ALTERNATIVE CERTIFICATION PROGRAM PARTICIPANTS DETAIL EARLY TEACHING EXPERIENCES USING THE TEACHER PROXIMITY CONTINUUM AS A FRAMEWORK

by

ALEXIS WILLIAMS

(Under the Direction of Elaine Adams)

ABSTRACT

Society's perception, recruitment, and retention of alternative certified teachers entering the education system is a critical issue in Career and Technical Education (CTE) (Heilig, 2007). Although public education is an important factor in our society and the nation's future, fewer college and university students are majoring in education programs. Therefore, a need exists for greater numbers of alternatively certified educators in school systems (Heinen, 2007). The Georgia Professional Standards Commission (GaPSC) sets the qualifications to become an educator in the state of Georgia. Educators without a traditional undergraduate degree in education are required to complete the necessary education courses within three to five years (GaPSC, 2021c). These nontraditional educators are classified as non-renewable or provisional until education courses and other requirements are completed. The purpose of this qualitative case study explored the early experiences of Career and Technical Education teachers who participated in an alternative certification program (ATCP) using the teacher proximity continuum as a framework. Teacher participants in the study were observed in their classroom settings and participated in a series of in-depth interviews over the course of the school year.

Data collected in the study included semi-structured interviews, observations evaluations, and other archived documents.

INDEX WORDS: Alternative Teacher Certification Programs, Workforce Education, Alternative Certified Teachers, Case Study, Career and Technical Education, Teacher Proximity Continuum

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DEDICATION

To my grandmother, Hattie Byrd Green Coverson, born September 29, 1929 who passed away in 2008 shortly after my arrival to the University of Georgia as an undergraduate student. The positivity and joy you engrained in me has supported me through my academics and successes. Thank you for encouraging the importance of education because you loved school although the education system only allowed you to complete the 6th grade as the highest level. You worked extremely hard during your lifetime, especially in a difficult era of time for African Americans and women in America. Your efforts are not forgotten and have transformed me. Thank you for your continued love and guidance as an angel in heaven. I am your wildest dream!

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Thank you to my village of family, friends, colleagues, and cohort members. It takes a village to get here and I appreciate you all encouraging me to keep going every day. I'm so grateful to God for bringing me this far!

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CHAPTER 1

INTRODUCTION: ALTERNATIVE CERTIFICATION PROGRAM DETAIL EXPERIENCES THROUGH THE TEACHER PROXIMITY CONTINUUM

Public education is a multi-faceted entity in our society to provide education to our diverse population of children in a vast array of subjects. The need for more educators is growing and school systems are pursuing more alternatively certified teachers to fill shortages. Schribner and Heinen (2009) are scholars who study teacher shortages and the production of teachers in Alternative Teacher Certification Programs (ATCPs). They described ATCPs as being a "widely used as a term for a variety of programs designed to train and credential teachers in expedited fashion" (Schribner & Heinen 2009, p. 179). Typically, ATCPs are used to develop nontraditional teaching candidates, who hold a Bachelor's degree or less in another scholarly area and are transitioning to become a public-school teacher. Bradshaw, a researcher who explores educational leadership roles in public education defined alternative certification as "a method of entry into the teaching profession that does not require completion of a traditional education program" (Bradshaw, 1998, p. 4). ATCPs are defined broadly as programs outside of a traditional four-year university-based education after the 1990s.

Most states across the nation offer ATCPs to assist with the current and future teacher shortages in critical subject areas (Friedrich, 2014). Full-time nontraditional candidate recruitment includes the availability of online and blended delivery through ATCPs. Some universities offer transition-to-teaching programs for individuals with baccalaureate degrees to become certified teachers after completion of an expedited education programs. Schribner and

Heinen (2009) posited that ATCPs (a) improves teacher quality, (b) increases the diversity of the teachers, (c) increases retention rates, and (d) decreases teacher shortages. “Policymakers assume that by providing alternate routes to certification (a) persons with valuable professional experience will be recruited to the profession, (b) professional experience translates into effective teaching, (c) more mature novice teachers will persist in the profession longer than younger, traditionally prepared teachers, (d) teachers of underrepresented groups will be attracted to the profession, and (e) the experiences of students of alternatively and traditionally certified teachers do not differ significantly” (Schribner & Heinen, 2009, p. 180). For the purpose of this dissertation, an ATCP is defined as a university program focused on providing guidance for non-certified teachers to earn teacher certification based on state requirements, specifically industry professionals with a degree or licensure in a CTE field related to their previous professional experiences (Schribner & Heinen, 2009; Bradshaw, 1994).

Statement of Problem

Alternative teacher certification programs (ATCPs) were created to fill teacher shortages in high needs schools and critical subject areas. High needs areas in Georgia consist of isolated and rural areas, for example, most areas outside of the metropolitan cities in Georgia would be considered rural areas and high needs subjects include Career and Technical Education (CTE), math, science, and special education fields (Adams, 2014; Scott, 2016; Partelow, 2019). Schribner and Heinen’s (2009) findings conclude the title ATCP is broad with each program developing different strengths and weaknesses (Schribner & Heinen, 2009). Strengths of the ATCPs from Schribner and Heinen’s article (2009) included the flexibility of the program encouraged teachers from different backgrounds and filled the teacher shortages (Schribner & Heinen, 2009). Weaknesses of the ATCPs included teachers’ feelings of not being adequately

prepared for challenging environments and failed to provide consistent on-site support for new teachers due to the disconnect between the ATCP and their full-time placement (Schribner, 2009). Continuous evolution of ATCPs is recommended by Schribner and Heinen (2009) due to the environmental changes while ensuring teacher quality. Haberman created the National Teacher Corps and served as an advisor to other ATCPs in the country. In Haberman's (1994) article, he supported teacher development through ATCPs because it is believed that "the primary knowledge base teachers need is content knowledge" and "teaching know-how and methods are best taught on-the-job" (p. 5). Recommendations from Haberman included (a) teachers admitted to the program are selected based on the prediction of their effectiveness with low-income students and cultural diversity, (b) the university supervisors are effective teacher practitioners within low-income schools, (c) content of the program is derived from related experience and supported by research, theory, and expert opinion, (d) the teacher has on-site coaching by an effective classroom teacher, and (e) student learning measured by standard mastery and/or standardized testing (Haberman, 1994).

State legislators and organizations offer incentives such as loan forgiveness and tuition waivers to teachers in high needs subjects such as Science, Technology, Engineering, and Mathematics (STEM) in rural and urban areas (Koehler et al., 2013; Partelow, 2019). Along with ATCPs recruiting transitioning teachers from industry to teach CTE and STEM courses, other recruits are targeted to fill the teacher shortage in the high needs area of Special Education. Scott, a scholar specializing in critical issues in special education claims minority and male recruitment is increased by ATCPs compared to traditional education programs (Scott, 2016). These programs have attracted students due to advantages such as expedited course completions and flexible schedules. Most states have ATCPs equipped to license new teachers in different areas

without the 4-year undergraduate process of traditional certification programs (Scott, 2016). A case study in Memphis, Tennessee, compared demographics of graduates from ATCPs and traditional certification programs. The study found more males graduated from ATCPs (20%) than traditional teacher education program (7%). In addition, African-Americans graduated more frequently (39%) compared to other populations (22%) (Scott, 2016).

Underrepresented regions, genders, subjects, and races are targeted by ATCPs to increase diversity in school systems across the country. A trend of least qualified teachers servicing our most disadvantaged students with the greatest educational needs in low socioeconomic rural and urban areas is found across the country (Scott, 2016). The nation's teachers' demographics lacks an equal representation of minorities such as African-American, American Indian, Asian/Pacific Islander, and Hispanic. Due to the significant race inequality, some states implemented programs to recruit minority teachers to attract minority students in multiple subject areas. Sims, a researcher who focused on recruitment and retention of racial minorities stated minority teachers usually influence minority students to be more successful in the classroom when their racial or ethnic group is reflected and minority teachers benefit all racial backgrounds due to creating awareness and appreciation of diverse populations (Sims, 2010, p. 26).

ATCPs like AmeriCorps and Teach for America (TFA) openly pursue candidates at Historically Black Colleges and Universities (HBCUs) and Hispanic-Serving Institutions to increase minority rates of teachers to the profession and to the high minority populated school systems. TFA's was established in 1989 with the purpose to recruit college graduates without traditional teaching certifications to teach in urban and rural public schools for two consecutive years. These non-profit ATCP organizations provide training, monetary stipends, student loan forbearance, and relocation benefits for the teacher recruits. Although TFA serves

underrepresented populations of students and attempts to recruit minorities, the programs fall short with 70% of participants being Caucasian and the remaining 30% being members of the minority population. Retention of TFA teachers is “approximately 63% of TFA alumni remain in the field of education as teachers, principals, policy advisers, and leaders” (Sims, 2010, p. 28). Compared to the national average of 40-50% of teachers exiting the field of education between year 3-5, TFA produces effective teachers with 37% leaving the profession of education (Sims, 2010). The availability of online courses increases flexibility with scheduling, therefore allowing students to complete coursework on their own time instead of traveling to campus for a specific time on an assigned day. Online classes are more accessible options for students with full-time employment and/or dependent children. Alternative certification programs create a pattern of recruiting minorities and males through the offered benefits (Scott, 2016).

The Georgia Professional Standards Commission (GaPSC) sets the qualifications to become a certified educator in Georgia’s public school systems (GaPSC, 2020). Educators without a traditional undergraduate degree in education are required to complete five educational courses (Educational Foundations, Educational Psychology, Exceptional Children/Special Needs, Curriculum, and Instructional Strategies) and a year-long supervised teaching internship within three to five years depending on the type of certificate of non-renewable certificate held. Those seeking teacher certification via an alternative route must hold a degree or technical certification in the subject area or have documented work experience in the area of expertise. These nontraditional educators are classified as non-renewable or provisional until education courses, and other PSC requirements (e.g.: Program Admission Assessment or exemption, GACE content, and GACE Ethics Exam) are completed. According to the article named ‘Steps to

Become a Georgia Teacher' on the GaPSC's website, these requirements are the same certification requirements for traditional teacher education programs (GaPSC, 2020).

Purpose of Study

The purpose of this qualitative case study was to explore the early teaching experiences of Career and Technical Education (CTE) teachers who participated in an alternative teacher certification program (ATCP) using the teacher proximity continuum as a framework. There are seven broad teacher certification areas in Career and Technical Education: Agricultural Education, Business Education, Engineering and Technology, Family and Consumer Sciences, Health Sciences, Marketing Education, and Career and Technical Specialization (formerly known as Trade and Industry Education) (GaPSC, 2020). According to the Association of Career and Technical Education (ACTE) website (ACTE, 2020), CTE is classified into sixteen Career Clusters and consists of more than seventy-nine pathways. The sixteen Career Clusters includes (a) Agriculture, Food and Natural Resources, (b) Architecture and Construction, (c) Arts, A/V Technology and Communications, (d) Business, Management and Administration, (e) Education and Training, (f) Finance, (g) Government and Public Administration, (h) Health Sciences, (i) Hospitality and Tourism, (j) Human Services, (k) Information Technology, (l) Law, Public Safety and Security, (m) Manufacturing, (n) Marketing, Sales and Service, (o) Science, Technology, Engineering and Mathematics (p) Transportation, Distribution and Logistics (ACTE, 2020). The ATCP under study prepares teachers from industries such as, but not limited to nursing, automobile mechanics, engineers, athletic training, culinary arts, business, and many other career paths into middle and high school teachers. Beginning CTE teachers participating in the ATCP are entering the classroom for the first time as an educator, holding a nonrenewable or provisional certification from the GaPSC. This study examined these teachers' early experiences

using the teacher proximity continuum, summarized in Table 1. It includes eight domains at five levels of functional distance from the teacher.

Table 1

Teacher Proximity Continuum (Camp & Heath-Camp, 1990)

Levels	Domains	Description
Personal Characteristics		
	Internal	Experiences within the teacher
Professional Skills		
	Pedagogy	Evaluation, delivery, short-term planning, and improvement of instruction experiences
	Curriculum	Experiences related to planning course content and preparing instructional materials
	Program	Experiences with long-term planning and implementing the pathway or program
Inter-personal Relationships		
	Students	Interactions with students
	Peers	Interactions with same level co-workers
Intra-system		
	System	Experiences within the educational system that impact the teacher
Extra-system		
	Community	Experiences outside of the educational system

The eight domains include internal, pedagogy, curriculum, program, students, peers, system, and community. The five levels of the Teacher Proximity Continuum are personal characteristics, professional skills, interpersonal relationships, intra-system, and extra-system (Camp & Heath-Camp, 1990). The continuum was developed using the documented experiences of a similar group of CTE teachers who participated in an ATCP. These experiences were recorded during interviews, daily tape-recorded logs, Nominal Group Technique (NGT) sessions, and focus group sessions (Camp & Heath-Camp, 1990).

Research Questions

The following are questions that guided this research study:

1. Personal characteristics- Internal
    a. How did participation in the ATCP impact teachers' early teaching experiences associated to internal characteristics?
2. Professional Skills- Pedagogy, Curriculum, Program
    a. How did participation in the ATCP impact teachers' early teaching experiences associated to pedagogy, curriculum, and program?
3. Interpersonal relationship- Students and Peers
    a. How did participation in the ATCP impact teachers' early teaching experiences associated to students and peers?
4. Intra-system- System
    a. How did participation in the ATCP impact teachers' early teaching experiences associated to the system?
5. Extra-system- Community

a. How did participation in the ATCP impact teachers' early teaching experiences associated to community?

Research Design

This study used a qualitative case study to focus on the teachers' early experiences collected through observation, interviews, and documents. This study was approved via the University of Georgia Institutional Review Board on November 15, 2021, refer to Appendix A. The teachers' early experiences included the transition into a new role of teaching full-time and enrollment in a part-time education program. The research explored the early experiences during the educational development while enrolled in the ATCP in Career and Technical Education (CTE) disciplines. This study is classified as applied research because the researcher's motivation is to understand the nature of the teachers' early experiences (Patton, 2015). Participants of the ATCP included teachers in CTE fields such as Business Education, Career and Technical Specializations, Engineering and Technology, Family and Consumer Sciences, Health Sciences, and Marketing as classified by the GaPSC (GaPSC, 2020). Public education settings often perceive alternative teacher certification programs as an ineffective method to train teachers for the classroom (Heilig et al., 2011). Due to the many negative misconceptions and opinions of alternative teacher certification programs, this research explored the education process of the teacher proximity continuum with respect to the eight domains and the five levels that teachers may experience. The researcher examined teachers' early experiences using the eight domains and five levels of the teacher proximity continuum to guide the research. Impact of participation in the ATCP program was also explored.

Case Study

Creswell and Poth (2018) defined qualitative research as "an inquiry process of understanding based on a distinct methodological approach to inquiry that explores a social or human problem. The researcher builds a complex, holistic picture; analyzes words; reports detailed views of participants; and conducts the study in a natural setting" (p. 2). This case study explored the transition of industry professionals to teaching a CTE course in the public-school systems. "A case study is an in-depth description and analysis of a bounded system" (Merriam & Tisdell, 2017). Creswell and Guetterman (2019) expanded on the definition of case study as "an in-depth exploration of a bounded system based on extensive data collection" (Creswell & Guetterman, 2019, p.477). The researcher used the case study method to explore the lived experiences of teacher candidates in an ATCP. The researcher's purpose for an in-depth study of the case study is to fully understand the complexity of the ATCP and the experience of an alternative certification program instead of the surface-level exploration of a quantitative study. Participants could elaborate more in interviews than they could in surveys and the researcher was able to collect more data from observations than surveys. The twofold definition of a case study as a research method is, "a case study relies on multiple sources of evidence, with data needing to converge in a triangulating fashion" (Yin, 2014, p. 12).

The case study's methodology fits the design of the research better than other types of qualitative research methods since the case is bounded in the ATCP program (Merriam & Tisdell, 2017). Students are accepted and registered for the ATCP program through the university's Graduate School. Students enroll in two courses or six credit hours, Curriculum Planning in Workforce Education Instructional Strategies in Workforce Education, to start the cohort in Summer 2019 (Workforce Education, 2020). During these summer classes, students

attend class ten days, and receive face-to-face instruction from their professor. Conducting this research study with this cohort allowed improvements to be made overall to ATCPs globally based on the teachers' early experiences. The qualitative method of data collection stimulated more detailed information compared to quantitative data collection because the researcher is using in-depth, semi-structured interviews, and archived documents such as observation evaluations, lesson plans, and other materials to support the research (Creswell & Poth, 2018).

Conceptional Framework

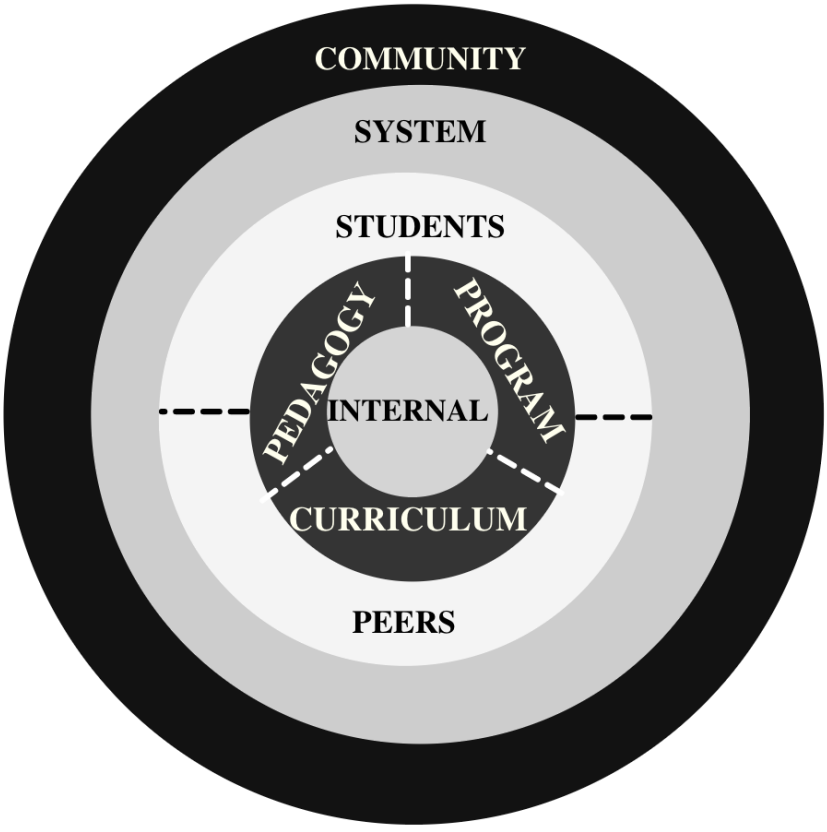
The conceptional framework of the research is the teacher proximity continuum. The teacher proximity continuum framework along with a case study design explored the early teaching experiences of the teachers who participated in an ATCP to obtain full-renewable CTE teacher certification (Camp & Heath-Camp, 1990). Uniting the qualitative case study method and the teacher proximity continuum for this study allowed multiple alternative certified teachers to share their experiences in an ATCP as a bounded system. The teacher proximity continuum includes eight domains at five levels of functional distance from the teacher. The eight domains include internal, pedagogy, curriculum, program, students, peers, system, and community. The five levels of the Teacher Proximity Continuum are personal characteristics, professional skills, interpersonal relationships, intra-system, and extra-system (Camp & Heath-Camp, 1990) in Figure 1.

The personal characteristics level includes the internal domain, which focused on the experiences within the teacher. The professional skills level includes domains such as pedagogy, curriculum, and program. Pedagogy encompasses the short-term planning, improvement related to instruction, evaluation, and delivery, while the curriculum is the experience associated with to planning the course and preparing instructional materials. The program includes long-term

planning of implementation of the pathway or program. The next level is inter-personal relationships, including students and peers. The students' domain involves the interactions between the teacher and the students compared to the domain of peers involving the interactions with same-level co-workers or other teachers. The intra-system level consists of the system, which is the education system's experience that impacts the teacher. The educational systems can be the local school system that employs the teachers, the state school system regulating state teaching standards, and the federal education school system mandating the nation. The last level is extra-system, which is the community domain, including the experiences outside of the educational system and how their community impacts the teacher.

Figure 1

Teacher Proximity Continuum (Camp & Heath-Camp, 1990, used with permission, personal communication on January 22, 2021)



According to Camp and Heath (1989), as many as one-fourth of problems encountered by beginning CTE teachers are unique to CTE (Camp & Heath, 1989). The teacher proximity continuum was developed to analyze and classify over 5,000 events based on the collection of significant events, positive influences, negative influences, and assistance (Camp & Heath-Camp, 1990). Due to the uniqueness of the experiences encountered by CTE teachers, the teacher proximity continuum is the best framework for the study based on the multiple components of the teachers' early experiences. Personal characteristics include the internal domain; this domain relates to experiences arising from factors within the teacher. The professional skills level includes the pedagogy, curriculum, and program domains. Pedagogy is the method and practice of teaching; therefore, the teachers described their early experiences of how the ATCP impacted their pedagogy. The pedagogy domain includes experiences related to the teachers' short-term planning, deliver, evaluation, and improvement of instruction.

The curriculum domain relates to planning for course content and preparation during the duration of the course. One source of planning for this research would be to use the standards from Georgia Department of Education (GaDOE) to design and outline the school courses. The program domain includes experiences related to the long-term planning and operation of the teachers' CTE pathway or program. CTE pathways consist of three courses required in sequence before completing the End of Pathway Assessment for student certifications. The interpersonal relationship level includes students and peers. The student domain explores the relationship and interactions between the teachers and students. The peers domain explores the relationship and interactions between the teachers and their same level co-workers in the school system. The domain connected to the intra-system level is a system. The system includes the GaDOE, the federal school system, and the local school system. The researcher explored the early

experiences between the system and teacher. The extra-system level involves the community domain which explores the early experiences arising from outside the administrative and physical bounds of the educational system (Camp & Heath-Camp, 1990).

Significance of Study

This study explored the early experiences of teachers in alternative teacher certification programs (ATCPs) located in a college of education in a major research university in Georgia. This research's focus is on the shared experiences of completing an ATCP within the early years of the teachers' career in education. This study is important because about 25% of experiences within CTE teachers are unique to CTE and need to be explored in the state of Georgia (Camp, 1989). Due to the uniqueness of these teachers' experiences, their experiences needed more examination to discuss CTE teacher experiences and explore ATCPs' role in combatting teacher shortages in the state of Georgia. While this study is bounded in the shared experiences of participating in an ATCP, this study is not a program evaluation of the specific ATCP. ATCPs receive criticism for "professionalizing teaching" by dissolving teaching education down to basic classroom management techniques and content knowledge; therefore, important factors of this study include the discovery how participation in the ATCP impacted early experiences regarding the teachers' professional knowledge and skills (Friedrich, 2014). Childre's study stated both traditional university programs and ATCPs integrate the three categories for the framework of understanding teaching and learning: (a) knowledge of learners and their development in social contexts, (b) knowledge of teaching, and (c) knowledge of subject matter and curriculum goals. These three categories overlap to encompass effective teaching skills in the classroom. Preparation in the three teacher training components includes: (a) content training, (b) pedagogy, and (c) field-experience (Childre, 2014). Content area expertise is an instrumental factor in

student achievement; therefore, alternative certification teachers with an undergraduate or graduate degree in the field effectively impact students. Pedagogy addresses strategies for diverse learners such as students with learning disabilities is increasingly difficult as the content level progresses throughout the year for general education teachers. Field experience for ATCPs is the year-long supervision as a classroom teacher. The three components of effective teaching are incorporated and expanded with the teacher proximity continuum.

Assumptions of Study

Assumptions are important facts presumed to be true that may not be verified and does not need testing (Gay, 1976). Assumptions of the study included participants are honest about their early experiences in the ATCP. Another assumption is the participants were certified and licensed in their respective career fields before teaching their specific subject. The last assumption is the participants willingly chose the career transition from their industry to education.

Limitations of Study

Overall, the limits or boundaries of this research study are minimal since the researcher was a Graduate Assistant for the cohort and assisted in teaching the courses. The researcher has access to the participants and their information, such as interviews, assignments, documents, and observation evaluations. The only limitation was not being able to interview participants in person due to participants living in different locations in the state of Georgia and the COVID-19 pandemic. Limits for the participants could be the teacher candidates not being entirely honest because the researcher was the Graduate Assistant and co-taught the courses for the cohort. The researcher's role in data collection is the primary and secondary collector when the documents,

assignments, and archived observation evaluations were reviewed and interviews were conducted which overlapped with Graduate Assistant duties.

Dissertation Overview

This dissertation has six chapters to explore the early experiences of the teachers in the ATCP. An overview of the dissertation includes: review of the literature, methodology, ATCP teacher experiences, findings from the research based on the experiences of the participants, and discussion and conclusion. The review of the literature in chapter two addresses related research in the aspects of the evolution of teacher education in traditional and nontraditional routes, CTE, teacher certification requirements in Georgia, teacher early experiences, and theoretical/conceptual frameworks explored. Chapter three explores the qualitative case study methods related to this dissertation study and the characteristics of the participants. The detailed experiences of the teachers as a participant overview are in chapter four. Chapter five explores the findings from the research in relation to the teacher proximity continuum. In the last chapter, discussion and conclusion, the research is placed in current context of alternative certification and early experiences of CTE teachers.

CHAPTER 2

LITERATURE REVIEW:

Historical Evolution of Teacher Education

Alternative teacher education models and traditional university-based teacher education models have different requirements, some delivery methods are similar to develop effective teachers. Other commonalities of traditional and ATCPs from Friedrich's study (2014) stated both programs integrate the three categories for the framework for understanding teaching and learning: (a) knowledge of learners and their development in social contexts, (b) knowledge of teaching, and (c) knowledge of subject matter and curriculum goals. These three categories overlapped to encompass effective teaching skills in the classroom. Shulman (1987) developed the pedagogical content courses to bridge the gap between content and teaching methods which is one of the goals of ATCPs. In the 1980s, a decline in traditional Career and Technical Education (CTE) programs started due to the elimination of most programs in universities and the decline continued in the 1990s due to the lack of Perkins II funds (Gray & Walter, 2001; Camp & Heath-Camp, 2007). In the 1980s and 1990s, the U.S. teacher education program focused on the 'era of standards' and is currently practicing the 'era of accountability' with the incorporation of policies throughout the years (Cochran-Smith et al., 2017).

The implementation of the No Child Left Behind Act (NCLB) defined a highly qualified teacher as an individual with a bachelor's degree, full certification, and competency in the subject matter in which he or she will instruct classroom curriculum (Quigney, 2010). Revisions to the NCLB Act transitioned the control of licensure requirements to each state as Every

Student Succeeds Act (ESSA) (Bowen et al., 2019). In 2015, ESSA abandoned the highly qualified teacher title and focused on the state's licensing requirements instead of federal requirements (Sawchuk & Burnette, 2016). The American Association of Colleges for Teacher Education (AACTE) was established in 1948 with the purpose to develop high-quality and evidence-based preparation to assure readiness to teach all learners (American Association of Colleges for Teacher Education, 2021). AACTE represents over more than 800 colleges and universities in the nation. Another association was established in 1954 to regulate education preparation named the National Council for Accreditation of Teacher Education (NCATE) (Feistritzer, 2009).

Recently, enrollment in traditional teacher preparation programs has declined by one-third, see Figure 2 and see Figure 3 which compares the completion rates of those enrolled (Partelow, 2019). The rates in the nation for teacher preparation programs declined and the rates for alternative certification programs remain steady.

Figure 2

Teacher Preparation Program Enrollment Decline by Year 2010- 2018 (Taken from Partelow, 2019).

