreciated the background (or explanation) of
the current behavior and found herself still able to re-evaluate her assumptions and apply
it in her new role.

**Andy.** As a 33 year old white male automotive instructor at both the high school
and college level, Andy previously obtained an Associate Degree in Automotive Service.
Andy was prompted to make this change in his life (to pursue teacher certification) after
working with both high school and college aged students. He really enjoyed learning
more about his trade and, perhaps more importantly, sharing it with his students. He was
attracted to ProMoTEd because he felt it was a ‘quick way to get it done’ (teacher
certification).

At this time, Andy feels that he would still be pursuing teacher certification if he
did not already have a position teaching because he really enjoys the job. Figure 5
illustrates Andy’s further responses on the topic, will analysis to follow.

The survey data pointed out several aspects of how Andy is experiencing the
ProMoTEd program as an adult learner. Questions addressing the first subset of adult
learning found that Andy actually reports that it is ‘somewhat not true’ that he is self
directed. This being said, he does feel the ProMoTEd program supports this trait. While
he reports too, that it is somewhat not true that he tends to promote dialogue and
openness with his peers about teaching and learning, the practice is strongly supported in
the program. Conversely, while he reports disagreement with being self directed, he says
it is usually true that he does take an active role in planning, monitoring and evaluating
his own learning, something he feels’ supported to do in the ProMoTEd program.
"Andy" Responses for Adult Learning Theory

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Note. Extent true scale; 1= usually not true, 2=somewhat not true, 3=somewhat true, 4=usually true. ProMoTEd supported this scale; 1= not supported, 2= somewhat supported, 3= supported, 4= strongly supported.

He feels that it is somewhat true that as a student he has a shared responsibility for meeting the learning objectives in his courses and that this practice, too, is supported in the ProMoTEd program.

When addressing the second subset on the reservoir of experience he brings to the program, Andy does feel it is somewhat true of him that his experience serves as a resource in his learning. Versus somewhat true of experience actually serving as a resource, he says it is more usually true that he recognizes the value of that experience contributing to his learning. To this end, he reports it usually true that he appreciates...
receiving multiple/diverse viewpoints as a part of his learning, another trait he feels the ProMoTEd program strongly supports.

When measuring the application of new knowledge as he assumes new roles (the third subset of research question 1 on adult learning), Andy agrees that it is usually true that he learns best by applying new knowledge in practical applications and that he is most interested in learning subjects that have immediate relevance to his job or personal life. He feels the ProMoTEd program supports the learning of subjects with immediate relevance, while it strongly supports applying knowledge to practical application.

Unlike Abby, Andy agrees that it is usually true that he enjoy projects to lectures. This is a practice he felt the ProMoTEd program supported in him as an adult learner. To this end, Andy also reports that he finds it usually true that he re-evaluate assumptions about teaching and learning on a regular basis, another strongly supported practice of the ProMoTEd program.

The fourth and final subset on adult learning addressed the participants being able to problem solve and apply new knowledge in a timely fashion. In addition to the comments above on learning subjects with immediate relevance, Andy further indicated it was usually true that he tends to learn things best when it is problem centered. Reporting the ProMoTEd program strongly supports this, it manifests in his enjoyment of projects to lectures. This problem solving ability is also recognized in his self reported enjoyment of instruction that allow him to discover things for himself, with guidance only when needed. Appreciating explanations as to why things are being taught is usually true of Andy as opposed to just getting the facts, allowing him to problem solve.
Focus group data on the subsets of research question 1 on adult learning reports similar results as noted above. While Andy's discussion comments on the topic were somewhat limited, there were two instances where he informed the topic of adult learning and how he was experiencing the ProMoTEd program. Such an instance arose when discussing aspects of the first subset of research question 1, on being self directed. As reported above, Andy stated that he enjoyed projects to lectures which supported him as a self directed learner. Conversely, in discussion, he responded:

The experience itself of having to put a project together is stressful with teaching and working. It's more beneficial to have the information (from a lecture) that I can use, rather than me go out and acquire all the information to put in a project so that I can use it. It's difficult, it's time consuming... I mean, you have a lot of restraints on time... and in some respects by giving us the information I can use I can apply it and try it out, whereas if I put this big project together I'm spending all my time trying to put stuff together rather than implementing what I have learned and it is touch. I would much rather sit in a lecture or some kind of interactive learning thing than put together this big portfolio. Don't get me wrong, I like the fact that I did it and it's going to be useful in the future and there are certain circumstances where I really enjoyed doing it, but it's a huge stress and it kept me up at night at times.

Assumptions on this comment will be addressed in Chapter V regarding perhaps the specificity of the noted project above, as previous comments by Andy about the application of work were recognized on the topic of timeliness of instruction we he shared;
I was at (the same institution) for my Associate Degree in Automotive. It meant something, but I was learning a great deal of facts (knowledge). I think it is different now that I'm teaching that I'm coming in and learning strategies and techniques that I can apply. They are much more useful because I can take them...and use them. I think a lot of this was useful because we could take it and apply it right away, it wasn’t just like a grand idea...when you are a teacher you can do it. It is a grand idea, and I can use it tomorrow! I can make some changes to it, re-read the idea and fit it in to what I want so I think it is nicer being able to teach and learn stuff at the same time, although sometimes hard!

Beth. As illustrated in Figure 6, Beth reported all aspects of the adult learning survey questions as being ‘somewhat true’ of her and ‘supported’ by the ProMoTEd program, with the exception of the topics of the enjoyment of projects to lectures and being most interested in learning subjects that have immediate relevance to her job or personal life. In both instances, enjoying projects to lectures and enjoying learning things with immediate relevance, she reported the stronger option of them being usually true of her and strongly supported in the ProMoTEd program.

Her reported congruence that as a student in the ProMoTEd program, her experience can be favorably viewed through the use of the lens of adult learning theory as well as how she reports the ProMoTEd program as supporting those subsets.

Upon further discussion in the focus groups, when reporting ways she was experiencing the ProMoTEd program, Beth noted collaboration with other instructors but more specifically, the opportunity to “get different ideas and be able to apply them right away.” This comment is in clear support of the adult learning assertion that adults
appreciate applying new learning as they assume new roles, particularly in a timely fashion.

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Figure 6. Responses on adult learning theory for Beth.

Note. Extent true scale; 1= usually not true, 2=somewhat not true, 3=somewhat true, 4=usually true. ProMoTED supported this scale; 1= not supported, 2= somewhat supported, 3= supported, 4= strongly supported.

Upon further discussion in the focus groups, when reporting ways she was experiencing the ProMoTED program, Beth noted collaboration with other instructors but more specifically, the opportunity to “get different ideas and be able to apply them right away.” This comment is in clear support of the adult learning assertion that adults appreciate applying new learning as they assume new roles, particularly in a timely fashion.
Another focus group discussion that lent itself to the topic of adult learning theory which drew Beth’s response was the topic of projects to lectures. As noted in Chapter II, this aspect of preference for adults (projects to lectures) supports the notion of being self directed. While Beth reported it somewhat true that she is self directed, something she reported the ProMoTEd program supported, discussion highlighted her further thoughts on the topic. While it was regarding a specific project her peers had noted in the discussion, on the topic Beth added:

I like projects myself...I mean, if the person giving the lecture is interesting, then you can learn a lot from the lecture. I just think maybe (regarding her peers note of a specific example) it’s the projects that we’ve done are a little bit too much in-depth...I mean, if maybe they were cut in half you can get just as much information out of them...where they were based more on rigor, which I think is great, but I think all of us in our program are teaching. I’d of liked to see it been able to be applied with a little more relevance...and I think that is what we are all talking about, (the specific project) was more of a scientific research thing, a little over the top...which you have to keep in mind was online.

Beth’s consistency in her self-reported experience as an adult learner and how she was experiencing the ProMoTEd program in light of it, provided a great deal of insight into the topic.

**Brett.** As noted in Table 1, Brett is a 41 year old white culinary instructor. Having previously worked both as a Pastry Chef and teaching technician, he reports not having any previous education experience before this position. While he holds an Associate Degree in Applied Science, he has found a passion for teaching that drove him
to seek this change in his life. Despite stating his passion for teaching, he states he would not be pursuing teacher certification if not already teaching and needing such certification to keep his job.

Survey data on Brett’s experience as an adult learner with the ProMoTEd program revealed interesting results, and are represented in Figure 7.

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Figure 7. Responses on adult learning theory for Brett.

Note. Extent true scale; 1= usually not true, 2=somewhat not true, 3=somewhat true, 4=usually true. ProMoTEd supported this scale; 1= not supported, 2= somewhat supported, 3= supported, 4= strongly supported.

Less consistent in overall agreement with the survey questions, Brett (like Andy) reported that it was somewhat not true that he is a self directed learner. Regardless, he did feel that the ProMoTEd program supported him in this aspect. Although he self reports not being self directed, he reported that it was somewhat true that he takes a
active role in planning, monitoring and evaluating his own learning (something he also feels the ProMoTEd program supports), and that moreover, it is usually true that as a student, he has a shared responsibility for meeting the learning objectives in his courses.

Reporting feeling strongly supported in assuming this shared responsibility, he also felt strongly supported in his actions that promoted dialogues and openness with his peers about teaching and learning, something he found usually true of himself. In addition to this area of being usually true and strongly supported, another area he felt equally supported was in questions involving subset 2 of research question 1, the role of previous experience.

Brett also feels it is usually true that he recognizes the value of his previous experiences as contributing to his further learning, something he again finds the ProMoTEd program strongly supports. Conversely however, he only finds it somewhat true that he has that rich reservoir of experience to serve as a resource in his learning. Feeling supported in the use of whatever reservoir by the ProMoTEd program, he also recognizes the program as supporting his ‘somewhat true’ appreciation of receiving multiple/diverse viewpoints as part of his learning.

When measuring being able to apply new learning as he assumes new roles, Brett reports it is somewhat true that this leads to him often re-evaluating his assumptions about teaching and learning (another supported aspect of the ProMoTEd program). While he reports it usually true (the strongest response option) that he is most interested in learning subjects that have immediate relevance to his job or personal life, he says it is somewhat not true that he learns best by applying new knowledge to practical
applications. He felt it was somewhat not true that the ProMoTEd program supported him this aspect of him as an adult learner.

Brett also reports it as somewhat true that he enjoys projects to lectures, indicating that he is self directed in the lens of adult learning theory. The disconnect between him enjoying projects to lectures, but not learning best in this application of new knowledge will be discussed further in Chapter V. He did feel supported in his preference of projects to lectures.

When queried on the fourth and final subset of research question 1, with regard to being able to problem solve and apply new knowledge in a timely manner, Brett’s responses support his aforementioned preference of projects to lecture. Reporting it as somewhat true that he enjoys instruction that allows him to discover things for himself, with guidance and help provided when mistakes are made, he felt the program supported this. Appreciating explanations as to why things are being taught as opposed to just getting the facts was something he reported as usually true of him and strongly supported by the ProMoTEd program.

Preferring to learn things best when they are problem centered is also somewhat true of Brett, and he says supported by the program. This finding too is consistent with other findings in the survey data.

In review of the focus group records, Brett did offer comments supporting his role as an adult learner in his experience of the ProMoTEd program. When discussing how the participants, overall, were experiencing the ProMoTEd program, Brett was quick to point out:
As a CTE instructor, when I go to different meetings in my district, it always seems to focus on general K-12 education that onto things related to CTE...so being here and dealing with fellow instructors that know what CTE is, we all know what we are going through, we are in the same boat, and it really helps us to learn and be able to apply to our own situations, versus simply talking with a middle school math teacher or something.

While Brett was more vocal in other focus group discussions on other research questions, on the topic of how they as adult learners are experiencing the program, the only additional thing he shared was with regard to his level of enjoyment with projects versus lectures. Citing the same specific project as noted previously in this chapter, Brett shared frustration with the facilitation of projects, albeit an area that he prefers. His comment did however support being able to problem solve and get assistance only when needed when he stated “I like projects, but [with] these projects it was very hard to understand the information, so when we (called on) our peers in the cohort, we were all equally confused as to what we were supposed to be doing.”

**Cara.** Cara, a 48 year old white health science instructor, worked as a Registered Nurse for 23 years before teaching secondary education. While she reported working as a health educator in the home care field, this found her primarily working with adults. Holding an Associate Degree in Nursing, when asked what prompted her to seek this change in her life, she shares “I felt that I had accomplished my goals in my nursing position. I was offered a teaching position that better suited my family and long term goals and I decided to start a new career.” Survey data reports that although she was interested in seeking a new career, she would not still be pursuing teaching certification if
she did not already have a teaching position, adding “I had already begun taking classes for my BSN (Bachelor of Science, Nursing) prior to accepting this job...I probably would have pursued Nurse Practitioner instead.”

She was attracted to the ProMoTEd program because it was shorter than the other programs she had researched and the majority of it was online. The online aspect contributes to the assumption in adult learning that adult learners are self directed.

Survey responses for Cara are reported in Figure 8.

When asked on the survey the extent to which the statement ‘overall I tend to be a self directed learner’ is true of her, Cara reports that it is usually true. She also reported that it is usually true that she takes an active role in planning, monitoring and evaluating her own learning, both of which she feels are aspects of adult learning the ProMoTEd program strongly supports.

Agreeing that it is usually true of her that she has a shared responsibility for meeting the learning objectives in my courses, another aspect the program strongly supports, it is only somewhat true that she tends to promote dialogue and openness with her peers about teaching and learning. The program supports her in this aspect of her program as well.

When addressing the second subset of adult learning theory regarding the reservoir of experience possessed, Cara reports it being usually true, that as an adult learner she has a rich reservoir of experience that serves as a resource for her learning and equally usually true she recognizes the value of the experience as contributing to her further learning.
Figure 8. Responses on adult learning theory for Cara.

Note. Extent true scale; 1= usually not true, 2=somewhat not true, 3=somewhat true, 4=usually true. ProMoTEd supported this scale; 1= not supported, 2= somewhat supported, 3= supported, 4= strongly supported.

Cara also reports that the ProMoTEd program strongly supports these aspects of adult learning. Cara reports it is usually true that she appreciates receiving multiple/diverse viewpoints as part of her learning. Being able to apply those viewpoints, along with new information as she assumed this new role as the way she learns best, is reported as usually true. To wit, usually true is her interest in learning subjects that have immediate relevance to her job or personal life. ProMoTEd, in her report, strongly supports these preferences and application of new knowledge as she acquired a new role.
Stating it is somewhat true that she often re-evaluates her assumptions about teaching and learning, she is supported in the program in that. She too only somewhat agrees that it is true she enjoys projects to lectures, a measure of how she applies her knowledge as well as self-directedness. While she states she learns best when issues are problem centered (something strongly supported in ProMoTEd), she also finds it usually true that she appreciates explanations as to why things are being taught as opposed to just getting the facts. This all being said, Cara only finds it somewhat true that she enjoys instruction that allows her to discover things for herself, with the guidance and help provided when mistakes are made. She reports the ProMoTEd program as supporting this as well.

Focus group records show Cara’s support of the discussions on aspects of the program and adult learning theory. Her first comments coming when the group discussed how they were experiencing the ProMoTEd program overall. Cara shared:

I think the program brought a lot of relevance to what I do. Not having been from the traditional teacher background, you’re at school and they say implement this (reading strategy), or do this, do that with special needs kids, but you never really knew why. I think I learned a lot about why we implement the strategies that we do and why they’re helpful and what the outcome should be as a result of that. Continuing again when asked for examples of things they have learned that they were able to immediately apply to their classroom, Cara added;

I don’t think there’s a single class I took in this ProMoTEd program that wasn’t immediately relevant in some way from reading strategies to dealing with different types of behaviors, learning about accommodations for the kids with
some disabilities, revamping lesson plans, or implementing new strategies, it’s been really fun actually.