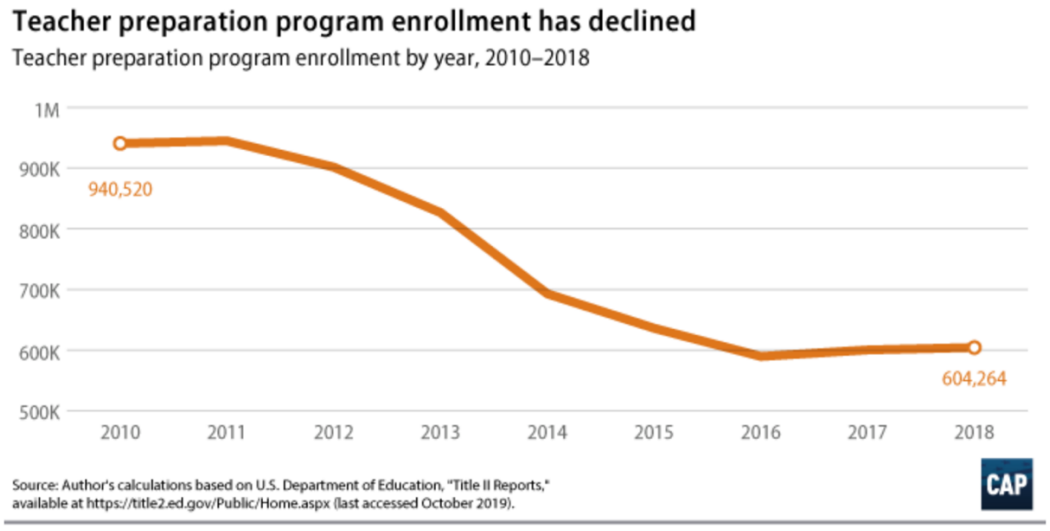
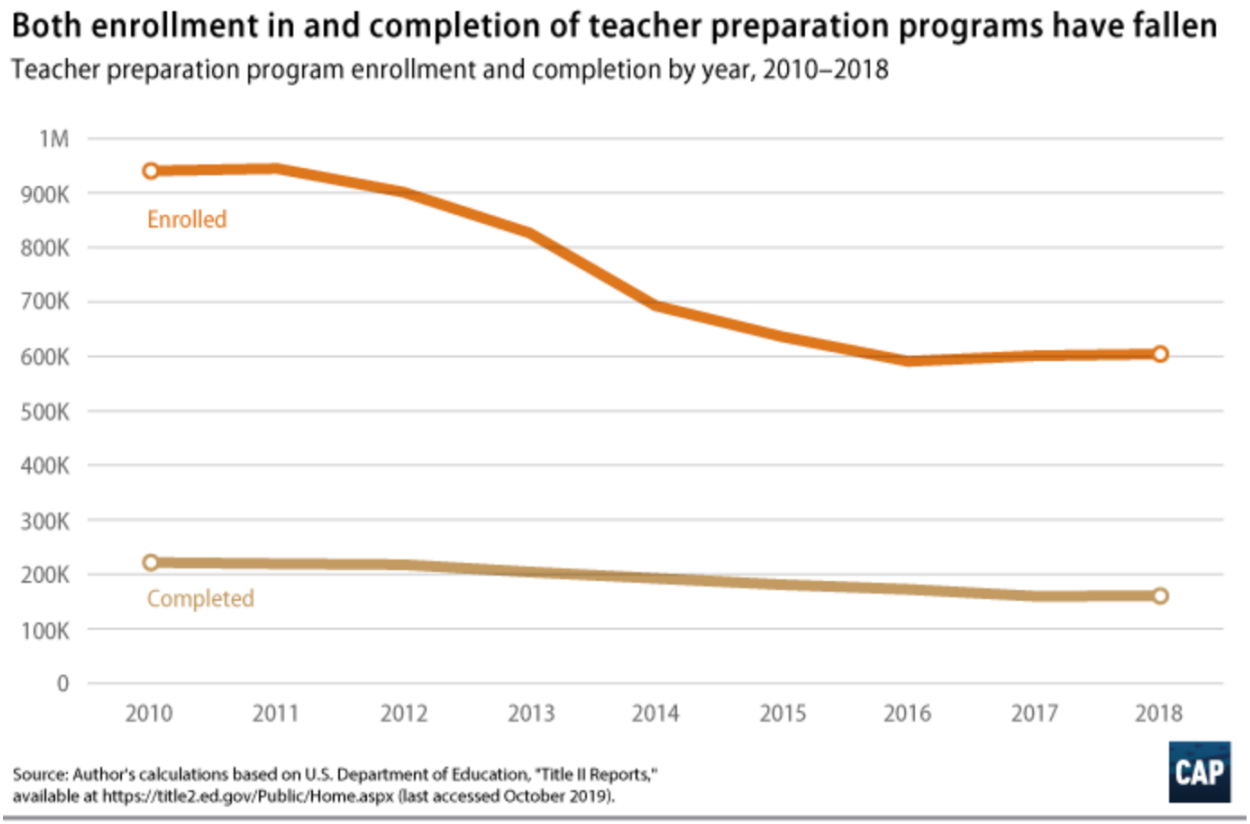


Figure 3

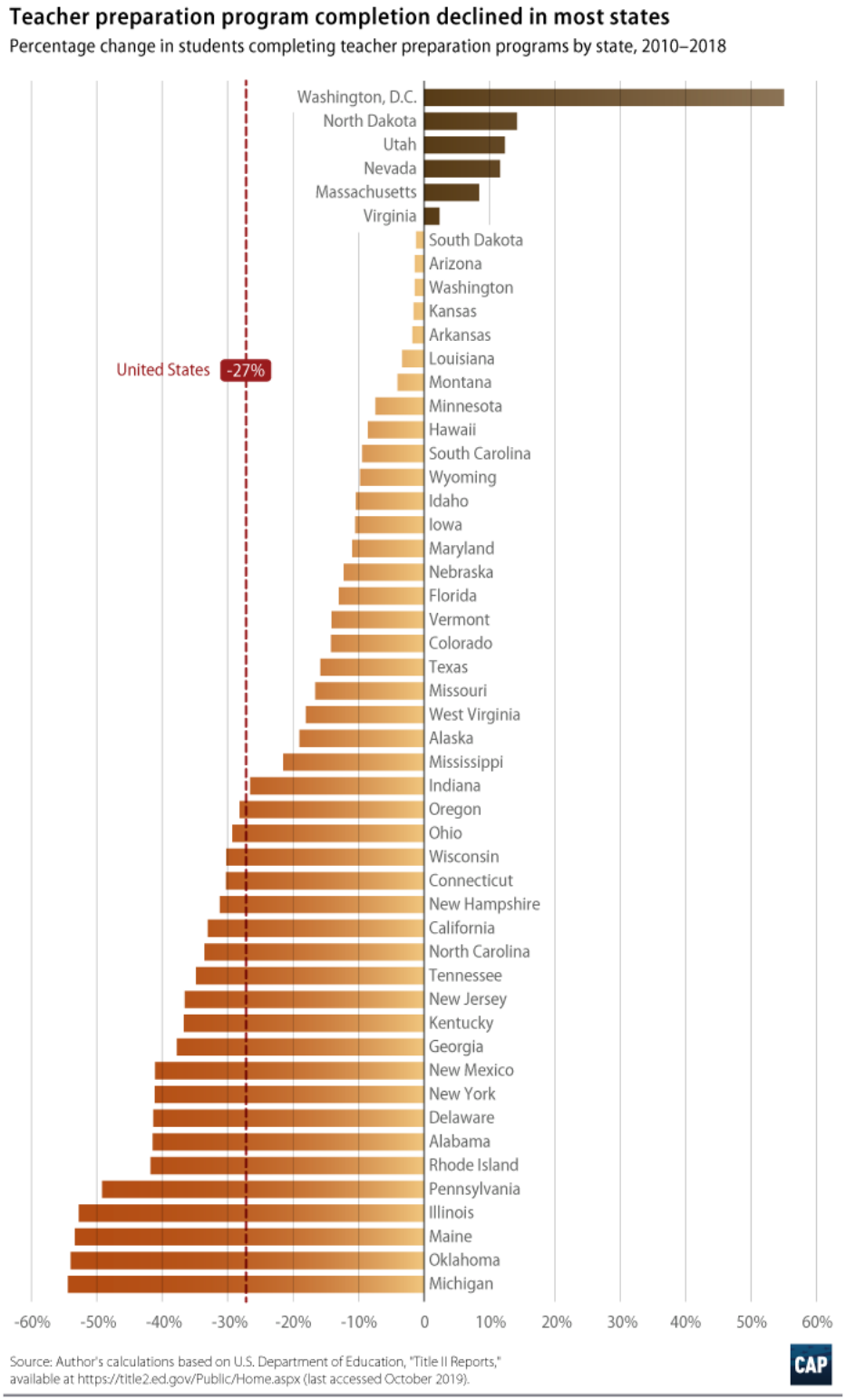
Comparison of Decline in Enrollment and Completion (Taken from Partelow, 2019)



While the statistics reported a decline in enrollment and completion in most states, nine states have seen a dramatic decline of 50% or more such as 80% in Oklahoma, 67% in Michigan, 62% in Pennsylvania, 61% in Delaware, 60% in Illinois, 55% in Idaho, 54% in Indiana, 54% in New Mexico, and 51% in Rhode Island see Figure 4 (Partelow, 2019). As the decline continues in traditional programs, the teacher shortage expanded creating more need for ATCPs to fill these shortages. As of 2019, 75% of teacher enrollments were as traditional preparation teachers comprised of the 1,466 traditional programs in the nation (Yin & Partelow, 2020).

Figure 4

Teacher Preparation Program Completion Decline by State (Taken from Partelow, 2019)



Alternative Teacher Education Models

Bradshaw (1998) defined alternative certification as "a method of entry into the teaching profession that does not require completion of a traditional education program" (Bradshaw, 1998, p. 4). Schribner, a scholar who studies teacher shortages and the production of teachers in Alternative teacher certification programs (ATCP) defined ATCPs as being "widely used as a term for a variety of programs designed to train and credential teachers in expedited fashion" (Schribner & Heinen, 2009, p. 179). Typically, ATCPs are developed for non-traditional candidates with a Bachelor's degree transitioning to education. Full-time nontraditional candidates are recruited with the availability of online and blended delivery through ATCPs. Universities offer transition-to-teaching programs for individuals with baccalaureate degrees to become certified teachers after completing expedited education programs. Schribner and Heinen's (2009) suggested that ATCPs improve teacher quality, increase diversity of the teachers, increase retention rates, and decreases teacher shortages (Schribner & Heinen, 2009). ATCPs receive criticism for "professionalizing teaching" by dissolving teaching education down into basic classroom management techniques, added to content knowledge. Most states across the nation offer ATCPs to assist with the current and future teacher shortages in critical subject areas (Friedrich, 2014).

Yin and Partelow (2020) divided teacher preparation programs into three types: traditional teacher preparation programs typically based within an Institute of Higher Education (IHE), post-baccalaureate ATCPs geared towards individuals with at least a bachelor's degree housed within an IHE, and ATCPs not in IHEs referred to as non-IHE. Non-IHE programs exist in 32 states within those states 26 programs are operated as for-profit organizations, 17 programs are in Texas while the remaining programs are housed in eight other states across the nation

(Arizona, Hawaii, Indiana, Louisiana, Michigan, Nevada, North Carolina, and South Carolina) (Yin & Partelow, 2020). In Arizona, Hawaii, Indiana, Louisiana, Michigan, and Texas, the for-profit programs enroll majority of the non-IHE population due to state-based circumstances such as Michigan only has for-profit non-IHE programs, Texas enrolled 93% because they have 17 programs in the state (Yin & Partelow, 2020). State examples of variety in programs included Louisiana's Practitioner Teacher Programs that required a minimum of 9- twelve credit hours in coursework before the first year of teaching then a three-hour seminar each semester, and one-on-one supervision during the first year (Woods, 2016). Oklahoma's program does not require any coursework if the teacher has at least a bachelor's degree and at least two years of work experience in the selected field (Woods, 2016). Lastly, Woods (2016) stated Utah must have a bachelor's degree and at least 27 credit hours in elementary curriculum content areas to teach elementary, but secondary teachers do not need any additional coursework outside of their bachelor's degree.

Feistritzer (2004) classified alternative certification into 9 categories: (a) Class A: these programs lead to full certification by meeting the following criteria because the program is designed for individuals with at least a bachelor's degrees in a field other than education. The program also involves formal theory and practice of teaching scheduled and teaching with a trained mentor. The program is not restricted to shortages based on grade level or subjects. (b) Class B: these programs are designed for individuals who have at least a Bachelor's degree with mentoring and formal instruction similar to class A, but the programs are restricted to specific shortages, secondary grade levels and/or subject areas. (c) Class C: the state and/or local school districts have majority of the responsibility for the design of the program. These programs use transcript analysis to review the prospective teacher's professional and academic background

with individually designed in-service preparation and course taking to complete certification requirements. (d) Class D: similar to Class C, but an institution of higher education has the majority responsibility for the design of the program. (e) Class E: these programs are post-baccalaureate programs based in an institution of higher education. (f) Class G: these programs are for individuals with a few requirements left to be certified through a traditional university-based teacher education. (g) Class H: this category is for an individual with special qualifications to be certified in specific areas. (h) Class I: this class is for areas without alternative teacher certification routes. (i) Class K: these programs target individuals in special populations who want to teach. Before the 2004 edition, there were 11 classifications, Class F and Class J were related to emergency routes of certification, but were eliminated (Feistritzer, 2004). The classes are explored in Table 2.

Table 2

Feistritizer (2004) Classifications and Examples

Feistritzer Classification	Programs in Georgia
A	Georgia Teacher Alternative Preparation Program
B	None
C	None
D	Post Baccalaureate Non-Degree Preparation Programs
E	Master's Degree Level Initial Preparation
F	Eliminated
G	Probationary Certificate
H	Permitted Personnel
I	Not applicable

J	Eliminated
K	Teach for America and Troops to Teachers

Historical Overview of ATCP

In 1985, New Jersey and Texas developed a controversial program to produce an alternate route to teacher certification then Congress expanded on Title II of the 2001 Elementary and Secondary Education Act from the NCLB provisions with more funds for ATCPs (Feistritzer, 2009; Mikulecky et al., 2004). Serpell and Bozeman (1999) stated program components of ATCPs included phases as a preparation, orientation, and practice. Preparation included the general information about characteristics of the school and disbursing materials, orientation included curriculum training and practices of effective teaching, and practice is the interaction with students and a mentor teacher (Serpell & Bozeman, 1999). Feistritzer (2009) stated that the nation has about 125 state alternate routes housing roughly 600 alternative certification programs which employs about one-third of new teachers in the country. Feistritzer's (2009) article referred to data from the Schools and Staffing Survey such as approximately 40% of traditional education program graduates do not go into teaching, U.S. Department of Education's Baccalaureate and Beyond Longitudinal Study showed only 33.5% of traditional education program graduates go directly into the classroom while less than 75% will teach by their 10-year university of their graduation. The National Center for Alternative Certification reported that all participants teach in some capacity, 79% teach full-time and the 21% teach part-time (Feistritzer, 2009).

In 2003, Transition to Teaching programs received about $42 million from Congress for individuals to wanting to pursue teaching during a mid-career transition (Mikulecky et al., 2004).

In 2000, the first state, Texas and the Texas State Board for Educator Certification approved community colleges to offer ATCPs and by 2004, the state approved community 22 community colleges (Mikulecky et al., 2004). ATCPs started in the mid-1980s with less 300 teachers and progressed to approximately 676,000 teachers currently (Blazer, 2012; US Department of Education- Institute of Education Sciences, 2018a). Over the years, ATCPs have evolved based on needs from two programs within the initial two states and have led to the over 130 program types currently in the nation (Bowling & Ball, 2018). Other examples of ATCPs across the nation includes: Texas Region XII Education Service Center's Educator Certification Program, Teacher Education Institute in the Elk Grove, California, Unified School District; New Jersey's Provisional Teacher Program; Milwaukee's Metropolitan Teacher Education Program (MMTEP); North Carolina Teachers of Excellence for All Children (NC TEACH); New York City Teaching Fellows Program; Georgia Teacher Alternative Preparation Program, Northeastern California Partnership for Special Education, and Wichita Area Transition to Teaching (Humphrey et al., 2008; U.S. Department of Education- Office of Innovation and Improvement, 2004).

Current Status of ATCP

The current statistics of teachers that entered education through an ATCPs is 18.6% nationally of the 3.8 million public school teachers in 2017-2018 (US Department of Education- Institute of Education Sciences, 2018a). While the education field grows and glows, teacher attrition rates are consistent with almost half of teachers leaving within their first five years (Tatto et al., 2016). Between the 2011-12 and 2012-13 school years, only 8% of the teacher left the profession in the nation (US Department of Education- Institute of Education Sciences, 2015). The nation's test requirements for initial certification included traditional and alternative

teachers as of 2018 includes 39 states require a basic skills exam, 46 states require a subject-matter exam, 26 states require a knowledge of teaching exam, and 26 states require assessment of teaching performance (US Department of Education- Institute of Education Sciences, 2018b). The alternative certified teachers presented higher percentages of underrepresented populations such as minorities and males compared to traditional university-based teacher education. The comparison breakdown is 13% Black teachers to the 5% in traditional programs, 15% to the 8% of the Hispanic traditional teachers, 2% to the 1% of traditional teachers identify as Two or more races, and 32% males are alternatively certified compared to the 22% in traditional programs (US Department of Education- Institute of Education Sciences, 2021b). The main activity the year before becoming a teacher for alternatively certified teachers was working in an occupation outside the field of education while traditional teachers' main activity was being a student at a college or university (US Department of Education- Institute of Education Sciences, 2018a).

Approximately, 37% of alternative certified teachers in the nation go into CTE (US Department of Education- Institute of Education Sciences, 2018a). The area with the highest amount of alternative certified teachers is the city based on The National Center for Education Statistics, which stated 22.4% of those teachers were products of ATCPs compared to 17.5% are in rural areas, 17.4% are in the suburban areas, and 15% are in town areas (US Department of Education- Institute of Education Sciences, 2021b). About 50% of the schools that received alternative certified teachers consist of 75% or more minorities while 39% of the teachers work in a school with 51% or more eligible for free or reduced-price lunch based on the National School Lunch Program (US Department of Education- Institute of Education Sciences, 2015).

Traditional University-based Teacher Education Models

The traditional path to teacher preparation and certification historically followed an undergraduate, four-year path from an accredited institution (Walter & Grey, 2002). For example, a major university in Georgia requires at least 62 hours in general or core level as pre-requisites before applying for specific teaching programs (Mary Frances Early- COE, 2020). Core courses includes foundation courses such as 9 hours in lower level English and math courses, 8 hours in science, 4 hours in quantitative reasoning, 9 hours in world languages and culture, 3 hours in humanities and the arts, 9 hours in social science, and approximately 20 hours in major related courses (Mary Frances Early- COE, 2020). After acceptance to the education program, the traditional certification route requires 31 hours of higher level, subject specific education courses, 27 hours of educational technology courses, and finally 15 hours of a full-time student teaching placement (Mary Frances Early- COE, 2020). Traditional teacher education preparation models include student teaching as a clinical experience under the supervision of a certified teacher for degree completion to measure the students' readiness (Bradley, et al, 2019). CTE fields with traditional education programs includes agriculture education, business education, marketing education, family and consumer sciences education, and technology education (Walter & Grey, 2002). According to Stephens (2015), approximately 50% of health sciences and automotive teachers did not compete a traditional education program or ATCP (Stephens, 2015).

State Requirements and Model in Georgia

The Georgia Professional Standards Commission (GaPSC) sets the qualifications to become a certified educator in Georgia's public-school systems (GaPSC, 2020). Over 22% of newly hired teachers were hired from alternative certification routes according to The PSC Pulse,

the GaPSC newsletter in 2009 (PSC Pulse, 2009). Educators without a traditional undergraduate degree in education are required to complete five required education courses (Educational Foundations, Educational Psychology, Special Needs/Exceptional Children, Curriculum, and Instructional Strategies) and a year-long supervised teaching internship. Those seeking teacher certification via an alternative route must hold a degree or technical certification in the subject area or have documented work experience in the area of expertise. These nontraditional educators are provided non-renewable or provisional type certificate until education courses, internship and other requirements are completed. While the teacher pursues the coursework in education, candidates must obtain a passing score from the GaPSC Ethics exams to measure growth on multiple assessment scales. Additionally, passing scores of the Georgia Assessments for the Certifications of Educators (GACE) are required for full teacher certification from Georgia. According to the article named 'Steps to Become a Georgia Teacher' on the GaPSC's website, these requirements are the same certification requirements for traditional teacher education programs (GaPSC, 2020).

Career and Technical Education Areas in Georgia

The Smith-Hughes Act of 1917 provided federal support for vocational education (Scott & Sarkees-Wircenski, 2008). The United States Department of Education (USDOE) developed Career Clusters in the 1970s to classify industry systems in education (Scott & Sarkees-Wircenski, 2008). In 1983, the Nation at Risk report was released as criticism of the National Commission on Excellence in Education (1983). April's report (1983) focused attention to the federal government and the ineffectiveness of public education (National Commission on Excellence in Education, 1983; Scott & Sarkees-Wircenski, 2008). In 2000, The USDOE identified sixteen major career clusters. According to the Association of Career and Technical

Education (ACTE) website (ACTE, 2020), Career and Technical Education (CTE) is classified into sixteen Career Clusters and consist of more than seventy-nine pathways. The sixteen Career Clusters includes (a) Business, Management and Administration, (b) Marketing, Sales and Service, (c) Information Technology, (d) Hospitality and Tourism, (e) Law, Public Safety and Security, (f) Agriculture, Food and Natural Resources, (g) Human Services, (h) Transportation, Distribution and Logistics, (i) Finance, (j) Architecture and Construction, (k) Education and Training, (l) Arts, A/V Technology and Communications, (m) Health Sciences, (n) Government and Public Administration, (o) Manufacturing, (p) Science, Technology, Engineering and Mathematics (ACTE, 2020). These Career Clusters are identified into eight disciplines in Georgia: Agriculture, Business, Career and Technical Specializations, Computer Science, Engineering and Technology, Family and Consumer Sciences, Health Sciences, and Marketing (GaPSC, 2021c).

Studies have shown that these CTE programs improve graduation rates by linking academics and career readiness to prepare students for career and/or college (Hanover Research, 2018). Each discipline has at least one Career and Technical Student Organizations (CTSOs) to integrate classroom knowledge and curriculum to reinforce learning through hands-on application and experiences. The expansion of Carl D. Perkins Vocational Act of 1984 included vocational student organization activities in its definition of vocational education. In 1999, the USDOE recognized ten CTSOs to serve students in the specific disciplines to focus on leadership skills, career exploration, community service, and personal growth and development (Scott & Sarkees-Wircenski, 2008). CTSOs are structured to have local, state, and national organizations with officers.

Agriculture Education

Agriculture education supplies students with knowledge, skills, and personal attributes required to explore and prepare for careers in agriculture and natural resources (Scott & Sarkees-Wircenski, 2008). The systemic program of instruction of agriculture education encompasses science, business, technology of plant and animal production and/or about the environmental and natural resources systems (National FFA Organization, 2019). The vision of agricultural education envisions a world with all people valuing and understanding the vital role of agriculture, food, fiber, and natural resources systems to advance personal and global well-being (National Council for Agricultural Education, 2018). Examples of Agricultural education pathways includes Agribusiness systems, Animal systems, Environmental service systems, Food products and processing systems, Natural resources systems, Plant systems, and Power, structural and technical systems (GaDOE, 2021b). Based on the three-part instructional delivery system, agricultural education executes contextual learning, work-based learning, and student organizations (GaDOE, 2021a). Contextual learning includes the classroom instruction and laboratory instruction such as experiments while work-based learning involves supervised agriculture experience programs with community stakeholders (Scott & Sarkees-Wircenski, 2008). Agriculture education student organizations includes National FFA Organization formerly Future Farmers of America (FFA), National Young Farmer Educational Association (NYFEA), and National Postsecondary Agricultural Student Organization (PAS) (Scott & Sarkees-Wircenski, 2008).

Business Education

Business education trains students to enter the industry of business by providing knowledge of business and maximizing employability skills (Scott & Sarkees-Wircenski, 2008).

Business teachers typically work with middle or high school students to teach fundamentals (Association for Career and Technical Education, 2021a). Aspects of business education includes preparing students to (a) be ethical decision makers and knowledgeable in their roles such as workers, consumers, and economic system citizens, (b) understand the role and structure of business in the economy, (c) manage their personal business affairs (Georgia Business Education Association, 2021). Other aspects include (a) develop and refine communications, analytical, computational, and technological skills necessary for economic and business applications, (b) develop students' personal commitment to lifelong learning, and (c) prepare and provide leadership roles though the respective CTSOs (Georgia Business Education Association, 2021). Business education CTSOs are Business Professionals of America (BPA) and Future Business Leaders of America- Phi Beta Lambda (FBLA) (Scott & Sarkees-Wircenski, 2008). Examples of Business education pathways in Georgia includes General Management, Business information management, Human resources management, Operations Management, and Administrative support (Georgia Department of Education, 2021c).

Computer Science Education

The Computer Science education branched off as a new and emerging discipline in Georgia to create a new separate subject to encompasses the art and science of computational thinking (Georgia Professional Standards Commission, 2021b). Computer Science teachers introduce and present fundamental concepts of computer science including computers and computer programming (Computer Science Teachers Association, 2021). Limited information about this discipline is developing due to the new evolution. Based on the Georgia Department of Education standards for Computer Science, the associated CTSOs are FBLA, Technology Student Association (TSA), and SkillsUSA.

Engineering and Technology Education

Engineering and Technology education is the study of technology to develop students' technological literacy. Technology literacy is the ability to use, manage, and understand technology (Scott & Sarkees-Wircenski, 2008). Engineering and Technology educations is a series of courses that allow students to work with and study the impact of modern technology on society (Georgia Engineering and Technology Education Association, 2021). Students are able to understand the history and uses of technology, present uses of technology, and the future uses of technology (Georgia Professional Standards Commission, 2021b). Some examples of Engineering and Technology education pathways include Network systems, Information support and services, Web and digital communications, Engineering and technology, Science and Mathematics, and Programming and software development (Georgia Department of Education, 2021d). The CTSO linked to Engineering and Technology education is Technology Student Association (TSA) (Georgia Department of Education, 2021e).

Family and Consumer Sciences Education

Family and Consumer Sciences (FCS) education formally named Home economics profession in Georgia until 1995 (Georgia Family, Career and Community Leaders of America, 2021; American Association of Family and Consumer Sciences, 2021b). Family and Consumer Sciences Educators website defines FCS as the field of study focused on the science and art of living and working well in our complex world (Family and Consumer Sciences Educators, 2021). This discipline is an action-oriented field concerned with functions of family such as everyday life-enhancing, care-giving activities, private interactions within the family, and public interactions in the community (Laster, n.d.). FCS prepares students for family life, work life, and careers (Scott & Sarkees-Wircenski, 2008). A major goal of this discipline is to assist families

manage complexities between work, life, and relationships (South Dakota State University, 2021). A unique aspect of FCS teachers is to educate students based on families, work, and interrelationships across the life span (Association for Career and Technical Education, 2021b). Values of FCS includes using their professional skills to (a) lead better lives, (b) be career and work ready, (c) build strong families, and (d) make meaningful contributions to their society (American Association of Family and Consumer Sciences, 2021b). Career pathways in Georgia includes (a) Housing and Community Management, (b) Interiors, Fashion, and textiles, and (c) Nutrition and Food Science (Georgia Department of Education, 2021f). Examples of FCS includes Early childhood development and services, Family and Community Services, and Consumer services (Scott & Sarkees-Wircenski, 2008). The Family and Consumer Sciences CTSOs includes Family, Career and Community Leaders of America (FCCLA).

Health Sciences Education

Health Sciences education develops knowledge, skills, and attitudes for students to succeed in health careers (Scott & Sarkees-Wircenski, 2008). Those education opportunities, the students are able to explore health industry careers from professional to administrative support to technical (Georgia Department of Education, 2021g.). The curriculum is guided by National Health Care Skills Standards (Scott & Sarkees-Wircenski, 2008). Examples of pathways in health Sciences are Health informatics, Diagnostics services, and Biotechnology research and development (Georgia Department of Education, 2021g). The CTSO connected to Health Sciences is HOSA- Future Health Professionals formally known as Health Occupations Students of America (HOSA) (HOSA- Future Health Professionals, 2021).

Marketing Education

Marketing education expands on business by educating students on the relationship of products and services between producers and consumers (Scott & Sarkees-Wircenski, 2008). Goals of marketing education include (a) integrate academic skills into the marketing, (b) develop human relations skills, and (c) demonstrate proficiency in the foundational and functional marketing (Georgia Department of Education, 2021h). The foundational areas of marketing include business, management, interpersonal skills, economics, professional development, and entrepreneurship communications (Scott & Sarkees-Wircenski, 2008). The functional areas of marketing include distribution, selling, financing, marketing information, management, pricing, promotion, and product service management (Scott & Sarkees-Wircenski, 2008). Some examples of Marketing education are Marketing communications, Marketing management, Marketing research, Merchandising, and Professional Sales (Scott & Sarkees-Wircenski, 2008). The CTSO related to Marketing education is National DECA formerly Delta Epsilon Chi (Scott & Sarkees-Wircenski, 2008).

Career and Technical Specializations

Career and Technical Specialization education, formerly known as Trade and Industry education, encompasses a wide range of trade and industrial programs other than the CTE areas not categorized above such as Cosmetology, Welding, Graphic Arts and Design, Automotive, etc. The mission of Career and Technical Specialization prepares students for skilled occupations and technical work in industrial occupations. Some pathways in Career and Technical Specialization includes Construction, A/V technology and film, Visual arts, Emergency and fire management services, Correction services, etc. The CTSO connected to these specializations is

SkillsUSA formerly Vocational Industrial Clubs of America (VICA) (Scott & Sarkees-Wircenski, 2008).

CTE teacher programs in Georgia

Due to the integration of these Career Clusters and pathways, the need for teachers in these disciplines increased to effectively teach the content. As postsecondary CTE teacher education programs declined through the country, most school systems discovered employing people from the specific industries would compensate for the lack of highly qualified teachers. CTE programs are facing teacher shortages because of the decreasing amount of traditional university-based programs around the nation (Bowling & Ball, 2018; Blazer 2012; Partelow, 2019). The U.S. Bureau of Labor projects 7,700 CTE job vacancies through 2026 (U.S. Bureau of Labor Statistics, 2018). The industry professions are hired based on their expertise of the CTE areas and can share their real-life experiences and expectations to prepare students in the discipline of training (Stephens, 2015). These former industry workers would then be required to obtain the pedagogy skills later. For instance, at a major university in Georgia education programs includes traditional education undergraduate degrees in subjects such as Agricultural education, Elementary education, English education, Family and Consumer Sciences education, Health and Physical education, Mathematics education, Middle Grades education, Science education, Social Studies education, Special education, and TESOL and World Language education (Mary Frances Early College of Education, 2021). CTE programs are becoming less tied to the CTE disciplines and more academically rigorous by incorporating purposeful academic instruction (Camp & Johnson, 2005). According to GaPSC, the decline of CTE baccalaureate is reported with the availability of institutions with approved programs (GaPSC,

2021a). Refer to Table 3 for the current approved CTE undergraduate programs. Table 4 for the current for the current approved CTE graduate programs from GaPSC.

Table 3

Institutions with Approved CTE Baccalaureate Programs in Georgia (GaPSC, 2021a)

Discipline	Number of programs	Institution(s)
Agriculture Education	4	Abraham Baldwin Agricultural College Emmanuel College Fort Valley State University University of Georgia
Business	2	Emmanuel College University of Georgia
Career and Technical Specialization	1	Valdosta State University
Computer Science	1	Columbus State University
Engineering and Technology	1	Savannah State University
Family and Consumer Sciences Education	1	University of Georgia
Health Sciences	1	Valdosta State University
Marketing	0	None

Table 4

Institutions with Approved CTE Graduate Programs in Georgia (GaPSC, 2021a)

Discipline	Number of programs	Institution(s)
Agriculture Education	7	Covenant College LaGrange College Mercer University Shorter University Thomas University University of Georgia Valdosta State University
Business	10	Covenant College Georgia College and State University Georgia Southern University LaGrange College Mercer University Shorter University Thomas University University of Georgia University of West Georgia Valdosta State University
Career and Technical Specialization*	Varies based on specification	Varies based on field

Computer Science	8	Columbus State University
		Covenant College
		LaGrange College
		Mercer University
		Middle Georgia State University
		Shorter University
		Thomas University
		Valdosta State University
Engineering and Technology	7	Covenant College
		LaGrange College
		Mercer University
		Shorter University
		Thomas University
		University of Georgia
		Valdosta State University
Family and Consumer Sciences Education	8	Covenant College
		Georgia Southern University
		LaGrange College
		Mercer University
		Shorter University
		Thomas University
		University of Georgia
		Valdosta State University

Health Sciences	7	Covenant College
		LaGrange College
		Mercer University
		Shorter University
		Thomas University
		University of Georgia
		Valdosta State University
Marketing	7	Covenant College
		LaGrange College
		Mercer University
		Shorter University
		Thomas University
		University of Georgia
		Valdosta State University

Description and Comparison of CTE Teacher Preparation and Certification Models

The Childre (2014) study stated both traditional university programs and ATCPs integrate the three foundational constructs important for understanding teaching and learning: (a) knowledge of learners and their development in social contexts, (b) knowledge of teaching, and (c) knowledge of subject matter and curriculum goals. These three constructs overlapped to encompass effective teaching skills in the classroom. Childre reduced preparation in the three areas of teacher training in traditional and alternative training into these components: (a) content training, (b) pedagogy, and (c) field-experience (Childre, 2014). The CTE teachers in the ATCP

of the dissertation study are recruited and hired from an industry where the teachers have obtained a certification or degree or licenses previously to satisfy the content training component and a minimum of two-years of experience. The ATCP assists the CTE teachers by developing pedagogy and the field-experience is executed through their full-time employment as the teacher of record for the class.

The next section and Table 5 compared the ATCP at a major university in Georgia an undergraduate degree in Science Education. In the traditional education programs, the undergraduate students complete at least sixty-two hours in general or core level initially as pre-requisites before applying for the specific teaching programs. The General Education Core courses include Foundation courses such as nine hours in lower level English and Math courses, eight hours in Science, four hours in Quantitative Reasoning, nine hours in World Languages and Culture, three hours in Humanities and the Arts, nine hours in Social Science such as Political Science, History, and an elective, roughly twenty hours in major related courses (Mary Frances Early- COE, 2020).