The last of Cara’s qualitative comments arose on the topic of the enjoyment of projects versus lectures, where in the survey, Cara reported it was somewhat true that she enjoyed them and felt supported by the program. When asked if any discrepancy about enjoying project was because of ‘more homework’ or simply that it was learning style based, Cara responded:

I agree on both accounts, they are more work, but my preferred learning style is lecture versus hands on. I do actually get more out of a lecture than a project and I’ve found the projects to be very, very time intensive, and when you're trying to balance a full-time job and family full time and this program full time, it’s difficult to find that much time to put into a project…so I think that is probably why, not that I don’t like the outcome when it is done, but the experience itself of having to put it all together is stressful.

Conclusions on the disconnect between quantitatively reported preference to projects as opposed to qualitative discussion will be addressed in Chapter V.

Charlie. After working 20 years as an Electrician, Charlie, a 42 year old white Electrical Instructor felt the natural progression of his life experience is what led him to seek this change in his life. Having only previous worked as an adjunct instructor at a community college, he is uncertain if he would be pursuing teacher certification if he did not already have a secondary teaching position. This being said he states ‘probably yes though, as I enjoy it.’ Holding only a high school diploma and Journeyman’s License,
Charlie had no previous college experience. The time accelerated aspect drew him to the ProMoTEd program. His survey responses are illustrated in Figure 9.

"Charlie" Responses for Adult Learning Theory

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Figure 9. Responses on adult learning theory for Charlie.

Extent true scale; 1= usually not true, 2=somewhat not true, 3=somewhat true, 4=usually true. ProMoTEd supported this scale; 1= not supported, 2= somewhat supported, 3= supported, 4= strongly supported.

When asked the extent to which he agrees that he is 'overall, a self-directed learner,' Charlie states this is usually true of him. Also usually true are his agreement that he takes an active role in planning, monitoring and evaluating his own learning and shares a responsibility for meeting the learning objectives in his courses. He feels the ProMoTEd program strongly supports all three variables. Additionally supported
strongly by the ProMoTEd program is his 'usually true' promotion of dialogue and openness with his peers about teaching and learning.

In the second subset of adult learning theory, his reservoir of experience was addressed. Survey data continued to report that Charlie finds it usually true that not only does he have a rich reservoir of experience serving as a resource for his learning, he recognizes the value of his previous experiences as contributing to his further learning. Because the ProMoTEd program strongly supports both his possession of and use of this experience, Charlie reports strong agreement with his adult learning preferences and sense of support in the ProMoTEd program. Additionally, Charlie finds it usually true that he appreciates receiving multiple/diverse viewpoints as a part of his learning as an adult, something too he feels the program strongly supports.

While he finds it usually true that he re-evaluates his assumptions about teaching and learning, he is less inclined to learn best when applying new knowledge to practical applications. Similarly, it is only somewhat true that he is interested in learning subjects that have immediate relevance to his job or personal life, both topics of which he feels are equally supported by the ProMoTEd program. Consistent with these reports, Charlie only finds is somewhat true that he enjoys projects to lectures, but that ProMoTEd strongly supports this.

In all three instances, (1) learning best when the issue is problem centered, (2) enjoying instruction that allow him to discover things for himself with guidance only when needed, and (3) more than getting just the facts, appreciating explanations as to why things are being done, are usually true of Charlie. Feeling that items 1 and 2 are
strongly supported, Charlie reports the ProMoTEd program as supporting his appreciate of explanations versus facts.

Focus group records show Charlie’s active participation in the various discussions, with three specific responses dealing with aspects of adult learning theory. When asked to provide a specific example of a time he was able to take something from class and apply them in his own classroom in a timely, if not immediate fashion, Charlie offered the following response:

When we did reading in your content area, learning to read in your contact area. We had assignments to do where you read an excerpt from literature and then I was able to take an excerpt from a book about Thomas Edison or Ben Franklin and use that to introduce lessons on electricity and on light fixtures and those things…it really helped pique interest in my students and at the same time it was demonstrating for them reading and demonstrating to them the importance of reading and literature. It also gave me an avenue to incorporate my English standards so that I can accomplish providing credit (high school English credit) through my CTE program.

While the next discussion focused on research question two and the concept of mentoring, a comment made by Charlie further informed his experience with the ProMoTEd program as an adult learner. When a peer made the statement “I think having a mentor becomes trivial when you have a cohort,” Charlie shared:

I agree, we bounced questions off each other. It made a huge difference for us and the fact that we are adult learners, we like to discover those things…we like to find those things out rather than have someone tell it to us…we want to
discover it, just because of the way we are, becoming educators at our age versus a traditional teacher.

Further comments not only highlighted the enjoyment of instruction that lets him discover things for himself, getting assistance only when needed, but the concept that more than facts, they appreciate explanations for why things are being taught. Charlie added:

As with our assignments, we are not just interested in getting it done, we want to know the purpose...what’s the reason we are doing it. Maybe I am wrong, but that is how I feel, we really don’t want someone to just tell us how to do things, we want them to tell us what it means and how we can work through it.

Dan. As an Engineering Technology Instructor, Dan reports having had no prior teaching experience before his current position. As a 44 year old white male, he did however serve for 18 years with a consulting firm, that eventually landed him a vice presidency.

Industry downsizing is what led Dan to make this change in his life. While the accelerated time frame attracted him to ProMoTEd, he states that he would not be pursuing teacher certification if not for his position. Having previously receiving an Associate Degree in Applied Science, he cites the lack of positions teaching Engineering being readily available as why he would not be pursuing this path if not for his position. Figure 10 visually represents Dan’s responses on the topic of his experience with ProMoTEd as an adult learner.
Figure 10. Responses on adult learning theory for Dan.

Note. Extent true scale; 1 = usually not true, 2 = somewhat not true, 3 = somewhat true, 4 = usually true. ProMoTEd supported this scale; 1 = not supported, 2 = somewhat supported, 3 = supported, 4 = strongly supported.

On the topic of self-directedness, the first subset of research question 1 on adult learning finds Dan in agreement with statements in the survey. Agreeing that it is usually true in all instances of (a) being a self directed learner, (b) having a shared responsibility for meeting the learning objectives in his courses, (c) taking an active role in planning, monitoring and evaluating his own learning and (d) promoting dialogue and openness with his peers about teaching and learning, he reports that in his experience as an adult learner, the ProMoTEd program strongly supports these aspects.
While he reports it as being usually true that he has a rich reservoir of experience that serves as a resource for his learning, he did not note this as being strongly supported by the ProMoTEd program, but rather ‘supported.’ Equally ‘usually true’ and ‘strongly supported’ is his recognition of the value his previous experiences have on contributing to his further learning, as well as his appreciation of multiple/diverse viewpoints as part of that learning.

In the third subset on adult learning, being able to apply new knowledge as they assume new roles, as an adult learner, Dan agrees it is usually true of him that he learns best by applying new knowledge to practical applications, something he states the program supports. Additionally usually true of himself, he is most interested in learning subjects that have immediate relevance to his job or personal life, another area supported by ProMoTEd.

Tending to learn things best when the issue is problem centered is something else Dan reports as usually true of himself. This leads to him stating his usually true enjoyment of projects as opposed to lectures, both of which he reports are supported (versus strongly supported) by the program. In the same vein, Dan enjoys instruction that allows him to discover things for himself, with guidance and help provided when mistakes are made, and more than just getting the facts, appreciates explanations as to why things are being taught. These too, he finds supported by the ProMoTEd program in his experience as an adult learner.

In addition to the above findings, Dan also indicated it was usually true that he finds himself often re-evaluating his assumptions and beliefs about teaching and learning. This was supported by comments offered in the focus groups. When asked overall how
the participants were experiencing the program, Dan shares: "It is adding a lot of insight
to teaching in general, things I hadn't thought about before I started the program and it is
nice to see from an experienced background how to approach some of the problems I run
into."

Further discussion inquired as to times when they were able to take something
they learned in class and immediately apply it in their own classrooms as practicing
teachers. Dan reports:

Structuring lesson plans. I started just looking at the different structured lesson
plans and how they were set up. I went back to my class and was able to
reorganize the lesson plans. Some of them were left for me, some I had
developed, but I put a lot more purpose in the lesson plans because of the
structure that got us here.

While his involvement in several other topics for discussion was limited, he did
contribute to the ongoing concept that as adult learners they enjoy projects over lectures,
which in the survey, Dan agreed with. In agreement that projects have, however, become
'simply more homework,' Dan expressed the following thoughts:

I feel that because of our experience, if you give me a concept or theory, I can
apply it as opposed to kids I teach, I want to give them a project so they can apply
these concepts and theories. If I've got a concept or a theory that you're telling
me how this applies, I can do that. To do a whole project is kind of reinforcing
that learning. We really don't need that at this point, the way our students do.
We need the theory, we need to how-to and why this works...and then we can run
with it, I don't want to do a whole project.
Discussion and conclusions regarding the disconnect in self reported preference to projects and the later expressed difference are addressed in Chapter V.

**Dee.** Dee, a 51 year old white female is employed as long term substitute teacher in Culinary Arts. Having previously worked as a Para-professional in the Culinary classroom, she cites only ‘internal training of staff in industry’ as prior experience in teaching. While in industry, she worked as a Hospitality & Banquet Director for 26 years. Although she had just some college, when asked what made her seek this change in her life, to become a certified teacher, she replied:

> I truly thought I was stepping out of a more than full time job, less stress, time, etc., kind of a ‘semi-retirement’; however once I started working in the classroom, I was encouraged to get my teaching degree. I found out that I loved teaching in the classroom and I am excited to begin my new career.

When asked what attracted her to the ProMoTEd program she offers that although she had worked with (another university), they did not have a program to fit her needs. The ProMoTEd program at this university offered this and the opportunity to put work experience together with the MOCAC (Michigan Occupational Competency Assessment Center test), thus making the process much faster.

She states that if it were not for her current position, she would not still be seeking teacher certification adding:

> I think most of the people that teach CTE have gained a wealth of experience in their field, and did not plan to teach. I do not believe I would have gone back to school while working full time in my previous job, it would have been too demanding and almost impossible.
As illustrated in Figure 11, in the instance of questions regarding being self-directed as an adult learner, Dee found the statements all to be usually true of herself. Not only was it usually true that she was self-directed, agreeing that she had a shared responsibility for meeting the learning objectives in her courses, she also agreed it was usually true that she takes an active role in monitoring and evaluating her own learning, all of which she reports are strongly supported in her role as an adult learner within the ProMoTEd program. She also found it usually true that she tends to promote dialogue and openness with her peers about teaching and learning.

Note. Extent true scale; 1 = usually not true, 2 = somewhat not true, 3 = somewhat true, 4 = usually true. ProMoTEd supported this scale; 1 = not supported, 2 = somewhat supported, 3 = supported, 4 = strongly supported.
Equally as supported, Dee reports it as being usually true that she has a rich reservoir of experience that serves as a resource for her learning and appreciates the value of that experience as a contributing factor. The ProMoTEd program, reports Dee, ‘strongly supports’ her in this role. Also noted as part of her past experience, she states it is usually true that she appreciates receiving multiple/diverse viewpoints as part of her learning.

Continuing to agree that it is usually true of herself, are the questions reported by Dee on the subject of applying new learning as she assumed her new role. Learning best by applying new knowledge to practical applications and more than facts, appreciating more explanations as to why things are being taught, are also strongly supported by the ProMoTEd program. While it is usually true that Dee re-evaluates her assumptions about teaching and learning, she also usually enjoys projects to lectures. Not only does she further report the ProMoTEd program as strongly supporting her application of new learning, she also notes the strong support of her preferred interest in learning subjects that have immediate relevance to her job or personal life.

On the topic of being able to problem solve and apply new knowledge in a timely fashion, Dee consistently reports her findings in this final subset on adult learning. Finding it usually true that she tends to learn things best when the issue is problem centered, the program strongly supports her as an adult learner with this preference. Additionally, the program strongly supports her enjoyment of instruction that allows her to discover things for herself; with guidance and help provided when mistakes are made, as usually true of this, too more than just getting the facts, she appreciates explanations as to why things are being taught, which are also strongly supported by the program.
While Dee was involved in various focus group discussions, her participation in discussion on adult learning theory and how she was experiencing her program as an adult learner is what she shared with us:

I think that it's been really cool to be able to take these classes while you're teaching in a classroom, I think it's much easier to apply what we're learning and it makes more sense. An example of something I was able to immediately apply was one of the most interesting things I feel I have learned, about how the brain is still developing for my students at this age. I am teaching eleventh and twelfth graders and I didn’t realize that their brains are not totally developed yet. And so...it helped me to understand and maybe to think of new ways to approach topics and it just give you more patience...at least for me.

These responses by Dee highlighted the third and fourth subsets of research question 1, on applying new learning as they assume new roles, and more specifically doing so in a timely manner.

Ed. Having previously earned an Associate Degree, Ed cited no prior experience in education or teaching prior to joining the ProMoTEd program. As a 44 year old automotive instructor, Ed reports having worked in the automotive field for 21 years.

Medical reasons (i.e., back/other physical issues) are what led Ed to consider this change in his life. When asked what attracted him to ProMoTEd he responded that it is a quick and easy way to get it done. If not for his current teaching position, Ed also claims that he would not continue pursuing teacher certification. Figure 12 illustrates his responses that are reported below.
Figure 12. Responses on adult learning theory for Ed.

*Note.* Extent true scale; 1 = usually not true, 2 = somewhat not true, 3 = somewhat true, 4 = usually true. ProMOted supported this scale; 1 = not supported, 2 = somewhat supported, 3 = supported, 4 = strongly supported.

Survey data finds that Ed reports it being usually true that he is a self directed learner, although he states it is somewhat not true that ProMOted supports him in that. Further, he says it is somewhat true that he takes an active role in planning, monitoring and evaluating his own learning, something the program supports.

He continues to agree it is somewhat true that he feels as a student he has a shared responsibility for meeting the learning objectives in his courses, and that he feels the program is strongly supportive of this. Less confidently, he agrees it is somewhat not
true that he promotes dialogue and openness with his peers about teaching and learning, and that the program only somewhat supported this.

Ed agrees it is somewhat true that he has a rich reservoir of experience that services as a resource for his learning, but that the program only somewhat supported this. Consistently he only finds it somewhat true that he recognizes the value of his past experience as contributing to his further learning, something he reports the program supports. Lastly on the topic of his reservoir of experience, Ed states it is somewhat true that based on this experience, he appreciates receiving multiple/diverse viewpoints as part of his learning and he feels the program supports this as well.

Moving on to the third subset of research question one on adult learning theory and how participants feel the program supports them in this role, Ed agrees it is usually true that he is most interested in learning subjects that have immediate relevance to his job or life. He further reports he feels this is only somewhat supported by the ProMoTEd program. Ed does report enjoying projects more than to lectures in the application of his knowledge as he assumes new roles, something he feels the program strongly supports.

Ed reports it is somewhat true that he learns best by applying new knowledge to practical situations and that he often finds himself re-evaluating his assumptions about teaching and learning, both of which he reports ProMoTEd supports.

Ed also reports that consistent with an assumption of adult learning, it is usually true that he tends to learn things best when the issue is problem centered and that the program supports this. He also states it is usually true he enjoys instruction that allows him to discover things for himself, with guidance and help provided when mistakes are made (agreeing that the program supports this). Finally, finding it somewhat true of
himself and supported by the program, is the fact that more than just getting the facts, he appreciates explanations as to why things are being taught.

Upon review of the focus group transcripts, Ed, in many occasions agrees with statement made by his peers. In two instances those comments and further agreement were on the topic of his experience with the ProMoTEd program as an adult learner. The first of his comments were regarding a time he was able to immediately apply something he had learned to his own classroom to which he said:

I knew everybody learned in different ways and at different levels, with different abilities and stuff...but it actually helped me more pinpoint what type of learner each kid was so I could help them better...especially a kid that I had that was mild, well; I guess it is called CI (cognitively impaired). It helped me greatly with him and to deal with him without getting too frustrated at times. It has really helped me with every kid in my class, even the kids that didn’t need a whole lot of help. I would then change my tone so that it wouldn’t make them feel ‘stupid.’ Like...if I had talked slower to this one kids, I don’t want to talk as slow to the kid who knows a lot, so he wouldn’t feel like ‘why are you talking to me this way?’ Further it helped me with my own children as well.

A second response from Ed was on the topic about projects and lectures, and his noted disconnect in the level of reporting on that topic. Ed agreed with the statement made by his peer Dan supporting:

I feel that because of our experience, if you give me a concept or theory, I can apply it as opposed to kids I teach, I want to give them a project so they can apply these concepts and theories. If I’ve got a concept or a theory that you’re telling
me how this applies, I can do that. To do a whole project is kind of reinforcing that learning. We really don’t need that at this point, the way our students do. We need the theory, we need to how-to and why this works…and then we can run with it, I don’t want to do a whole project.

This theme, as mentioned, will be discussed more in Chapter V when drawing conclusions and making recommendations.

Frank. Frank, a 49 year old white male welding instructor reports his previous experience in teaching as his work as a Para-professional in welding after working as a certified aero-space welder.

While he did not hold a degree prior to entering the ProMoTEd program, he had completed the core courses needed for his certification that were not directly related to the art of teaching. Frank noted that the need to become state certified prompted him to seek this change in his life. While he would not still be seeking teacher certification if it were not for his current job due to the direction in which he feels CTE is going in Michigan, he was attracted to ProMoTEd for the opportunity to complete his education classes in a timely manner.

Survey data reported by Frank on the topic is illustrated in Figure 13, and found it is somewhat true that he is a self directed learner and he feels supported by the program in that aspect. Similarly, he reports it somewhat true that he takes an active role in planning, monitoring and evaluating his own learning, again which he feels the ProMoTEd program supports.
"Frank" Responses for Adult Learning Theory

<table>
<thead>
<tr>
<th>Response Description</th>
<th>Extent True Scale</th>
<th>PromOTEd Supported</th>
</tr>
</thead>
<tbody>
<tr>
<td>Share Responsibility for Learning Objectives</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Take Active Role in My Own Learning</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Enjoy Discovering on My Own</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>I am Self Directed</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Enjoy Projects to Lectures</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Recognize Previous Learning Contributing</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Reservoir of Experience for Resource</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Often Re-Evaluate Assumptions</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Appreciate Multiple Diverse Views</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Learn Best by Applying Knowledge</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>More than Facts, Appreciated Explanations</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Most Interested in Things with Immediate Benefit</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Learn Best with Problem Centered Issues</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Promote Dialogue &amp; Openness</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

Figure 13. Response on adult learning theory for Frank.

Note. Extent true scale; 1 = usually not true, 2 = somewhat not true, 3 = somewhat true, 4 = usually true. PromOTEd supported this scale; 1 = not supported, 2 = somewhat supported, 3 = supported, 4 = strongly supported.

Reporting it as usually true that he feels a shared responsibility for meeting the learning objectives in his courses, he feels the program strongly supports this. As a self directed learner, he also agrees that it is somewhat true that he tends to promote dialogue and openness with his peers about teaching and learning, again something supported in the program.

Survey data reported by Frank on the topic is illustrated in Figure 13, and found it is somewhat true that he is a self directed learner and he feels supported by the program in that aspect. Similarly, he reports it somewhat true that he takes an active role in
planning, monitoring and evaluating his own learning, again which he feels the ProMoTEd program supports. Reporting it as usually true that he feels a shared responsibility for meeting the learning objectives in his courses, he feels the program strongly supports this. As a self directed learner, he also agrees that it is somewhat true that he tends to promote dialogue and openness with his peers about teaching and learning, again something supported in the program.

When probed on the topic of the rich experience from which he can draw, Frank states that it is usually true that he has a rich reservoir of experience that serves as a resource for his learning, feeling supported as an adult learner in that area. He also finds the program to strongly support the value of his previous experience as a contributing factor to his further learning. Also strongly supported by the program is his appreciation for receiving multiple/diverse viewpoints as part of his learning, something he reports is usually true of himself.

Switching the focus to the ability to apply new learning as he assumed his new role, Frank says it is usually true of him to learn best by applying new knowledge to practical application. Recognizing this, and his interest in learning subjects that have immediate relevance to his job and personal life, the ProMoTEd program strongly supports both instances.

Franks adds it is usually true that he often re-evaluates his assumptions about teaching and learning, he also usually finds it true that he prefers projects to lectures, aspects of adult learning theory the program also strongly supports. Reporting he only somewhat finds it true that he tends to learn things best when the issue is problem centered, the program supports this aspect of his process. He does however; report it is
usually true that he enjoys instruction which allows him to discover things for himself, with guidance and help provided when mistakes are made. He usually appreciates explanations as to why things are being taught as opposed to lectures, another strongly supported aspect of the program.

Frank was an active participant in several discussions that took place in the focus groups, however there was just one area he offered comments regarding his experience with the program as an adult learner. These comments, supporting the assumption that adult learners are able to apply new learning as they assume new roles, was validated when Frank offered;

I have been enjoying my experience in the ProMoTEd program I think because of the different strategies that we learned-maybe we implement or maybe we don’t, but we’re aware of them now. Most of us have all taught and we’ve probably been annually authorized and come out of the workforce automatically and then get into teaching and we had our way of doing things…and I think this program enlightens us a little bit about different ways, different students; special needs, just maybe a different teaching approach when we go back to our classroom has been very helpful.

Glenn. Glenn, a 50 year old white construction trades teacher, worked as a carpenter for 25+ years after earning a Bachelor of Business Administration from another Michigan university. Citing some teaching he did at his church over the course of 20 years as the only experience in education prior to his current positions, Glenn states a phone call is what prompted him to seek this change in his life. “They called me and asked if I wanted the job and I said yes!”
Glenn appreciated the accelerated aspect of the ProMoTEd program and the courtesy with which he felt the staff treated him. When asked if he would still be pursuing teacher certification if not for his current position, Glenn says no, stating it would have been too expensive and time consuming. Figure 14 illustrates findings reported below.

Figure 14. Response on adult learning theory for Glenn.

Note. Extent true scale; 1= usually not true, 2=somewhat not true, 3=somewhat true, 4=usually true. ProMoTEd supported this scale; 1= not supported, 2= somewhat supported, 3= supported, 4= strongly supported.

Glenn reports it is somewhat true that he is a self directed learner, something he feels the program supports. He agrees it is usually true that he has a shared responsibility for meeting the learning objectives in his courses (which ProMoTEd strongly supports),
and it is usually true that he takes an active role in planning, monitoring and evaluating his own learning (again, which is strongly supported). He says it is only somewhat true of him that he tends to promote dialogue and openness with his peers about teaching and learning and that the program supports that aspect of him as an adult learner.

Noting it is somewhat true that he has a rich reservoir of experience which serves as a resource for his learning, which he feels is supported by the program. Usually true is his response about being able to recognize the value of his previous experience as it contributes to his continued learning, something he feels ProMoTEd strongly supports and recognizes.

Appreciating multiple/diverse viewpoints as part of his learning, he feels again that the program recognizes and supports him in this as an adult learner. When asked questions about applying new learning as he assumed his new role, he states it is usually true that he is most interested in learning subjects that have immediate relevance to his job or personal life, an aspect strongly supported by the program. While it is somewhat true that he learns best by applying new knowledge to practical applications, he conversely reports it somewhat not true that he actually enjoys projects as opposed to lectures. Finally, on the topic of applying information as he assumed his new role, Glenn states that it is usually true that it often leads him to re-evaluate his assumptions about teaching and learning, another aspect of adult learners the ProMoTEd program strongly supports.

The last subset of survey questions on adult learning focused on his being able to problem solve and apply new knowledge in a timely fashion. While it is usually true that Glenn appreciates explanations as to why things are being done as opposed to merely
facts (something he says the program supports), he only finds it somewhat true that he enjoys instruction which allows him to discover things for himself, with guidance and help provided only when mistakes are made. Also, only somewhat true of Glenn is the statement ‘I tend to learn things best when the issue is problem centered,’ which he feels supported in as an adult learner in the ProMoTEd program.

Review of the focus group records on the subjects addressed in adult learning revealed that Glenn, while active in several other topic discussions, only offered input on the topic of projects versus lectures. After hearing Dan speak to the point that as an adult learner, when given a topic or theory, he can apply it, he doesn’t really need laborious projects to prove that point as his students might, Glenn agreed with Dan adding:

We have experiences that we draw on in our minds to visualize ‘this might have worked when I had this situation’...we do back to those things, the experiences we already have. We don’t have to experience it again...we’ve already experienced it and now we know where our mistakes may have been or things we could have done better where a younger person (traditional college student) coming out of high school into college, they have to do the project, period, just to get the experience. And I agree with Dan that we don’t have to do that...we can do the lecture, we can go through it, we can look at the worksheets, things of that nature, and move forward.

The interesting parallel between the preference on hands on/project based learning and the strong opposition to actually having to do it are discovered more in Chapter V.

Harry. Harry, a 51 year old white Power Technology Instructor, worked in positions from mechanic to engineer for 30+ years prior to his current position.
Reporting company training as his only experience with teaching prior to his position, Harry holds an Associate Degree.

When asked what prompted him to make this change in his life Harry stated, “My children are now out of college and I wanted to contribute to students as many of my past teachers had done for me.” Because teacher certification was not necessary in his past positions, Harry states that if not for his current position, he would not still be pursuing teacher certification. The fact that the program helps get the job (certification) done ‘fast’ is what attracted Harry to ProMoTEd. To aid the below analysis, Figure 15 offers visual representation of Harry’s responses.

Harry reports it is somewhat true that he is a self directed learner, something he feels the program strongly supports. Similarly, he says it is somewhat true that he tends to promote dialogue and openness with his peers about teaching and learning, another aspect strongly supported. He does however state it is usually true that he takes an active role in planning, monitoring and evaluating his own learning and also finds it usually true that he has a shared responsibility for meeting the learning objectives in his courses, both strongly supported aspects adult learners in the ProMoTEd program.

Harry also notes it is usually true that he has a rich reservoir of experience that serves as a resource for his learning, and that he both he and program strongly recognize and support the value of that experience as contributing to his learning. Harry also feels his experience makes it usually true that he has an appreciation for receiving multiple/diverse viewpoints as part of his learning, something he feels the program supports.
Figure 15. Responses on adult learning theory for Harry.

Extent true scale; 1= usually not true, 2= somewhat not true, 3= somewhat true, 4= usually true. ProMoTED supported this scale; 1= not supported, 2= somewhat supported, 3= supported, 4= strongly supported.

With regard to applying new learning as he assumed his new role, Harry says it is usually true that he learns best by applying new knowledge to practical application (strongly supported by the program), and it is true that he is most interested in learning subjects that have immediate relevance to his job or personal life (again, strongly supported). Somewhat true is his appreciation of projects versus lectures, which the program supports and that he often re-evaluates his assumptions about teaching and learning, another item he feels the program supports.
The final subset of survey data gathered from Harry involved the ability to problem solve and apply new knowledge in a timely fashion. Harry agrees it is usually true that he tends to learn things best when the issue is problem centered, and the program supports that preference. Also usually true for him is the statement that ‘more than just getting the facts, I appreciate explanations as to why things are being taught.’ Supportive of that, Harry reports that the program also supports adult learners who enjoy instruction that allows them to discover things for themselves, with guidance and assistance provided when mistakes are made.

A final review of the qualitative data from the focus groups on the topic of adult learners as they experience the ProMoTEd program finds additional information from Harry. When asked how the ProMoTEd program supports him as an adult learner and if there are any examples where he was able to take information he learned and apply it in his classroom Harry shared:

Coming from industry and everything, there was so many things and I guess I got into this program early and I’ve only been teaching two years now. So when it came to anything to do with curriculum writing, writing tests, lesson plans...I didn’t know any of that, so I was able to apply just about everything I was getting here right away, so it has been very helpful.

Harry also commented (as did his peers) on the topic of projects versus lectures. Agreeing with comments he had heard from Andy that reinforced the need for information he can use in his class right away rather than spend all of his time assembling a big project, Harry added:
Maybe projects for younger (traditional) college students, allowing them to explore their interests and everything is good…but here, we have all (as adult learners) we’ve all been doing it out in the field so when someone is giving us new information, we are processing it and applying it right away anyway, giving it more relevance that way.

As Chapter IV continues now, we look at the findings from the participants as to what they would offer as both a strength and weakness of the program. Additional discussion on research question three can be found in Chapter V.

ProMoTEd Program Strength and Weaknesses (Research Question #4) Findings

The fourth research question measured how participants overall describe the strengths and weaknesses of their experiences within this CTE alternative certification program. This question was addressed in the qualitative format and was the focus of discussion in the focus group sessions.

After discussion on the themes that arose from the survey data were completed, participants were asked to recall their experience with the ProMoTEd program from the time they first encountered it until the present time as they were finishing. Each of the 12 participants responded at least one time in each instance.

On the topic of strengths of the overall program, 17 responses were offered, representing each of the participants at least once. Figure 16 illustrates a summary of the findings which are further explained and supported with qualitative remarks in this section.
As noted in Figure 2, one participant (6%) felt the design of the program with regard to time frame was a strength. Three of 17 comments (or 17%) focused on the flexibility the faculty offered within the courses, noting the prescribed format of the order in which the courses were taken. Comments included; “I do think there was flexibility for working adults who are working fulltime and have other commitments in our lives,” and “It was flexible enough where we could work it into our lives.”

One respondent (6% of comments) noted the structured and prescribed plan guided with advising, offering the comment “The main strength or the one big strength I felt was that they have a plan for you and that there’s an advisor that helps you get through this and for me, that was big.”
Four of the seventeen comments (or 24%) felt the cohort model was the strength of the program, adding: “I guess the biggest thing for me is that they kept us in a kind of a support group with the cohort, there was a lot of benefit to being together and all of that,” and “Keeping us together in a cohort, you get to know everyone and it is a good support system.” An additional comment agreed stating; “I’ll agree, having a cohort and having people that you’re in it with in the thick of it and having somebody to kind of hash it out with.”

Of the seventeen comments shared, four others (24%) addressed the faculty within the program. Comments offered in support of these responses included; “Faculty here, it’s good faculty because they were realists, most of them (with exceptions) didn’t burden us with busywork, which at our age is nonsense,” and “they understand who we are and that we are teaching so we are out in the field in one way or another and they can related to that, and understood during our busy times, adjusted timelines and said ‘take the time to get me quality work.’” Another comment commended the faculty then they met with the group in an adjacent city the semester after the initial summer meeting. “They heard our concerns and some made adjustments to help us out, we were heard.”

Another comment of the 17 (or 6%) addressed the integration of subject matter into the coursework. The participant supported her response adding: “the integration of the subject matter of the different subjects that we were learning was helpful, rather than segmenting by term or semester.”

The online component and design of the program was addressed as a strength by 3 of the 17 respondents (or 17%). Clarifying, one participant added; “well the number one strength in my mind is that it’s mainly online, if it hadn’t been online, I don’t … I
probably wouldn’t even be in this program.” Another comment included “the design of it being online made it convenient, having the opportunity to (once your general education courses were done) to get the required teaching credits of it being online,” to which another respondent agreed.

As reported in Figure 17, the respondents were then invited to comment on what they felt were weaknesses of the program. Again, seventeen responses were offered, representing each participant at least once.

Figure 17. Overall weaknesses of the program.

As noted, an overwhelming number of responses (8 of 17, or 46%) focused on the difficulty contacting the instructors within the online component and the terrible response time of the communications. Sample comments supporting the above Figure include;
“clarification and communication within the classes. The overall program (ProMoTEd) communicated well, but the communication in the classroom could have been better.” Another example stated “there was only one instructor that communicated, if you emailed him/her there was a response within a day or two.” Two respondents agreed that communication was the main weakness after the aforementioned example was offered. “For me, it was the difficulty that I had just trying to communicate with some of the instructors when we weren’t face to face,” another offered. “The lack of instructors in a timely manner is difficult, particularly if we are awaiting response as to how to move forward with an assignment,” shared another. A frustrated participant further elaborated on the topic;

Communication is the biggest weakness of the program…I’m not going to lie when I say I hate online classes because of this…which is ironic because here I am taking all online classes. It’s a necessary evil because it’s flexible…I mean, you can fit your work into a hectic and crazy schedule, but at the same time, I mean any question you have for your instructor, you take the time to sit down and type it all out, hit send…and then wait for a response, which can be a day, or a week…and I do understand they are busy, but there needs to be a better way to communicate other than email, because too, that is impersonal and sometimes it’s hard to convey what you exactly mean.