Compare and Contrast certification model at major university in Georgia

Table 5

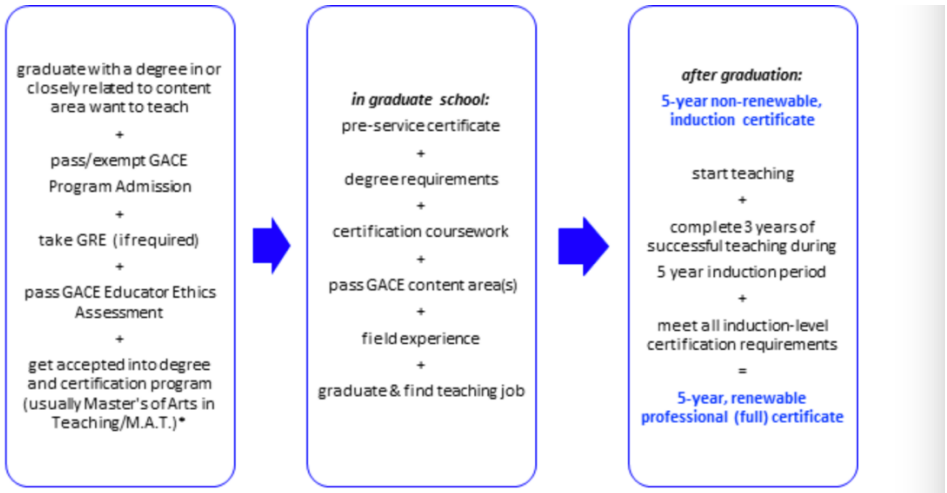
Certification Model Comparison of Traditional (after completing 62 hours of General Education Core) (Mary Frances Early College of Education, 2021) and ATCP (GaPSC, 2020)

	Content training (Courses related to program of study)	Pedagogy	Field-experience
Traditional	31 hours of upper-level content area. Examples higher level subject education courses	27 hours Educational Technology Specific content education courses	12 hours of student teaching (one-semester, full-time)
ATCP	Hours range due to previous experience and licenses/certificates/degrees earned. Examples are Registered nurse licenses, undergraduate degrees, Welding certificates, etc.	15 hours Educational Foundations Educational Psychology Exceptional Children/Special Needs Curriculum Instructional Strategies	12 hours of supervised teaching internship (one-year as a full-time employee)

See Figure 5 for a flowchart of a traditional route that includes graduate school at a university for teacher certification in Georgia. The email to request permission to use the figure is found in Appendix B and the response from Georgia Tech is found in Appendix C. See Figure 6 for flowchart of alternative route with certification only for teacher certification in Georgia.

Figure 5

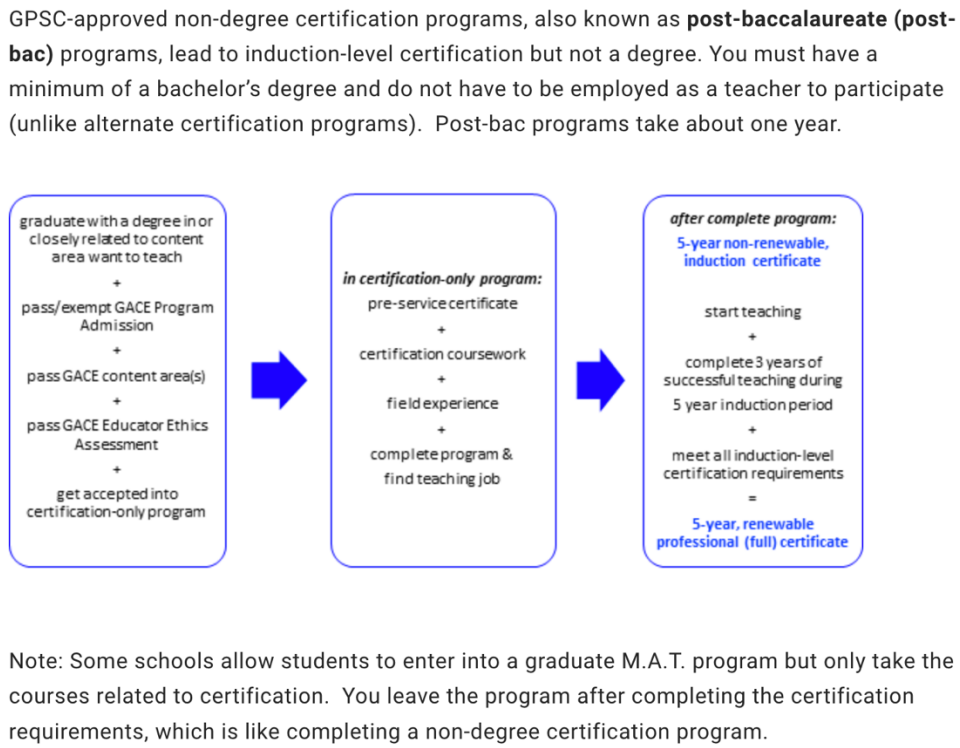
Alternative Route through Graduate School- Degree Plus Certification General Progression (Georgia Tech, 2021)



Note: M.A.T. programs exists across the country. The home state of a M.A.T. program is where you will receive state certification.

Figure 6

Certification Only in a Non-degree Certification Program; Post-baccalaureate (Georgia Tech, 2021)



Characteristics of Career Technical Education Teachers

As of 2008, 87.4% of CTE teachers were classified as highly qualified teachers, which means the teachers hold a Bachelor's degree and full state certification and demonstrated competency in the subject taught (U.S. Department of Education- Institute of Education Sciences, 2008d). CTE teachers are highly educated with approximately 43.7% holding a Bachelor's degree and 46.2% holding a Master's degree or higher (U.S. Department of Education- Institute of Education Sciences, 2008e). More than 10% of all of the CTE teachers in the nation hold less than a Bachelor's degree with education such as an Associate's degree or certificate or no degree (U.S. Department of Education- Institute of Education Sciences, 2008e). Results of the Zirkle et al. study suggested that CTE teachers complete at least one degree higher

while completing teacher licensing requirements (Zirkle et al., 2019). Other demographics of CTE teachers include 48% are male and 52% are female (U.S. Department of Education- Institute of Education Sciences, 2008c). The national secondary teacher demographics is 36% male and 64% female while the total distribution of teachers compared by sex is 24% male and 76% female (U.S. Department of Education- Institute of Education Sciences, 2021a). Racial demographics of CTE teachers includes approximately 85% White, 8.8% Black, 3.9% Hispanic, and 2.5% Other (U.S. Department of Education- Institute of Education Sciences, 2008b). The national distribution of race is 79% White, 7% Black, 9% Hispanic, 2% Asian, 1% American Indian/Alaska Native, 2% two or more races, and 0% Pacific Islander (U.S. Department of Education- Institute of Education Sciences, 2021a).

The average age of CTE teachers is 46 years-old (U.S. Department of Education- Institute of Education Sciences, 2008b). The age distribution of CTE teachers includes 10.4% under the age of 30, 44.9% are between the ages of 30-49, 16.5% are between the ages of 50-54, and 28.2% are 55 or older (U.S. Department of Education- Institute of Education Sciences, 2008b). The average years of teaching experience of CTE teachers in the nation is 14 years with the majority (42.7%) of CTE teachers having 15 or more years of classroom experience (U.S. Department of Education- Institute of Education Sciences, 2008a). About 7.7% of our nation's teachers are in the CTE field (U.S. Department of Education- Institute of Education Sciences, 2008a). The CTE teacher population is composed of 1.1% Agriculture and natural resources teachers, 2.1% Business teachers, 0.9% Communications and design teachers, 0.6% Computer and information sciences teachers, 0.9% Construction, architecture, and engineering technologies, 0.6% Consumer, culinary, and public services, 0.4% Health sciences teachers,

0.3% Manufacturing teachers, 0.4% Marketing teachers, and 0.5% Repair and transportation teachers (U.S. Department of Education- Institute of Education Sciences, 2008a).

Demographic Benefits of ATCP Education

The use of ATCPs has increased recruitment of minorities and men compared to traditional teacher preparation program (Mikulecky et al., 2004; Scott, 2016; Partelow, 2019). These programs have attracted students due to advantages such as expedited course completions and flexible schedules. Most states in our nation have some type of ATCPs or alternative certification methods to equip and license emergency certification teachers without the 4-year undergraduate process of traditional certification programs (Mobra & Hamlin, 2020). Other advantages include the addition of distance learning through technology. The availability of online courses increases flexibility with scheduling, therefore allowing students to complete coursework on their own time instead of traveling to campus for a specific time on an assigned day. Online classes are more accessible options for students with full-time employment and/or dependent children.

Alternative certification programs created a pattern of recruiting minorities and males through the offered benefits (Scott, 2016). A case study in Memphis, Tennessee compared demographics of graduates from alternative certification programs and traditional certification programs. The study found more males graduated from alternative certification programs than traditional with rates of 20% to 7% as well as the Black population 39% to 22% to increase the nationwide Black male teacher percentage to 2% of the public school teacher population (Scott, 2016; Partelow, 2019). The purpose of the Scott's article was to promote awareness of the lack of Black Male Special Education Teachers across the nation. Generally, special education is one of the leading subjects of the high needs subjects in education and the teacher shortage produced

an unequal correlation between the high number of Black male students with special needs and the demographics of the special education teachers. Scott referenced a study by Talbert-Johnson in 2001 that discovered White female special education teachers felt poorly prepared to work with Black children. The increase of alternative certification programs across the country addressed the teacher shortage and lack of diversity in the classroom specifically special education. Although the rates are increasing, Black male teachers require the school districts and state policies to use more recruitment techniques to represent the disenfranchised populations of Black children with special needs (Scott, 2016). While ATCPs attract diverse teachers and recruit more Black teachers, Newton et al. (2008) found that the recruitment should be more purposeful to ensure the teachers of color complete the programs and retain teachers.

Underrepresented regions, genders, subjects, and races are targeted by ATCPs to increase diversity in school systems across the country. A trend of least qualified teachers serving our most disadvantaged students with the greatest educational needs in low socioeconomic rural and urban areas across the country. The nation's teacher demographics lacks in equal representation of minorities such as African-American, American Indian, Asian/Pacific Islander, and Hispanic with an estimated 40% of schools not employing any teachers of color (Partelow, 2019; Scott, 2016). Due to the significant race inequality, some states implemented programs to recruit minority teachers to attract minority students in multiple subject areas. "Minority students are usually more successful in classrooms when their teachers reflect their racial or ethnic groups, but minority teachers are beneficial to all students as their presence can help create an awareness of and appreciation for diverse populations" (Sims, 2010, p. 26). Partelow (2019) expanded and suggested that Black students who are taught by Black teachers benefited with improved

achievement in academics, greater educational attainment, and were influenced to achieve higher academic aspirations based on the consistent modeling of their teachers.

ATCPs like AmeriCorps and Teach for America (TFA) openly pursue candidates at Historically Black Colleges and Universities (HBCUs) and Hispanic-Serving Institutions to increase minority rates of teachers to the profession and to serve high minority populated school systems (Sims, 2010). TFA was established in 1989 with the purpose of recruiting college graduates without traditional teaching certifications to teach in urban and rural public schools for two consecutive years (Teach for America, 2020). These non-profit ATCP organizations provides training, monetary stipends, student loan forbearance, and/or relocation benefits for the teacher recruits. Although TFA serves underrepresented populations of students and attempt to recruit minorities, the programs fall short with 70% of participants being White with the remaining 30% being members of the minority population. Retention of TFA teachers is about 63% of TFA alumni remain in education as teachers, principals, leaders, and policy advisers while adding to minority population in the field (Sims, 2010). A newer program named Teacher for Tomorrow's actively recruits teachers to be equivalent to the demographics of the student population of the schools in their non-IHE for-profit ATCP in states such as Florida, South Carolina, North Carolina, Louisiana, Michigan, Indiana, Texas, Arizona, Nevada (Teachers of Tomorrow, 2021).

ATCPs Combating Teacher Shortages

Teacher shortages affects the country's education system in a wide scale. Based on the national average in the recent decade, 40-50% of new teachers exit education within the first 5 years (Childre, 2014). Attrition rates in education can be accredited to, but not limited to ineffective preparation, life changes, lack of instructional resources, weak school leadership, and

conditions related to community poverty resulting in a need for more teachers (Tatto et al., 2016). Ineffective preparation in the three components: content training, pedagogy, and field experience (Childre, 2014). Content area expertise is an instrumental factor on student achievement; therefore, alternative certification teachers with an undergraduate or graduate degree in field effectively impact students. Pedagogy addresses strategies for diverse learners such as learning disabilities is increasingly difficult as the content level progresses throughout the year for general education teachers. Alternative certification teachers do not receive the traditional student teaching experiences under a supervising teacher from a partner school as for most have accepted a teaching position without certification. The position as teacher serves as the field experience similar to a paid internship in other careers.

Due to this need for more teachers, Alternative Teacher Certification Programs (ATCPs) were implemented to fill the teacher shortages in high needs school and/or subject areas. Tatto et al's findings concluded the title ATCP is broad with each program developing different strengths and weaknesses. State legislators and organizations offer incentives such as loan forgiveness and tuition waivers to teachers in high needs subjects such as Science, Technology, Engineering, and Mathematics (STEM) in rural and urban areas (Koehler et al., 2013; Partelow, 2019). Multiple components develop an effective teacher such as content training, pedagogy, and intensive field experiences with supervision. Haberman's (1994) article supported the teacher development of ATCPs because it is believed that "the primary knowledge base teachers need is content knowledge" and "teaching know-how and methods are best taught on-the-job" (p. 5).

Comparison Effectiveness of Traditional and ATCP models

Beare et al's (2012) research study compared effectiveness in three teacher preparation groups at Yosemite State in California. The three Yosemite State education pathway groups

included: Yosemite Campus-Based (YCB) as a traditional teacher preparation program, Yosemite Internship (YI)- candidates were employed full or part-time as teachers, and Yosemite Partner School Program (YP)- students interned at a partner school while completing coursework on campus. Research results state "Elementary principals did not discern differences in the preparation of graduates who pursued the different pathways to obtaining a credential…" (Beare et al., 2012, p. 70). Along with no differences found between the alternative and nontraditional teachers, the research study also found cohorts of students in the education program and one or more constant university staff member to be essential to the success of teacher preparatory programs (Beare et al., 2012). The smaller learning environment of cohorts is parallel to the Career Academy models from high schools around the country. This strategy combines teacher training and academic coursework. The school-within-a-school arrangement builds a sense of community within the learning environment (Scott & Sarkees-Wircenski, 2008). College cohort's implementation in more colleges across the nation because of the success from high school Career Academy models.

Teacher Early Experiences in an ATCP

The average person in the United States changes jobs 10.7 times with respect to 11.7 employers between the ages of 18-48 years old whereas most of the job changes are before the age of 30 (Chi et al., 2016). The alternative certificated teachers in this dissertation study usually transition to education after a career in their industry of certification. CTE teachers participating in the ATCP have early experiences regarding promoting success in classroom management, lesson planning, and student assessment along with training in challenging areas such as special populations, student engagement strategies, high-stakes standardized testing, and the incorporation of technology in the classroom (Briggs and Zirkle, 2009; Kiv et al., 2018; Smalley

& Rank, 2019). Legislation reforms and the evolving workforce in recent decades have impacted education. CTE curriculum develops students into productive members of society that can join the workforce or obtain post-secondary education. New educators in CTE need to be knowledgeable of the critical problems facing education such as lack of special education resources for the CTE populations, lack of student engagement, high-stakes and standardized testing, and emerging technology. Solutions to the problems in education would create effective lessons for students in any school system.

Exceptional Children/Special Education

The Individuals with Disabilities Education Act (IDEA) and Section 504 requires a specialized plan such as the Individualized Education Program (IEP) or 504 Plan (Sarkees-Wircenski & Scott, 2003). These laws improved the education system of students with special needs. IDEA and Section 504 created better opportunities for students with special needs in regular education and provided more rights to the students and parents. The amendments Congress passed to IDEA in 1997 expanded the availability of special education classrooms, includes students with disabilities in state reform efforts, supports quality and intensive professional development for personnel involved with special education and related services, and fosters research-validated instructional and behavioral interventions (Katsiyannis et al., 2003). Alternative certification teachers enter the classroom without a formal background in education background and are advised to consult with other certified teachers and Special Education professionals. Many of the alternative certification teachers in this dissertation teachers felt unable to deliver appropriate curriculum to students with disabilities due to the lack of support and information in the classroom. CTE programs potentially consist of a special population of students with reading, writing, and spelling disorders (Sarkees-Wircenski & Scott, 2003).

Another critical problem in CTE stems from the lack of support from the Special Education Board; therefore, teachers provide their own modifications by conducting and collecting more data based on their classroom curriculum. The majority of students with disabilities in the U.S. attend general education classes without any support from special education teachers (Lee et al., 2011). Special Education teachers are essential to the growth and development of young children to attain the highest level of student achievement and strive for continuous improvement. Challenges for Special Education teachers include working conditions such as extreme workload, ineffective paraprofessionals, lack of instructional and planning time, and lack of resources (Lee et al., 2011). The main focus of collaborating between CTE and Special Education consists of preparing high school students with special needs with life skills. This partnership would continue the mission of preparing students with necessary life skills through self-advocacy. Another strategy to promote success is creating smooth transitions between activities to promote structure and allows students to establish routines and rituals in the classroom (Spatarelu, 2019).

Strategies in CTE

Instructional strategies increase relevance; therefore, providing students with instructional experiences to develop a correlation of the Family and Consumer Sciences to their everyday lives (Stefaniak & Tracey, 2015). Instructional strategies differentiate curriculum to encompass all learning styles such as Visual, Auditory, and Tactile/Kinesthetic techniques (Sarkees-Wircenski & Scott, 2003). Visual Learners prefer learning by reading or seeing pictures because these students understand and remember concepts by sight. Tools such as visual flashcards, physically writing key words, and color-coding improves success for Visual Learners. Auditory Learners prefer hearing to understand and remember concepts. These students

comprehend out loud instructions better than written instructions. The information is stored in their memory by sounds and benefit from tools such as verbal flashcards and recording as methods of studying material. Tactile (or Kinesthetic) students learn through the physical movement by touching and actively learning. These learners are commonly referred to as 'hands-on' students that thrive on physically movements such as recipe evaluations in the kitchen or classroom labs. 'Hands-on' learning activities such as project-based learning and labs increase curriculum absorption through instructional strategies. Research stated students retain 20% of what they hear, therefore instructional strategies implemented in the classroom promote learning methods (Sarkees-Wircenski & Scott, 2003).

Project-based learning provides students with the opportunity to create a solution with more choices because the projects are more open-ended techniques. Students are able to effectively work as a group when students' interest, critical thinking abilities, presentation skills, communication skills in project-based learning assignments (Tamin & Grant, 2013). The earliest form of education was through methods of accidents, imitation, trial and error, and apprenticeship (Scott & Sarkees-Wircenski, 2008). In past generations, children would inherit skills for survival and then imitate parents to create an in-home apprenticeship. Francis Bacon's Realism philosophy focused on manual arts in school systems, which promoted hands-on learning in education (Scott & Sarkees-Wircenski, 2008). The real-world setting of CTE promotes learning because students have the ability to apply the curriculum to aspects of their life. Earlier education reformers in Europe like Martin Luther implemented state responsible educational systems to provide opportunities to all students despite social status or gender (Scott & Sarkees-Wircenski, 2008). The in-home apprenticeships were used to learn trades partnered with core academic classes for two hours per day (Scott & Sarkees-Wircenski, 2008). Hands-on

learning opportunities such as labs, simulations, and work-based learning provides students with the opportunity to apply content from the classroom to real-world situations. CTE embraces project-based and hands-on learning by developing activities to encourage collaboration through flexible and strategic groups. Icebreakers are a great technique to use the first week of school to identify similarities and differences with the students in the classroom (Chlup & Collins, 2010). Using Icebreakers in the classroom to build rapport and create a family atmosphere.

Group member's productivity is the responsibility of each group member to become a self-directed learner to identify and achieve learning goals (Bagheri et al., 2013). No one member can force the other members to do more or less work. Each member is responsible for a level of work they are willing to do before they begin the project. Other members can attempt to lead by example and be an overachiever but all members are not on the same level; therefore, the group project will be differentiated. As equal group members, the only method that can increase equivalent work is to divide the sections and open communication built within the students. Students are able to collaborate by thinking together to solve a problem or clarify materials through collective thinking.

High-stakes Testing

Since the implementation of No Child Left Behind (NCLB), students are exposed to an unprecedented number of tests (Nichols & Berliner, 2008). Nichols & Berliner documented hundreds of cases in which high-stakes testing correlated with suspicious forms of data manipulation. Standardized tests are now the objective of classroom instruction rather than the measure of teaching and learning. The common trend of teaching to the test eliminates the opportunity for teachers to teach students higher-order thinking skills. The tests undermine teacher-student relationships, lead to narrowing of the curriculum, demoralize teachers, and bore

students (Nichols & Berliner, 2008). Parents that become knowledgeable of the local high-stakes testing programs become hesitant and are likely to feel as though the school system lowers the quality of education their child receives in school. Popham (2003) suggested enhancing the policymakers' understanding of local assessment issues (Popham, 2003). Better understanding will often lead to better decisions by allowing local school systems to develop an honest, accurate, persuasive briefing with evidence of the analysis (Popham, 2003). Popham also suggested the creation of an instructional sensible accountability test by urging key decision makers to support the creation of credible accountability tests that help rather than harm students (Popham, 2003). Popham (2003) stated that schools should inform "key decision makers in your state that it is definitely possible to build large-scale assessments that can measure instructional quality while providing appropriate clarification of the assessment program's targets" (p. 159). The clarification will help teachers direct their instruction toward the important bodies of knowledge and skills being measured, rather than toward the specific items any particular test form. According to Kearns, students in the high-stakes standardized testing study perceive their test failure in various levels of embarrassment, degradation, humiliation, and/or shame creating emotional and mental turmoil on the student (Kearns, 2011).

Technology

Lumpkin et al. (2015) stated, "when students enjoy the learning process in their courses are more likely to prepare for, participate in, and interact with disciplinary content" (p.124). Incorporating instructional strategies with technology emerging in our society due to the digital transformation of learning allows students to enjoy, therefore assist in the curriculum. Creating more opportunities for technology in the classroom would improve students' computer skills and promote employability skills in their selected field while elevating the students' knowledge to

real-world computerization (Kiv et al., 2018). Instructors should adapt to more computer learning due to most career fields are continuously evolving more towards technology, but some school systems do not have sufficient funding to provide technology. The digital divide is very evident in low social economic status school system within the school and households. The development of cloud-based technologies and learning environments to prepare students for the changes in the workplace (Kiv et al., 2018).

Reforms through legislation and the evolving workforce in recent decades have impacted the education. CTE curriculum develops students into productive members of society that can join the workforce or obtain post-secondary education. Educators in CTE need to be knowledgeable of the critical problems facing education such as high stakes testing, lack of student engagement, lack of special population resources, and lack of emerging technology since these factors will arise in their early experiences. Solutions to the problems in education would create effective lessons for students in any school system. These factors were also discovered in Smalley and Rank (2019) study of early experiences of Agriculture teachers as five main themes emerged: (a) work-life balance, (b) public relations, (c) advisor responsibilities, (d) student success, and (e) school responsibilities. These five themes incorporated the critical issues during the early experiences of the CTE teachers enrolled in an ATCP such as high stakes testing, special population resources, student engagement and strategies, technology.

Theories and Conceptual Frameworks

During the research process, many theories and conceptual frameworks were considered relevant to address the study. Major options included symbolic interactionism, expectancy-value theory, pedagogical content knowledge model, Borich needs assessment model, and teacher proximity continuum. While researching theories and frameworks, the main components to

selecting a suitable theory or framework was the ability to incorporate the three constructs of effective teacher training from Childre's study and the capacity for the participants' sharing of their personal life. Constructs from Childre's study included (a) content training, (b) pedagogy, (c) field-experience (Childre, 2014).

Symbolic Interactionism

Concepts such as ontology, epistemology, and axiology shape theoretical perspectives, such as symbolic interactionism. Ontology is the study of what is real. In relation to symbolic interactionism, the researcher could explore what is real to a person or what they perceive is true (Dillard, 2006). Key scholars in the field of symbolic interactionism are Charles Horton Cooley, George Herbert Mead, and Herbert Blumer. Symbolic interactionism is a micro-level theory focused on individual relationships in society. Based on the meanings and social interactions, social interactionism is based more on thoughts and feelings. "The experiences a person has includes the way in which the experience is interpreted" (Merriam & Tisdell, 2017, p. 9). Since experiences and situations can be interpreted differently by different people, social interactionism is no longer a real concept. Mead also explored how a person can interpret their own experiences and how the person interprets themselves.

Epistemology is the study of the nature of knowledge and justification or the theory of knowledge (Carter & Little, 2007). The assumptions of symbolic interactionism are rooted in how people interpret the meaning of relationships with others. Axiology is the study of the valuation of the experience. "The importance of symbolic interactionism to qualitative inquiry is its distinct emphasis on the importance of symbols and the interpretative processes that undergird interactions as fundamental to understanding human behavior" (Patton, 2015, p. 134). The methods typically used by researchers in the symbolic interactionism include interviews and

participant observations (Prasad, 2018). Although, the symbolic interactionism theory does not overall have components to identify or address the three components of teacher training, this theory would have allowed the researcher to explore the participants' perceptions of their experiences openly instead of guiding the study with components or criteria. Since symbolic interactionism does not contain components or categories, the researcher could develop research questions based on the three training components. While the researcher can model the research based on the training components, the researcher would not be able to explore their personal, internal, and family life.

Expectancy-Value Theory

The expectancy-value (EV) theory determines how student achievement is influenced by expectancies for success and their subjective value to the task (Eccles et al., 1983). Eccles et al (1983) stated that the value of a task depended on how someone perceived they would perform at the task. The person focuses more on the future outcome than their ability to complete the task. Components of the EV theory include: task values, attainment values, interest values, utility values, and cost (Eccles et al., 1983). Attainment value is based on the person's internal want to successfully complete tasks, which is ingrained in their personality. Interest value refers to the personal joy the person receives from completing the task. Utility value is the perception of how useful the information is to the person's specific goals. The cost refers to how much is negatively lost by engaging in the activities. Examples of costs can be time, fear, effort, anxiety, and other opportunities that can be lost or missed (Burak, 2014).

According to Yang & Mindrila (2020), EV theory links expectancy and values to successful achievement, persistence, motivation, and resilience (Yang & Mindrila, 2020). See

Figure 7 and Figure 8 are provided as visuals for the EV theory as a simplified model and a condensed model.

Figure 7

Simplified Model of EV theory taken from Bostrom & Palm (2020) article, (Bostrom & Palm, 2020, p. 543) adapted from Figure 1 in Wigfield & Cambria article (Wigfield & Cambria, 2010, p. 37)

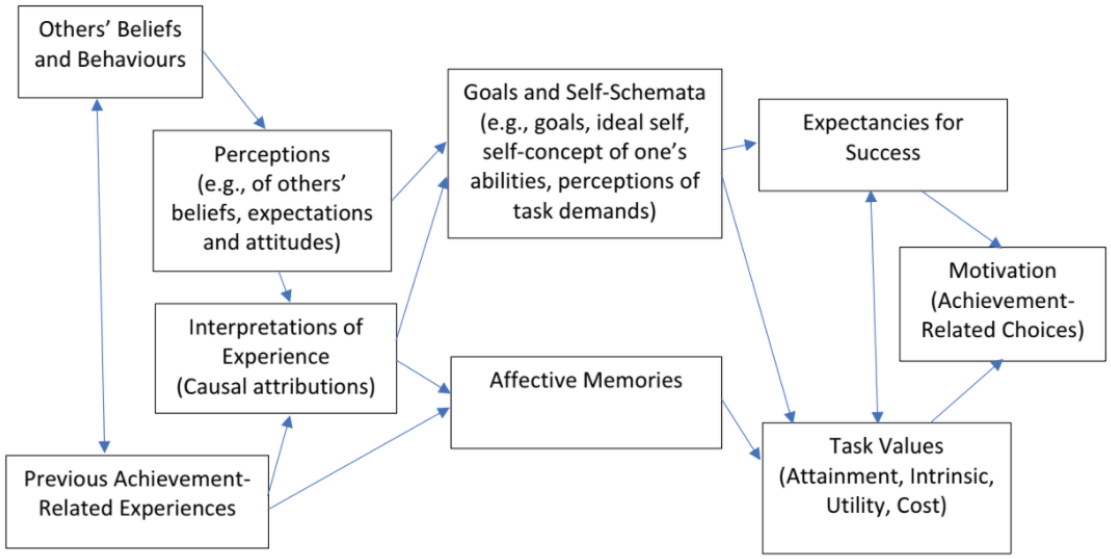
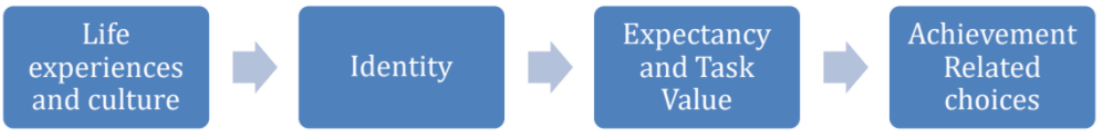


Figure 8

Condensed Version of EV theory taken from Jones & Hite (2020) article, (Jones & Hite, 2020 p. 89) based on Eccles & Wigfield article (Eccles & Wigfield, 2002, p. 119)

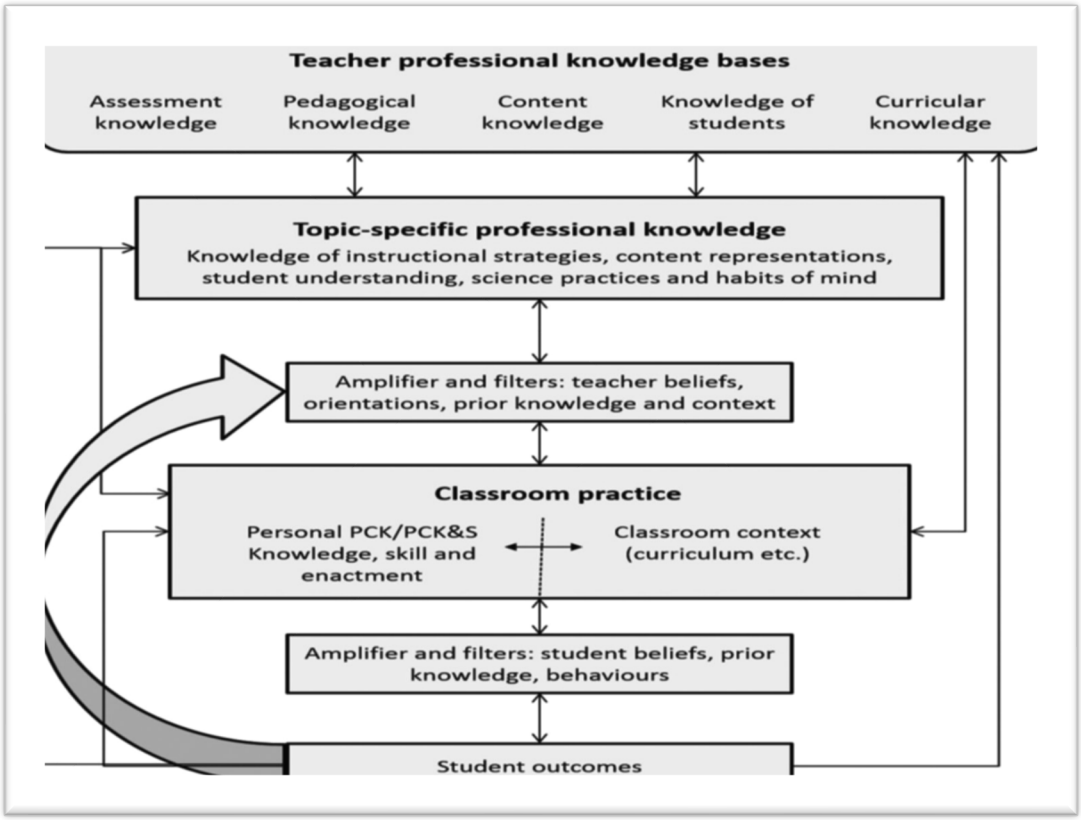


Pedagogical Content Knowledge

Shulman (1987) developed seven domains of knowledge for teachers to effectively teach in a classroom (Shulman, 1987). The seven domains are (a) general pedagogical knowledge (GPK), (b) knowledge of learners and characteristics, (c) knowledge of educational context, (d) knowledge of educational ends, purposes and values, and the philosophical and historical grounds, (e) knowledge of the content, (f) pedagogical content knowledge (PCK) and curriculum knowledge (CK) (Kula Unver et al., 2020). While the first four of the seven domains are categorized as generic knowledge due to being knowledge every teacher needs despite subject area (Shulman, 1987), the last three domains are known as content-specific knowledge (Boz & Belge-Can, 2020).

Figure 9

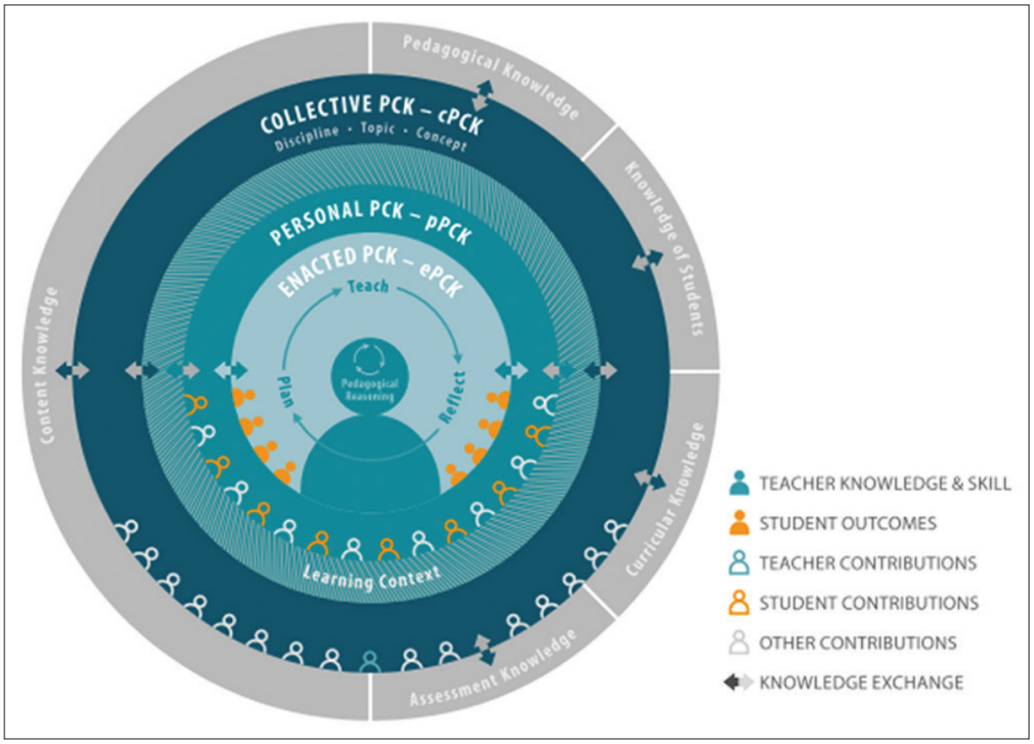
Teacher Professional Knowledge and Skill Model (Taken from Gess-Newsome, 2015, p. 31)



The Kula Unver et. al. (2020) article defined "PCK as knowing how to present a topic in a way that is accessible to others and understanding the approaches that facilitate or hinder the learning of a topic" (p. 62). PCK is the ability a teacher has to transfer their subject matter knowledge using teaching strategies into concepts and lessons for their students. Tamir (1988) expanded teacher knowledge into components of PCK such as (a) orientation to teaching, (b) knowledge of students' understandings, (c) knowledge of the curriculum, (d) assessment knowledge, and (e) teaching strategy knowledge (Kula Unver et al., 2020). Duruk & Akgun (2020) encouraged teachers to use PCK to develop and create a learning environment for students to explore learning by becoming active participants in their learning, thus, requiring students to take responsibility of their learning. See Figure 9 and Figure 10 for visuals of PCK.

Figure 10

Refined Consensus Model (Taken from Carlson & Daehler, 2019, p. 83)



PCK includes (a) orientation to teaching, (b) knowledge of students' understandings, (c) knowledge of the curriculum, (d) assessment knowledge, and (e) teaching strategy knowledge (Kula Unver et al., 2020). Orientation to teaching is the teacher's performance in the classroom. Knowledge of students' understanding is the ability to comprehend and assess the level of their students understanding. Knowledge of the curriculum is the content knowledge or the subject knowledge of the course taught. Assessment knowledge is the skill to understand summative and formative assessment type and appropriately provide feedback. Teaching strategy knowledge involves using differentiation to instruct students based on learning styles and special needs. The researcher could have incorporated the PCK components to the teacher training components mentioned by Childre (2014). Orientation to teaching would encompass the field-experience of teaching full-time in a classroom. The knowledge of students' understanding, teaching strategy knowledge, and assessment knowledge included the pedagogy component. The content training classified as the knowledge of the curriculum. Although the pedagogical content knowledge theory addressed the three teaching components, the theory does not address the participants' personal experiences in their social lives.

Borich Needs Assessment Model

Borich (1980) developed the Borich needs assessment model as a comprehensive tool to assess the actual performance of agriculture educators compared to the expectations required in the field. This model was created to improve training programs of agriculture educators (Ashraf et al., 2020). The evaluation methods of the model allowed the current program the opportunity to establish training needs to develop a successful program. A training need is defined as "a discrepancy between an educational goal and trainee performance in relation to this goal" (Borich, 1980, p. 39). The Borich Needs Assessment Model is used around the world for

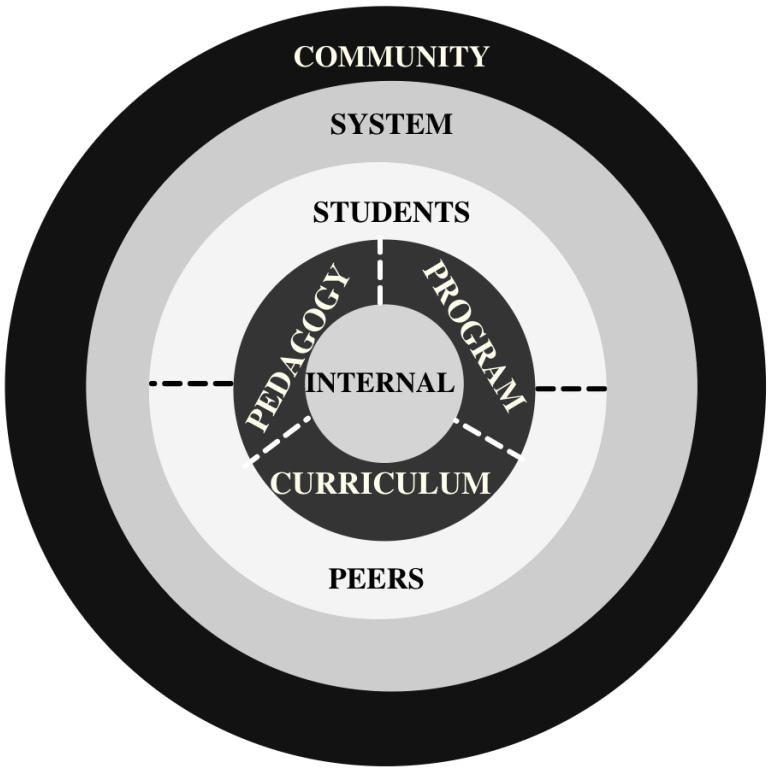
agriculture teachers, extension officers, and farmers to develop data based on the present state and the desired state of the program being evaluated (Sicelo & Huang, 2020).

Teacher Proximity Continuum

The teacher proximity continuum was developed to analyze and classify over 5,000 events based on the collection of significant events, positive influences, negative influences, and assistance (Camp & Heath-Camp, 1990). The conceptual framework was established and built using a collection of theories in the beginning during the classification of the levels and domains. The research suggested that as many as one-fourth of the problems encountered by beginning CTE teachers are unique to CTE (Camp & Heath, 1989) Due to the uniqueness of the experiences encountered in CTE, the teacher proximity continuum is the best framework to use for the dissertation study based on the multiple components of the teachers' early experiences. This study explored the early teaching experiences of the teachers who participated in an ATCP to obtain full-renewable CTE teacher certification. The teacher proximity continuum includes eight domains at five levels of functional distance from the teacher. The eight domains include internal, pedagogy, curriculum, program, students, peers, system, and community. The five levels of the teacher proximity continuum are personal characteristics, professional skills, interpersonal relationships, intra-system, and extra-system (Camp & Heath-Camp, 1990) shown in Figure 11.

Figure 11

Teacher Proximity Continuum (Camp & Heath-Camp, 1990 used with permission, personal communication on January 22, 2021)



The personal characteristics level includes the internal domain, which focuses on the experiences within the teacher. The professional skills level includes domains such as pedagogy, curriculum, and program. Pedagogy encompasses the short-term planning, improvement related to instruction, evaluation, and delivery, while the curriculum is the experience associated with to planning the course and preparing instructional materials. The program includes long-term planning of implementing the pathway or program. The next level is inter-personal relationships, including students and peers. The students' domain involves the interactions between the teacher and the students compared to the domain of peers involving the interactions with same-level co-workers. The intra-system level consists of the system, which is the education system's experience that impacts the teacher. The educational systems can be the local school system that

employs the teachers, the state school system regulating state teaching standards, and the federal education school system mandating national. The last level is extra-system, which is the community domain, including the experiences outside of the educational system and how their community impacts the teacher.

Joergar and Bremer (2001) classified topics into the categories of the teacher proximity continuum domains. The personal characteristics level includes the internal domain, which focuses on the experiences within the teacher. Joerger (2003) described this category as needs and challenges within the teachers as a result form from other factors. Examples of the internal domain includes (a) managing time effectively, (b) developing organization skills, (c) maintaining a healthy perception of self, developing and maintaining a positive attitude toward teaching activities and roles (Joergar & Bremer, 2001). The professional skills level includes domains such as pedagogy, curriculum, and program. Pedagogy encompasses the short-term planning, improvement related to instruction, evaluation, and delivery, while the curriculum is the experience associated with planning the course and preparing instructional materials (Camp & Heath-Camp, 1990; Joerger, 2003). Pedagogy also includes the improvement of instruction for future lessons (Jenset et al., 2018; Joerger, 2003). Examples of pedagogy includes (a) organizing and designing effective lessons, (b) organizing facilities for effective learning, (c) managing instruction in laboratory settings, (d) locating teaching materials, (e) managing the classroom, (f) preparing for and meeting the individual needs of students, (g) using alternate teaching methods and strategies, (h) preparing for multiple courses, (i) soliciting support and help from administrators, (j) using results from principals to enhance teaching performance, (k) maintaining a safe learning environment, (l) securing instructional resources and materials, (n)

advising and managing career and technical education student organizations (Joerger & Bermer, 2001).

The program includes long-term planning of strategies to implement the pathway or program (Camp 1990; Joerger, 2003). Stone III (2017) defined a career pathway as a stackable credential built on curriculum adjusted from the specific industry's credentials to provide opportunities for the students to learn the trade or content area during secondary education. Examples in the Joergar and Bermer (2001) study included in the program domain (a) completing clerical tasks in a timely manner, (b) maintaining a supply of current equipment, supplies, facilities, and materials, and (c) securing, organizing and managing safe and attractive facilities. Strengths of pedagogy, program, and curriculum included the participants know the subject and content classified as common content knowledge and specialized knowledge usually based in their prior training before transitioning to teaching (Humphrey et al., 2008).

The next level is inter-personal relationships, which includes students and peers. The students' domain involves the interactions and exchanges between the teacher and the students compared to the domain of peers involving the interactions with same-level co-workers (Camp 1990; Joerger, 2003). Teacher-student relationships are classified into two categories in the Mason et al. study (2017): closeness and conflict due to the researchers investigating the importance of caring and supportive teachers compared to meaningful impacts of the students. Closeness referred to the positive affect and the level of comfort a student has approaching the teacher, whereas conflict refers to lack of dyadic or negative rapport established in the relationship (Mason et al., 2017). As teachers serve as the 'loco parentis' or second parents during the school day, Giang and Nga (2019) suggested that a positive and warm atmosphere in the classroom is productive to students' learning because students need to feel comfortable while

classroom management techniques create social, emotional, physical, intellectual environment parameters allow optimization of teaching and learning can occur. Classroom management styles correlated with student behaviors because when the teachers focus on management instead of discipline, the teachers can support higher achievement by using approaches such as authoritarian, democratic, autocratic, and permissive management styles (Giang & Nga, 2019). Authoritarian style allows the teacher to have majority of the control and let the students have little influence while the democratic style allows the students the ability to express their feelings and the teachers has the final decision (Simola, 2005; Giang & Nga, 2019). The autocratic classroom management style is a dictatorial style with the teacher having all power and ignoring the opinions and attitudes of the students while the permissive or laissez faire style gives all control to the students with no input from the teacher (Giang & Nga, 2019). Jimenez et al. (2021) also attributed that the better relationship with the students is related to a better perception of the climate of the classroom. Examples of student domain included topics such as motivating and discipling students; therefore, peers domain facilitates activities that foster the development of collegial relationships with teacher colleagues (Joerger & Bremer, 2001). School-based mentors classify as interactions of the peers domain to model success and promote professional relationships within the school (U.S. Department of Education- Office of Innovation and Improvement, 2004).

The intra-system level consists of the system, which is the education system's experience that impacts the teacher. The system category arises from experiences from forces and individuals that require compliance within the educational system (Joerger, 2003). The educational systems can be the local school system that employs the teachers, the state school system regulating state teaching standards, and the federal education school system mandating

national regulations. The examples related to the system domain included (a) negotiating for a manageable teaching load, (b) advocating for needed funding and support, (c) create convenient and clear ways for understanding complex school systems and policies, (d) provide adequate time and resources to prepare for initial teaching assignments, (e) provide suggestions and assistance to lighten the burden of clerical work, (f) provide program-specific and general school orientations, (g) limit the number and scope of extra teaching duties, (h) clarify the process of formal observations and evaluations conducted by district personnel, (i) provide quality facilities and materials for classroom and laboratory instruction, and (j) serve as an advocate and promoter of beginning teachers and their programs (Joergar & Bremer, 2001).

The last level is extra-system, which is the community domain, including the experiences outside of the educational system and how their community impacts the teacher. These experiences are not regulated by the administrative or physical bounds of the educational system (Joerger, 2003). Examples of the community domain from the Joergar and Bremer (2001) study listed establishing relationships with the parents or guardians of students and establishing support from parents, organizations, and adult groups in the community. The components of teacher training from Childre (2014) aligned with teacher proximity continuum while contributing the aspect of the teachers' personal perspectives as well. Content training component includes the program, curriculum, and community domains. The pedagogy component encompasses the pedagogy and system domain. In-field experience component includes the students, peers, and internal domains. Table 6 shows a comparison between the training components and the researcher's interest in their personal lives.

Table 6

Theoretical and Conceptual Framework Comparison

	Content Training	Pedagogy	Field-experience	Personal life
Pedagogical Content Knowledge	Yes	Yes	Yes	No
Teacher Proximity Continuum	Yes	Yes	Yes	Yes
Symbolic Interactionism	Open	Open	Open	Open
Borich Needs Assessment	Open	Open	Open	No
Expectancy-Value Theory	Open	Open	Open	Open

Joergar (2003) conducted a quantitative study surveying 64 agriculture teachers to compare the frequency of occurrence of selected teaching events and the impact of teaching events upon the teaching experience of three consecutive cohort of beginning teachers in relation to the teacher proximity continuum. The survey categorized the 39 questions in the survey into the eight domains see Table 7. The teachers reported that being compared to the previous teacher had the lowest impact on their experiences while the highest impacts came from the following events: (a) principal support, (b) satisfaction from successful activities, (c) student respect, (d) student success, (e) self-confidence within their classroom teaching (Joergar, 2003). Almost 80% of the events impacted the teachers in a major or critical role in their experiences and based on

the conclusions and results, the most impacted by events in order related to peers, students, curriculum, internal, and pedagogy (Joergar, 2003; Heath-Camp et al., 1992). The initial study by Heath-Camp et al. (1992) reported the highest proximity for negative experiences resulted from the student domain.

Table 7

Domains Categorized by Selected Events in Joergar Study (Joergar, 2003)

Domain	Selected events
Internal (7)	I experience satisfaction when an activity succeeds
	My job allows me to be creative
	I feel in control of my program
	I have obtained the goals that I set for myself
	I am compared to the former teacher
	I am taking classes to further my education
	My home life is negatively affected by work
Program (4)	I have inadequate facilities (classroom, lab, etc.)
	My program is misunderstood by parents, students, counselors, and/or administrators
	I have inadequate equipment
	I have to do recruitment activities for my program
Pedagogy (8)	I feel self-confident in my classroom teaching
	I see my students succeeding in my class
	Job tasks that I am doing are already familiar to me
	My students participate in vocational club activities

	The subject matter I teach is already familiar to me
	I have had success using new teaching approaches
	I have trouble making and sequencing lesson plans
	Problems occur due to poor organizational skills
Curriculum (1)	I have inadequate curriculum materials
Students (7)	I receive positive feedback from my students
	I receive expressions of gratitude from my students
	Students act unmotivated towards my subject area
	Students act with respect toward me
	My students show pride in their accomplishments
	I see my students working to have [a] better future
	My students display a lack of self-discipline
Peers (2)	My peers act with respect towards me
	I receive positive feedback from my peers
System (8)	I have more work to do than I have time to do it
	My principal supports me
	I have sufficient funds for supplies and equipment
	I receive positive feedback from my principal
	I receive help from my local vocational director
	My class sizes are not appropriate for my subject
	Problems exist due to unclear school policies
	Problems occur due to unclear job expectations
Community (1)	I receive help from my state vocational supervisor

Interview with Dr. Camp and Dr. Heath-Camp

Once the researcher discovered the uniformity of the teacher proximity continuum and the ATCP, the researcher reached out to Dr. Camp and Dr. Heath-Camp for more insight to the framework they developed in their research. The researcher interviewed Dr. Bill Camp and Dr. Betty Heath-Camp (full transcript can be found in Appendix D). The focus of the interview was to revisit the initial study, discover more background information about the continuum from over thirty years ago, and explore functional uses of the conceptual framework. The teacher proximity continuum was developed and published in 1990 after the researchers categorized factors impacting practicing first and third year teachers (Camp & Heath-Camp, 1990). These categories evolved into the levels and domains Dr. Camp and Dr. Heath-Camp also referred to studies after the creation of the teacher proximity continuum in which the levels and domains withstood in teacher preparation and effective teaching methods.

Dr. Camp and Dr. Heath-Camp researched alternative certification teachers over the years and think the domains and levels still apply to modern education and will still be important factors. Since the study was originally conducted and published in 1990, the researcher wanted to know what types of changes would emerge or change over the past thirty years based on following first year teachers for three years. Dr. Camp remembered doing a card sort with based on a slip of paper and sorting the topics into similar piles before current qualitative practices were available. The topics developed into domains and the concept related to the proximity away from the teacher based on functional distances. Those domains were linked into levels of similarity of the domains. The researcher asked the interviewees for recommendations and ideas of how they would approach the research differently in this decade. One recommendation from Dr. Camp was to focus on one or two of the levels per study. Another recommendation was to

develop a matrix with the domains and levels on each axis. Dr. Camp stated he would "brainstorm about using a matrix approach where you go across the top with these categories here pedagogy, curriculum program, internal students, peers, et cetera, et cetera, the domains, and then go down the side, or you could reverse that of course, with aspects or components of the alternative certification program and come up with a research question, not a research question, but a leading question in the interviews that would approach each of the cells" (W. Camp, personal communication, January 22, 2021). After completing the interview with Dr. Camp and Dr. Heath-Camp, the researcher conducted a pilot study during comprehensive exam with previous cohort completers. The researcher discovered that the levels and domains created a systematic guide for the participants to elaborate on the experience in an ATCP. The pilot study allowed the researcher to test out research and interview questions for clarification and a simulation of the study.

Pilot Study Review and Adjustments

The researcher conducted a pilot study during the comprehensive exam in January and February of 2021. The pilot study was assigned to allow the researcher the ability to test out the research and interview questions. The researcher was also able to explore if the teacher proximity continuum would translate and fit the purpose of exploring the teachers' early experiences. Two teachers from the 2019-2020 ATCP cohort were chosen to participate based on the criteria of being a teacher candidate with no less than three years and no more than five years as a classroom teacher and hired as a full-time teacher in Georgia. Teacher candidates that were not considered from the cohort sample included the undergraduate students and students who were not yet hired into a full-time teaching position. The first sampling strategy for the pilot study eliminated the participants that did not meet the previous criteria of employment status

then the researcher randomly selected two participants using an online name selector. These strategies were applied to select the participants of the study while examining their survey, archived observations, documents, and interviews to create a sample for the pilot study.

Table 8

Participants in ATCP Study: Overview

Participant	Years taught	Gender	Race	CTE discipline	Degree option	Completion status
Kenya	3	Female	African American	Business	EDS	Certified as of May 2020 Expected graduation date is May 2021
Rose	4	Female	Caucasian	Family and Consumer Sciences	MAT	Certified as of May 2020 Expected graduation date is August 2021

Table 8 provides an overview of the two participants in the pilot study who shared their experiences and backgrounds during the ATCP cohort of 2019-2020 using randomly selected pseudonyms. A review to summarize the results from the pilot study with Kenya and Rose can be found in Appendix E. The pilot study research and interview questions were based on the teacher proximity continuum in Table 9.

Table 9

Research and Interview Questions from Pilot Study (Camp & Heath-Camp, 1990)

Levels (5)	Domains (8)/Research Question	Interview Question
Personal characteristics	How did the alternative certification program impact teachers' internal teaching experiences (internal)?	How did the program impact you personally?
Professional Skills	How did the alternative teacher certification program impact teachers' professional skills (pedagogy/curriculum/program)?	How did this program change your pedagogy in the classroom? How did this program change your curriculum? How did this program change your program of study/pathway?
Interpersonal relationship	How did the alternative teacher certification program impact teachers' interpersonal relationships with their students and peers (co-workers)?	How do you think the program impacted your relationships with students?

		How did the program impact your relationships with your peers (co-workers)?
Intra-system	How did the alternative teacher certification program impact teachers' understanding of their system (department, school/school system)?	How did the program impact your department, school, school system, state requirements, and standards?
Extra-system	How did the alternative teacher certification program impact teachers' connection to their community (your influence on the community or participation in community events)?	How did the program impact your community involvement, event attendance, and social interactions?

Conclusions based on Pilot Study

The two participants' interviews provided a detailed experience of the teachers during their second and third years of transitioning to teaching full-time, attending a full-time program at a major university of Georgia, and maintaining their personal lives in relation to the teacher proximity continuum. By understanding the impact of the program to multiple aspects of

educator training, the researcher improved the future study to defend the use of the conceptual framework based on the training molded by GaPSC's requirements. The researcher discovered using the levels and domains from the teacher proximity continuum conveniently produced codes and themes to organize the data collection. The overall themes of the levels and domains were explored with the survey from June 2019 and interview in January 2021. The researcher decided to add the previous assignments as documents for analysis and reference points during the interviews.

Revisions based on Pilot Study

Based on the interviews of the previous students, the ATCP benefited all levels and domains of the teacher proximity continuum. Other factors to note for the future of the program emerged as reinforcement to the design of the ATCP. The Georgia Department of Education's (GaDOE) Career and Technical Student Organizations (CTSOs) representatives was a valued breakout session to for the teacher candidates. Assignments such as syllabus, instructional calendar, and pacing guides have practical and conceptual value to pedagogy and field training in teacher preparation. Continuing with organizational and planning assignments allowed the teachers the ability to prepare for the upcoming school year during the summer program. Each of the assignments build on each other resulting in one complete course by the end of the cohort year. The syllabus with standards expanded to a pacing guide with overviews of the instructional units. The pacing guide evolved into the instructional calendar by developing daily topics. The topics on the instructional calendar emerged into a lesson plan involving multiple strategies to teach the specific content. All the previous documents are collected together to become a guide for the course called a teaching notebook which is reviewed at the end of the cohort year. Overall, while certification requirements change in Georgia, the ATCP used the teacher

proximity continuum to produce effective CTE teachers. Other recommendations included reviewing the transcripts and changing the interview questions to be more precise. The interview questions were too wordy and confusing so the researcher had to explain two questions further. Small adjustments to questions were made after the pilot study and the new questions need to be tested. The researcher adjusted the research questions for the future study, but the interview questions work for the interviews to get specific information based on the domains.

Chapter Summary

During the literature review chapter, this dissertation explored the historical evolution of teacher education overall. Later the need for more teachers based on the expansion of Career and Technical Education and teacher shortages opened up the possibility of alternative teacher education. The researcher compared traditional university-based education and alternative certification education models in the nation and programs in Georgia based on the state requirements and disciplines. In this chapter, the researcher also discussed the characteristics and demographics of the nation's teachers. Due to the progression of ATCPs, many benefits developed over time and exploration of early experiences as an ATCP teacher. The researcher considered multiple theories and conceptual frameworks such as symbolic interactionism, expectancy-value theory, pedagogical content knowledge model, Borich needs assessment model, and teacher proximity continuum to examine the teachers' early experiences as a teacher and participant of the ATCP. The researcher was able to interview the authors of the teacher proximity continuum and create a pilot study with two former participants to solidify the match of the conceptual framework and test research questions for the future study. The pilot study and discussion with Dr. Camp and Dr. Heath-Camp allowed the researcher to make changes to the research questions to narrow the direction of the dissertation study.

CHAPTER 3

METHODOLOGY

Purpose of Study

The purpose of this qualitative case study explored the early teaching experiences of Career and Technical Education teachers who participated in an alternative certification program using the teacher proximity continuum as a framework. There are seven broad teacher certification areas in Career and Technical Education: Agriculture, Business, Engineering and Technology, Family and Consumer Sciences, Health Sciences, Marketing, and Career and Technical Specializations (formerly known as Trade and Industry Education) (GaPSC, 2020). According to the Association of Career and Technical Education (ACTE) website (ACTE, 2020), CTE is classified into sixteen Career Clusters and consist of more than seventy-nine pathways. The sixteen Career Clusters includes (a) Agriculture, Food and Natural Resources, (b) Architecture and Construction, (c) Arts, A/V Technology and Communications, (d) Business, Management and Administration, (e) Education and Training, (f) Finance, (g) Government and Public Administration, (h) Health Sciences, (i) Hospitality and Tourism, (j) Human Services, (k) Information Technology, (l) Law, Public Safety and Security, (m) Manufacturing, (n) Marketing, Sales and Service, (o) Science, Technology, Engineering and Mathematics (p) Transportation, Distribution and Logistics (ACTE, 2020).

The ATCP under study prepares teachers from industries such as, but not limited to nursing, automobile mechanics, engineers, athletic training, culinary arts, business, and many other career paths into middle and high school teachers. Beginning CTE teachers participating in

the ATCP are entering the classroom for the first time as an educator, holding a nonrenewable or provisional certification from the GaPSC. This study examined these teachers' early experiences using the teacher proximity continuum. It includes eight domains at five levels of functional distance from the teacher. The eight domains include internal, pedagogy, curriculum, program, students, peers, system, and community. The five levels of the teacher proximity continuum are personal characteristics, professional skills, interpersonal relationships, intra-system, and extra-system (Camp & Heath-Camp, 1990). The continuum was developed using the documented experiences of a similar group of CTE teachers who participated in an ATCP. These experiences were recorded during interviews, daily tape-recorded logs, Nominal Group Technique (NGT) sessions, and focus group sessions (Camp & Heath-Camp, 1990).

Research Questions

The following are questions that guided this research study:

1. Personal characteristics- Internal
    a. How did participation in the ATCP impact teachers' early teaching experiences associated to internal characteristics?
2. Professional Skills- Pedagogy, Curriculum, Program
    a. How did participation in the ATCP impact teachers' early teaching experiences associated to pedagogy, curriculum, and program?
3. Interpersonal relationship- Students and Peers
    a. How did participation in the ATCP impact teachers' early teaching experiences associated to students and peers?
4. Intra-system- System

   a. How did participation in the ATCP impact teachers' early teaching experiences associated to the system?

5. Extra-system- Community
   a. How did participation in the ATCP impact teachers' early teaching experiences associated to community?

Research Design

According to Merriam and Tisdell (2016) research is usually divided into two categories, basic and applied. The motivation of basic research intellectual interest in a phenomenon with the goal of extended knowledge while applied research is used to improve the quality of practice in a specific discipline (Merriam & Tisdell, 2016). Denzin and Lincoln (2011) described qualitative research as "a set of interpretive, material practices that make the world visible" (p. 6). As Merriam and Tisdell (2016) stated qualitative researchers' main interests is understanding the meaning constructed with four characteristics: (a) focuses on understanding and meaning, (b) data collection and analysis from the researcher is the primary instrument, (c) an inductive process, and (d) produces rich description. Creswell and Poth (2018) categorized qualitative research into five approaches: (a) narrative research, (b) phenomenology, (c) grounded theory, (d) ethnography, and (e) case study. Narrative research involves examining how the participants tell stories to understand the perceptions to develop narratives based on their experiences (Clandinin, 2013; Riessman, 2008). Phenomenology describes and interprets the lived experiences of the participants with the investigation of a phenomenon or event (Moustakas, 1994; van Manen, 2014). Grounded theory derives from data collected about a topic of interest then the researcher develops theories based on inductive reasoning (Charmaz, 2014; Corbin & Strauss, 2015). Ethnography focuses on understanding different cultures through immersion

(Fetterman, 2010; Wolcott, 2008). A case study is an in-depth investigation during a period of time (Stake, 1995; Yin, 2014).