One respondent (of 17 offered, or 6%) felt there was no clear cut agreement on what was to be expected in the program on the outset, that it had taken months for him to finally learn exactly what he needed to take.
Another response (1 of 17 or 6%) focused on the lack of clear explanation of what to expect the first summer session and subsequent semesters. The comment supporting this stated;

For example, all of us...most of us felt that when we came that first time that we would be here, work our tail ends off for two weeks and then be done until the next semester...that wasn’t the case. There was a lot expected of us for the remaining of the summer and because it wasn’t communicated via an advanced syllabus, etc., we had no idea. Personally, I had a vacation planned for after I was done, thinking I would be done, and I spent my entire vacation with my family having to work on assignments...what’s expected after your two week residency should be made clear in advance.

Two of the 17 comments (or 12%) focused on the coursework and load within the semesters. A comment supporting this included “the load made time management really difficult...there are times of the year when our individual schools have so much required of us and the course load was so heavy with modules being different, all different workloads, so something has to give and it gets really rough.” The second comment agreed, adding “I have to agree, the first fall semester was probably the worst nightmare I have ever had...without trying to get out of work, it seems like they can try to time the work load more appropriately for new teachers.”

One respondent of the seventeen (or 6%) felt being on campus for two weeks each summer was not necessary. While he/she agreed that while perhaps it might have been the first summer, the second summer was;
Frustrating because much of what we have done could have been done online. We all have families and are given free time to work on it here, but we would rather shorted the time and work longer days...nobody sleeps well here..our time could just be better spent.

Another respondent (1 of 17 comments or 6%) said they felt the whole online component was a weakness because of the lack of communication or clear instruction provided within the courses. A comment to support this described “perhaps having all the faculty that teach online have to learn how to write lesson plans that they are not going to be personally explaining it...or provide a specific outline they have to follow.”

Another comment (1 of 17, or 6%) highlighted the difficulty getting all the information needed to even get started that first summer. The courses pick up expecting that all the students had needed passwords, etc., and that they were familiar with the online instructional delivery system. The comment offered further stated;

I think whoever’s in charge of getting these students on board, getting the students aligned, talking to the students and explaining to them what they need, what they need to do, how they need to do it...maybe it goes back to a mentor thing, but before we step on campus...before the 2 weeks start there is information we need to have that can make it all go more smoothly.

The last category reported in Figure 3 addresses the lack of alternative formats for required reading. While it was stated and understood that the university does not write the textbooks, the heavy reading requirement suggested that textbook choices entertain those available also on tape or in a downloadable version, particularly for student who endure lengthy commutes on top of their full-time work schedule (which is expected of
enrollees in this program). A comment in support of that stated: “textbooks on CD or MP3 would be valuable...I understand you don’t get the illustrations or examples, but it would be easier to go back and look those up for clarification...particularly with us having different learning styles too.” Another participant agreed sharing “I agree with that because I spend over 10 hours a week just in the car and if I could get my textbooks in an audio form it would help when we are balancing six modules and the amount of reading expected of us.”

Several recommendations could be made based upon the findings above and will later be discussed in Chapter V. Overall, the participants were thoughtful and consistent in the discussions throughout the focus groups.
CHAPTER V
DISCUSSION AND RECOMMENDATIONS

Alternative certification plays a central role in the production of new teachers in many states, yet little is known about the characteristics of an effective program (Humphrey & Wechsler, 2008). My descriptive mixed methods study utilized a researcher-designed survey, completed in the summer of 2010, and subsequent focus group sessions by participants in a state approved alternative certification program in the state of Michigan. The program was aimed specifically at the alternative certification of practicing CTE teachers who had been annually or otherwise authorized to teach under special conditions.

Using Malcolm Knowles' theory of Andragogy and the subsequent assumptions of adult learning theory as a lens, my study examined characteristics of various aspects of the program as experienced by its participants. The process of becoming an alternatively certified CTE teacher was examined regarding program structure and design, as well as the relationship between the participant’s experience with the program as an adult learner. Strengths and weaknesses of the program were also examined.

Of the total population of 14 students enrolled in the alternative certification program, 12 chose to participate. All 12 participants answered both the survey instrument and participated in the focus group sessions. A variety of CTE content areas were represented in the study, with all 12 participants having acquired numerous years of experience in their fields. With an average age of 44 years, these adult learners ranged from 33 to 51 years of age.
Each of the 12 participants is a practicing teacher in addition to their full time enrollment in the ProMoTED program. Very few reported having any experience in education, let alone formal education. Of the few that had some experience in educating people, it was in the context of corporate training or volunteer work.

Research Question 1

The study’s first research question used the lens of adult learning theory to measure how participants in the CTE alternative certification program, who were also practicing teachers at the same time, describe their experiences as related to; (a) being self directed; (b) being able to draw on their reservoir of experiences; (c) being able to apply new learning as they assume new roles; and (d) are able to problem solve and apply new knowledge in a timely fashion.

More than three quarters of the participants agreed that it was true that they were self directed as adult learners (first construct of research question 1). This category also included statements supporting that they felt a shared responsibility for the learning objectives in their courses and enjoy discovering things on their own. Equally as significant (average mean=3.56 on a 4.0 scale) was feeling supported, or strongly supported, by the program as a self-directed adult learners.

This finding was consistent with the research supporting the first assumption underlying adult learning theory that refers to learners’ independent self-concept and ability to direct their own learning (Knowles, 1989). According to Lieb (1991), since adults tend to be autonomous and self-directed, they need to be free to direct themselves. To enable this to occur, programs should become actively involved the participants in the learning process and be facilitators for this process (Cercone, 2008).
A counterintuitive finding in this subset of questions was that many of these self-directed adult learners did not prefer projects to lectures. As stated by Lieb (1991), adults need to be free to direct themselves, and thus would prefer projects versus lecture. In my study, however, survey data reported that only 50% (or 6 of 12) agreed that this was usually true of them. The other half of the group, or 50% said it was either only somewhat true of them or not true, and the topic was explored in the focus groups. When asked about this, respondents overwhelmingly agreed that while they do typically enjoy projects to lectures, and the hands-on learning it facilitates, the online format of courses within this alternative certification program, the lack of clear instructions and communications with some faculty, and the size of some projects within this program, are what they did not prefer.

While recommendations will occur later in this chapter, this finding does support previous research by Cercone (2008) who also recognized that not all adults are actually as self-directed as they may report. Because of this, she noted that some adult students need some type of structure to assist them in becoming more self-directed. The Cercone study also reports that any attempts to do this may cause some students to express negative opinions, especially for students who would rather remain passive than to become actively involved in the learning process. This may have been the case in my study, with further evidence being provided when my results on overall coursework and amount of work expected are discussed.

The second assumption of adult learning theory is that an adult has a large reservoir of experience to serve as a resource in his/her learning, and this concept was measured in the second subset (b) of research question 1. This assumption is based on
the need to attach instruction to relevant contexts (Knowles, 1989). All of the participants in my study (average mean=3.64 on a 4.0 scale) recognized a reservoir of experience that serves as a rich resource for their learning. In addition to possessing such experience, they all reported seeing it as having value in their current role as adult learners. Because of this, participants also reported they often re-evaluated previous assumptions they held in the application of new knowledge. Similarly, they all (mean = 3.56) felt largely supported by the program in the use of their experience as adult learners.

Because adult learners can build on previous knowledge and experience by relating new information to past events and experiences, Knowles (1989) states “it is important for the instructor to recognize the value of the experience” (p. 48). Faculty in this program seem to be doing just that, with all the participants feeling supported or strongly supported in this area by the program.

Fidishun (2000) found that adults want to use what they know and want to be acknowledged for having that knowledge. Recognizing too that learning is a continuous process based on experience, Kolb (1984) notes this process as the transformation of experience. The literature supports this finding from my study, whereby accumulated life experiences and knowledge are related to work or to family responsibilities as well as to past education (Lieb, 1991).

A third assumption of adult learning theory was addressed in subset (c) of my research question number 1. This assumption, that adult learners are able to apply new learning as they assume new roles, was measured through the use of three survey questions. Reporting an average mean of 3.30, the participants overall reported this as
being true of them as adult learners. The extent to which this was true in my study varied however, with some (33.3% or 4 of 12) stating it was only somewhat true of them and another 8.3% or 1 person reporting it was actually somewhat not true that they learn best by applying new knowledge in their role as a practicing teacher. Merriam and Caffarella (1999), described this as “the readiness of an adult to learn as being closely related to the developmental tasks of his or her social role” (p. 272). Merriam (2001) later explained that learning needs should be closely related to changing social roles, something that Lieb (1991) had previously addressed in suggesting that goals and objectives should be outlined early in a course and that adults are relevancy oriented.

Of those reporting this aspect of adult learning theory as being only somewhat true or usually not true, it could be argued they did not have a clear understanding of how their role as an adult learner in a new situation was being measured, a limitation of the study due to survey wording. All of the students (average mean= 3.56) felt that the program did support or strongly support the application of new knowledge being used in their new roles.

Expanding on the comments of Lieb (1991) that adults are relevancy-oriented, the fourth and final subset of research question 1 addressed how the participants in this CTE alternative certification program described their experience as adult learners in being able to problem solve and apply new knowledge in a timely fashion. Survey data on this topic was addressed with questions querying the extent to which it was true that participants were ‘most interested in things with immediate relevance,’ ‘learned best with problem centered issues,’ and to do so ‘promoted dialogue and openness’ with their peers.
Although an average mean of 3.50 revealed that the participants found this either somewhat or usually true of themselves, in the area of promoting dialogue and openness with peers, 3 of the 12 respondents (or 25%) said this was somewhat not true. Because being able to problem solve and apply new knowledge requires such a large amount of self reflection, Fidishun (2000) suggested this might not directly involve the opinion of their peers, but that they are equally able to learn best with immediate application.

Knowles in 1989 asserted that adult learners need to know why they should learn something and how it will benefit them. My study supports that adult learners are practical and need to focus on what is important to them, but that the openness and dialogue with peers may not be required to facilitate the application of new knowledge. Because self reflection is important to adult learners (Lieb, 1991), it could be assumed that these adult learners believe that their own individual situation is more challenging and/or complex than that of their peers, requiring them to assimilate new knowledge differently.

The literature supports all findings from my study related to adult learning theory, but current learning theory does not address all aspects of how adults learn (Cercone, 2008). It can be argued that everyone is different and is shaped by his/her history and many variables shape how individuals develop as adults.

Present day concerns with Knowles’ theory of Andragogy and adult learning might argue that his theory does not consider the context of learning. This seminal work was developed far before the use of computer-based instruction and online learning, which is presented later in this chapter as a limitation of my study. Andragogy is not
perfect, but its attempt to explain the difference between adult and childhood learning has been useful to understand the results from my study.

Research Question 2

The second research question in my study asked how program participants described their experiences as they relate to known best practices in alternative certification including; (a) program structure (e.g., overall coursework, advising); (b) availability of a university mentor; (c) being within a cohort model; and (d) training in quality pedagogical and classroom management practices. Significant findings were recognized in all areas.

Program Structure

Advising. For this first subset of research question 2, we recall that as noted in Chapter II, one of the first contact points for incoming college students are advisors (at either a college, program or department level). This is also true for those seeking alternative teacher certification. Benjamin and Hollings (1995) noted that advising is viewed as a component of student satisfaction in college. Further, we are reminded that quality advising for alternative certification candidates is particularly important as a basis for determining the direction of their education in becoming teachers (Brouwer, 2007). While my review of the literature noted various models in place through collegiate academics, my study focused on the perceived preferences between prescriptive and developmental advising.

Bland (2003) noted that developmental advising involves ongoing communication between student and advisor, something the literature posits adults learners are more
inclined to prefer. The literature supported this more bi-directional, holistic approach to
the advising of adults as opposed to the prescriptive approach which has long been the
model in academe (Bland, 2003; Knox, 2006; Schlosser & Gelso et al., 2001).

This was somewhat of an interesting dynamic for my study. Half the respondents
reported having discussions with advisors regarding options that matched their goals (an
aspect of developmental advising). Conversely, 58.3% (or 7 of 12) stated what they
appreciated most about their advising experience with the program was that it was ‘direct
and to the point.” Findings suggest that the frequency of meetings with an advisor was
dependent on individual needs, with all reporting having met at least once, 33.3% met
twice, and 41.7% met three or more times with an advisor. Although the literature
suggests that adult learners like to be nurtured and recognized for the experiences they
bring to the table (Knox et al., 2006), most in my study seemed to be seeking a
prescriptive list that told them exactly what to take, with little tolerance for the ambiguity
that past experience and education brought to the table. This was recognized in my
qualitative findings via comments stating; “they couldn’t agree on the number of credit
hours for me due to several misunderstandings” as well as frustration with the lack of
exception that seemed to be made in the statement; “thirty plus years of experience, eight
U.S. patents in carburetor design, several classes on statistics and accounting and they
want me to take basic math, science and English classes? I disagree!” There appears to
be a dichotomy of sorts occurring, but overall the advising experience went well and/or
improved for all of them as their time in the program progressed.

**Overall coursework.** In a 2008 study on characteristics of effective alternative
certification programs that was later endorsed by the NAAC (National Association for
Alternative Certification), participants in the study reported that coursework mattered to their development as teachers, though ratings did vary by program. As a result, my study asked participants to describe their experience in the program as related to known best practices in alternative certification regarding coursework.

My results reveal that the only variable not in a positive direction was a question assessing whether coursework in the program was both timely and manageable (mean=2.58). Overall this indicates that the respondents in general do not feel that their course assignments were given to them in a timely fashion, and/or are not manageable. Based on further discussion in the focus groups, this appeared to be a 'time-sensitivity' issue. Describing the assignments as too time consuming and unwieldy due to project scope and poor direction, the low score seems to be representative of time pressures under which the participants operate. It is posited that because they are managing a full time job, perhaps a family, class time and studying, the added pressure and stress of projects just made things difficult for them. This aligns with my finding for research question 1 regarding the dichotomy between adults typically enjoying projects to lectures, but this not being the case in this program. Further discussion on the complexities of this dynamic are offered later for research question 4, as well as with a discussion of program strengths and weaknesses.

Another survey topic of interest measured in this subset of research question 2 is the topic of course content. When asked about their beliefs regarding courses taken, specifically asking the extent they would agree that 'course content has been helpful in my development as a CTE teacher,' half (or 6 of 12) disagreed or only somewhat agreed. This suggests they find the program's course content less than helpful overall in their
current position as a practicing CTE teacher. Such a significant percentage reporting possible negative issues with course content is important. The respondents did however, all agree (to some extent) that the program was helpful in highlighting areas they needed to develop, and that being able to integrate their subject matter knowledge was needed throughout the program.

Some aspects of overall coursework were found positive. All respondents agreed, to some extent (with the greatest number ‘somewhat agreeing’), that the sequencing of courses was helpful and supportive of their needs as a practicing teacher. There was only one example where they felt that the sequencing of childhood/adolescent development courses could well have been switched to arm them with the knowledge they felt they immediately needed in dealing with teenagers, because CTE is offered as secondary education programming. Theoretically the sequencing followed developmental practicality with childhood development first, however in this case, some participants had more of a ‘need to know now’ perspective on the subject. Further discussion on this topic in the focus groups suggested that there were times when the ‘heaviest loads’ fell at the busiest times of their own academic year as practicing teachers.

Addressing the use of 1 credit ‘modules’ (versus 3 credit classes) in the intentional design of the program, participants were asked two questions on the subject; (1) if the 1 credit modules were effectively scheduled, and (2) if learning in 1 credit modules was helpful for their success. In reference to the effectiveness of scheduling, 10 of the 12 agreed, that on some level they had been scheduled effectively. Responses from those that either disagreed or somewhat disagreed with the effectiveness of scheduling were noted in the survey option eliciting additional comments, and included
“not all 1 credit modules were weighted similarly.” The fact that “some modules had the work of three full modules in them” further informed the perceived effectiveness in scheduling. It is presumed that from an administrative standpoint, the exact content of courses is not known when the curriculum is designed and often left to the discretion of the faculty member. Suggestions for future consideration are provided later in this chapter.

Upon examining learning in 1 credit modules as being helpful for success, my study found 25% (or 3 of 12) disagree and only 50% agree completely with this statement. This could signal a pedagogical issue, assuming that while the 1 credit modules are offered to fit schedules better, they are not weighted/designed the same. As a best practice, the NAAC (National Association for Alternative Certification) supports research stating “effective programs provide carefully constructed and timely coursework tailored to candidate’s backgrounds and school contexts” (Hough, Humphrey, & Wechsler, 2008, p. 2). I would assert was attempted in this program on a conceptual level but the execution of actual content was possibly overlooked or lacked evaluation on a yearly basis.

**Availability of a University Mentor.** As also noted by the NAAC’s 2008 support of research on effective characteristics in alternative certification, mentoring is found to be important. They note this as embedded within the teacher preparation program, but do not put the onus specifically on the university or student teaching site. Further report findings conclude that the role of a college/university mentor is under-researched in terms of teacher education as a whole. As previously noted, the role of university personnel, in both traditional and alternative certification programs, is not
clearly researchable; therefore the focus of my study simply focused on the role of university personnel affecting the alternative certification process.

Survey questions captured the perceptions/beliefs regarding mentoring available to the participants of the ProMoTEd program. As noted in Table 8 of Chapter IV, in most instances (3 of the 5 questions asked), nearly half (41.7%) of the respondents answered “N/A, no mentor.” Because of this factor, there is impactful data to report on the topic. The fifth variable on Table 8 noted that 22% of the 9 reporting they DID report have a mentor, still felt they did not receive helpful feedback from them. This is a negative feature of the program. Later, in Table 9, 3 of the 12 respondents (25%) reported having never met with a mentor when asked about frequency of contact with a faculty mentor (note, this was offered as either an assigned or self-selected mentor). Half (6 of 12) reported as meeting at least once, if not 2-3 times a semester with such mentor.

Based on such data, I can infer some confusion on the part of the participants on the topic of mentoring. It could be posited that the participants viewed the advisor and mentor perhaps in the same role. Also, based on follow up discussion in the focus groups where most students agreed that the ‘cohort group itself’ functioned as a mentor for them, it appears that the participants are unclear as to the definition, role, and importance of a mentor.

Such confusion can be further noted when (as reported in Table 10) participants were asked about the frequency of classroom observations by the mentor, to which 4 of the 12 (or 33%) reported having never been observed by a faculty mentor.

As reported by Lopez, Lash, Schaffner, Shields and Wagner (2004), research on mentoring suggests that it can be an effective strategy to reduce teacher attrition and
improve teacher quality. Most alternative certification programs provide two types of mentoring and supervision for participants: a mentor or supervisor from the university or alternative certification program, and a school (site) based mentor (Hough, Humphrey, & Wechsler, 2008). Only the role of mentoring offered by the university was examined in this study. While mentoring is an obvious concern and one that is given a lot of emphasis, there were substantial numbers of participants who do not believe this role was ever facilitated by the ProMoTEd program.

**Cohort Models**

In her study of adult learning characteristics that have implications on learning, Cercone (2008) avers that consistent with the assumptions of adult learning theory, non-traditional students (such as the participants in this study) need dialogue and social interaction must be provided. Because adult learners need to collaborate with other students, in addition to the supported literature, this topic was researched as a best practice in the alternative certification of adults.

In his evaluation of an integrated cohort model in pre-professional course of study, Mello (2003) found the vast majority of students in his study reported feeling that being a member of a cohort was highly beneficial, and the use of the cohort structure became the clearest benefit of the program. Mello’s findings are consistent in my study.

When asked how my study’s participants would describe their experience in an alternative certification program as a cohort, 11 of 12 respondents (91.6%) agreed that it was a very positive experience. The same percentage (91.6) further agreed that their peers had been supportive and empathetic of their roles as practicing teachers and full time students. Over 66% (or 7 of the 12) reported that they frequently sought assistance
from their peers. The disconnect between such a high percentage feeling their peers were supportive and those that actually sought assistance is worthy of discussion. Possibilities might include that those who did not seek assistance, consistent with adult learning theory, are self-directed; or that this part of the group while having felt supported, does not benefit from group work. Either way, the relationship between these two variables on the use of the cohort model is not found to be clear in my study.

Qualitative findings on the subject of cohort groups suggest too, that most of the participants in the program found this to be a beneficial part of the design. The first question in each focus group asked which ways the participants were enjoying their experience in the ProMoTEd program. Six of the 12 (or 50%) of the respondents reported the camaraderie and support they were experiencing as a part of the cohort as a source of enjoyment in the program. The same group also expressed that having peers from around the state and other programs to relate to was very beneficial. In light of the perceived lack of mentoring that took place within the program for the participants, many suggested that the cohort itself facilitated mentoring.

Specific comments on mentoring clarified that the participants felt they would not have been as successful in the program if it had not been for the cohort. They appreciated the team building aspects of the program as well.

In the survey data, one participant reported that he/she did not feel being part of a cohort was a positive experience. He/she also reported strongly disagreeing that their peers were supportive and empathetic. It could be argued that this independent learner may not have the personality type that is congruent with group work and if presented the option, may have selected another type of alternative certification program. It was found
that while the majority (91.6%) found their peers to be supportive and empathetic, only half (6 of 12, or 50%) agree or strongly agree that they expect to continue communication with their peers after graduation.

The use of cohort groups in teacher education, regardless of long term connectedness, helps create a stronger connection between what is termed the 'university context' and the field (Alder, Fox, & Phillipsen, 2002). In building this bond, the cohort model in my study was found to address consistency and clarity as individuals create a better sense of mutual purpose.

Training in Quality Pedagogical and Classroom Management Practices

Thirteen survey questions were developed to assess both the perceived amount of instruction on various topics related to pedagogical practices and classroom management, as well as the usefulness of the instruction in the day-to-day teaching of the participants. In measuring perceived amount of instruction, the item reporting the highest mean was ‘writing lesson plans’ with mean=3.58 (on a 4 point scale) with 58.3% of the participants reporting having received ‘lots’ of instruction and 41.7% reporting they had received ‘sufficient’ instruction. This same item scored the highest mean (3.33) of all instruction and its usefulness in their day-to-day teaching.

Further understanding of the intentional design of instruction, or models used for lesson plans was not assessed, but it is inferred that this critical tool in teaching was not something many of the study participants (if any) brought into teaching from industry. In unexpected findings in the literature, a 2003 study of the Education Commission of the States (ECS) found that research provides “limited support for the conclusion that preparation in pedagogy can contribute significantly to effective teaching, particularly
subject-specific courses and those designed to develop core skills" (p. 2). The development of core skills in a trade is particularly the case in CTE. Limited findings of significance in my study on other areas of instruction (e.g., use of in class time, using instructional media, and various teaching methods) are of less surprise when held against these previous findings. The ECS study further noted that, in addition to preparation in pedagogy, there is limited support of the teaching of subject-specific courses. Support was found for other core skills, such as classroom management, and curriculum development, two topics that were examined in my study.

In addressing classroom management instruction, this topic was approached as the use of in-class time, the development of people, and in dealing with inappropriate behavior and administering consequences in an appropriate fashion. Yielding a surprising finding, my study found the highest mean (3.33) on questions addressing the instruction received and the usefulness of that instruction in day-to-day teaching in helping students develop, both academically and professionally. Lower means (2.67, respectively) were found on the topics of dealing with disruptive students and the use of appropriate consequences when necessary. Literature on the subject of classroom management finds it to be the most common concern of both pre-service and experienced teachers (Sokal et al., 2003). The authors of this study also point out that while copious research has been conducted on the development of attitudes toward classroom management in teachers in traditional teacher education program, less research has been conducted with students in non-traditional alternative certification programs.

The results of my study, with relatively low means reported regarding the usefulness in day-to-day teaching of various pedagogies and classroom management
techniques, suggests that difference in attitudes may be the result of alternative certification teachers being older than traditionally trained teachers. Extended experience in the field and acquisition of subject matter knowledge allows them greater confidence in their content knowledge, an observation that may set in motion confidence in other dimensions of teaching.

With the single highest mean (3.47) reported in of usefulness of instruction in day-to-day teaching, the participants had highest regard for instruction that guided them in helping their own students develop academically. This contradictory finding regarding their limited perceived need for classroom management skills, was examined further in the focus groups.

When pointed out that survey data suggested a perceived lack of instruction in classroom management practices, the participants agreed they did not really remember having any, but that they did not really feel that they either (a) needed it, or that (b) training could not have prepared them for every situation. Noting that each of their districts has preferred approaches and guidelines to behavioral issues, the information on learning styles is what made it easier for them to relate to their students, "smoothing out our edges a little from industry."

I then queried the group, that perhaps, due to their ages and having had life experience, might they be better prepared to deal with behaviors better than a traditional college student/graduate that went to school at 18 and was trying to manage a classroom at 22? Overwhelmingly; ‘absolutely’ became the group comment.

Less clear is how such knowledge and skills are best acquired by alternative certification candidates. While participants in my study reported having received
sufficient amounts of instruction, rarely did half report it as being useful. It remains unclear after this study how other forms of pedagogical coursework (such as child development) impacts the day-to-day performance of these teachers. The pedagogical model is one that is concerned with the transmission of information and skills, where the teacher decides in advance what knowledge or skill needs to be transmitted and arranges a body of content into logical units, and selects a plan for delivery (McAuliffe et al. 2009). Findings in my study may contend that these participants, as previous experts in the field, are fully aware of what knowledge or skill needs to be transmitted. And in most cases, because of emergency teaching authorizations held by each of them, most have inherited a curriculum and outline for the presentation of these units. If pedagogy is rooted in the transmission of knowledge, and andragogy the transaction by which learning takes place, the participants in this study support the independent, self-directed nature of adult learners. It appears to be that in their vast experience, they return to teach how they were taught, which in itself is pedagogy. This finding does not refute the need for training in quality pedagogical practices, but rather places less crucial an emphasis as would be noted in the literature.

In their 2010 publication, the National Association of State Directors of Career & Technical Education noted that while teacher shortages undermine CTE, alternative teacher certification programs should be used to ensure teachers pedagogical qualifications, and that new CTE teachers must meet standards that demonstrate their abilities in content knowledge of relative core subjects, classroom management, and pedagogical practices. The ProMoTEd program strongly supports and delivers such opportunities. However, the perceived need of this finding of the state directors has been
found to be contradictory in my study, but still is of issue in accountability that needs to be addressed across the board. These results have sound implication for practice, and as the body of public school educators continues to change and diversify, these issues may yield fruitful future research. The past several years have witnessed a change in the type of people entering various teacher preparation programs (Martin & Shoho, 2000). Because they are likely to be older and more diverse than ever, the non-traditional student is likely to have the benefit of richer life experiences, as noted in this study.

**Research Question 3**

The third research question in my study examined what relationships existed between the participants’ adult learning preferences and the extent to which they experienced various aspects of this alternative certification program. Using the same data from Table 3 for research question 1, Figure 18 illustrates the overall means reported for each construct of various adult learning preferences and the extent to which they felt the ProMoTEd program supported this.

In only four instances did the participants report a higher adult learning preference than they felt the program supported, and even in that case, the means were well above average. These four included (1) Recognizing previous learning as contributing to their experience, (2) (similarly) That they have a large reservoir of experience for resource, (3) They appreciate multiple, diverse views, and (4) They are most interested in things with immediate relevance. Conversely, there were a few occasions where the adult learning preferences were scored a ‘less important’ to them, but they still felt that the program supported those particular preferences.
Figure 18. Overall Response Mean on Adult Learning Preferences and Perceived Support of ProMoTEd Program.

Note. Extent true scale; 1 = usually not true, 2 = somewhat not true, 3 = somewhat true, 4 = usually true. ProMoTEd supported this scale; 1 = not supported, 2 = somewhat supported, 3 = supported, 4 = strongly supported.

Worth discussing would be the possible alternative message that could be present, but no less significant. It is assumed in Figure 18 that while participants may not have found a particular adult learning preference as something central to their learning style, that the ProMoTEd program supported this in others. Instead, it could be possible that while the participants did not strongly report a particular adult learning preference as central to their own learning, the program supported THAT in them as well, facilitating the flexibility of them to not having to work in a modality of little interest to them.
Encouragingly, the means represented were not low enough to indicate a
disparaging difference in what could have been found. The probability that each
respondent approached this in a different manner is high, but still leaves us with the
knowledge that the ProMoTEd program either continually supported all of the adult
learning preferences, or at the very least made exception in the case of a non-preferred
modality.

Consistent with previous findings, participants in the study reported learning best
when things have immediate relevance to their day to day life; a major assumption of
Knowles' adult learning theory. Also, while the literature suggested that adults prefer
developmental models of advising and learning, the lowest scoring mean was observed in
the statement 'more than facts, I prefer explanations.' This upholds previous findings in
my study that quite often, the opposite is the case. Whether due to busy lifestyles and the
weight of trying to fulfill several roles, these adult learners prefer to know exactly what is
expected of them, what they need to know, and then assume the responsibility of
application onto themselves.

The second highest scoring mean recognized these learners are actively able to
recognize large reservoirs of experience that serve as a resource in their new learning.
Through subject matter knowledge, application, and reference, the life experience
accumulated has a major function in their alternative certification process.

**Research Question 4**

The fourth and final research question examined how the participants described
the overall strengths and weaknesses within this CTE alternative certification program.
This question was addressed in the qualitative aspect of the study as a key issue in the focus groups.

Each of the twelve respondents took time to reflect and report what they felt to be the strongest and weakest part of the program. Findings, as illustrated in Figures 16 and 17 (Chapter IV), recognized core issues that the group was in agreement on.

The strongest part(s) of the program, as reported by the participants, were the faculty involved with the program and the use of the cohort model. Remarkable enough however, the greatest weakness of the program (as noted by nearly half the participants), was the communication within the courses, on which the onus falls on the faculty. While somewhat parallel with the same dependent variable, the contradictory implication is noteworthy. While participants seemed to have enjoyed the faculty, they were very disappointed in the communication and functioning within the courses.

While other dichotomies have been observed as a function of the clarity of survey data versus qualitative data, in this instance the participants were engaged in discussion only on these topics. It is possible that, albeit reported as a strength, the online learning environment and inherent nature to which they operate was at the core of the issue. Online learning, in lacking the face-to-face availability and frequency of communication, is presumed to be more likely the case. Written word is less easy to understand as confirmed in statement made by a participant;

We are trying to fit all of this into a hectic schedule and really have to take time to type up our concerns and communicate them, when we really don’t know if they understand what we are asking. Aside from the length of time we wait for a response, email is very impersonal and it was hard for both of us to convey what
we’re actually saying in text where you can hear it in a voice. It would have been nice to have another outlet for communication.

Subsequently, it is posited that while the timeliness of communication is certainly at issue here, the vehicle itself was not effective, and leads to the genesis of reported concerns. Several additional comments supported the use of dedicated time frames where faculty availed themselves, as well as using other instructional media to deliver instructions and responses to majority issues.

The use of the cohort model, which saw consensus as a reported strength, seems to have facilitated the communication matter as well. With several reporting increased support during the times many were awaiting replies from faculty. The flexibility offered by faculty within the courses for the submission of assignments was also viewed as a strength and likely contributed to the patience that participants were exhibiting. Knowing that the faculty would be flexible on submission dates rather than act in a punitive nature was a reported strength of the program.