This study uses a qualitative case study to focus on the teachers' early experiences collected through interviews, data collection, and archived documents. The teachers' early experiences include balancing the transition into a new role of teaching full-time and enrolling in a part-time education program. The research also explored the early experiences during the educational development while enrolled in the ATCP in Career, and Technical Education (CTE) disciplines. This study classifies as applied research because the researcher's motivation is to understand the nature of the teachers' early experiences (Patton, 2015). Participants of the ATCP in this study include teachers in CTE fields such as Business Education, Career and Technical Specializations, Engineering and Technology, Family and Consumer Sciences, Health Sciences, and Marketing as classified by the GaPSC (GaPSC, 2020). As a qualitative researcher, the researcher is interested in understanding how the participants interpret their experiences, the construction of their words used to tell their stories, and the meaning accredited to their experiences (Merriam & Tisdell, 2016). Public education settings often perceive alternative teacher certification programs as ineffective method to train teachers for the classroom (Heilig et al., 2011). Due to the many negative misconceptions and opinions of alternative teacher certification programs, this research explored early experiences including the certification process and transition to teaching through the teacher proximity continuum with respect to the eight domains and the five levels that teachers may experience. The researcher examined teachers' early experiences using the eight domains and five levels of the teacher proximity continuum to guide the research. The impact of participation in the ATCP may also be explored due to being part of the teachers' early experiences.

Case Study

Creswell and Poth (2018) defined qualitative research as "an inquiry process of understanding based on a distinct methodological approach to inquiry that explores a social or human problem. The researcher builds a complex, holistic picture; analyzes words; reports detailed views of participants; and conducts the study in a natural setting" (p. 2). This study qualified as a case study and explored the transition of industry professionals to teaching a CTE course in the public-school systems. "A case study is an in-depth description and analysis of a bounded system" (Merriam & Tisdell, 2017). Creswell and Guetterman (2019) expanded on the definition of case study as "an in-depth exploration of a bounded system based on extensive data collection" (Creswell & Guetterman, 2019, p.477). The researcher used the case study method to explore the lived experiences of teacher candidates in an ATCP. Stake's text (1995) discussed single case study as research based and bounded on a shared experience while a multi-case design is multiple cases bounded by qualifications (Stake, 1995). This study classified as a single case study as the whole group of teachers is bounded by the experience of the ATCP and being a teacher within the first three-five years of transitioning from their specific industry to education. Although the researcher could expand the study to a multi-case study to compare this specific ATCP to other certification programs in the country, that is not be done in this dissertation. This case study was classified as an instrumental case study because the purpose was to gain insight into the shared issues or themes of the teachers' early experiences (Creswell & Poth, 2018).

The researcher's purpose for an in-depth study of the case study was to fully understand the complexity of the ATCP and the experience of an alternative certification program instead of the surface-level exploration of a quantitative study. Participants can elaborate more in interviews than they can in surveys and the researcher can collect more data from observations

than surveys. The twofold definition of a case study as a research method is, “a case study relies on multiple sources of evidence, with data needing to converge in a triangulating fashion” (Yin, 2014, p. 12). The case study methodology fits the design of the research better than other types of qualitative research methods since the case was bounded in the ATCP program (Merriam & Tisdell, 2017). Students are accepted and registered for the ATCP program through the university’s Graduate School. Students enroll in two courses or six credit hours, Curriculum Planning in Workforce Education Instructional Strategies in Workforce Education, to start the cohort in Summer 2019 (Workforce Education, 2020). During these summer classes, students attended class ten days, and receive face-to-face instruction from their professor. While this research is not a program evaluation, conducting this research with this cohort can create future improvements to be made overall to ATCPs globally based on the teachers’ early experiences. The qualitative method of data collection stimulated more detailed information compared to quantitative data collection because the researcher is using in-depth, semi-structured interviews, archived observation evaluations, and documents to support the research (Creswell & Poth, 2018). In-depth interviews are a qualitative research technique consisting of intensive interviews with a small number of individuals to explore their perspectives, in this case, the perspective is their early experiences as a teacher (Boyce & Neale, 2006).

Advantages and Limitations

An advantage of a qualitative case study with in-depth interviews is that the participants are able to provide more detailed explanations and the researcher can explore the participants’ experiences through storytelling (Creswell & Poth, 2018). Advantages of a case study include collecting multiple sets of data such as observations, interviews, documents, and journals (Creswell & Guetterman, 2019). Also, the researcher can explore the bounded system of the

program while exploring the participants as individuals to learn more about their early experiences in education. Another advantage of a case study is the design allowed the participants the opportunity to describe and examine their perception and experiences and the impact of ATCP participation on these lived experiences. An advantage of an in-depth interviews was some individuals may be more comfortable having a conversation about their early experiences compared to completing a survey (Boyce & Neale, 2006).

Disadvantages of in-depth interviews included the limitations due to it being prone to bias, time-intensive, and the interviewer not being appropriately trained in interviewing techniques (Boyce & Neale, 2006). The researcher can only conduct those data collection methods with a select number of participants as opposed to conducting interviews with each member of the cohort since interviews are time-consuming (Creswell & Poth, 2018). After conducting interviews, the researcher was required to transcribe and analyze the results which adds to the time intensive component of in-depth interviews (Boyce & Neale, 2006). The time constraints detailed in the qualitative design also applied to being a disadvantage of the case study method. Time restraints put a limit on how many teachers can be interviewed although the researcher would love to explore the experiences of all the participants journey during the early years of their career, time does not permit for all participants to be interviewed during this dissertation study. Since the participants were former students of the ATCP, the researcher placed efforts in the data collection, instrument creation, and used techniques in conducting interviews to prevent and allow less bias (Boyce & Neale, 2006). The researcher obtaining training from qualitative courses in the Interdisciplinary Qualitative Studies graduate certification program to learn appropriate interview techniques to avoid leading questions,

promote neutral body language, and inhibit any displays of personal opinions (Boyce & Neale, 2006).

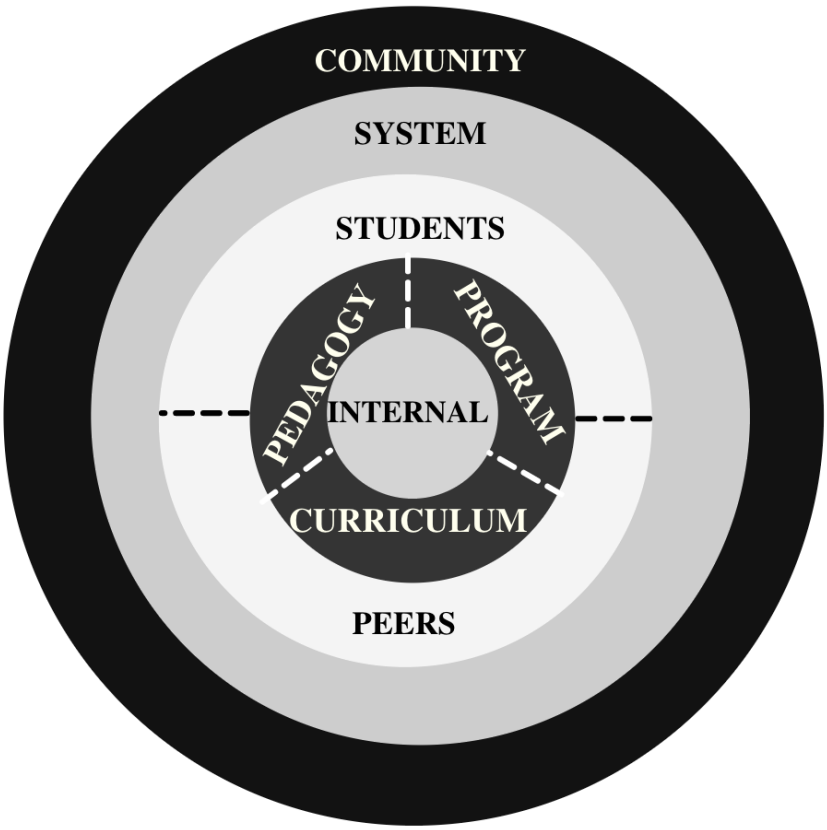
Overall, the limits or boundaries of this research study are minimal since the researcher was the Graduate Assistant for the cohort and assisted in teaching the courses. The researcher has access to the participants and their information, such as interviews, documents, and archived observations. One limitation is not being able to interview participants in person due to participants living in different locations in the state of Georgia and the COVID-19 pandemic. Limits for the participants could be the teacher candidates not being entirely honest because the researcher was the Graduate Assistant and co-taught the courses for the cohort. The researcher's role in data collection is the primary collector when reviewing documents, conducting interviews, and observations which overlapped with the duties of being the Graduate Assistant.

Conceptional Framework

The conceptional framework of the research is the teacher proximity continuum. The teacher proximity continuum framework with a case study design explored the early teaching experiences of the teachers who participated in an ATCP to obtain full-renewable CTE teacher certification (Camp & Heath-Camp, 1990). Uniting the qualitative case study method and the teacher proximity continuum for this study allowed multiple alternative certified teachers to share their experiences in an ATCP as a bounded system. The teacher proximity continuum includes eight domains at five levels of functional distance from the teacher. The eight domains include internal, pedagogy, curriculum, program, students, peers, system, and community. The five levels of the teacher proximity continuum are personal characteristics, professional skills, interpersonal relationships, intra-system, and extra-system (Camp & Heath-Camp, 1990) as shown in Figure 12.

Figure 12

Teacher Proximity Continuum (Adapted from Camp & Heath-Camp, 1990 used with permission from personal communication on January 22, 2021)



The personal characteristics level includes the internal domain, which focuses on the experiences within the teacher. The professional skills level includes domains such as pedagogy, curriculum, and program. Pedagogy encompasses the short-term planning, improvement related to instruction, evaluation, and delivery, while the curriculum is the experience associated with to planning the course and preparing instructional materials. The program includes long-term planning of implementing the pathway or program. The next level is inter-personal relationships, including students and peers. The students' domain involves the interactions between the teacher and the students compared to the domain of peers involving the interactions with same-level co-workers. The intra-system level consists of the system, which is the education system's

experience that impacts the teacher. The educational systems can be the local school system that employs the teachers, the state school system regulating state teaching standards, and the federal education school system mandating national. The last level is extra-system, which is the community domain, including the experiences outside of the educational system and how their community impacts the teacher.

According to Camp and Heath (1989), as many as one-fourth of problems encountered by beginning CTE teachers are unique to CTE. The teacher proximity continuum was developed to analyze and classify over 5,000 events based on the collection of significant events, positive influences, negative influences, and assistance (Camp & Heath-Camp, 1990). Due to the uniqueness of the experiences encountered by CTE teachers, the teacher proximity continuum is the best framework for the study based on the multiple components of the teachers' early experiences. Unique experiences of CTE teachers included being required to be an advisor of a co-curricular activity such as their connected Career and Technical Student Organization (CTSO), teaching a pathway which consists of three courses in sequence ending in certification with an End of Pathway Assessment (EOPA), being the only teacher of your content area in your school or district, and completing teacher certification courses in the early years. Personal characteristics include the internal domain; this domain relates to experiences arising from factors within the teacher. The professional skills level includes the pedagogy, curriculum, and program domains. Pedagogy is the method and practice of teaching; therefore, the teachers described early experiences of how the ATCP impacted their pedagogy. The pedagogy domain includes experiences related to the teachers' short-term planning, deliver, evaluation, and improvement of instruction. The curriculum domain relates to planning for course content and preparation during the duration of the course. One source of planning for this research would be

to use the standards from Georgia Department of Education (GaDOE) to design and outline the school courses. The program domain includes experiences related to the long-term planning and operation of the teachers' CTE pathway or program. CTE pathways consist of three courses required in sequence before completing the End of Pathway Assessment for student certifications. The interpersonal relationship level includes students and peers. The student domain explores the relationship and interactions between the teachers and students. The peers domain explores the relationship and interactions between the teachers and their same level co-workers in the school system. The domain connected to the intra-system level is a system. The system includes the GaDOE, the federal school system, and the local school system. The researcher explored the early experiences between the system and teacher. The extra-system level involves the community domain explores the early experiences arising from outside the administrative and physical bounds of the educational system (Camp & Heath-Camp, 1990).

Establishing Trustworthiness of Data

Firestone (1987) stated qualitative studies describes people acting in events and these studies are so detailed that it provides enough information to display how the researcher's conclusions "makes sense". Qualitative research strategies to establish authenticity and trustworthiness in based on another assumption of perspectives congruent with another paradigm such as naturalist inquiry (Merriam & Tisdell, 2017). Lincoln and Guba (1985) adopted naturalist equivalents for conventional terms of quantitative research to apply to qualitative research. The terms internal validity, external validity, reliability, and objectivity transitioned from credibility, transferability, dependability, and confirmability respectively in Table 10 (Lincoln & Guba, 1985). Based on the naturalist approach to the qualitative research, internal

validity is the “truth value”, external validity is applicability, reliability is consistency, and neutrality is objectivity (Lincoln & Guba, 1988).

Table 10

Terminology for Lincoln and Guba’s (1985) Four Criteria for a Trustworthy Qualitative Study Compared to Quantitative Labels

Qualitative Terminology	Quantitative Terminology
Credibility	Internal Validity
Transferability	External Validity
Dependability	Reliability
Confirmability	Objectivity

Credibility

The term credibility in qualitative research relates to the consistency within the context of the research to build confidence of the truth and interpretations of the data (Lincoln & Guba, 1985). In quantitative research, the term construct validity is used with the same meaning as credibility to establish consistency using multiple sources of evidence and the study used key information to review the draft of the case study report. Due to this research being qualitative research, the researcher established credibility using pattern matching, explanation building, address rival explanations, and use logic models (Yin, 2014). Lincoln and Guba (1985) attributes credibility as one of the most crucial factors in establishing trustworthiness in the data. Credibility developed explanations and patterns in the research study to support cause and affects through the teacher candidates’ narratives (Merriam & Tisdell, 2017).

Lincoln and Guba (1985) described six techniques for establishing credibility as (a) prolonged engagement, (b) persistent observation, (c) triangulation, (d) peer debriefing, (e) negative case analysis, and (f) member checking. Prolonged engagement includes spending time in the field to understand and learn the setting of the research. The researcher was a Graduate Assistant and former 2015 participant of the program, therefore those factors established prolonged engagement based on the rapport and trust with the current participants making the information obtained useful and rich. Lincoln and Guba (1985) stated that "if prolonged engagement provides scope, persistent observation provides depth". Persistent observation in the research is based on the characteristics of the early experiences being explored in the research.

Triangulation is the use of multiple methods, data sources, and instruments to develop the conclusions from the research to discover what is true of the experiences (Patton, 2015; Merriam & Tisdell, 2017). The researcher was able to employ triangulation in the research to understand the experiences of the teachers in the study within Patton's (2015) four types of triangulation classified as (a) data triangulation, (b) investigator triangulation, (c) method triangulation, and (d) theory triangulation. Data triangulation uses multiple data sources as validation such as time, space, and person (Denzin, 1989). Time triangulation involves collecting data on the same people or phenomenon at different times to establish congruency across time, space triangulation involves collecting data in multiple research sites on the same phenomenon for cross-site consistency, and person triangulation involves collecting data from different types of people to validate data through multiple perspectives (Denzin, 1989). For this research, the researcher used person triangulation by using different types and levels of people in the participant pool because the participants come from different backgrounds, school types, areas of Georgia, demographics, education levels, and discipline areas. Method triangulation involves using multiple data

collection methods such as interviews, observations, and documents (Patton, 2015; Denzin, 1989). The researcher's method triangulation was the semi-structured interviews that included references to archived data such as the observation evaluations and documents like lesson plans from the 2019 cohort year including summer 2019, fall 2019, and spring 2020 semesters to develop a convergence of evidence leading to the similar findings (Yin, 2018). Peer debriefing includes meeting with peers to explore and review the written or oral components of the research gathered by the researcher (Denzin, 1989). The researcher also used peer debriefing to explore themes and the interpretations of the data (Denzin, 1989). The purpose of negative case analysis is to continuously improve and refine the hypothesis or theory to explain and account all the cases in the research by searching for cases that do not verify the early diagnosis and revise interpretations if necessary (Denzin, 1989).

The last technique of triangulation is member-checking, the researcher used this strategy to determine participant accuracy and credibility. Member checking allowed the participants an opportunity to provide feedback to the researcher about emerging interpretations that were obtained and the researcher also gauged the participants' reaction to the emerging interpretation (Denzin, 1989). Member checking is defined as research validation to ensure accuracy or credibility to ensure the researcher's interpretations of the data is correct (Yin, 2014; Merriam & Tisdell, 2017). The researcher used member checking to ensure no bias developed from the researcher's recording and recollection of data from the interviews by summarizing the interviews with initial interpretations after the interview protocol is complete. Lincoln and Guba (1985) classified member checking into two categories, informal and formal. The method of informal member checking includes providing the interview transcripts or playing the interview recordings for the participants to ensure the participant shared the intended information and

allow the participant to make additional points and/or corrections to the interview (Lincoln & Guba, 1985; Amin et al., 2020). Formal member checking employs a team of the study participants to provide feedback on the data and can be done in an in-person meeting or written form (Lincoln & Guba, 1985; Amin et al., 2020). Due to the distances of the participants across Georgia and the COVID-19 pandemic, the researcher conducted formal member checking on Zoom with a Google Doc as a written form so all participants can view, edit, and comment in real-time with internet access. Both methods of member checking were expected to take multiple hours, but formal member checking was expected to take more time and effort to coordinate five participants to meet at the same time in one meeting compared to meeting with each person individually based on their availability. The researcher's preference is informal member checking, but the researcher contacted the selected participants by email to request their participation and preference for informal or formal member checking since these are voluntary methods then make plans to move forward. The researcher provided the analysis report of the interpretation overviews produced instead of the participants member checking their transcripts.

Transferability

Transferability is using a theory in single-case studies (Merriam & Tisdell, 2017). Transferability in this case study is established through the conceptual framework, teacher proximity continuum. Based on the nature of the study, the results should transfer to other similar situations with similar characteristics. Lincoln & Guba (1985) stated that the researcher's responsibility is to provide the descriptive data so the readers can evaluate and apply the data to other contexts. Multiple sources of data collection through observations, interviews, and data collection established credibility and transferability. One technique for establishing transferability is thick description based on providing ample and relevant information for the

reader to develop similar conclusions about the research (Denzin, 1989; Merriam & Tisdell, 2017; Lincoln & Guba, 1985). The researcher provided an abundant amount of data in the appendices and used quotes from the participants as a method of thick description and add to the authenticity (Denzin, 1989; Prasad, 2018).

Dependability

Reliability is the is classified as dependability in qualitative terminology based on Lincoln and Guba's (1985) research. Dependability relates to if the data collection procedures can be repeated and can produce the same results (Merriam & Tisdell, 2017). Dependability in this research is the use of a case study protocol developed based on case study databases. The research's dependability demonstrated stability of the data over periods of time and over different conditions. Due to the research's replicability, dependability is established for others to recreate the study. A technique for establishing dependability includes inquiry audit which is analyzing relevant data and supporting documents by an external reviewer (Denzin, 1989).

Confirmability

Objectivity is nonbiased or prejudice research without a political agenda and referred as confirmability, once credibility, transferability, and dependability are established and achieved in qualitative research (Lincoln & Guba, 1985). The focus of confirmability is to ensure the data is accurate, relevant, and meaningful based on representing the information from the participants and not developed by the researcher's imagination. Authenticity is essential to the research process as well. Lincoln and Guba (1988) described four types of authenticity in their text: (a) ontological authenticity as a balanced view that presents all constructions and values that undergird them, (b) educative authenticity is the ability of the inquiry to raise consciousness or unite a divided consciousness through dialectical process to allow the readers the opportunity to

develop an informed opinion, (c) catalytic authenticity is to increase the understanding of various constructions, (d) tactical authenticity is the simulation and facilitation to action (Lincoln & Guba, 1988). Techniques for establishing confirmability includes (a) audit trial, (b) reflexivity, (c) triangulation (Denzin, 1989). An audit trial is the systematic collection of data for an independent auditor to develop conclusions based on (a) raw data, (b) data reduction and analysis products, (c) process notes, (d) materials relating to the intentions and dispositions of the researcher, (e) instrument development information, and (f) data reconstruction products (Denzin, 1989; Lincoln & Guba, 1985; Merriam & Tisdell, 2017). The researcher maintained a personal journal for memos and field notes during this study for reflexivity purposes and to limit subjectivity. The journal also serves as a self-reflection tool to address assumptions and biases (Merriam & Tisdell, 2017). Again, triangulation is using multiple methods to develop conclusions to represent the truth in the research and reflexivity involves focusing on the knowledge being built during the research (Denzin, 1989; Lincoln & Guba, 1985; Merriam & Tisdell, 2017).

Ethical Standards

The first step to conduct research at the researcher's institution is to complete the Collaborative Institutional Training Initiative (CITI program) which is regulated by the Institutional Review Board (IRB). According to the IRB website, the Human Research Protection Program ensures safe practices based on the state, institution, and federal policy (University of Georgia- Office of Research, 2019). In July 2017, the researcher completed the CITI modules with the expiration date of July 2022. The next step was to complete the orientation session for new members to understand research ethics. The researcher's prospectus approval timeline was September 2021; after that the researcher applied for IRB and awaited

approval from the IRB committee to conduct research on human subjects. IRB approval was received in November 2021 and provided in Appendix A.

Tracy (2010) classifies four ethical standards to be considered by the researcher while conducting research as (a) procedural ethics, (b) situational and culturally specific ethics, (c) relational ethics, and (d) exiting ethics. Procedural ethics are ethical actions the institution deems as necessary and dictates the researcher to avoid risk and/or harm, ensures anonymity and confidentiality, and provide informed consent to the participants (Sales & Folkman, 2000; Tracy, 2010). Situational and culturally specific ethics involves the ethical practices in specific circumstances that emerge based on reasoned considerations (Tracy, 2010). Relational ethics refers to the ethical self-consciousness the researchers have to place on themselves to be mindful their actions, character, and consequences on others (Tracy, 2010). Exiting ethics occurs during the findings and how revolves around how the researcher shares the results to avoid unintended or unjust consequences (Tracy, 2010). The researcher avoided harm to the participants by following the requirements and limitation provided by the institution. Anonymity is provided because the researcher assigned pseudonyms and omitted personal information. The researcher stored archived and new data on a password-protected flash drive to ensure security of the information collected. Participation in the study was voluntary and the researcher informed the participates of their rights related to the research. The informed consent sent to the participants can be found in Appendix F.

Methods and Procedures

Multiple methods of data collection were used in this dissertation with the 2019-2020 ATCP cohort, such as archived documents such as graded assignments and research interviews. The qualitative methods of data collection allowed the discovery of more in-depth information

about the early experiences of the teachers. The archived documents for each participant included the syllabus, pacing guide, instructional calendar, lesson plans, and observation evaluations as reference materials for the interviews. The teachers were required to develop a syllabus, pacing guide, instructional calendar during the summer of 2019 for one of their courses. The syllabus included, but not limited to: (a) behavior expectations written in a positive manner, (b) major instructional units, (c) major project assignments, (d) special costs, and (e) details regarding evaluation with percentages. The pacing guide should include functional units paired with major course standards from the Georgia Department of Education (GaDOE) with an estimated amount of instructional time. The instructional calendar expanded on the outline created by the pacing guide and evolved into topics for each instructional day. The major units from the pacing guide developed into minor units linked to the sub-standards from the GaDOE.

The lesson plan assignments were continuous over the span of the fall 2019 semester. The archived rubrics for the syllabus, pacing guide, and instructional calendar is provided in the Appendix G as evidence. In the program, a lesson plan is an outline of the activities planned for the duration of the class per day. The lesson plans guide teacher effectiveness by developing an agenda based on the learning goals, instructional strategies, methods, and assessments. The 'Evaluation of Lesson Plan' in Appendix H assessed twelve components such as (a) General information, (b) Objectives and/or Essential questions, (c) References, (d) Materials/Supplies, (e) Set induction activity, (f) Sequence of activities, (g) Instructional aids/Strategies, (h) Summary activity, (i) Assessment/Evaluation, (j) Learning styles, (k) Special accommodations and (l) General quality.

The observation evaluations consisted of the researcher observing one class period or block depending on the schedule of the school. The teachers are required to allow the researcher

and/or professor of record to visit their classroom to observe and evaluate their teaching. The 'Teaching Evaluation Form' found in Appendix I assessed fifteen teaching skills on the rubric such as (a) Objectives, (b) Set Induction, (c) Enthusiasm for content, (d) Stimulating discussion/assessing understanding, (e) Encouragement, (f) Real-world examples, (g) Teaching methods, (h) Instructional aids, (i) Organization/time management, (j) Oral and written expression, (k) Command of subject, (l) Communication, (m) On-task behavior, (n) Evaluation of students, and (o) Summarizing method. The teachers were observed teaching their classroom topics live with their students based on lesson plan requirements during the fall and spring semester.

The individual interviews with the participants based on the research and interview questions were conducted in January 2022. The researcher contacted the selected participants through email to request their participation in the study. The participants notified the researcher of their acceptance or declined status by responding the invitation email. The accepted participants received the consent form to sign and return to the researcher. After the signed consent form was received, the researcher and participant arranged a date and time to meet on Zoom for the interview while the researcher retrieved the archived documents for each participant for the interview. The researcher sent each participant a Zoom invitation once the date was determined. The Zoom interview was recorded and took approximately 45 minutes to complete. Once the Zoom interviews were complete, the researcher downloaded the interviews to a secure storage device. Temi, an online transcription program was used to transcribe the interviews. Coding was used on the online program for organizational purposes in NVivo.

Target Population and Participant Selection

The participants in this study were teachers early in their education career. The study participants were teacher candidates that participated in an ATCP at a major university in Georgia starting summer 2019. The ATCP program certifies teachers for initial certification in six of the Career and Technical Education disciplines in Georgia such as Business, Marketing, Engineering and Technology, Family and Consumer Sciences, Health Sciences, and Career and Technical Specializations formerly known as Trade and Industry (GaPSC, 2020). These teachers in the ATCP previously transitioned from their industry of specialization to teach in a middle or high school setting. The design of the alternative certification program is for beginning Career and Technical Education (CTE) teachers who are entering the classroom for the first time as an employee and hold a nonrenewable/provisional certification from the Georgia Professional Standards Commission (GaPSC). GaPSC requires teachers to pass several assessments and complete specific coursework related to education to obtain a highly qualified teaching certification in Georgia (GaPSC, 2020).

This study's ATCP is a three-semester cohort starting in the summer and concluding in the spring semester resulting in state licensure once all other PSC requirements have been successfully completed. Teacher candidates registered for courses such as Curriculum, Instructional Strategies, Educational Foundations, Educational Psychology, Exceptional Children/Special Needs, and a year-long supervised teaching internship. Some teachers opted to use those courses for certification towards a higher degree in Masters in Teaching (MAT) or Educational Specialist (EDS). Out of the cohort of thirty-five teachers starting in summer 2019, the cohort consisted of five business education teachers, five family and consumer sciences (FACS) teachers, two health sciences teachers, one marketing, three technology teachers, and

twelve career and technical specializations teachers. Outliers that registered for the summer courses, but are not, included in the ATCP included one agriculture teacher, three FACS undergraduate teachers, three business education teachers without a full-time teaching position, and one teacher who withdrew. During the researcher's comprehensive exams, the researcher did a pilot study with two teachers, therefore one more FACS teacher and one more business education teacher was eliminated from the participant pool. The twenty-six eligible teachers disseminated into four program of study groups such as non-degree certification-only, certificate-only, Master's with certification (MAT), Specialist's degree with certification (EdS). Demographics based on race, gender/sex, discipline, and program of study is explored in Table 11.

Table 11

Demographics of ATCP Participants

Demographic categories						
Race	White: 13	Black: 12	Hispanic: 1			
Gender/Sex	Female: 17	Male: 9				
Discipline	Business: 4	Marketing: 1	Engineering & Technology: 3	Family and consumer sciences: 3	Health sciences: 3	Career and technical specializations: 12

Program of study	Non-degree: 18	Certificate only: 4	MAT: 2	Ed.S: 2

Merriam and Tisdell (2017) suggested lower numbers of participants to avoid oversaturation of hearing and seeing the same information repeatedly (Merriam & Tisdell, 2017). The researcher selected five participants because Yin (2014) suggested including no more than four or five cases in a single study (Yin, 2014). Stake (2006) also recommended having four or fewer cases or more than fifteen cases (Stake, 2006). The researcher combined the research in the text with the specifications based on the characteristics of the program of study groups and/or disciplines. Since the program required all teachers to complete the same evaluations and assessments, all full-time teacher cohort participants are eligible for selection since the program has many variations of content areas, education levels, and teacher experiences. The researcher surveyed the 2019 cohort teachers via Qualtrics to establish availability and interest, the purpose of this survey was to find out if the participants are still in the education field and if they were interested in being a participant found in Appendix J.

Initially, the goal was to have at least one person per program of study group and/or CTE disciplines if the numbers allowed this selection, therefore, the teachers remaining in the field were to be divided based on their program of study group. Once teachers were narrowed down based on program of study groups and/or CTE disciplines, the researcher planned to use random selection to select participants if multiple participants qualified in each group. The sample desired for the study included: teacher candidates with no less than three years, but no more than five years as a classroom teacher and hired as a full-time teacher in Georgia. Teacher candidates

that were not be considered for the sample included undergraduate students, students who were not hired full-time yet, and the pilot study participants. As previously mentioned, the researcher's sampling strategy was to first eliminate participants that did not meet the previous criteria of employment status then, the researcher planned to randomly select five participants using an online name selector. The researcher planned to use the online wheel of names to insert names of participants who agree to participate in the study, once all names were entered into the wheel names were to be randomly selected one name at a time. The initial plan for sampling did not materialize because only sixteen teachers completed the Qualtrics survey out of the thirty-five teachers. Only nine teachers were within the 3–5-year teaching timeframe responded yes to participating in the study. Out of the nine interested participants, two teachers already participated in the pilot study and were not eligible because of their previous participation and one teacher was not fully certified by GaPSC, therefore, eliminated as well. The researcher decided to alter the sampling methods due to the limited amount of interested participants. Instead of the initial plan, the researcher sent the invitation email with the consent form and scheduled interviews with the five teachers that responded. An online name generator was used by the researcher to select a pseudonym for each participant. This website allowed the researcher to select a name based on gender randomly.

Research Site

The research took place at a major university in Georgia. The post-secondary institute houses an ATCP within the College of Education for CTE teachers. All interviews were on Zoom and research materials were collection previously during the cohort's active year. The research materials aligned with the teacher proximity continuum levels and domains. During the cohort year, the teachers developed materials such as a syllabus, pacing guide, and lesson plans.