Aside from the aforementioned weakness of communication within the courses, the participants were somewhat divided in what they felt were the other issues. While several discussed the course load and lack of predictability semester-to-semester when assessing overall coursework, only 2 of 12 (or 12%) actually reported it as a weakness of the program. Comments in the focus group noted both the timeliness of workload as balanced with their own academic year as practicing teachers, as well as the unequal emphasis a 1 credit module might necessitate.

Off topic on any of the researchable variables in my study, another perceived weakness of the program was noted with regard to the heavy reading load that was
required each semester, when there were upwards of 6 modules being completed by the participants. Again, due to the hectic schedules the participants were enduring due to full time work and school, several noted that family life and commutes often took away from available reading time as well. The lack of alternate means by which the participants could engage with the materials apart from reading was difficult. Comments supporting the selection of texts with audio components (of which they would bear the cost to add), or online support guides were recognized.

While new to the landscape of education, such modalities do exist. Several students noted their own acquisition of voice recognition software for the dictation of assignments or papers as time permitted, and efforts by the faculty to incorporate similar options would be welcomed.

Other weaknesses reported appeared to represent the individual preferences of the participants and were not recognized as group consensus. One participant (6% of responses) noted that the full 2 weeks in residence required each summer could likely have been shortened. In light of the free time provided for them to work on tasks as opposed to actual time in class, the feeling was that time could be used more effectively in the weeks leading up to coming to campus, or after, but keeping them there, away from their families, was difficult.

The lack of an orientation to campus infrastructure (i.e., passwords, portal use, registration issues) was also cited by one participant. The assumption that they were familiar with and on board with email communication systems the first summer, when several had just registered, was burdensome. The participant noted the time it took to try
and understand the system aside from the actual course content that was expected of them.

Overall, discussion of the strengths and weaknesses of the program recognized both group accord and individual expressions of thought. It was encouraging that while in these focus groups, ‘group think’ did not depress the individual expressions.

**Comparison of Flanagan Research with Prior Research**

My study sought to understand and describe the process by which twelve practicing CTE teachers experienced their alternative certification program. Adult learning theory provided a theoretical perspective for investigating various aspects of the program. Both qualitative and quantitative research techniques were utilized in union with Sequential Exploratory Design (Creswell, 2008).

Table 13 provides a synopsis of findings from this study to those of prior research. Presented in aggregate groups, the table first highlights the comparison of alternative certification programs before embarking on the contrasts within the research questions.

Following the section on alternative certification, adult learning theory and its’ constructs are reported followed by the best practices in alternative certification that were examined in this study. Information for research question 3, assessing the relationship between the adult learners experience and the ProMoTEd program are also pragmatically reported in the adult learning theory information for research question 1. Finally, research on the design and administration of alternative certification programs is illustrated through the strengths and weaknesses of the program.
It should be noted that this table is not exhaustive, and therefore does not present every finding within the current study. Rather, it is intended to illustrate the overall findings and how such findings compare to the review of the literature.

Table 13

*Comparison of Summary Flanagan Study and Prior Research Funding*

<table>
<thead>
<tr>
<th>Flanagan (2011) Key Findings</th>
<th>Previous Research</th>
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<tbody>
<tr>
<td><strong>Alternative Certification Program Design</strong></td>
<td></td>
</tr>
<tr>
<td>91.7% of participants are new to teaching.</td>
<td><strong>Affirms</strong> NCAC (Bassett, et al., 2003), opportunities and challenges of fast track alternative certification programs that 40-50% of Participants are new to teaching</td>
</tr>
<tr>
<td>Sequencing of courses indeed helpful; Intentional Design appreciated</td>
<td><strong>Affirms</strong>: NCAC (Bassett et al., 2003), quality curriculum is key</td>
</tr>
</tbody>
</table>
| Lack of perceived mentoring for some, not others | **Limited support**: NCAC (Bassett et al., 2003), quality mentoring is key  
**Supports**: NCAC (Bassett et al., 2003), Variations in mentoring are recommended |
| All participants were white. | **Refutes**: NCAC (Bassett, et al., 2003), alternative certification works as a tool to increase minorities teaching  
**Refutes**: (Chen, 1997), “20% of alternatively certified teachers are non-white” |
| 66% of Program Participants were Male | **Affirms**: (Chen, 1997), alternative certification is attracting more males |
| Newly approved fast-track style of alternative certification has no other similar programs in the state of Michigan for comparison. | **Supports**: U.S. Secretary of Education (2002), “There is little comparability of Alternative Certification routes across or within states.” (p. 2). |
Table 13 – Continued

<table>
<thead>
<tr>
<th>Flanagan (2011) Key Findings</th>
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<tr>
<td>83.3% of participants would not have become a teacher if this alternative certification program had not been an option.</td>
<td><strong>Supports:</strong> NCEI (2005), nearly half of those entering teaching through alternative routes say they would not have become a teacher if alternative certification was not an option</td>
</tr>
<tr>
<td>83.3% of participants were working in non-education jobs prior to beginning the program</td>
<td><strong>Supports:</strong> NCEI (2005), nearly half of those entering teaching through alternative routes were working in a non-education job prior to beginning the program</td>
</tr>
<tr>
<td>The average age of participants was 44 years old</td>
<td><strong>Supports:</strong> NCREL (2002) alternative certification teachers are older and bring life experiences to teaching</td>
</tr>
<tr>
<td>Participants appreciated the flexibility of the program.</td>
<td><strong>Supports:</strong> National Assoc. of State Directors CTE Consortium (2010), that flexibility should be applied for the means by which teachers may exhibit qualifications.</td>
</tr>
</tbody>
</table>

**Adult Learning Theory Assumptions**

| Participant report it is usually true they are self directed and enjoy discovering things on their own | **Supports:** Knowles (1983), adult learners are self directed. McAuliffe et.al, (2009) Adult learning succeeds by allowing the learner to know why something is important, showing them how to direct themselves through information. |
| Participants report they have a shared responsibility for the learning objectives in their courses | **Supports:** Knowles (1983); Adult Learners are self directed McAuliffe et.al., (2009) Andragogy requires adult learners to be involved in the identification of their learning needs and the planning. If they are satisfied, learning is active |
| Participants report having a large reservoir of experience that contributes to their learning and that their experience is valued by the ProMoTED program. | **Supports:** ECS (2003), The extent to which subject matter knowledge contributes defines the program success. McAuliffe et al., (2009) adult learning succeeds by allowing the learner to know why something is important and related it to their experience. |
Table 13 – Continued

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Participants report they enjoy hands on projects to lectures, but not in the context of the ProMoTEd program</td>
<td>Refutes: Lieb (1991). Adult learners much prefer the hands on nature of projects to fact based lecture. Fidishun (2000), adults learn best when they are provided the opportunity to build on what they know and can do.</td>
</tr>
</tbody>
</table>

**Best Practices / Characteristics of Effective Alternative Certification Programs**

**Advising**

Participants favored prescriptive advising while also appreciating aspects of developmental advising experiences that allowed for past experiences to be matched with goals

Inconclusive: Bland (2003), adult learners prefer developmental advising experiences as opposed to prescriptive, limiting plans of action

**Overall Coursework**

Participants felt curriculum was constructed well for the program

| Supports: Hough, Humphrey & Wechsler (2008), adult learners desire a carefully constructed program |
| Supports: Hough, Humphrey & Wechsler (2008), coursework for adult learners in alternative certification should work at helping to identify weaknesses |

Participants felt coursework helped

| Supports: Hough, Humphrey & Wechsler (2008), much of the coursework in alternative certification should be designed to be relevant to immediate needs |

Participants felt the overall coursework was relevant to their immediate needs

| Supports: Hough, Humphrey & Wechsler (2008), effective alternative certification programs will be carefully crafted and well timed in sequence relevant to the needs of participants |

Participants concur that the program was carefully crafted, but desired better timing

| Supports: Hough, Humphrey & Wechsler (2008), effective alternative certification programs will be carefully crafted and well timed in sequence relevant to the needs of participants |

**Mentoring**

The majority of participants did not report the use of a faculty mentor assigned by the university

Inconclusive: Hough, Humphrey & Wechsler (2008), mentoring remains a key characteristic of alternative certification programs regardless of quality.
Table 13 – Continued

<table>
<thead>
<tr>
<th>Flanagan (2011) Key Findings</th>
<th>Previous Research</th>
</tr>
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<tbody>
<tr>
<td>Participants presumed the mentor was the faculty member who conducted observations and evaluation</td>
<td>Refutes: Schriebner-Dill, &amp; Stafford-Johnson (2010), mentoring supports; it does not evaluate.</td>
</tr>
<tr>
<td>Mentoring was not seen as a critical component in the ProMoTeD alternative certification program.</td>
<td>Inconclusive: Lopez, Lash, Schaffner, Shields &amp; Wagner (2004), mentoring is effective in reducing alternative certification program attrition and improves quality.</td>
</tr>
</tbody>
</table>

**Use of Cohort Model**

- Participant consensus is that the use of the cohort model in this program attributed to their success
  - Supports: Hough, Humphrey, & Wechsler (2008), adults in alternative certification programs appreciate a collegial atmosphere. Mello (2003), being a member of a cohort is highly beneficial.
  - Supports: Church-Pupke & Bondy (2006), members of a cohort identify mutual respect and empathy and academic support as benefits derived from being part of a cohort. Stafford (2010), effective cohorts provide a supportive context for learning that is essential when students are challenged to wrestle with unfamiliar ideas or expectations.
  - Supports: Imel (2002). Spending time at the beginning of the program developing relationships is a key foundation to cohort success.

**Pedagogical Practices**

- While participants felt they received adequate training in quality pedagogical practices, they reported it as not having a significant impact on their day-to-day teaching.
  - Inconclusive: ECS (2003), preparation in pedagogical practices contributes to successful teaching.
Table 13 – Continued

<table>
<thead>
<tr>
<th>Flanagan (2011) Key Findings</th>
<th>Previous Research</th>
</tr>
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<tbody>
<tr>
<td><strong>Classroom Management</strong></td>
<td>Supports: Sokal et al.,(2003) age can be used to explain differences in classroom management styles. Martin &amp; Shoho (2000), difference in classroom management style for alternative certification teachers is age. ECS (2003), there is a significant relationship between age and the manner which one interacts with others in the construct of classroom management.</td>
</tr>
<tr>
<td>Participants reported their age and past experience brought a different presence to their classes and did not feel the need for extensive classroom management training.</td>
<td></td>
</tr>
<tr>
<td><strong>Program Strengths &amp; Weaknesses (In addition to use of Cohort, Design of Program [above])</strong></td>
<td>Supports: Knowles (1983), Merriam (2001a), adults appreciate the ability to engage in self regulated learning.</td>
</tr>
<tr>
<td>The participants of this program report its flexibility as a strength</td>
<td>Supports: Knowles (1983), adults learn best when they are able to apply new learning as they assume new roles</td>
</tr>
<tr>
<td>Participants in the program report subject matter integration as a strength of the program</td>
<td>Supports: Knowles (1983), adults learn best when they are able to problem solve and apply new knowledge in a timely fashion</td>
</tr>
<tr>
<td>Participants in the program report examples of instances when they were immediately able to apply something learned to their day to day practice</td>
<td>Supports: Cercone (2008), limited knowledge on a subject makes the adult learner depend on the instructor more for communication CAEL (2000), clarity on outcomes set the stage for accountability and is vitally important to adult learning</td>
</tr>
<tr>
<td>Participants report the greatest weakness of the program as communication within the courses regarding coursework, as it is not timely or effective</td>
<td>No previous research found</td>
</tr>
<tr>
<td>Participants in the program would prefer text options that offer various modalities for the consumption of knowledge (e.g., MP3, Internet, Audio Files, etc.)</td>
<td></td>
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Table 13 – Continued

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Participants favor effective use in time during summer residency requirements to shorten the length of time away from family and other responsibility</td>
<td>No previous research found</td>
</tr>
<tr>
<td>Participants in the program found the faculty as a strength of the program, although communication was an issue at times</td>
<td>No previous research found</td>
</tr>
</tbody>
</table>

Limitations

In addition to the limitations outlined in Chapter III, additional limitations include a relatively small group of participants, indicating that in most instances, percentages and means may not hold true to a larger population.

Even though the study is rooted in sound theory; Andragogy overlooks the contexts, backgrounds and variables of culture, gender, experience and technological issues. While it is clear that theoretical conceptions of adult learning are supported, curriculum design intricacies noted here are not sensitive to relevant design issues in online education. Special attention is needed in the application of adult learning in an online modality.

With respect to the advising aspect of the study, it should be reiterated that the ProMoTEd program consists only of the 24 professional education credits for teacher certification required by the state, and did not include any general education, or subject matter requirements. In this instance, comments insinuating ProMoTEd made decisions
on the requirements outside of this professional education sequence should be held in context.

Lastly, it should be noted that on the day of survey administration, I arrived at the university prior to the assigned time. Upon arriving, I learned that the students had been dismissed nearly an hour early for the day, but were ordered to await my arrival. Very frustrated participants greeted me with 'she’s finally here’ and they all quickly asked to get started.

After following research protocol and obtaining necessary signatures and permissions, I administered the survey. Several of the twelve participants were done quite quickly and later it was noted that a very large assignment had been given that was due the next day and they were all under a great deal of stress to get it done. It is assumed by the lack of consistency in some answers (i.e., some reporting they did not have a mentor, but later answered questions about interaction with a mentor) that many students simply rushed through the process. Such implications should be noted in the quantitative data.

**Leadership Recommendations**

Based on the findings from this study, recommendations have been identified for current or prospective administrators of similar alternative certification programs. Additionally, there are recommendations directed for use by curriculum and instructional design professionals in the development of programming for adult learners.

**Recommendations for Administrators of Alternative Certification Programs**

**Cultivate a learner focused environment in the implementation of program processes and procedures.** Based on the study findings that communication within
online courses was difficult for the majority of the students, establishing protocol on the
timeliness of responses and implementation of programmatic best practices is an
important aspect for the adult learner. Moreover, being learner focused will put the onus
on faculty to facilitate the learning process, a dimension that is dependent on
communication.

**Structuring of program coursework modules should not be done at the
convenience of the university calendar, but should take into account that of
practicing secondary teachers.** By encouraging ongoing communication with faculty
and site based mentor teachers, coursework can be better designed to accommodate the
schedule of the adult learner. Modules of instruction should be scheduled effectively and
offer opportunity for critical reflection and inquiry that is not overlooked or rushed due
the demand holding several roles puts on these practicing teachers.

**Face-to-face instruction should be effectively scheduled to maximize the
resource (time, money, materials, and travel) invested by the adult learner.** While
institutions may vary on residency definitions and requirements, coursework requiring
face-to-face contact for maximum effectiveness should be scheduled carefully. While
time is appropriated for the completion of projects and assignments, many adult learners
would benefit from pre-course work in addition to follow up that might reduce their time
away from family and responsibility. The hybrid component of programs such as this is
indisputably valuable, and should be treated equally with such high regard.

**Continue to recognize life/work experience and acquisition of a teaching
position as being commensurate with the baccalaureate degree.** In this study, 91.7%
of the participants did not hold an often required baccalaureate degree for admission in
alternative certification, and have still observed success. This continues to produce teachers from all walks of life, making the deliberate choice to teach. They are defined by the U.S. Department of Education in its Highly Qualified teacher guide as being highly qualified. Further, consider partnerships with small, rural districts to encourage enrollment of emergency or otherwise authorized teachers.

Consider approaching the classroom management fraction of the program in a more holistic 'developmental' approach, embracing the three dynamics noted in the study. Subdivisions of 'people management' (helping students develop academically and professionally), 'instructional management' (class time usage, appropriate assignments, and instructional media modalities), and 'behavior management,' addressing the class structure, rules, guidelines and consequences the emulate expectations in the career area being instructed.

Appoint faculty members as mentors to students in the ProMoTED program. Such mentors can facilitate programmatic operations and conceptual theories on instruction. In accordance with the frequency of contact between the university and the learner, programs should consider appointing a faculty member that can help synthesize certification requirements and the day-to-day activities of the practicing teachers. In programs such as ProMoTED, where the students are continuously involved with faculty, a specific mentor in addition may not be needed when effective communication systems are in place. In instances where contact between faculty and practicing teachers happens more infrequently, a mentor should be established. Roles between the faculty mentor and the site based mentor should be clarified and communication between them encouraged.
Continue the use of the cohort model, and balance individual development as well. Students in cohorts often need to be challenged to think outside of the function of the group. Adversely, several students recognize required participation in the cohort, although it is not their learning preference.

Recommendations for Instructional Design Professionals

Offer multiple methods of instructional delivery to enhance convenient access to educational programming. Assess and provide choices about preferred learning modes and styles. Inclusion of various technological modalities for use in instructional delivery is crucial for the learner. Due to preferences and differences in learning styles, text heavy assignments can be enhanced (e.g., videotaped lectures, audio descriptions, links to sample pieces of work) maximizing how project guidelines are interpreted and facilitate communication systems that lessen the dependence on the instructor.

Encourage faculty to build upon the knowledge, interests and life situations that adults bring to their education and develop learning experiences together. Because vocational teachers are being expected to know more than ever before, consider curriculum that facilitates them keeping pace with the rapid technological advances in their occupational field be embedded within the lessons. Continue to develop relative pedagogical lessons that enable the participants to find dynamic ways to reveal their content expertise.

Maximize the use of instructional technologies. Because most institutions are forced to keep up with technological advances in education, several technologies are likely available to the campus community that are not being fully utilized. Syllabus
introduction and course expectations can be easily videotaped to help hit upon all learning styles. Audio learners have a difficult time with text only instruction, as to kinesthetic learners. Video lecture segments would also facilitate better understanding for several learning styles.

Consider the use of inquiry based learning as opposed to problem/project based learning. The use of inquiry can accomplish the objectives and outcomes of courses while facilitating the acquisition of information in self described critical areas of development.

Recommendations for Future Research

Because the area of alternative certification process is highly under-researched, studies that continue to assess the perceptions of participants, as well as program effectiveness are encouraged. Difficulty was experienced in finding research on alternative certification program features, particularly those unique to CTE. Due to the shortage of CTE teachers, expanding the field of knowledge of preferred program characteristics can help address such initiatives.

The work of Cercone (2008) is of continued interest as well. The continued study of applying andragogy in a technical world would be very beneficial to adult learning and alternative certification programs. Only one such study was found in addition to the work of Cercone (2008), (i.e., Merriam, 2001) and only Cercone discussed the use of online learning versus Merriam, whose focus was the more broad ‘self-directed’ learning platform.

Lastly, and in congruence with institutional effectiveness and program evaluation, the ProMoTEEd program graduates should be tracked for possible follow-up studies
measuring teacher retention and effectiveness upon completion of the ProMoTEd program.

**Conclusion**

My own involvement as a post-secondary educator in the instruction of CTE professionals served as the impetus for this study. While bureaucratic and systemic issues in academe have prevented the responsive creation of new and dynamic programs, reaching adults learners continues to motivate campuses across the nation.

The more I studied the diverse alternative teacher certification forms in the literature, the less convinced I became that solid best practices in alternative certification existed. My first research question examined the macro role of adult learners as they actually experienced the process of alternative certification. Driven by the theory of andragogy in my instruction of adults, examining the program through this lens became vital to my understanding. I sought to understand how they perceived the process as self-directed learners, drawing on a rich reservoir of experience. Knowing that being able to apply knowledge as they assumed new roles helped facilitate Bloom’s taxonomy; the question of how they experienced the program as being able to problem solve and use knowledge in a timely fashion remained.

My second research question came about after discussion with a committee member after a discussion about NCAC (National Center for Alternative Certification) initiatives. Having both been familiar with the work, we became curious as to what, if any, best practices might exist for program design. While the limited research available was humble to proclaim being a best practice, a few studies did identify characteristics of effective alternative certification programs. These, combined with recommendations in
adult learning theory, made up the constructs of program structure, use of faculty mentors, experience in a cohort model, and training received in quality pedagogical and classroom management practices.

My third research question focused less on the intricacies of the ProMoTEd program, but rather how the program as a whole supported the participants as adult learners. The relationships between the participant individual learning preferences and known theories on the instruction of adult learners were examined.

My final research question asked how these participants, having completed the requirements of the ProMoTEd program, would report both the strengths and weaknesses of the program. Surprisingly, where an instance of critical examination could have proved ineffective, there were relatively few perceived weaknesses and the strengths found their way into organic themes.

This mixed methods study is important to the alternative certification and adult learning literature for a number of reasons. First, it is significant as it is the only known study to evaluate a cohort experiencing a relatively new ‘Fast Track’ certification program. Additionally, all the participants are ‘teaching while doing’ the program, having gained access to teaching positions prior to their enrollment in the program. Implications of this study are far reaching and can model program design features outside of CTE. Secondly, this study advances the literature on CTE teacher shortage issues and offers a model for use in program / instructional design.

Lastly, having not merely conducted a program evaluation, this study examines the process of alternative certification, and assumes a proactive role in the identification of factors that are both significant and surprising as we meet the challenges of the new
face of education. The findings of this study have helped paint a clearer picture of the characteristics of alternative certification programs facing all education programs. The next step, as articulated by the current Secretary of Education (Duncan, 2010), is to find a way to adequately prepare students for college and the workforce. Thus is the mission of CTE.

It is my hope that this study illustrates a model for moving experienced and qualified professionals into K-12 classrooms helping prepare students for success in careers by boosting the quality of instruction that a new, (and older) generation of teachers receives. As stated by the Obama administration; “states that limit alternative routes to certification for teachers and principals will be at a competitive disadvantage” (Duncan, 2010, p. 1). My study offers some understanding of the processes that should lead the instructional design of programs serving the adult learner, and hopes to better inform those engaging in such efforts.
REFERENCES


Chan, J. K. (1999). *Student teachers’ beliefs: What have they brought to the initial teacher training,* ERIC Document Reproduction No. ED435607.


Certification of Teachers (pp. 3-34). Washington DC: Eric Clearinghouse on Teacher Education.


Appendix A

Survey
A Study on Becoming an Alternatively Certified Vocational Teacher

The following short answer questions are simply about getting to know you. All of the answers are kept confidential and will be coded for confidentiality.

1. What is your gender?

2. What is your age?

3. What is your race?

4. What is your current position/title?

5. What was your prior career/ CTE area of expertise before your teaching position, and how many years were you in that position?

6. What (if any) teaching experience did you have prior to your current position?

7. What was your level of education prior to admission to the ProMoTEd program and did you hold any degrees (e.g. high school, some college, Certificates, Associates degree, Baccalaureate degree in another area)?
8. What made you seek this change in your life, to become a certified teacher? (Use back of page if necessary)

9. What attracted you to the ProMoTEd program? (Use back of page if necessary)

10. Would you still be pursuing teacher certification if you didn’t already have a teaching position?

   YES / NO

   Please explain (using back of page if necessary):
Advising: From your initial contact with the University regarding the ProMoTEd program until this point; please consider the academic advising process (as provided by the College of Education)

1. Please choose which one of the following most closely describes your experience with advising:
   a. The academic advisor told me exactly what classes to take
   b. The academic advisor and I discussed class options, selecting those which best fit my goals.
   c. I have not met with an academic advisor
   d. Other (explain)

2. How often have you met with an academic advisor about your program of study? (choose one)
   a. I have never met with an academic advisor
   b. Once
   c. Twice
   d. Three or more times

3. What I appreciated most about the advising I have received: (choose one)
   a. I have not received advising
   b. It was direct and to the point
   c. It allowed for flexibility and personal growth
   d. Other (explain)

4. To what extent do you agree or disagree that your academic advisor was interested in your career goals?
   1  2  3  4  5  6  7
   Strongly Disagree
   Strongly Agree
   N/A-no Advisor
5. Overall, the academic advisor gave me the direction and tools needed to effectively navigate my program.

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<tr>
<td>Strongly Disagree</td>
<td>Strongly Agree</td>
<td>N/A-no Advisor</td>
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6. Overall, the academic advisor was helpful in explaining the needed state certifications, and directed me to appropriate resources for those certifications.

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<tbody>
<tr>
<td>Strongly Disagree</td>
<td>Strongly Agree</td>
<td>N/A-no Advisor</td>
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</table>

7. Please describe your experience with any advising provided from the University regarding the ProMoTED program, including both positive and negative feelings about the process. (Use back side if needed)
**Mentoring**: Please answer the following questions about your perceptions/beliefs regarding the Mentoring that has been in place and available to you from the ProMoTEd program:

1. A faculty mentor (either appointed or self selected) was available to me, throughout the program, as needed.

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<tr>
<td>Strongly Agree</td>
<td>Strongly Disagree</td>
<td>N/A-no Mentor</td>
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2. My faculty mentor has effectively maintained communication (including by phone, email or face to face) with me.

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<tr>
<td>Strongly Agree</td>
<td>Strongly Disagree</td>
<td>N/A-no Mentor</td>
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3. The use of a faculty mentor has been beneficial while in the ProMoTEd program

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</tr>
<tr>
<td>Strongly Agree</td>
<td>Strongly Disagree</td>
<td>N/A-no Mentor</td>
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4. During the past year, about how often were you in contact with a faculty mentor (including by phone, email or face to face)?
   a. Never
   b. Once a semester
   c. 2-3 times a semester
   d. More than 3 times a semester

5. How often (if any) have you been observed in your classroom by your faculty mentor?
   a. Never
   b. Once
   c. Twice
   d. Three or more times
6. The feedback received from the observation(s) has been helpful in your teaching practice?

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<td></td>
<td>Strongly Agree</td>
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<td></td>
<td>Strongly Agree Mentor</td>
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<td></td>
<td>Strongly N/A-no</td>
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<td>N/A-no</td>
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7. My faculty mentor provided assistance with areas I struggled within my teaching.

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<td>Strongly Disagree</td>
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<td>Strongly Agree</td>
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<td>Strongly N/A-no</td>
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<td></td>
<td></td>
<td></td>
<td>N/A-no Mentor</td>
</tr>
</tbody>
</table>

8. Please describe your experience with any mentoring provided as part of the ProMoTEd program including both positive and negative perceptions of the mentoring process. (Use back side if needed)
Cohort Models: Please answer the following questions with regard to your feelings/beliefs about the use of the Cohort Model in the ProMoTEd program.

1. Being a part of a Cohort has been a very positive experience for me.

   1 2 3 4 5 6
   Strongly Disagree
   Strongly Agree

2. My peers in the Cohort were supportive and empathetic to my needs, since they too are both a teacher and a student.

   1 2 3 4 5 6
   Strongly Disagree
   Strongly Agree

3. I frequently sought assistance from my fellow Cohort members at various times throughout the academic year.

   1 2 3 4 5 6
   Strongly Disagree
   Strongly Agree

4. The Cohort model enabled me to move along with my program of study at a pace I was pleased with.

   1 2 3 4 5 6
   Strongly Disagree
   Strongly Agree

5. I expect to continue my relationship with the members of my Cohort upon graduation.

   1 2 3 4 5 6
   Strongly Disagree
   Strongly Agree

6. Share thoughts you have about being engaged in a cohort, including both your positive and negative perceptions. (Use the back side if needed)
**Pedagogy & Classroom Management**: The following questions are designed to measure two things, both how much you have learned about the identified issues AS WELL AS the usefulness of being able to put what you have learned into practice as a current teacher.

*Please note you are responding TWICE for each topic area, once in the gray column and once in the yellow column.*

<table>
<thead>
<tr>
<th>Amount Learned From the ProMoTEd Program?</th>
<th>How Useful in Your Day-to-Day Teaching?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Instruction on various teaching methods used in CTE</strong></td>
<td></td>
</tr>
<tr>
<td>Not much</td>
<td>Lots</td>
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<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td><strong>Instruction on writing lesson plans</strong></td>
<td></td>
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<tr>
<td>Not much</td>
<td>Lots</td>
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<td>1</td>
<td>2</td>
</tr>
<tr>
<td><strong>Instruction on use of instructional media to engage students</strong></td>
<td></td>
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<tr>
<td>Not Much</td>
<td>Lots</td>
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<td>1</td>
<td>2</td>
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<tr>
<td><strong>Instruction on Learning Styles</strong></td>
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<tr>
<td>Not Much</td>
<td>Lots</td>
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<td>1</td>
<td>2</td>
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<tr>
<td><strong>Instruction on effectively structuring daily activities</strong></td>
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<td>Not Much</td>
<td>Lots</td>
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<td>1</td>
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<tr>
<td><strong>Instruction on use of in-class time for learning</strong></td>
<td></td>
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<tr>
<td>Not Much</td>
<td>Lots</td>
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<tr>
<td>1</td>
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</tr>
<tr>
<td>Amount Learned From the ProMoTED Program?</td>
<td>How Useful in Your Day-to-Day Teaching?</td>
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<tr>
<td>------------------------------------------</td>
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<tr>
<td>Instruction on designing a curriculum that supports benchmarks and standards</td>
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<tr>
<td>Not Much</td>
<td>Lots</td>
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<td>1</td>
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<tr>
<td>Instruction of how to effectively deal with disruptive students</td>
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<td>Not Much</td>
<td>Lots</td>
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<tr>
<td>Instruction on effective consequences for inappropriate behavior</td>
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<td>Not Much</td>
<td>Lots</td>
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<tr>
<td>Instruction on effectively helping students develop academically</td>
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<td>Not Much</td>
<td>Lots</td>
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<tr>
<td>Instruction on effectively helping students develop as people</td>
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<td>Not Much</td>
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<tr>
<td>Instruction on understanding my students</td>
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<td>Not Much</td>
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<tr>
<td>Instruction encouraging development of my own view on students education</td>
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<td>Not Much</td>
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**Overall Coursework:** Please answer the following questions regarding your perceptions/beliefs about the overall coursework in the classes you have taken.

1. The 1 credit course module offerings have been scheduled effectively and are available as needed.
   
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<tr>
<td></td>
<td>Strongly Disagree</td>
<td>Strongly Agree</td>
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2. Course assignments have been timely and of a manageable pace while I teach.
   
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<td>Strongly Disagree</td>
<td>Strongly Agree</td>
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3. The course content has been helpful in my continuous development as a CTE teacher.
   
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<td>Strongly Disagree</td>
<td>Strongly Agree</td>
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4. The program has helped me realize areas that I still need to develop in my teaching.
   
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<td></td>
<td>Strongly Disagree</td>
<td>Strongly Agree</td>
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5. The coursework requires an integration of my subject knowledge into various assignments throughout my courses.
   
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<td>Strongly Disagree</td>
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6. Learning in smaller 1 credit course modules has been helpful to my success in the program.
   
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<td>Strongly Disagree</td>
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7. The overall program structure of some courses last summer, and then courses through the year and then finally this summer has been a good way to support me as a practicing teacher.
   
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<td>Strongly Disagree</td>
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**Adult Learning Theory**: As a student in the ProMoTEd program, this study is interested in how your experience can be viewed through the lens of Adult Learning Theory, as well as the extent to which the ProMoTEd program supported the theory. Please consider the following questions with regard to your own personal experiences.