The materials were created based on the professional skills level which includes pedagogy, curriculum, and program domains. Pedagogy is initially fostered during the Instructional Strategies and curriculum is built during the Curriculum courses in the summer. The program of study/pathway was expanded with the creation of the pacing guide. The department and school system domains are in the intra-system level, which is the foundation of the standards from the state of Georgia's Department of Education (GaDOE). Interpersonal relationship level consisted of relationships with students and peers which the ATCP addressed in the Educational Foundations, Educational Psychology, and Exceptional Children/Special Needs courses. The extra-system included the teachers' community involvement which consisted of CTSO participation or other aspects based on the teachers' open interpretation. The personal characteristics level with the internal domain was also open to the teachers' perception based on how the ATCP impacted the teachers personally.

Interview Protocol

The interview protocol in Appendix K was developed based on the research and interview questions. Before each interview, the researcher assessed the internet connection to confirm connectivity to the Wi-Fi, Verizon cellular data from cell phone, or T-Mobile hotspot. After the connection to the internet was established, the researcher accessed Zoom to ensure the program worked properly to conduct and record to the interview. The researcher admitted the interview participant in the Zoom meeting room. Once the interview participant entered the Zoom meeting room, the researcher conducted an introduction including name, description of the study, briefly reviewed the informed consent form, and asked if the participant had any questions. The next step was to reiterate that the interview is recorded and asked for verbal consent to record the interview. Once verbal consent to record is established, the researcher

started the recording then restated the recording statement and asked for verbal consent again so the interviewee consented on the recording as well. The interview questions are based on the research questions in Table 12. The participants are thanked at the end of the interview and the researcher ends the recording.

Table 12

Interview Questions Compared to Research Questions (Camp & Heath-Camp, 1990)

Levels (5)	Domains (8)/Research Question	Interview Question
Personal characteristics	How did the alternative certification program impact teachers' internal teaching experiences (internal)?	How did the program impact you personally?
Professional Skills	How did the alternative teacher certification program impact teachers' professional skills (pedagogy/curriculum/program)?	How did this program change your pedagogy in the classroom? How did this program change your curriculum? How did this program change your program of study/pathway?
Interpersonal relationship	How did the alternative teacher certification program impact	How do you think the program

	teachers' interpersonal relationships with their students and peers (co-workers)?	impacted your relationships with students? How did the program impact your relationships with your peers (co-workers)?
Intra-system	How did the alternative teacher certification program impact teachers' understanding of their system (department/school/school system)?	How did the program impact your department, school, school system, state requirements, and standards?
Extra-system	How did the alternative teacher certification program impact teachers' connection to their community (your influence on the community or participation in community events)?	How did the program impact your community involvement, event attendance, and social interactions?

Data Collection and Instrumentation

Data collection for this qualitative case study used the following steps in the research process. The researcher developed an online survey with Qualtrics to assess which of the twenty-six eligible teachers are still in education as a teacher, if they are fully certified based on Georgia requirements, program of study through ATCP, and CTE discipline. Based on the responses to the initial survey, the researcher contacted the interested teachers that are still in education field by email to ask for a date for their participation in the study. To be as transparent as possible, the researcher provided the informed consent form in the email to the eligible participants, see Appendix F for informed consent and Appendix L for invitation email. The researcher selected five participants and attempted to have all program of study areas and most of the disciplines represented in the semi-structured, in-depth interviews based on the participants willingness to participate in the study. Once the researcher selected the five participants to interview, the researcher obtained the archived 2019-2020 documents such as the syllabus, instructional calendar, observation evaluation, and lesson plans from secure storage locations like Foliotek, an online portfolio and the professor of record's computer and researcher's computer.

The researcher did a brief document analysis of the archived documents to refresh the researcher's memory and highlight key components of the previous assignments. The teacher subjects were contacted with a welcome email to schedule a date and time to participate in the interview, one-on-one, to be conducted virtually on Zoom in January 2022. Since the teachers live in various locations in Georgia and the COVID-19 pandemic, Zoom was the best method to conduct the interviews and lasted approximately 45 minutes on Zoom. The participants had the opportunity to discuss and elaborate on the interview questions. The interview protocols have sub-questions that are bounded as front-end questions that allowed the interviewee to openly talk

about their experience in the alternative certification program (Creswell & Poth, 2018). The study selected five participants to ensure that the researcher was able to gather information from five individuals with different personalities, program of study groups and/or disciplines as well as having a limited number of participants allowed for more detailed points of view. The researcher recorded interviews on Zoom and saved the recordings to a password protected and secure computer, external hard drive, and flash drive to ensure there are multiple safe locations. Data transcriptions of the interviews were completed within two weeks of completion of interviews using online software and programs such as Temi. Establishment codes, themes, and subthemes within verbal interactions were developed and organized in the computer software, NVivo. After codes and themes are developed from the transcriptions, the researcher contacted participants again by email to ask if they want to contribute to the member checking process of reviewing the interpretations from the data analysis report instead of the transcriptions. The email is found in Appendix M. The researcher asked for their preference and explained the difference between formal or informal member checking. The participants that decline to participate in member checking were done and the participants that agreed to participate in member checking received an email with details to set up another meeting. Informal member checking was done on Google Docs and formal member checking was completed done on Zoom with the other participants that agree.

Data Analysis

Creswell and Guetterman (2019) described six steps for analyzing and interpreting qualitative data: (a) preparing and organizing data analysis, (b) engaging in an initial exploration through coding, (c) using the codes to develop a general picture of the data with descriptions and themes, (d) representing the findings through narratives and visual, (e) interpreting the meaning

of the results through personal reflection on the impact of the findings and on the literature that might form the findings, and (f) conducting strategies to validate the accuracy of the findings.

Before conducting the interviews with the selected five participants, the researcher conducted the document analysis process on the archived assignments so the researcher can be knowledgeable and make coherent references to the documents during the interview. According to the Bowen (2009) article, document analysis mainly involves skimming which is the superficial examination, then thoroughly examining the documents by reading, and interpretation the information from the documents (Bowen, 2009). The three types of documents are public records, personal documents, and physical evidence (O'Leary, 2014). The researcher examined the previous lesson plans of the teacher candidates which classifies as physical evidence. The public records are associated with the syllabus, pacing guide, and instructional calendars and the personal documents such as the 'Virtual Visit Self-Reflection' form. Before the document analysis began the researcher went through O'Leary's eight-step planning process (O'Leary, 2014): (a) create a list of texts to explore such as syllabus, pacing guide, instructional calendar, and teacher reflection, (b) consider access to text with attention to linguistic or cultural barriers which includes files being saved on secure flash drives from the 2019-2020 cohort, (c) address biases such as researcher subjectivity addressed later, (d) develop appropriate research skills, (e) consider strategies to promote credibility, (f) be specific about the data, (g) conduct ethical practices, and (h) create a contingency plan.

Yin (2018) suggested creating visual displays such as flowcharts to examine data in chronological order or in sequence. The researcher developed a table of sources based on the themes and codes to organize the data collected and materials used. Using the teacher proximity continuum, the researcher developed a preset list of codes then the researcher expanded of those

codes from the levels and domains to specific themes and codes mentioned by the participants. To ensure familiarization and transcription accuracy, the researcher conducted data transcription of the Zoom interviews using qualitative data analysis software such as Temi within two weeks of reception. Data collection and data analysis happened simultaneously at some points due to the researcher's and participants' availability to schedule time to conduct interviews over Zoom. The researcher was patient with the participants as all work as full-time teachers while maintaining their personal lives and one participant is still working on their graduate school program requirements part-time. After transcription, the interview coding process examined common and broad coding and themes in the computer software, NVivo.

Saldana (2016) defined coding as "a word or short phrase that symbolically assigns a summative, salient, essence-capturing, and/or evocative attribute for a portion of language-based or visual data" (Saldana, 2016, p. 3). Bendassolli (2013) stated coding is when "previously unassociated things now become associated" (p. 15). While coding the interviews, the themes emerged because the researcher looked for common phrases and words used by the participants (Saldana, 2016). Coding is an important tool to transform raw qualitative data into a story that is trustworthy and communicative (Linneberg & Korsgaard, 2019). According to Linneberg and Korsgaard (2019) some advantages of coding include (a) acquire deep, comprehensive and thorough insights into your data, (b) make the data easily accessible and retrievable, (c) sorting and structuring your data, (d) ensuring transparency, (e) ensuring validity, (f) giving a voice to one's participants. While coding, the researcher examined each sentence and paragraph individually to develop a judgement about the data. Coding allowed the researcher to organize the data into segments for easier access and retrievability for future research. The coding process permitted the researcher the ability to select essential data based on relevancy. Transparency

through the coding process was promoted due to being able to show credibility and trustworthiness with the data. External validity or transferability with regards to qualitative research was ensured because the research and interview questions are answered during the data collection process. The creation of codes came from the participants and their perspectives and/or phenomenon. According to Charmaz (2014), the dynamic development of codes comes to understand participants' view and actions from their own perspectives.

Coding is a continuous cycle, the first cycle of coding is the descriptive coding for field notes and document based on inductive and/deductive coding methods and attribute coding for structure and overview which is valuable in comparative research (Saldana, 2016; Linneberg & Korsgaard, 2019). Descriptive codes were assigned to smaller units of data the researcher collected during the process which allowed for more or less structure based on whether the researcher is using a deductive or inductive method. Deductive coding aims to generalize across the study while induction coding codes specifically from the data, abduction coding is a combination of both inductive and deductive coding (Linneberg & Korsgaard, 2019). Attribute coding is for larger amounts of data collected such as interviews, sites of observations, and data sets in multiple case studies. The second cycle of coding included eclectic coding for refining the choices made in the first-cycle, pattern coding included exploring the patterns within the codes in the first-cycle, categorization included the combination of the first-cycle codes into categories theoretically informed, then the researcher explored patterns across codes by temporal or processual structure based on similarities and differences based on the descriptive and attribute codes in the first cycle (Saldana, 2016; Linneberg & Korsgaard, 2019). The researcher used abduction coding for more structure and to make sure all components of each interview was classified in a code. The researcher combined the coding methods with the analytic memo tool

early in the data analysis process to create smaller documents for ongoing reflections while collecting and analyzing the data.

A notetaker guide was created by the researcher to take hand notes on major ideas while listening to the recorded interviews in the first cycle of coding. The second cycle of coding included uploading transcripts to NVivo, an online platform for data organization. The researcher was the instrument to code and organize the transcript data until all portions of the transcripts were classified. After all sentences were coded, the researcher used diagrammatical thinking to build connections and flow outside of the chart to conceptualize the experiences and feeling into new entities (Freeman, 2017). Diagrammatical thinking (a) consists of working with moving assemblages as open systems, (b) focuses on the performance event or agential operations of assembled entities, (c) is creative, interventionist, and experimental, (d) anti-reductionist. An assemblage in diagrammatical thinking is a moving matter instead of a stable structure in the specific event such as the participants' interviews that continue to move and transform through the process (Freeman, 2017). The researcher used diagrammatical thinking to create a "visual forms of information and knowledge transfer" to develop created a brainstorming web to think more freely compared to a chart used when hand coding interview notes (Saldaña, 2015, p. 147). The researcher then developed a data findings report to serve as a narrative discussion that summarized the findings in the data analysis. The findings report served to provide an interpretation of the data collection. After presenting the narrative discussion, the data analysis included personal reflections of the data, literary comparisons, and discuss plans for future research.

Researcher Subjectivity Statement

The researcher is a 31-year-old African-American woman, single, and without children. As a former teacher and graduate from the same institution and ATCP, the researcher is familiar with the program as a participant and as an instructor. The researcher attended undergraduate and graduate school at the institution. The researcher received her Bachelor's degree in Family and Consumer Sciences in 2012, Master's degree in Workforce education in 2016, Specialist's degree in Workforce education in 2018, and is currently in the Ph.D. program in Workforce education. Along with attending the major university in Georgia since 2008, the researcher received a Master's degree in School Counseling from another institution in 2019. Previous work experience for the researcher includes working as an Economic Support Specialist at the Division of Family and Children Services in Muscogee County, Columbus, Georgia, teaching in a rural area of Troup County, LaGrange, Georgia, serving as a Graduation Coach and School Counselor in a metropolitan area of Muscogee County, Columbus, Georgia, and serving as the Graduate Assistant for the same ATCP. Due to the researcher's close experience as a member and teacher of the ATCP, the researcher has been curious about the early experiences of ATCP teachers completing a certification program while teaching full-time, maintaining a personal life, and sponsoring other activities within transition to a career in education. After entering the ATCP in June 2014, the researcher was also interested in learning how the participants balance work, school, and life. Many of the participants also manage traveling from long distances across the state to attended classes and learning how to maneuver and succeed while attending online classes as well. The researcher was intrigued by the participants' tenacity and resiliency maintaining the potential stress and initially wanted to gain a better understanding of how the

teachers manage their personal and professional lives during a career transition into public education from their industry.

CHAPTER 4

OVERVIEW OF PARTICIPANTS

Introduction

In this chapter, the researcher composed an overview of five study participants using the Career and Technical Education (CTE) teachers' interviews and education reports. The participants shared their stories and personal information to describe their early teaching experiences during their semi-structured interviews. The school and school district information are summarized to cultivate a depiction of the learning environment the teachers work in during their early teaching career using the College and Career Ready Performance Index (CCRPI) report. The CCRPI report data merged with the interview data collected generated an overview of the participants. The researcher used the CCRPI in addition to the participants' previous education, and home life. A compilation of essential information about education in Georgia including CCPRI reports and an overview of the participants is established to create a representation of the study participants for the dissertation.

Education in Georgia

In 2015, Every Student Succeeds Act (ESSA) each state gained control of licensure requirements and the ability to develop state plans to support education (Bowen et al., 2019). ESSA revised No Child Left Behind (NCLB) reducing the influence of the United States Department of Education (USDOE) and the Secretary of Education (Sawchuk & Burnette, 2016). The Georgia Department of Education (GADOE) develops a College and Career Ready Performance Index (CCRPI) report for all Georgia public school students which serves as a

comprehensive school improvement, communication, and accountability platform to promote college and career readiness. The CCRPI report is a yearly tool used to measure how well students are prepared for the next educational level annually (Georgia Department of Education, 2022b). Each school, district, and the state overall receive a score to assist in preparing our students as community members, parents, educators, and stakeholders. The five main components of the CCRPI score includes content mastery, progress, closing gaps, readiness, and graduation rate for only high schools. Each component is scored on a scall of 0-100. Other information on the CCRPI report includes school climate, student subgroups, and financial efficiency status. This dissertation will use 2019 CCRPI reports because due to the COVID-19 pandemic the GADOE received a waiver from the USDOE to waive statewide assessments and reports related to the requirements.

As of the 2019 CCRPI report, Georgia consists of 2,493 schools educating 1,890,361 students. Title I schools make up 70.8% of the schools in Georgia, which means the school qualify for Title I, Part A (Title I) of the Elementary and Secondary Education Act provides assistance financially to local education agencies for children from low-income families. Title I funds are supplemented through four grants with different algorithms around the nations, (a) basic grants, (b) concentration grants, (c) targeted grants, and (d) education finance incentive grants (Georgia Department of Education, 2022b). The largest funding comes from basic grants while the smallest amount of funding comes from concentration grants is a factor if the number of formula-eligible children exceeds 6,5000 or 15% of the districts age 5-17 years old population. Targeted grants are distributed based on the student weighting system, therefore benefits districts with high formula-eligible percentages of children. The education finance incentive grants (EFIG) are provided as additional funding for children with low-income and

disadvantaged families. The EFIG fund amount is dependent on the state's effort and equity of funding public education. Allocation of the grants and mathematical formula calculates the needs of the support based on Georgia's per pupil cost of education. The purpose of the financial assistance provided by Title I is to assist with the children's ability to meet the state's academic standards (Georgia Department of Education, 2022b). For the purpose of this dissertation study, the CCRPI report is used to provide and supplement background information of the state, school districts, and schools of each participant.

The racial demographics overall of Georgia schools comprises of 0.2% American Indian/Alaskan Native, 4.2% Asian, 37.8% Black, 16.1% Hispanic, 3.9% Multi-racial, 37.7% White. Other demographics includes 64.3% economically disadvantaged students, 10.2% English learners, and 13.3% students with disabilities. Economically disadvantaged students are a member of a household that meets the poverty eligibility of Federal qualifications. For free and reduced price meals or free milk based on the Richard B. Russell National School Lunch Act (Sarkees-Wircenski & Scott, 2003; Sarkees-Wircenski & Scott, 2008). English learners or limited English-proficient learners are individuals who were not born in the United States or whose native language is a language other than English. These learners may face challenges with speaking, reading, writing or understanding the English language resulting in educational difficulties (Sarkees-Wircenski & Scott, 2003; Sarkees-Wircenski & Scott, 2008). Disabilities is defined by the Individuals with Disabilities Education Act (IDEA) as a mental or physical impairment that substantially limits one or more of a student's major life activities (Sarkees-Wircenski & Scott, 2003; Sarkees-Wircenski & Scott, 2008). IDEA received a plethora of reforms since the conception in 1975. The Rehabilitation Act of 1973 expanded the disability services in public education. Students labeled as disabled based on IDEA and Section 504 has a

specialized plan like the Individualized Education Program (IEP) or Section 504 Plan. These laws improved the education system of students with special needs. IDEA and Section 504 created better opportunities for students with special needs in regular education and provided more rights to the students and parents.

Georgia high schools' graduation rates are 82.02% for four-year students and 83.73% for five-year students. Graduation rates measures students graduating with a regular diploma within four or five years based on cohorts. High school racial demographics includes 0.2% American Indian/Alaskan Native, 4.2% Asian, 37.4% Black, 15.2% Hispanic, 3.3% Multi-racial, 39.7% White. Other demographics of high school includes 57.7% economically disadvantaged, 4.9% English learners, and 12.2% students with disabilities. Middle school racial demographics includes 0.2% American Indian/Alaskan Native, 4.1% Asian, 38% Black, 16.5% Hispanic, 3.7% Multi-racial, 37.5% White. Other demographics of middle school includes 65.1% economically disadvantaged, 10.5% English learners, and 14.4% students with disabilities. The demographics of public education in the state of Georgia provides an overview of the state's school and baseline for the comparisons of each of the participants' school and system.

CCRPI also measures readiness based on the participation of students in activities to prepare and demonstrate readiness for the next grade level, college, and/or career. High school readiness includes indicators such as literacy, student attendance, accelerated enrollment, and college and career readiness, and pathway completion. Student attendance rates for middle and high school in Georgia is 82.53% and 89.72% respectfully. Accelerated enrollment encompasses dual enrollment, advanced placement (AP), and international baccalaureate (IB). Dual enrollment programs provide students with the opportunity to earn college credit toward a high school diploma and a postsecondary certificate, diploma, or degree which is 36.62% of students

in Georgia. Other terms for dual enrollment include dual credit and concurrent enrollment (Sarkees-Wircenski & Scott, 2008). Advanced placement (AP) courses are rigorous courses modeled as a college-level class in varies subjects designed to allow students the opportunity to earn college credit in high school by scoring proficiently on the AP exam. Approximately 71.06% of Georgia students participate in the AP program in their high school. The International Baccalaureate (IB) program consists of 3.60% of students and is an international program that aims to teach students based on a global network to develop leaders (Georgia Department of Education, 2022b). College and career readiness statistics states 25.64% of students in Georgia pass an End of Pathway Assessment (EOPA). Other aspects of college and career readiness include entering Technical College System of Georgia (TCSG) or University System of Georgia (USG) without needing remediation, readiness score on the American College Test (ACT), Scholastic Aptitude Test (SAT), AP or IB exams, and work-based learning. Georgia pathway completion in CTE includes 57.21% of students that complete a pathway of sequential CTE courses. Other pathways include advanced academics, fine arts, and world language to make up a 79.68% pathway completion rate. Approximately 75.98% of economically disadvantaged students obtain pathway completion, 56.71% of English learners, and 53.42% of students with disabilities as well. Pathway completion based on demographics shown in Table 13.

CTE in Georgia

Career and Technical Education (CTE) is recognized as Career, Technical and Agriculture Education (CTAE) in Georgia due to the large and thriving Agriculture discipline (Georgia Department of Education, 2022a). Some districts also consider military branches' Reserve Officer's Training Corps (ROTC) pathways and courses in the local CTAE departments. The specific programs taught currently and presently by the participants based on the Georgia

Department of Education Standards of Excellence include Health Science- Therapeutic Services/Allied Health and Medicine, Human Services- Family and Consumer Sciences and Nutrition and Food Science, Hospitality and Tourism- Culinary Arts, Arts, A/V Technology, and Communications- Audio-Video Technology and Film I and II, and Computer Science.

Table 13

Pathway Completion by Demographics

Racial demographic	Percentage
American Indian/Alaskan Native	73.33%
Asian	88.73
Black	74.02
Hispanic	75.69
Multi-racial	79.88
White	85.07

Participant Information

The summer 2019 cohort consisted of thirty-five teacher candidates starting in summer 2019. Out of those thirty-five teacher candidates, twenty-eight of those teachers eligible for the study consisted of five business education teachers, five family and consumer sciences (FACS) teachers, two health sciences teachers, one marketing, three technology teachers, and twelve career and technical specializations teachers. The remaining seven teacher candidates registered for the summer courses, but not part of the ATCP consisted of outliers of this study such as one agriculture teacher, three FACS undergraduate teachers, three business education teachers without full-time teaching positions, and 1 teacher withdrew. During the researcher's

comprehensive exams, the researcher did a pilot study with two teachers, therefore one more FACS teacher and one more business education teacher was eliminated from the participant pool. The twenty-six eligible teachers disseminate into four program of study groups such as non-degree certification-only, certificate-only, Master's with certification (MAT), Specialist's degree with certification (EdS). Demographics based on race, gender/sex, discipline, and program of study is explored in Table 14.

Table 14

Demographics of ATCP Participants

Demographic categories						
Race	White: 13	Black: 12	Hispanic: 1			
Gender/Sex	Female: 17	Male: 9				
Discipline	Business: 4	Marketing: 1	Engineering & Technology: 3	Family and consumer sciences: 3	Health sciences: 3	Career and technical specializations: 12
Program of study	Non-degree: 18	Certificate only: 4	MAT: 2	Ed.S: 2		

The researcher sent a Qualtrics survey to the cohort to get volunteers to participate in the study. Out of the thirty-five teachers from the cohort surveyed only sixteen completed the survey, but only nine teachers within the 3–5-year teaching timeframe responded yes to being interested in participating in the study. Out of the nine interested participants, two were previous participants from the pilot study and one was a teacher that was not fully certified by GaPSC leaving six eligible participants. The researcher contacted the six eligible teachers interested in the study to set up an interview date. Only five teachers responded for scheduling, which determined the selection of the participant pool. An overview of the selected participants in this dissertation study is shown in Table 15.

Table 15

Participants in Dissertation Study: Overview

Participant	Years taught	Gender	Race	CTE discipline	Degree option	Completion status
Alyssia	5	Female	African American	Engineering and Technology Family and Consumer Sciences	MAT	Certified as of May 2020 Graduation date is May 2020
Maxie	3	Female	Caucasian	Engineering and Technology	EDS	Certified as of May 2020 Graduation date is May 2020

Easton	5	Male	Caucasian	Computer Science Family and Consumer Sciences	Certification only	Certified as of May 2020
Kendall	5	Female	African American	Family and Consumer Sciences	EDS	Certified as of August 2020 Graduation date is August 2021
Courtney	5	Female	Caucasian	Health Sciences	Certification only	Certified as of May 2020

Alyssia's Personal Profile

Alyssia is in her fourth year as an Audio and Visual teacher which falls under the Engineering and Technology discipline. She teaches the Audio and Visual pathway, which consists of Audio/Visual I, II, and III, and the Broadcast and Productions course. Previously, she taught FACS at her previous school and is also certified in that discipline. The Career and Technical Student Organization (CTSO) she is the sponsor of is SkillsUSA. Her undergraduate degree is in Mass Communication from Savannah State. While attending the ATCP for certification, she also received a MAT from the ATCP institution in 2020 and returned for her Ed.S degree with the expectation to graduate in May 2022. The CTE department at her school encompasses (a) Work-based learning, (b) Agriculture, (c) Audio-Video Technology & Film, (d)

Business, Management and Administration, (d) Culinary Arts, (e) Education and Training, (f) Engineering and Technology, (g) Health Science, (h) JROTC Naval Science pathways and courses.

The home life of Alyssia includes a husband, three kids which the younger two were born during her early teaching career, and a pet. She was pregnant with her two sons during her ATCP/MAT degree and again during her Ed.S. program. Her previous job experiences after college consisted as a marketing consultant at the Savannah Morning News planning events and recruiting subscribers. After years at Savannah Morning News, Alyssia became a stay-at-home mother to her oldest child until she left home with her daughter to join the public education sector in two Savannah area school districts.

School district comparisons

Alyssia has been in two different school districts and high schools during her early teaching career. Her current school district is Savannah-Chatham and the previous school district is Effingham. Savannah-Chatham has 57 schools with 40,108 students and although 57.9% of the schools in this district are Title I she has not taught at a Title I school. Effingham has 12,974 students educated within 13 schools and 38.5% of the schools are qualified as Title I. Rates for students from economically disadvantaged households represent 66.4% of Savannah-Chatham students and 40.9% of Effingham students. Students with disabilities are 13.2% of Savannah-Chatham and 15.8% of Effingham. The English learners in Savannah-Chatham is 5.4% and 2.5% of the students in Effingham.

District demographics

Racial demographics comparison for Alyssia's current and former school districts are in Table 16.

Table 16

Alyssia's School Districts' Racial Demographics Comparison

Racial category	Rate in Effingham (%)	Rate in Savannah-Chatham (%)
American Indian/Alaskan Native	0.3	0.2
Asian	2.4	0.9
Black	57.7	16
Hispanic	10.6	7.8
Multi-racial	4.9	4.9
White	24.1	70.2

School information and comparisons

Since Alyssia taught in two districts and two high schools, the school information is presented as a comparison in Table 17 to describe her teaching environments.

Table 17

Alyssia's School Districts' Demographics Comparison

	Effingham	Savannah-Chatham
Overall CCRPI score	80.8	73.3
Economically disadvantaged	30.1	67.6
English learners	1.0	3.3
Students with disabilities	11.8	13.1
Graduation rate	91.1	87.8
4-year graduation rate	91.22	87.32

5-year graduation rate	90.8	88.7
Attendance		
Student attendance	87.13	90.23
Personnel attendance	96.32	96.09
Administration attendance	97.46	97.11
Staff attendance	97.93	95.05
Accelerated enrollment		
Dual enrollment	29.34	30.81
Advanced placement (AP)	76.90	40.12
International Baccalaureate (IB)	N/A	17.19
Pathway completion	94.46	96.28
Advanced academic	41.81	30.58
CTE	65.99	71.07
Fine arts	25.44	24.79
World language	33.5	54.96
College and career readiness		
Entering TCSG/USG without remediation	38.8	22.76
Readiness score on ACT/SAT/AP/IB	35.42	9.70
EOPA	49.88	34.70
Work-based learning	13.25	11.57

School demographics and comparisons

Racial demographics comparisons of both schools are found in Table 18.

Table 18

Alyssia's Schools' Racial Demographics Comparison

Racial category	Rate in Effingham (%)	Rate in Savannah-Chatham (%)
American Indian/Alaskan Native	0.2	0
Asian	1	1.9
Black	11.4	69.1
Hispanic	7.8	12.2
Multi-racial	4.4	5
White	75.2	11.8

Maxie's Personal Profile

Maxie is in her third-year teaching and started her teaching certification process in January before obtaining a teaching position. She teaches the Computer Science, specifically the Cybersecurity pathway in middle school including Foundation of Secure Information System, Foundation of Interactive Design, and Introduction Digital Technology which is a high school level course. Other certifications from the GaPSC includes Business Education, Engineering and Technology, and Health. There is not a CTSO connected to this pathway at the middle school level in her school. Her CTE department at her school consists of her as a Computer Science and an Engineering and Technology teacher.

Previous careers include being a Personal Trainer as an undergraduate student in college around 2002. She also served Durable Medical Equipment field in an Orthopedic Practice in Ohio. Once she moved to Georgia in 2007, she continued in the Health and Wellness field as an Orthopedic Navigator and Bariatric Counselor for eight years. Maxie's home life consists of two children, a 9-year-old son and 7-year-old daughter that attend the feeder elementary school to her middle school. Her husband is in the automotive paint industry and they were married in 2009. In 2004, she earned her Bachelor's degree in Health Promotion and Education with a focus in Exercise Sciences from the University of Cincinnati then earned her Master's in Management with a focus in Healthcare from Troy University- Augusta Campus in 2009. She also became a registered Orthopedic Technician and certified in Fitness Wellness. While completing her teaching certification, she earned an Education Specialist in Workforce Education from the University of Georgia in 2020.

School and district information

Columbia County consists of 31 schools as a district educating 29,097 students with 35.5% of the school qualifying for Title I funding. Since Maxie teaches in a middle school, graduation rates, accelerated enrollments, pathway completion, and college and career readiness are not measured by the CCRPI report and will not be explored in this section. Attendance rates at her school are recorded as the following students is 94.59%, personnel is 96.7%, administration is 99.05%, and staff is 96.5%. Her school consists of 6th, 7th, and 8th grade totaling 706 middle school students with approximately 21.4% of the students classified as economically disadvantaged. Students with disabilities are represented as 8.1% of the school's student population and 2% are English learners. The district's students' population consists of 37.2%

economically disadvantaged students, 3.1% English learners, and 10% students with disabilities. Table 19 compares racial demographics throughout the district and school.

Table 19

Maxie's Racial Demographics of District and School

Racial demographic	District percentages (%)	School Percentages (%)
American Indian/Alaskan Native	0.3	0.6
Asian	4.4	3.8
Black	21.5	17
Hispanic	10.8	7.2
Multi-race	6.6	4
White	56.5	67.4

Easton's Personal Profile

Easton is currently completing his fifth-year teaching Family and Consumer Sciences while teaching the first two courses in the Culinary pathway. His educational background includes a Bachelor degree in Business from Auburn University. After graduating from Auburn in 1992, he served as a computer programmer for Federated department stores commonly known as Macy's until 1993, when he decided to attend Atlanta Art Institute for Culinary. In 1995, he graduated from Atlanta Art Institute with his Associate's degree in Culinary and pursued a career as a chef in hotels, restaurants, and corporate for Delta Airlines. For 13 years, he owned and operated his own catering kitchen then continued as an entrepreneur with a landscaping company until transitioning to teaching. The ATCP provided him with certification-only from the GaPSC

in 2020 and he did not pursue a higher degree during his program duration. Easton serves in extracurricular activities as an assistant coach for football and baseball. He also co-sponsors FCCLA with the other Culinary teacher. Home life for Easton consists of a wife for 25 years and 2 adult children. One child is in college at the University of Georgia and the other child has a career in the workplace. As a family, they enjoy visiting Georgia State Parks to kayak and fish during their free time.