*Please note, you are responding TWICE, once in the Gray column and once in the Yellow column.*

<table>
<thead>
<tr>
<th>To what extent is the following statement true of you?</th>
<th>To what extent did the ProMoTEd program support this aspect of you as an adult learner?</th>
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<tbody>
<tr>
<td>Overall, I tend to be a self directed learner.</td>
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<tr>
<td>Usually True</td>
<td>Not Supported</td>
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<tr>
<td>Not True</td>
<td>Strongly Supported</td>
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<td>I have a rich reservoir of experience that serves as a resource for my learning.</td>
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<tr>
<td>Usually True</td>
<td>Not Supported</td>
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<td>Not True</td>
<td>Strongly Supported</td>
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<td>I tend to learn things best when the issue is problem centered.</td>
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<tr>
<td>Usually True</td>
<td>Not Supported</td>
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<tr>
<td>Not True</td>
<td>Strongly Supported</td>
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<td>I often re-evaluate my assumptions about teaching and learning.</td>
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<tr>
<td>Usually True</td>
<td>Not Supported</td>
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<td>Not True</td>
<td>Strongly Supported</td>
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<td>I take an active role in planning, monitoring and evaluating my own learning.</td>
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<tr>
<td>Usually True</td>
<td>Not Supported</td>
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<tr>
<td>To what extent is the following statement true of you?</td>
<td>To what extent did the ProMoTEd program support this aspect of you as an adult learner?</td>
</tr>
<tr>
<td>I tend to promote dialogue and openness with my peers about teaching and learning.</td>
<td>1</td>
</tr>
<tr>
<td>1: Not True</td>
<td>2: Usually Not True</td>
</tr>
<tr>
<td>I learn best by applying new knowledge to practical applications.</td>
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</tr>
<tr>
<td>1: Not True</td>
<td>2: Usually Not True</td>
</tr>
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<td>I appreciate receiving multiple/diverse viewpoints as part of my learning.</td>
<td>1</td>
</tr>
<tr>
<td>1: Not True</td>
<td>2: Usually Not True</td>
</tr>
<tr>
<td>As a student, I have a shared responsibility for meeting the learning objectives in my courses.</td>
<td>1</td>
</tr>
<tr>
<td>1: Not True</td>
<td>2: Usually Not True</td>
</tr>
<tr>
<td>I recognize the value of my previous experiences contributing to my further learning.</td>
<td>1</td>
</tr>
<tr>
<td>1: Not True</td>
<td>2: Usually Not True</td>
</tr>
<tr>
<td>I enjoy projects as opposed to lectures.</td>
<td>1</td>
</tr>
<tr>
<td>1: Not True</td>
<td>2: Usually Not True</td>
</tr>
<tr>
<td>I enjoy instruction that allows me to discover things for myself, with guidance and help provided when mistakes are made.</td>
<td></td>
</tr>
<tr>
<td>---------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Usually Not True</td>
<td>Usually True</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>More than just getting the facts, I appreciate explanations as to why things are being taught.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Usually Not True</td>
</tr>
<tr>
<td>1</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>I am most interested in learning subjects that have immediate relevance to my job or personal life.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Usually Not True</td>
</tr>
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<td>1</td>
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</tbody>
</table>

**In Summary:** If there is anything else you might want to share about your involvement with the ProMoTEd program that has not been addressed, please feel free to do so below, and on the back of this page if necessary.

Thank you for your participation, it is greatly appreciated 😊
Appendix B

Focus Group Sessions
Expected Script for Focus Group Sessions

After being reminded that the session will be audio taped and transcribed, the students will be directed to a table where pseudonyms have been created for them based on answers from the first four questions on the survey. They will be asked to introduce themselves through the use the pseudonym when responding to the questions for recording.

SAMPLE QUESTIONS:

1. In what ways are you enjoying your experience in the ProMoTEd program?

2. Can you give some examples of how having a university mentor has/would have effected your experience in the program?

3. A theme that arose from the group about the use of the cohort model includes: __________________________; can we discuss how this has impacted your experience?

4. A theme that arose from the group about pedagogy and classroom management was __________________________; can we discuss how this has impacted your experience as student and a practicing teacher?

5. A theme that arose from the group about overall coursework was __________________________; can we discuss how this has impacted your experience as a student and a practicing teacher?

6. A theme that arose from the group about being adult learners was __________________________; can we discuss how this has impacted your experience as a student and a classroom teacher?
7. I would like to discuss how the ProMoTEd program supports you in your role as a practicing teacher. Can you provide me an example of where you took something from your coursework/classroom experience and were able to immediately apply it to a real life experience (in your own classroom)?

8. How did you experience the intentional design of the program, whereby certain modules were taught during the first summer, others throughout the year while you were teaching, and then a few this summer? Was the sequencing helpful for you overall?

9. As a group, I would like to assemble a list of strengths and weaknesses of the ProMoTEd program, in supporting you as an adult learner who is also teaching while taking university courses in order to become fully certified.
Appendix C

Letter of Invitation to Participants
Dear ProMoTEd Students;

My name is Kymberli Flanagan and I am an alumnus of the College of Education here at Ferris, as well as a doctoral student at Western Michigan University. I am writing to ask if you are interested in participating in a research study on the process of becoming an alternatively certified vocational teacher. This research is for my dissertation, which is part of the requirements for a doctoral degree in Educational Leadership.

Participating in this study will include:

An initial survey that you would fill out after class that should last no more than 15 minutes. Permission to administer the survey in the classroom has been granted by the Director of the School of Education. About a week later, there will be two focus group sessions held to further discuss themes that emerged in the review of the survey instrument. You would only need to choose one of the focus groups to attend, and that should last no longer than 45 minutes. The focus group discussion, which will be recorded by a tape recorder, will focus on your practical application of your coursework as well as perceptions about the design of the ProMoTEd program in addition to the themes that emerge from the groups responses to the survey instrument. I will also be taking written notes, in addition to the audio recording. If needed, a follow up contact may occur which would allow me to check for the accuracy of my notes and to ask any follow up questions I had after reviewing the transcripts from our focus group. This possible contact would be done via email.

Participation in this study is completely voluntary and there is no penalty for not participating or for withdrawing from the study. If you agree to participate in this study, your identity will be kept strictly confidential. Your name and school will not appear in the study. Your stories will be referenced by a pseudo name. All transcripts will be kept on a portable thumb drive in a secured office in the researcher’s home.

If you are interested in learning more about participating, please join me at the end of class to review the consent document and to proceed with participation if you decide to participate. You may also contact me at any time at kymberli.flanagan@att.net, or you may feel free to contact me by phone at (616) 821-8783. Today, at 3:00 P.M. you will have the opportunity to learn more about the study and review the consent document before deciding whether or not to participate.

Sincerely,

Kymberli Flanagan
Appendix D

Consent Document
You are invited to participate in a study examining “Perceptions of Becoming an Alternatively Certified Vocational Teacher.” This study is being conducted by Kymberli Flanagan, a doctoral student in the Education Leadership program at Western Michigan University, under the supervision of Dr. Louann Bierlein Palmer, her dissertation committee chair.

The following information is being provided for you to determine if you wish to participate in this study. In addition, you are free to decide not to participate in this research or to withdraw at anytime without affecting your relationship with the researchers or Western Michigan University. You are eligible for participation because you are students currently enrolled in the ProMoTEd program that are also currently teaching under some form of emergency certification by the state of Michigan.

The purpose of this study is to examine the process of becoming an alternatively certified vocational teacher. If you decide to participate you will be asked to participate in a survey lasting approximately 15 minutes, a follow-up focus group session lasting approximately 45 minutes, and possibly an email discussion if needed for clarification on the focus group discussion. The focus groups will be audio recorded to ensure the accuracy of the collected information and all interviews will be transcribed into transcripts that you will be able to review and edit should you choose. You would also be able to ask the interviewer to turn off the audio recording equipment at anytime during the focus group.

During the survey, participants can expect to answer questions related to prior careers and training, as well as particular aspects of the ProMoTEd program (e.g., advising, mentoring, overall coursework, and adult learning theory).

The focus groups will be administered to seven participants, respectively, at the end of the sessions during the week of June 28, 2010 in a classroom designated by the School of Education. The focus group sessions will address the practical application of program coursework as well as perceptions about the design of the ProMoTEd program. Additionally, any themes that emerged from the group’s responses to the survey instrument will be further addressed as well.

Please do not hesitate to ask questions about the study before participating or while the research is taking place. I will be happy to share the results with you at the completion of
the study. *Ensuring the confidentiality of data is the norm in research. Your name or school name will not be used in the dissertation dissemination process;* rather it will only be known to the researcher. Pseudonyms will be used for participants (i.e. Student 1, Student 2, and so on) and general terms will be used in reporting results (i.e. “Five of the teachers commented...”; “Two teachers reported that...;” etc.). Most importantly, your participation or decision to not participate will not impact your grade(s) in class in any manner whatsoever. The School of Education has merely offered support of my study by providing access to you and individual instructors are not involved in the study.

Written transcripts will be stored in a locked filing cabinet in the office of the researcher upon each completion and for one year following the completion of the study. The transcripts will be transported directly by the researcher and stored on the campus of Western Michigan University for at least three years after that.

The audio transcripts will be destroyed once the transcription process has been completed and a written record is produced. You are invited at any time to review the written transcript to ensure that you are confident that the written transcript accurately reflects your comments during the focus group. There are no other known risks/discomforts associated with participating in this study.

There are several expected benefits from participating in this study. Results of this study can serve to further the understanding of effective processes in alternative certification as well as contribute to future program design and function. Students in the ProMoTEd program may provide a clear picture of the process from the student perspective, particularly how the program supports them as adult learners. Support mechanisms of advising, mentoring and the use of cohort groups, in addition to the perceived value and usefulness of overall coursework and instruction may yield rich information for not only the College of Education but for the field as well. It may further provide leaders and administrators in similar programs some insight into the practices and classroom instruction they may wish to investigate for the purposes of designing future alternative teacher certification programs. Furthermore, because some of the support mechanisms and classroom instruction may be relevant to all subjects areas (not only CTE), administrators and policy makers throughout the field may gain insight into potential practices they may wish to consider when addressing successful instruction of adult learners in education.

If you have any questions about this study, please contact Kymberli Flanagan, the student investigator at (616) 821-8783 or via email at kymberli.flanagan@att.net. You may also contact you can contact the primary investigator, Dr. Louann Bierlein-Palmer at 269-387-3596 or l.bierleinpalmer@wmich.edu or the Chair, The Western Michigan University Human Subjects Institutional Review Board (269) 387-8293 or via email at hsirb@wmich.edu, or
the Vice President for Research (269) 387-8298 if any questions or issues arise during the course of the study.

This consent document has been approved for use by the researcher for one year by the Human Subjects Institutional Review Board (HSIRB) as indicated by the stamped date and signature of the board chair in the upper right corner. Do not participate in the study if the stamped date is older than one year.

A signed copy of this consent form will be given to you for your records.

___________________________________  __________________________
Participant                  Date

Consent obtained by: ______________________________________

Interviewer/Student Investigator: __________________________

Date: __________________________________________

Also,

My signature below indicates that I understand that all information in the focus group is confidential. Further, I agree not to discuss the contents of the discussion or information about other participants outside of the focus group.

___________________________________  __________________________
Participant                  Date

Consent obtained by: ______________________________________

Interviewer/Student Investigator: __________________________

Date: __________________________________________
Appendix E

Transcriptionist Confidentiality Form
Transcriptionist Confidentiality Form

I, ________________________, transcriptionist, agree to maintain full confidentiality in regards to any and all audiotapes and documentation received from Kymberli Flanagan as related to her doctoral study on becoming an alternatively certified vocational teacher. Furthermore, I agree:

1. To hold in strictest confidence the identification of any individual that may be inadvertently revealed during the transcription of audio taped interviews, or in any associated documents;

2. To not make copies of any audiotapes or computerized files of the transcribed interview texts, unless specifically requested to do so by Kymberli Flanagan;

3. To store all study-related audiotapes and materials in a safe, secure location as long as they are in my possession;

4. To return all audiotapes and study-related documents to Kymberli Flanagan in a complete and timely manner.

I am aware that I can be held legally liable for any breach of this confidentiality agreement, and for any harm incurred by individuals if I disclose identifiable information contained in the audiotapes and/or files to which I will have access.

_________________________________________  ____________
Signature                                      Date
Appendix F

HSIRB Documentation
Date: June 14, 2010

To: Louann Bierlein-Palmer, Principal Investigator
   Kymberli Flanagan, Student Investigator for thesis or dissertation

From: Amy Naugle, Ph.D., Chair

Re: HSIRB Project Number: 10-06-09

This letter will serve as confirmation that your research project titled “A Study on Becoming an Alternatively Certified Vocational Teacher” has been approved under the expedited category of review by the Human Subjects Institutional Review Board. The conditions and duration of this approval are specified in the Policies of Western Michigan University. You may now begin to implement the research as described in the application.

Please note that you may only conduct this research exactly in the form it was approved. You must seek specific board approval for any changes in this project. You must also seek reapproval if the project extends beyond the termination date noted below. In addition if there are any unanticipated adverse reactions or unanticipated events associated with the conduct of this research, you should immediately suspend the project and contact the Chair of the HSIRB for consultation.

The Board wishes you success in the pursuit of your research goals.

Approval Termination: June 14, 2011
Appendix G

Survey Comments, Advising
Participant responses when asked: “Please describe your experience with any advising provided from the University regarding the ProMoTEd program, including both positive and negative feelings about the process:

- Vague when first signed up, then a new advisor was hired and more info was given
- Great, I felt informed and with no negative
- Many things are left up to the individual. This can be good or bad. It would be easier for me if it was cut and dried like the ProMoTEd program in regard to the basics required.
- I feel the advising provided at Ferris was much better than other colleges. When I tried to gain information through WMU, I kept hitting a wall. It seemed no one knew what I needed to do. They were unable to put a program or course of study together for me.
- My advisor was timely in responding to questions and concerns, she took an active role in securing a spot for me in a class that I required but could not seem to get into. I feel there should be more support somewhere for the graduation clearance process.
- Thirty plus years of experience, eight U.S. patents in carburetor design, several classes in statistics and accounting, and they want me to take basic math, science and English classes. I disagree!
- When I was looking into the program, I felt that it was very hard to get information. My questions weren’t being answered, but as time has gone on, the communication has been better. I get emails answered promptly and get update emails with new information from my advisor. The best part is that I don’t have to ask twice. My question is answered right away.
- They couldn’t agree on the number of credit hours due to many misunderstandings.
- My experience with the advising provided was very good.
- Absolutely excellent, very informative and accurate
- I feel it’s getting better.
- They told me the classes I needed to complete my degree for my OTC.
Appendix H

Survey Comments, Mentoring
Participant responses when asked: “Please describe your experience with any mentoring provided as part of the ProMoTEd program including both positive and negative perceptions of the mentoring process.”

- Helpful
- Great, my mentor/observer very supportive
- The mentoring that I received was very beneficial and positive
- I felt the staffs at Ferris were truly vested in the success of their students. They are open to non-traditional students.
- I did not have an official faculty mentor.
- No mentor was officially established
- Helped focus instruction and assessments
- To my knowledge, I had no faculty mentor.
- She was kind and helpful. I was intimidated because of the procedure, not the mentor.
Appendix I

Survey Comments, Cohort Groups
Participant responses when asked: “Share thoughts you have about being engaged in a cohort, including both your positive and negative perceptions.”

- Everybody helped each other
- Great experience with fellow cohort students
- I enjoy interacting with them, but I tend to work individually
- The people in our cohort became fast friends. We encouraged and supported each other a great deal.
- My cohort is exceptional. We have built a strong team and become great friends in the process. They have been a great support!
- They do provide a support for an intensive program.
- I depended very little on my cohort because I am a more independent person. I did rely on their sense of humor often to make me smile.
- I didn’t do this to make friends; I did this to keep up with state demands.
- It was a positive experience sharing ideas and concerns with cohort.
- Motivational
- It was a good way to learn. I was able to bounce ideas off different cohorts.
Appendix J

Survey Comments, Anything Not Addressed in Survey
Participant responses when prompted: “If there is anything else you might want to share about your involvement with the ProMoTEd program that has not been addressed, please feel free to do so.”

- The one credit system is a little unbalanced; it is hard to know the work load as one credit may be a lot of work and one credit may not.
- ProMoTEd is extremely important and necessary.
- The overall combination of peers/instructors and Ferris has been very supportive.
- As more people get involved with the ProMoTEd program, students will be more computer literate. Prior classes in computers would have been helpful.