His school is a Career Academy and has a broad spectrum of CTE courses taught by 16 CTE teachers such as (a) Convergence Media/Audio Visual Technology Film, (b) Culinary Arts, (c) Computer Science, (d) Career and Technical Instruction, (e) Early Childhood Education, (f) Architecture, Drawing and Design, (g) Graphic Design, (h) Web and Digital Design, (i) JROTC-Army, (j) Teaching as a Profession, (k) Foundations of Electronics, (l) Fine Furniture & Cabinet Making, (m) IB Design Technology SL, and (n) Work-based Learning. Career Academies have increased nationwide to 24% of schools since the creation in 1969 at Thomas Jefferson High School in Philadelphia. Approximately fifty years later, the Career Academy model has been incorporated in more school systems. This smaller learning environment strategy combines career and technical training and academic course work. The school-within-a-school approach to Georgia school systems is an essential addition to ensure student success. Career Academy models potentially increase attendance, decrease failure rates, and reduce discipline issues resulting in higher graduation rates. Students attend Career Academies to enhance and elevate their educational experience within the school system.

The unique organization structure of the Career Academy operates as a smaller learning environment or school-within-a-school regarding curriculum and school policies (Scott & Sarkees-Wircenski, 2008). Students in the Career Academy belong to a learning communities

based on the career theme. Students in each career theme move along as cohorts through the years building a sense of community within the learning environment. The context of community is associated with successful learning when teaching is assessment centered, knowledge centered, and learner centered (Cox et al., 2015; Evan et al., 2013). Goals are communicated to students similar to workplace expectations regarding attendance and behavior policies. Students develop autonomy with the flexibility of the career model. The structure allows the school system to increase relevance and rigor with real-world application (Evan et al., 2013; Scott & Sarkees-Wircenski, 2008). Students are able to display concepts learned based on positivity and new opportunities in a developmentally appropriate school setting.

Curriculum is a combination of academic and CTE courses based on occupational theme in the Career Academy. Career Academies prepare students for career and post-secondary education by focusing on relevant and rigorous curriculum in a specific content field (Loera et. al., 2016; Scott & Sarkees-Wircenski, 2008). Multiple instructors in a collaborative data driven method plan instruction in this model. Strategies such as differentiation and instructional technology are used to assess students formatively and summative. Creating workplace curriculum expands traditional classroom learning. The teacher serves students as a mentor to assist in decision-making. The method of gradual release of responsibility is the overall theme of the model by providing students with an “I do, We do, You do” opportunity. The instructors will demonstrate techniques to lead students then together the students will practice the learned skill to eventually master the individual student’s ability to do the technique alone. The students develop employability skills and use classroom skills. The academy director serves as an advocate for students, school systems, and the teachers. As an advocate, the academy director works to promote a combination of academic course work and career and technical training. As

the leader of the Career Academy are able to work with others to implement and inspire change in the school system and policies.

Career Academies build relationships with the community to develop partnerships with local employers (Evan et al., 2013; Cox et al., 2015). Creating work-based learning experiences and post-secondary education overlaps. Partnerships with employers and local businesses create a work-based learning experience for the students. Mentorships and partnerships with the local businesses overlap the academic and career knowledge. The community mentors assist students with preparation for post-secondary education and careers. The relationships between the academy and community could also provide guest speakers as an instructional strategy implemented in the teacher's built curriculum. Guest speakers can discuss requirements and potential degrees students can pursue to join each profession. Community members engage the students by raising awareness of each career field and can assist the teachers in building curriculum. The relationship between the community and Career Academies bridges the gap between public school and the workforce. Effective communication with local businesses creates an opportunity for the community to have more input in education by promoting cooperation. Employability skills for the workplace are learned during the workforce simulation by integrating employer guidelines.

Career Academies have a college model and create more independent student learning (Scott & Sarkees-Wircenski, 2008). The model from Career Academies will make students more prepared for post-secondary education and the workforce. Students use Career Academies to learn and train for specific careers in their future. Roles of the student, teacher, and academy director produce a course guideline for a successful incorporation of workforce skills. The school-within-a-school arrangement creates a small learning community along with the

curriculum and community business involvement to ensure success and should be implemented in more schools across the nation.

School district information

City Schools of Decatur encompasses 8 schools in their school district with 25% of the schools qualifying for Title I funds educating 5,701 students. According to the CCRPI report, the district has 12.3% of their students coming from economically disadvantaged household. Students with disabilities make up 9.6% and English learners are 3.1% of students in the district. Only one high school exists in this district, therefore the graduation rate represents the district and the school. The district's graduation rate is 95.18% for four-years and 96.11% for five-years. Accelerated enrollment rates includes 21.05% completing dual enrollment and 100% completing AP and IB coursework. College and Career readiness rates are 36.49% for entering TCSG/USG without remediation, 64.91% for ACT/SAT/AP/IB, 23.16% are EOPA, and 0.35% are work-based learning. Racial demographics for pathway completion can be found in Table 20.

Table 20

Easton's Racial Demographics of Pathway Completion

Racial demographics	Percentage (%)
American Indian/Alaskan Native	Too few
Asian	Too few
Black	95.83
Hispanic	95%
Multi-racial	100%
White	96%

Pathway completion rates includes 94.69% in advanced academics, 37.19% CTE, 26.25% fine arts, and 60.63% world language. Economically disadvantaged students complete pathways at the rate of 95.24% while 82.05% of students with disabilities complete and there are too few English learners to be calculated.

District demographics

The racial demographics overall of the district are shown in Table 21.

Table 21

Easton's Racial Demographics of School District

Racial demographics	Percentage (%)
American Indian/Alaskan Native	0.2
Asian	4.1
Black	20.7
Hispanic	4.7
Multi-racial	7.1
White	63.2

School information

Easton's high school is a Title I school educating 1,505 students with 13.6% of those students labeled as economically disadvantaged students based on the CCRPI report. Students with disabilities represent 10.5% and English learners are 1.47% of the student population. Attendance rates in Easton's school are 85.45% for students, 97% for personnel, 98.64% for administration, and 96.37% for staff. The district's student attendance rates for the elementary school are 98.08% and 96.76% for the middle school.

School demographics

Racial demographics of the school is in Table 22.

Table 22

Easton's Racial Demographics of School

Racial demographics	Percentage (%)
American Indian/Alaskan Native	0.1
Asian	3.8
Black	26.8
Hispanic	5.8
Multi-racial	5.3
White	58.1

Kendall's Personal Profile

Kendell's teaching career consists of two schools within the same district. She taught Family and Consumer Sciences in middle for four years and is currently teaching high school during her fifth year in education. As a middle school teacher, she taught all aspects of Family and Consumer Sciences such as the Human Services pathway including (a) Nutrition and Food Science, (b) Interiors, Fashion, and Textiles, (c) Housing and Community Management, the Hospitality and Tourism pathway including (a) Culinary Arts, and the Education and Training pathway including (a) Early Childhood Education and (b) Teaching as a Profession. As a high school FACS teacher, she focuses on the Early Childhood Education pathway and teaches the Early Childhood I, II, and III courses. This year, she is filling in to teach the Level 2 Food for Life course of the Food and Nutrition pathway due to one of the teachers being out on medical

leave. The FACS department in her school consists of one ECE teacher, one Food and Nutrition teacher, one Interiors Design teacher, and an unfilled position. The FACS teachers co-sponsor FCCLA as a team. Additionally, to the FACS teachers, the school's CTE department also consists of (a) Business, (b) Engineering, (c) Marketing, (d) Health Science, (e) Work-based Learning, (f) Air Force ROTC and (g) Mass Communications courses.

Kendall majored in Family and Consumer Sciences at Jacksonville State University with a concentration in Dietetics receiving her Bachelor's degree in 2015. During her undergraduate program, she worked as a Certified Nursing Assistant (CNA) which was a certification she earned during her Health Sciences pathway completion in high school. After graduating college, she became Nutritionist for the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) working as a breast-feeding consultant for four years as a State of Georgia employee. She then became a Nutrition Leader for adults specifically prenatal women and mothers for the Children's Healthcare of Atlanta's Strong4Life program. While attending the ATCP, she earned a Master's in Public Health at Liberty University graduating in 2020 at the same time leading to her earning an Education Specialist in Workforce Education in 2021 with certification. Home life for Kendall includes a long-distance relationship with significant other in California employed as an Engineer with no children.

School district information

Dekalb county's school district contains 130 schools teaching 110,413 students. About 86.2% of the schools are identified as Title I with 76.1% of the students residing in an economically disadvantaged family. English learners are 19.1% of the district and 11.5% of the students have recognized disabilities. Student attendance rates for each school level is elementary is 87.62%, middle school is 86.59%, and high school is 73.97%. The district's high

school graduation rate for 4-years is 73.41 and 77.82% for 5-years. Accelerated rates for dual enrollment is 25.78%, AP is 74.91%, and IB is 3.03%. Pathway completion is this district is as follows: advanced academics 43.41%, CTE 52.78%, fine arts 24.82%, and world languages 30.47%. The college and career readiness section measures Dekalb county as 21.52% in the category of entering TCSG and USG without remediation, 21.11% ACT/SAT/IB, 24.66% of students pass EOPA, and only 11.15% of students participate in the work-based learning program.

District demographics

The racial demographics of Dekalb County is explored in Table 23.

Table 23

Kendall's School District's Racial Demographics

Racial category	Percentage in the school district (%)
American Indian/Alaskan Native	0.3
Asian	6.6
Black	62.6
Hispanic	17.9
Multi-racial	2.1
White	10.5

School information

Kendall's first four years in education were dedicated to a middle school in the district educating grades 6-8. The school houses 1,043 total students and is qualified as a Title I school

that has 100% students from economically disadvantaged households. Students with disabilities make up 15.2% of the student population and 1.5% are English learners.

As of this year, Kendall is teaching in a high school in the district with 2,208 students grades 9-12. Compared to the district's rates, this high school has more successful rates in the different categories. The overall graduation rate is 89% which breaks down to 88.99% for 4-years and 89.13% for 5-years. Accelerated enrollment rates includes dual enrollment rates of 50.36%, AP rates at an incredible 100%, and IB rates of 3.25%. Pathway completion rates are higher compared to the district as well with 64.37% of students completing an advanced academics, CTE is 63.45%, fine arts 38.39%, and world languages rates are 61.15%. These high school students are recorded as more ready for college and career in the field of entering TCSG and USG without remediation with 38.21%, ACT/SAT/AP/IB rates of 53.06%, and EOPA rates of 46.29%. The rate of students completing work-based learning is lower than the district's rate with 5.68%. Attendance rates includes student attendance at 82.86%, personnel at 96.17%, administration at 97.48%, and staff at 95.97%.

School demographics

The racial demographics of both of Kendall's schools are provided and compared in Table 24. Kendall's information includes the demographics of her previous middle school and the current high school. She taught FACS in both schools and both are in the same school district.

Table 24

Kendall's Schools' Racial Demographics Comparison

Racial category	Rate in Middle School (%)	Rate in high school (%)
American Indian/Alaskan Native	0	0.3
Asian	0.9	6.4
Black	95.1	15.3
Hispanic	2.0	30.7
Multi-racial	1.2	2.4
White	0.9	45

Courtney's Personal Profile

Courtney currently serves as a Health Sciences teacher in her fifth-year of education. She teaches the Allied Health and Medicine and Therapeutic Services pathways which includes Introduction to Healthcare, Essentials of Healthcare, and Allied Health and Medicine/Therapeutic Services courses. She sponsors the HOSA CTSO at her school and is planning to exit the field of education in May to attend medical school in South Carolina. Her home life includes a significant other, but no children. Courtney's degrees and certifications include a Bachelor's degree in Exercise Science from Georgia College and State obtained in 2015. In 2017, she received her Medical Assistant and Emergency Medical Technicians (EMT) certifications at the same time. She completed certification-only from the ATCP and did not pursue a higher degree after certification due to following her ultimate goal of applying to become a doctor in the future. During the most of her summers between teaching, she would take

prerequisite courses to be eligible for medical programs. The other summers were dedicated to completing teaching certification courses and receiving medical treatment for her recurring cancer. Her previous careers include being a Medical Assistant from 2015-2018 and an Athletic Trainer from 2018-present. She co-athletic trained with another trainer for 3 years and for the past two years, she's been the only trainer at her school of employment.

Her school's CTE department consists of 10 teachers and she is the department head for the second year. The CTE department at her school offers (a) Agriculture, (b) Audio Video-Technology & Film, (c) Business, (d) Early Childhood Education, (e) Health Science, (f) JROTC-Air Force, (g) Law, Public Safety, Corrections & Security, (h) Nutrition & Food Science, and (i) Work-based Learning pathways. Her school previously offered Engineering and Technology and Information Technology. As the department head, she mentors the teachers at her school and assists with mentoring the other 10 Health Sciences teachers in her district.

School district information

Henry county consists of 50 schools in the district educating 47,507 students. Of the 50 schools, 46% of the schools in the district are qualified as Title I with 53.3% of the students economically disadvantaged. The county encompasses 28 elementary schools, 11 middle schools, 10 high schools, and 1 specialty school. The district has 3.5% students as English learners and 14.1% students with disabilities. Racial demographics for the school district are in Table 25.

Table 25

Courtney's Racial Demographics of School District

Racial category	Percentage of Students in District (%)
American Indian/Alaskan Native	0.2
Asian	2.9
Black	55.9
Hispanic	10.3
Multi-race	4.7
White	26.2

School information

Courtney's high school has 1,811 students enrolled and scored a 79.9% based on the 2019 CCRPI report. The graduation rate at her school for 4-year graduates is 91.21 and 90.12 for 5-year graduates, which is higher compared to the state's graduate rate of 82.02% and 83.73%. Student attendance rate is 83.11 compared to the state's rate of 82.53%. Personnel, administration, and staff attendance is 96.35%, 99.245, and 98.14 respectively. Accelerated enrollment includes 40.45% of students attending dual enrollment and 59% of students completing Advanced Placement. Students obtaining pathway completion consists of 36.21% in the academic pathway, 47.08% in the CTE pathway, 15.88% in fine arts pathway, and 15.32% in the world language pathway. The overall pathway completion rate for the school is 69.64% with the demographics elaborated in Table 26. College and career readiness for her school includes 30.69% of students entering TCSG/USG without remediation, ACT/SAT/AP/IB rates are 20.72%, EOPA rates of 23.27%, and work-based learning is 3.32%.

Table 26

Courtney's Pathway Completion by Demographics

Racial demographics	Percentage of students (%)
American Indian/Alaskan Native	N/A
Asian	84
Black	67.14
Hispanic	73.91
Multi-racial	Too few
White	85.71

School demographics

Courtney's school is not classified as a Title I school, but 44% of students are economically disadvantaged. English learners are 2.7% of the student population and 9.4% of students have disabilities in this school. School racial demographics are listed in Table 27.

Table 27

Courtney's School's Racial Demographics

Racial category	Percentage of Students in School (%)
American Indian/Alaskan Native	0.1
Asian	8.3
Black	75.8
Hispanic	7.2
Multi-racial	3.6
White	5.1

Chapter Summary

In summary, this chapter provides background information about the participants, schools, and school districts. By providing insights on education factors in Georgia and the schools, the researcher develops background more qualitative data to create the story related to the teachers' early experiences. The CCRPI reports allows the reader specifics to build on the research through the interview and results process.

CHAPTER 5

FINDINGS

Introduction

The purpose of this qualitative case study was to explore the early teaching experiences of Career and Technical Education teachers who participated in an alternative teacher certification program (ATCP) using the teacher proximity continuum as a framework. This study examined these teachers' early experiences using the teacher proximity continuum, summarized in Table 28.

Table 28

Teacher Proximity Continuum (Camp & Heath-Camp, 1990)

Levels	Domains	Description
Personal Characteristics		
	Internal	Experiences within the teacher
Professional Skills		
	Pedagogy	Evaluation, delivery, short-term planning, and improvement of instruction experiences
	Curriculum	Experiences related to planning course content and preparing instructional materials
	Program	Experiences with long-term planning and implementing the pathway or program
Inter-personal Relationships		
	Students	Interactions with students
	Peers	Interactions with same level co-workers
Intra-system		
	System	Experiences within the educational system that impact the teacher
Extra-system		
	Community	Experiences outside of the educational system

The continuum included eight domains at five levels of functional distance from the teacher. The eight domains include internal, pedagogy, curriculum, program, students, peers, system, and community. The five levels of the teacher proximity continuum are personal characteristics, professional skills, interpersonal relationships, intra-system, and extra-system (Camp & Heath-Camp, 1990). The continuum was developed using the documented experiences of a similar group of CTE teachers who participated in an ATCP. These experiences were recorded with interviews, daily tape-recorded logs, Nominal Group Technique (NGT) sessions, and focus group sessions (Camp & Heath-Camp, 1990).

The following research questions guided the case study:

1. Personal characteristics- Internal
    a. How did participation in the ATCP impact teachers' internal teaching experiences?
2. Professional Skills- Pedagogy, Curriculum, Program
    a. How did participation in the ATCP impact teachers' professional skills?
3. Interpersonal relationship- Students and Peers
    a. How did participation in the ATCP impact teachers' interpersonal relationships with their students and peers?
4. Intra-system- System
    a. How did participation in the ATCP impact teachers' understanding of their system?
5. Extra-system- Community
    a. How did participation in the ATCP impact teachers' connection to their community?

Coding Process

In this chapter, the researcher presents the findings that surfaced from the five participants' early teaching experiences. Linneberg and Kosrsgaard (2019) described coding as a tool to transform the raw qualitative data such as the interviews into a story that is trustworthy and communicative. Saldana (2015) defined coding as a word or short phrase that "symbolically assigns a summative, salient, essence-capturing, and/or evocative attribute for a portion of language-based or visual data" (p. 3). Bendassolli (2013) stated coding is when unassociated things become associated. Some advantages of coding are to (a) acquire deep, comprehensive and thorough insights into data, (b) make the data easily accessible and retrievable, (c) sort and structure your data, (d) ensure transparency, (e) ensure validity, (f) give a voice to one's participants (Linneberg & Kosrsgaard, 2019). Since coding is a continuous cycle, the first cycle of coding was the descriptive coding for field notes and documented based on inductive and deductive coding methods and attribute coding for structure and overview which is valuable in comparative research (Saldana, 2016; Linneberg & Korsgaard, 2019).

In the first cycle of the coding process, the researcher created a coding guide for hand coded notes. While hand coding on the guide, the researcher looked at each sentence and paragraph of the transcripts individually to develop an initial judgement about the data. Hand coding allowed the researcher to organize the data into segments for easier access and retrievability for future research based on relevancy. The researcher used the guide provided in Figure 13 in the hand coding process, which permitted the researcher the ability to select specific data. Figure 13 allowed the researcher to take notes about major concepts and ideas from the participants. The researcher listened to the interviews and categorized the responses based on the

five levels. On one side of the guide, the levels were listed and on the right side the researcher hand wrote big ideas to become more familiar with the data.

Figure 13

Coding Guide for Hand Coding Field Notes from Interviews

Levels (5)		
Personal characteristics (internal)		
Professional Skills (pedagogy, curriculum, program)		
Interpersonal relationship (students, peers)		
Intra-system (department, school, school system)		
Extra-system (community)		

After the hand coded guide was complete, the researcher realized that the levels needed to be broken down into smaller units to get all encompass all idea. Descriptive codes were assigned to smaller units of data the researcher collected during the process which allowed for

more structure because the researcher used both deductive and inductive methods which is called abduction coding. The researcher used abduction coding which is a combination of deductive coding that aims to generalize across the study and induction coding to code specifically from the data. Descriptive codes were assigned and used in the NVivo rounds of coding to identify smaller pieces of the interview.

The researcher used the hand coded field notes from the first cycle of coding and began the second cycle of the coding process by uploading transcripts in NVivo. The online platform NVivo was used as an organizational tool and the researcher was the instrument to code the transcripts. The second cycle of coding included eclectic coding for refining the choices made in the first cycle and pattern coding which included the exploration of the patterns within the codes from the first cycle. The researcher first created codes based on the main terms from the research questions (a) internal, (b) pedagogy, (c) curriculum, (d) program changed to pathway, (e) students, (f) peers changed to teachers, (g) department, (h) school, (i) school system- changed to district, and (j) community. Once the transcripts were assigned to those terms in NVivo, there was plenty of the transcript left to be categorized further. Categorization included the combination of the first cycle codes info categories theoretically informed, then the researcher explored patterns across codes by temporal or processual structure based on similarities and differences based on the descriptive and attribute codes in the first cycle (Saldana, 2016; Linneberg & Korsgaard, 2019).

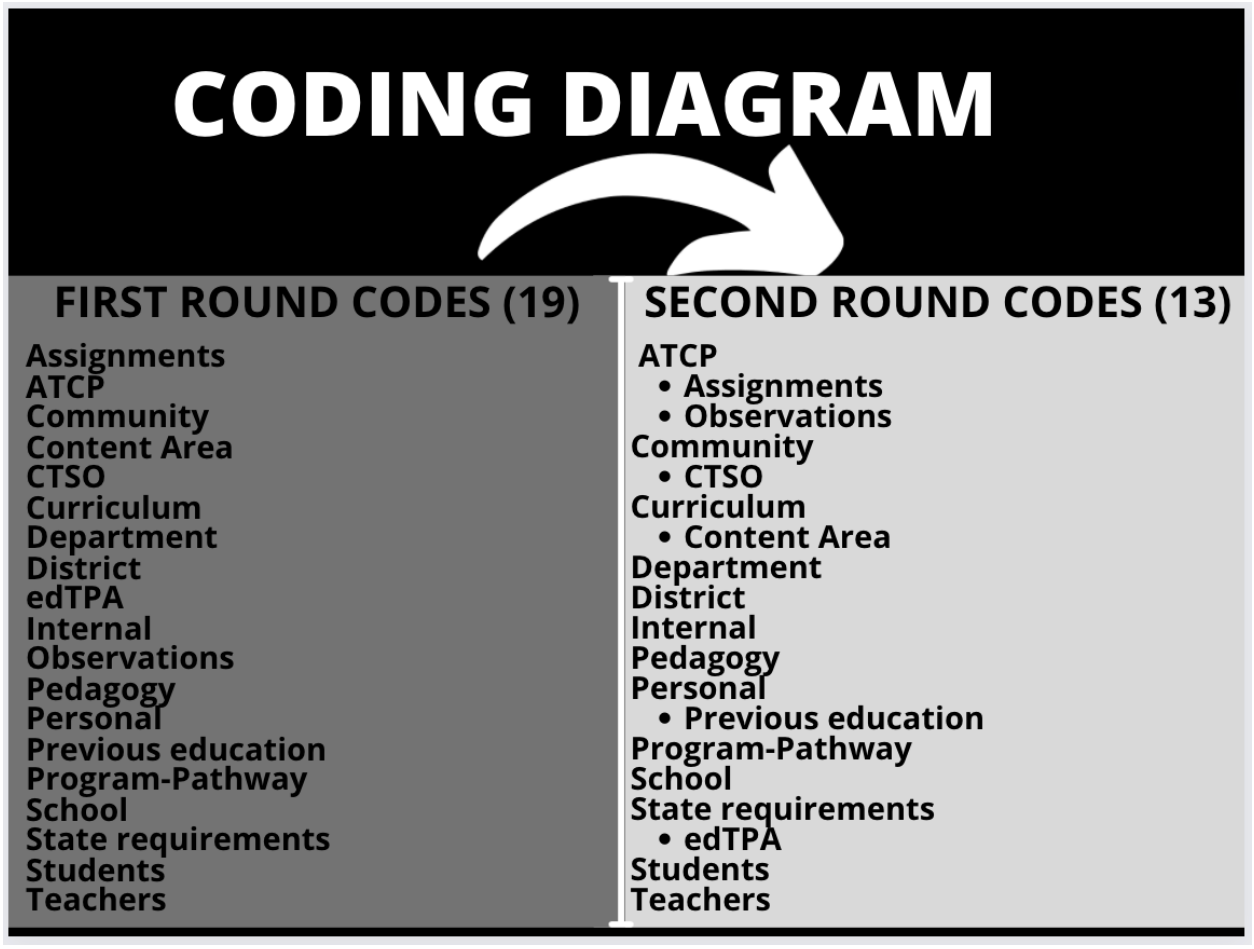
The researcher then used NVivo to create more codes to match the topics that emerged in the semi-structured interviews, which were assignments, ATCP, community, content area, Career and Technical Student Organization (CTSO), district, edTPA, internal, observations, personal, previous education, and state requirements. The addition of those codes brought the

total amount to nineteen codes and encompassed all the aspects of each transcript. Once the nineteen codes were established, the researcher proceeded to organize the codes based on related topics, ideas that expanded on each other, and aspects that made sense to go together.

During the next cycle of the coding process, the researcher consolidated the nineteen codes to establish thirteen codes, see Figure 14 Coding Round 1-2 on NVivo.

Figure 14

Coding Round 1-2 in NVivo



The researcher aligned assignments and observations to the ATCP because those two aspects were part of the ATCP requirements. The CTSO code was engulfed in the community code. Content area was placed under the curriculum code and previous education went under the

personal code. State requirements received edTPA because at the time edTPA was required by GaPSC to obtain certification. Previous education was assigned under personal as well.

While coding the interviews, the themes emerged because the researcher looked for common phrases and words used by the participants (Saldana, 2015). Due to conceptual parallels with the teacher proximity continuum, the conceptual framework used in the study, the thirteen codes then were categorized into five themes. The major themes that materialized included *(a) personal characteristics, (b) professional skills, (c) interpersonal relationships, (d) intra-system, and (e) extra-system* in Figure 15. The thirteen codes became subthemes under the five themes previously stated.

Figure 15

Themes/Subthemes in Relation to the Teacher Proximity Continuum Framework

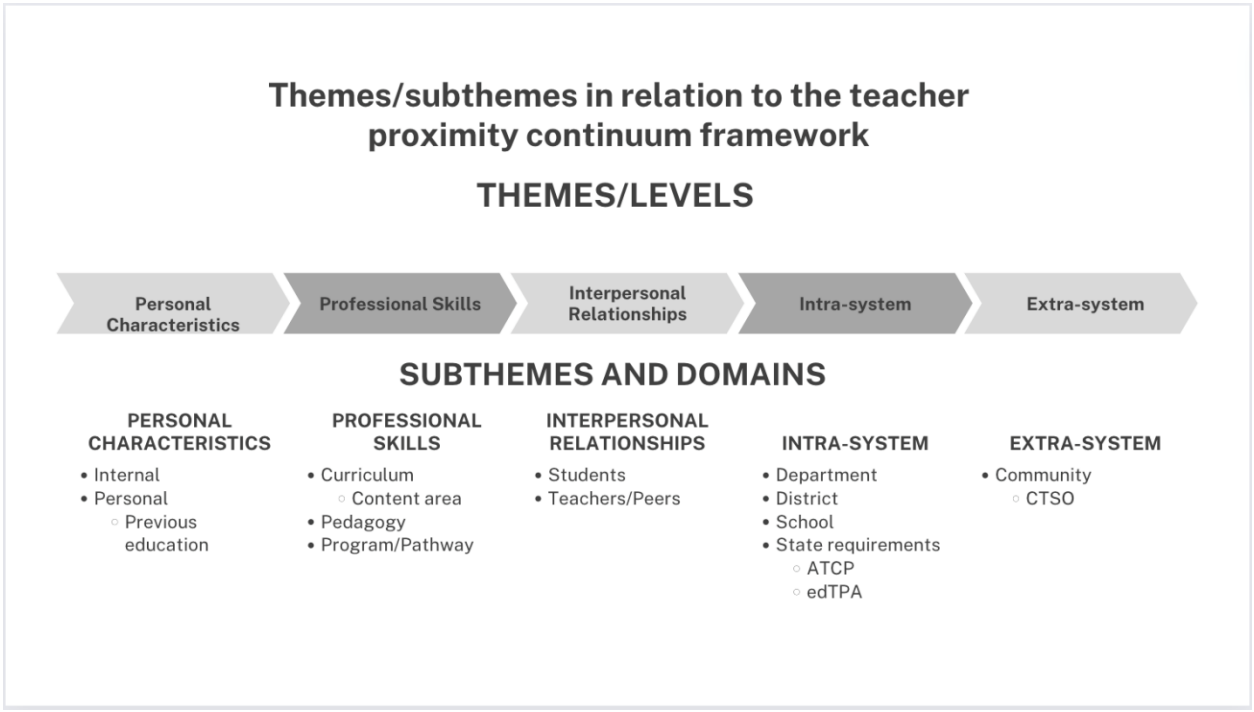


Figure 16-20 has an overview of number of coding references per participant to provide visualization about each individuals coding process through NVivo. Assignments included the

participants discussion about their lesson plans, instructional calendars, syllabus, and pacing guides and were coded 1 time by Alyssia, Maxie, and Easton, 2 times by Courtney, and 3 times by Kendall. The ATCP included references about the classes at the institution which was coded 7 times total between all five participants. Community included any mention of the community stakeholders, parents, sports, and people/events outside school hours. This code was categorized 8 times over with 1 time by Alyssia and Maxie, 2 times by Easton, Kendall, and Courtney. The content areas of the participants included Family and Consumer Sciences, Culinary, Audio/Visual, Health Sciences, and Computer Science. Overall, the content area code was used 19 times which breakdowns to Alyssia-3, Maxie-4, Easton-6, Kendall-4, and Courtney-2. Career and Technical Student Organizations (CTSOs) is the co-curricular organizations built into the standards for the CTE courses and were mentioned 7 times altogether and 3 times by Kendall then once by the other four participants.

The next code, curriculum, was mentioned once by each participant. The department included all of the CTE teachers, this code was presented twice by Alyssia and Easton, once by Maxie, and three times by Kendall and Courtney. The researcher didn't code the district with Kendall's transcript because the statement with mention of the district was coded in another category since that was more important. Alyssia mentioned the district three times while Maxie made two references and Easton made one while Courtney made six mentions. The portfolio assessment named edTPA was discussed three times by Alyssia and Maxie, two times by Easton and Courtney, and four times by Kendall. Internal code which was used four times by Alyssia and Kendall, three times by Maxie, and two times by Easton and Courtney described their internal factors and experience within the teacher during their early career. The teaching observations were evaluations of live teaching demonstrations by the participants which was not

mentioned at all by Easton and Kendall and once by Alyssia, Maxie, and Courtney. Pedagogy, the evaluation, delivery, short-term planning, and improvement of instruction experiences was coded once in the transcripts of Alyssia, Maxie, Easton, and Courtney while it was coded twice in Kendall's transcript. Personal aspects about the participants were coded in the personal code which was coded the most, 33 times overall. The coding amounts for pedagogy as follows Alyssia- five, Maxie-four, Easton- eight, Kendall-six, and Courtney-ten. Since all the participants transitioned from a previous career and teach a CTE discipline, the teachers have previous degrees or certifications in the specified field. Previous education was coded five times for Alyssia, six times for Maxie, four times for Easton, nine times for Kendall, and two times for Courtney.

The program or pathway is the long-term planning and implementation of the three courses to create a pathway. The program/pathway was stated one time by Alyssia and Maxie, two times by Easton and Courtney, and three times by Kendall. The school of employment was coded once by Alyssia, Maxie, and Courtney, then twice by Kendall, and zero times by Easton. The state requirements included the certification qualifications from GaPSC and was said once by Alyssia, Easton, and Kendall, while Maxie said three codes, and Courtney said two codes on the transcripts. Students were coded once by Alyssia, Easton, and Kendall while Maxie coded students twice and three coded were mentioned by Courtney. Peers or teachers were coded once per participants.

Figure 16

Coding References- Alyssia

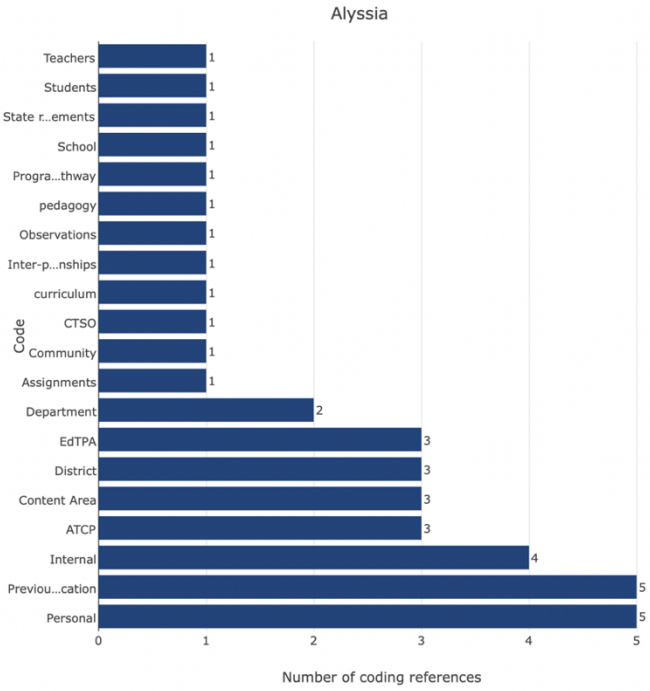


Figure 17

Coding References- Maxie

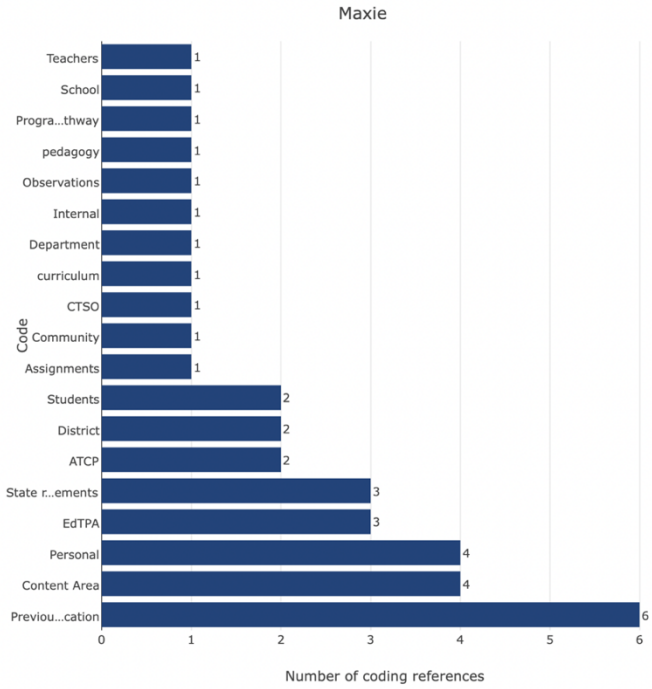


Figure 18

Coding References- Easton

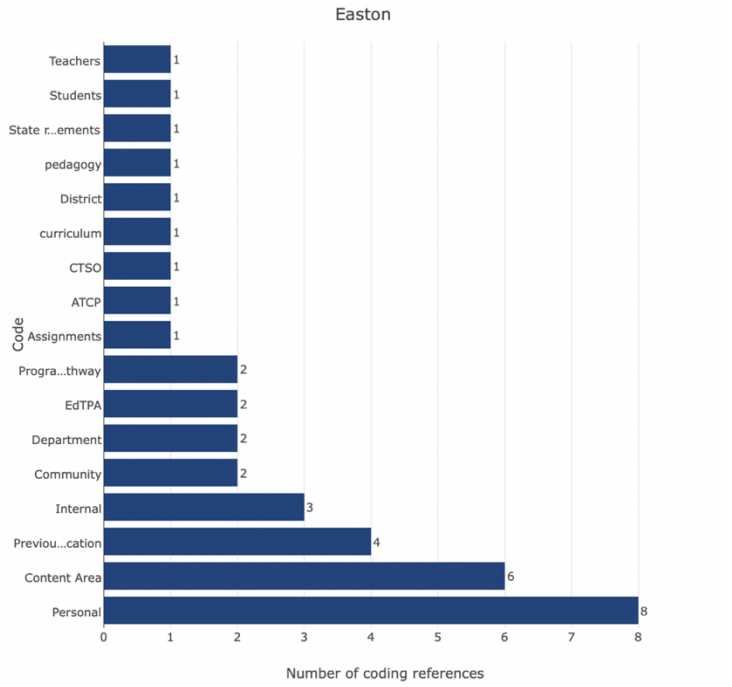


Figure 19

Coding References- Kendall

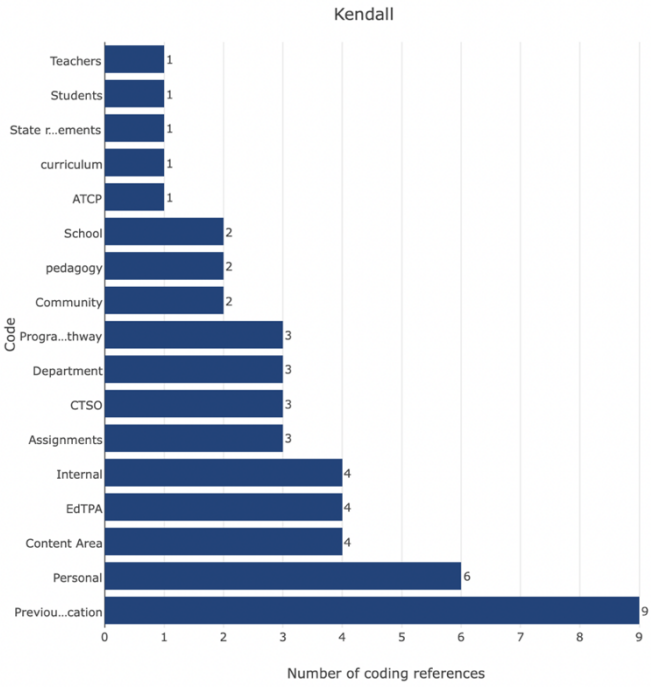
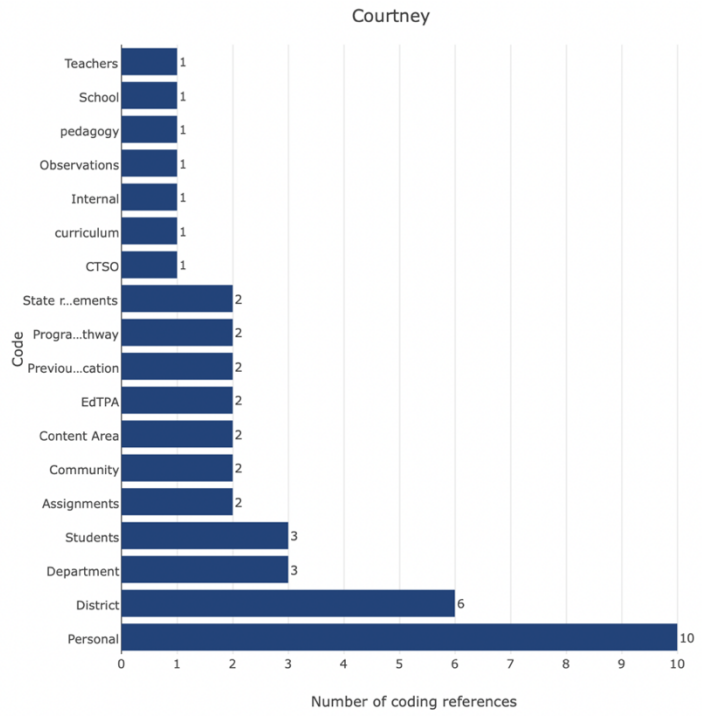


Figure 20

Coding References- Courtney



Overall coding amounts for each participant are found in Table 29 as a visual representation of how many times these codes were used and importance for the researcher to use later.

Table 29

Participants Amount of Mentions Per Code

Code/Participant	Alyssia	Maxie	Easton	Kendall	Courtney	Total
Assignments	1	1	1	3	2	8
ATCP	3	2	1	1	0	7
Community	1	1	2	2	2	8
Content Area	3	4	6	4	2	19
CTSO	1	1	1	3	1	7
Curriculum	1	1	1	1	1	5
Department	2	1	2	3	3	11
District	3	2	1	0	6	12
edTPA	3	3	2	4	2	14
Internal	4	1	3	4	1	13
Observations	1	1	0	0	1	3
Pedagogy	1	1	1	2	1	6
Personal	5	4	8	6	10	33
Previous education	5	6	4	9	2	26
Program-Pathway	1	1	2	3	2	9
School	1	1	0	2	1	5
State requirements	1	3	1	1	2	8
Students	1	2	1	1	3	8
Teachers	1	1	1	1	1	5

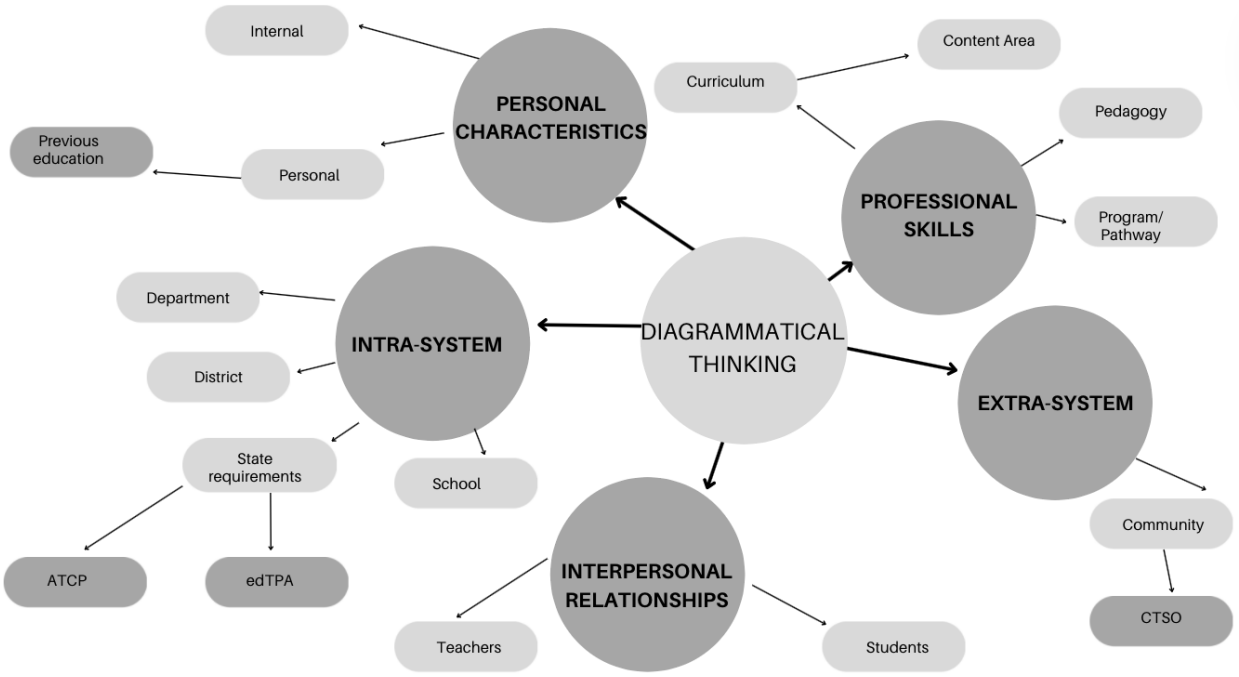
Diagrammatical thinking

The researcher used diagrammatical thinking to build connections and flow outside of the chart to conceptualize the experiences and feeling into new entities (Freeman, 2017). Diagrammatical thinking (a) consists of working with moving assemblages as open systems, (b) focuses on the performance event or agential operations of assembled entities, (c) is creative, interventionist, and experimental, (d) anti-reductionist. An assemblage in diagrammatical thinking is a moving matter instead of a stable structure in the specific event such as the participants' interviews that continue to move and transform through the process (Freeman, 2017). The researcher used diagrammatical thinking to create a "visual forms of information and knowledge transfer" to develop created a brainstorming web to think more freely compared to a chart used when hand coding interview notes (Saldaña, 2015, p. 147). Figure 21 used diagrammatical thinking to organize the themes and subthemes from the coding process.

In Figure 21, the researcher created a logical organization with the figure that reduced the nineteen codes into the five themes and thirteen subthemes. The researcher developed this diagrammatical thinking figure while coding in NVivo to explain the organization and thought process when codes and major themes were merged. Diagrammatical thinking impacted the findings because the figure allowed the researcher better flow and organization.

Figure 21

Coding through Diagrammatical Thinking



Overview of Major Themes and Subthemes

The researcher took major consideration of the teacher proximity continuum as a conceptual framework due to the Children's effective teaching components: (a) content training, (b) pedagogy, and (c) field-experience (2014) and because the framework is specific to Career and Technical Education (CTE) experiences when the research and interview questions were developed. According to Camp (1989), approximately 25% of experiences within CTE teachers are unique to CTE. Major themes corresponded with the levels from the teacher proximity continuum such as *personal characteristics, professional skills, interpersonal relationships, intra-system, and extra-system.*

Personal Characteristics

The ATCP included ten consecutive days of 8-hour class in person during the summer semester and one Saturday a month for three hours during the fall and spring semesters. The participants brought up their commutes to campus during the interviews. The aspect of commuting to the ATCP was considered in the participants early teaching experiences under their internal subtheme because of the effect it had to their internal experience. Travel time for each participants varied while commuting to the ATCP which required the participants to be away from their home life and/or families. Hardships from traveling included arrangements for childcare, housing, expenses, exhaustion from working full-time, and driving long distances. Alyssia's travels took almost three hours and would require a stay in the overnight for the Saturday classes or the full week for the summer sessions. Maxie's commute included an hour and a half drive while Easton had a one-hour commute "door to door" each day before and after class. Courtney's commute was an hour and a half, but she had extenuating circumstances to be explored in the personal subtheme later and did not attend class in person every day. Kendall lived one and a half hours away, but stayed with her supportive family members three miles away from the meeting location. Kendall also added to the discussion about her commute this school year, she has a one hour to one-and-a-half-hour commute to her current school. She used the time to decompress and feels like the commute time is worth "the peace of mind" of being in a better school environment.

Alyssia, Easton, Kendall, and Courtney are currently serving their fifth-year teaching compared to this year being Maxie's third year in the classroom. The teachers in their fifth year completed one full-year in the classroom before attending the ATCP. Maxie started the certification before obtaining a full-time teaching position. Easton wanted to start the ATCP his

first-year teaching, but “missed the cutoff” of the previous cohort. Alyssia and Kendall both served between two schools. Alyssia taught in two high schools in two different school districts. Kendall taught within the same school district and completed four years at a middle school then this current year at a high school.

The personal characteristics level encompasses the internal domain which included the experiences within the teacher. The researcher used the interviews to develop two subthemes (personal factors and internal aspects) like the participants’ previous education and experiences because these are elements within the teacher which developed their content knowledge. This section is a compilation of personal information collected for the first research question: *How did the ATCP impact teachers’ internal teaching experiences (internal)?*

Personal

Interview question: How did the program impact you personally?

The participants brought so many industry experiences to their transition to teaching. All of their previous and current endeavors created a unique experience as an educator and provided a unique educational experience for their students. Alyssia was a marketing executive for a morning news broadcast, Maxie as a several capacities in the health and wellness field. Easton was computer programmer and chef. Kendall worked as a state dietetics and nutrition educator for adults. And, Courtney was a medical assistant. In addition to teaching, Easton currently assistant coaches at his high school for two sports, football and baseball. Kendall has taken a step info the entrepreneurial world with a beauty services and eyelash business. Courtney serves an athletic trainer as well as her position as a teacher and is transitioning again to attend medical school. Alyssia, Maxie, and Easton are married with children while Kendall and Courtney have significant others and no children currently.

Maxie discussed her transition to teaching being heavily influenced by doing patient education while she was in the healthcare industry and thinking about public education as a potential future career. She also wanted to be on the same schedule as her children. Another factor for her transition is from her experience working in hospitals and she "felt a lot of employees come in that didn't care about their job and weren't trained well in how to ask questions or present themselves efficiently and effectively to patients". Maxie's goal is to encourage at least one student to "make a positive change towards pursuing their goal" at the middle school age think about the many possibilities and "not be tied to one profession".

Easton expanded on a major factor during his personal early teaching experiences as "having to cut bait and teach from home for a full year in front of a computer, especially being a brand-new teacher. I had to learn just like everybody else of how to do all this stuff".

Courtney was diagnosed with Thyroid cancer her senior year of college that recurred during the ATCP cohort summer and will continuously recur in the future. She had surgery and treatment at the end of her first-year teaching. Reflections during that challenging time included her logging into her digital teaching platform after six days to see a thread created by a student for other students to post the things you love about her. She talked about the students discussing how they missed her and good attributes stating the students "might be teenagers and crazy sometimes, but they really do have a heart so that was impactful". She also talked about not putting on a persona of being superior and being a teacher is a "partnership and they care about me not only as their teacher, but also like a friend in a way. Not calling them up on a Saturday to hang out with them, but we want to show that we care about you and this is how we were able to do it".

Alyssia, Maxie, and Kendall are considering going back to school after all three completed their Educational Specialist degrees. Kendall wants to switch concentrations to the administration area to advocate for workforce education and CTE. She wants to combat the "misconception that college is your only way of being successful". In her classroom she tells her students success stories of her best friend who is a railroad conductor and her personal experience in college working in nursing home during college as a Certified Nursing Assistant (CNA) earning more than minimum wage and having flexible work shifts to accommodate her college courses. She consistently advocates for the other CTE programs from her past years in high school as a student and now as a teacher. The tagline she used and created at the end of the interview was "Career tech, is really where it's at". During summers Courtney did not seek treatment, she worked on her pre-requites for applying for medical school. This school year she applied to seven schools, interviewed at six, and got five acceptance and one wait list.

Internal

One memory from Alyssia's first year teaching before attending the ATCP is that she knew about learning targets, but didn't fully understand the depth of "what I was doing or why I was doing it". She initially thought completing the ATCP was "just to check a box for admin putting on a dog and pony show, but going through the program, I really realized how important it was for the students to take ownership of their learning". She went on to say "I think that the main thing is getting the students to take ownership for their learning so that you're not spinning your wheels and work as much, they are doing majority of the work. You're just helping them figure out and connect those thoughts. And that's why I'm grateful for the program. I feel like I'm not working as much and helping them apply their own knowledge".

Maxie credits her enrollment in the ATCP as being "forced me to kind of refocus what it is that I wanted to do because it is a lot of work. And you really have to be dedicated to it. You can't think that it is just going to disappear. And so, I think it forced me to step up and be more detail orientated and just more focused in that timeframe."

Internally, Easton felt the ATCP was "very beneficial" because he came from industry and "had no prior college or any other teaching experience". He goes on to state the experience "helped me transition into teaching". He also received the external satisfaction of fulfilling the GaPSC requirements to obtain his certification and describes the program as "twofold to teach me how to be a teacher and fulfill those other requirements".

Kendall stated "Honestly, the program made me realize that I could do it because there was like a lot of self-doubt and there was a lot of confusion."

Courtney described her internal experiences as making her "more aware especially of kids' differences, like the special needs courses". Relating to the students with special needs and learning strategies to get the students "engaged" was the most beneficial. Realizing that "not every kid is going to study like you or have the same habits that you had in high school" was one of the main things that stood out for her.

Professional Skills

Professional skills level includes pedagogy, curriculum, and program. For the purpose of this dissertation, the researcher refers to the program and pathway interchangeable due to the language used by the Association of Career and Technical Education (ACTE) and Georgia Department of Education (GaDOE) to define three sequential CTE courses. Pedagogy is the evaluation, delivery, short-term planning, and the improvement of instruction experiences. Curriculum is the teachers' experiences related to planning the course's content and preparing

instructional materials. The program or pathway relates to the teachers' experiences regarding the long-term planning and implementation of the pathway or program. During the coding process, four subthemes emerged are pedagogy, curriculum which includes content area, and pathway or program. *Research question: How did the ATCP impact teachers' professional skills (pedagogy/curriculum/program)?*

Pedagogy

Interview question: How did this program change your pedagogy in the classroom?

Alyssia:

> I think it made me a much better teacher because I had an idea of what I was doing, but more specifically why I was doing it. And so, I was able to, be a better teacher all around because I knew the different strategies, instructional strategies, and ways to get my students engaged in the classroom. And I no longer felt like I was just trying to struggle to get by day to day. Like I had a method to my madness.

Maxie:

> I think it kind of forced me to identify pieces and parts of things that I was had already known, but didn't know. Does that make sense? So, it forced me to like categorize, like having an opening, you know, and then almost like writing a letter, like it forced me to categorize everything. Like I need to have this part, I need to have this part. I need to have this part. And how to ask better questions, which, I mean, I feel like any teacher knows as an ongoing process cause it's so easy to fall into those simple ones, but yeah, I feel like it forced me to stop and think about what I'm doing to make sure that I'm doing it right and well, not just doing it.

Easton:

> I think it kind of taught me how to, how to, to manage the kids and how to kind of meld or mold my industry experience into something that they were more along the lines of them, how they get taught other subjects.

Kendall:

> It helped me to differentiate a lot more, being able to be observant of my students. Being able to recognize their different types of needs and how I could like build it, like build the information and make it remain relative with them. Like right now my ECE students, like how we connect this to 'Euphoria' and 'Power'. Like every Monday that's our way of connecting. So, it's almost like teaching through learning because they, and just good for them to see like I'm human, just like y'all, you know, like we can make it relative and fun and engaging, and I think that was most important because I remember Dr. [professor name redacted] expressing that being relative and being current with them. And that really helped me out a lot as far as like my curriculum and how I move around the classroom.

Courtney:

> So, I would say my first-year teaching before the program, it was like, Hey, here's the work? Give it to the kid. They do it, they turn it back in. Whereas after the program, it was more like, I give them a pretest now and then based on where they are like, okay, you already know all the DOK [Depth-of-Knowledge], one stuff you're going to do two, three and four instead of one, three. So, you progress those students that already have some basic knowledge more than the students that don't come in with any basic knowledge. And it varies by unit because there'll be some kids that are like, oh, well,

you're really good about the muscular system, but the nervous system, you have no idea. And so, it helps each kid find their strength and that's something I changed after the program.

Curriculum/Content area

Interview question: How did this program change your curriculum?

Alyssia:

It helped me develop much better curriculum. When I first started audio/video, I didn't have anything. And so through going through edTPA, I was really able to develop a bunch of stuff and know how to develop a bunch of stuff to use going forward.

Maxie:

Well that one's tricky because the state pretty much mandates what I have to teach. So, I think it helped me see that there's more than one way to do things. And that it's a good idea to bring in as many resources as possible to create your own process and not just trust somebody else's

Easton:

Not so much. I already had a pretty set curriculum of, of when I was in culinary school and then how I, I, how I cooked and just the, kind of the logic progression of cooking. So, the curriculum, I just had to kind of meld to the Georgia standards. But that's not, it wasn't, to me, it, it bounced around too much where there's, there's a different, there's a different progression. So, I think actually added, added some stuff to the curriculum that was already in place when I got there.

Kendall:

It made me so much more organized because I felt like I was like scrambling and like a lot of the things that I had done in that first year, I didn't know the importance of being able to document and keep up with it. So, when she told us about that folder, that binder girl, I just go back for that unit. I be like, oh, let me pull this. So, I didn't like how that worked last year. Let me try it this way, this year or last semester. And so that has been amazing and I just had a sub to tell me she was like, you're so organized. Like even your desk, like I was like, yeah, I need to be able to touch it. It may look junky, but I know where it is. Like I could touch it, like physically see it. So, yeah.

Courtney:

So, sort of the same thing, like now it was, you know, pretest, here's some terms to define, here's some activities we're going to do. Here's like the test to show your mastery or whatever, and now it's more like, okay, here's the pretest. And based off that pretest, well, we don't need to go back and teach the stuff that you already know. So, it just allows students to identify their own strengths also to say, Hey, you're really good at X, Y, and Z. And so, they have some ownership of, hey, I really like this because I'm really good at, and they feel better about themselves instead of just, okay, you guys don't know anything. So, here's a bunch of stuff we have to learn. So, they can say like, hey, I already know some stuff and let me build on what I know. So, it gives them that ownership of their learning also.

Program/Pathway

Interview question: How did this program change your pathway/program?

Alyssia:

> Well, like I said, it gave me methods and strategies. I didn't have any of that. I didn't know about any of that prior to going into it. And so through developing for the coursework I was able to then take that blueprint and apply it to my class.

Maxie:

> It really doesn't, I guess, or didn't computer science in Georgia is really weird. The class that I teach at the sixth-grade level is not appropriate for their mental maturity. And so, I use an application for that that has already outlined everything and then bring in pieces and parts as I need to. So, I can't really spray away from it because it's already so detailed and demanding that I already have to kind of adjust for sixth grade brain. Does that make sense? Did that answer your question?

Easton:

> It didn't, I, when I got hired, I was told, I was told I was going to teach these classes and that's, what's, that's, what's kind of stuck. Not really. I mean, it kind of, I think it added to my planning but not, it didn't really, really radically change how I, how I planned the, their day or week.

Kendall:

> It made me, it made me want high school, more versus middle. Like it made me want to be in a direct pathway because with middle school, it's like you was teaching everything and I’m not going to lie some of the subjects in the, in the within family and consumer sciences, you, I was just floating through, but I'm, like I said, I'm a lot more energetic

when it comes to things that I'm, I'm passionate about like dealing with young children, dealing with nutrition and things of that aspect. So being able to tap into that and like I said, giving me that boost, say, girl, go on to high school. You can do it. Because when they told me they had the opening and I said, let me shoot Dr. [professor name redacted] a message and see if she got anybody looking for a job.

We had family and consumer sciences, but people always just took it as a cooking class and being able to be that person and be like family and consumer science is more than cooking. Like you need me to help you function through everyday life because what I'm teaching you in here, you are doing every day. It's not like something you would do once a month or every two weeks. Like you are implementing this in some type of way, every single day of your life. Like even like downtown, I was surprised at how many students, you know, didn't know how to wash dishes. How many students, you know, didn't how to use a broom or a mop? Yes. They're like laundry, oh, I, can drop them all in one time. You what? So yeah, like that's what the best experiences was being able for them, like the brightness in their eyes. And they were like, oh, this all it took to it. You know? So, yeah.

Courtney:

So, our third year is selective because we go to the hospital. They have clinical days over at the hospital, so we can only take 20 students. So, it was kind of more, it, it really gave the students like, hey, I really like this, or, hey, this is not really for me, especially that second course where you truly learn about the body. I wouldn't say it necessarily changed it, but it helped those students realize like, oh yeah, I do really like this and I want to continue on or, eh. It's okay. I got my science credit and now I can graduate. So, I'm good.

The researcher asked a follow-up question about pathway growth?

> So, more kids applied, but we can only take 20. That's been like set since I got here because of the hospital. They only allow so many kids a year or whatever so each school gets to take 20, but more have applied, which is a good and bad thing, I guess, because I can only take 20. So that means I'm telling more, no. But it has grown the program so good and bad.

Interpersonal Relationships

The interpersonal relationships level included relationships with the participants' students and same level co-workers. Initially, Camp's (1990) research the same level co-workers are labeled as peers, but while conducting the interviews the researcher referred to this domain as relationships with teachers. Redefining peers as fellow teachers was easier due to the many different positions recognized in different schools and districts outside of administrators (principals and assistant principals) such as curriculum or academic coaches, counselors, academic deans, discipline deans, magnet coordinators, other district and school personnel, etc. The administrators are placed in the intra-system level in the next section. The two subthemes emerged were with students and other teachers or peers. Research question: *How did the ATCP impact teachers' interpersonal relationships with their students and peers (co-workers)?*

Students

Interview question: How did this program impact your relationships with the students?

Alyssia:

> We, I feel like I was able to develop a better understanding of my students because I applied more energy on being more energy on creating relationships and being, not necessarily a friend, but like a confidant, as someone that they had an easier time talking

to because I was more understanding, I knew that the ultimate goal was, is to get them engaged and through and through doing that, I needed to be more, I don't know the word, not, not necessarily flexible, but more understanding and yeah.

Maxie:

I would love to say that initially it taught me to form more valuable relationships or whatever with my students, but it, it didn't I think it taught me more to go in guns, a blazing and back off, because I have quarter classes, quarter long classes, you know, so it's like every nine weeks I have to like reestablish that authority in the room and then inch off, as we all agree, who's running the show. So, I think once I have figured out how to do that effectively and quickly, that probably was some help of Dr. [professor name redacted] coming in and seeing how things are going and everything. And she was always very kind and complimentary about my relationships with them, but I think that I left it at that level. Whereas now I'm trying to stop and see the human and like these eighth graders that I have for a full year, I'm trying to stop and see that they're still kids and this is a really hard time for them. And I think we've a lot of us have forget like me we've. I mean, like I use that very general. Like we forget that and they're just hormonally going through so much. So, I think the program taught me to like establish those boundaries, but then I've learned how to, how, and when to make them a rubber band. It's not a fence, it's a rubber band.

So, the other week I had one of my eighth graders and we're together first thing in the morning. So, it's like, right. You know 22 of them, that number ebbs and flows. It's like every time one student leaves, I get one or two more and then one leaves and it's been like a revolving door, which is not supposed to happen in a high school level CTAE class.

So, I had one in particular cuss in class during a group project out of frustration. It was just like, and so I was like, go, you know, out the hall. An instant, you know, like out you go. And I think that's important for the other people to see and the other kids to see, because they have to see that I'm consistent. Like you, you step on my toes, I'm going to step on yours and, you know, push yours right out the door. But when I got out there, I was just like, this is so out of character for you. Like, this is not who you are. I've never had this issue with you before. So, I'm not writing you up. Like I should, because you dropped a big word, but what is going on with you? And we both were just squatted in the hallway. And he was like, I don't know. And I was like, I don't either, but let's, let's establish the eighth-grade sucks. And let's establish that this is a hard time for you, but we have to figure out how to control these emotions. You know, you can't just have a complete outburst at your group. And so, I just spent like 10 minutes with him and ever since he's been like Mrs. [name redacted], this is just, I don't know how you do this every day. It's really overwhelming. And it's just, it's changed our dynamic completely, you know, so, I had another kid cuss in my class and I was like, out in the hall, I'm writing your butt up because that was a fence. Like he has pushed me, you know, in, in the last couple of months, I've had to remove him from our Cyber Patriot program at times for behavior and what he is saying out loud that is not filtered. And so that, that's a fence, you know, that, that was a hard stop. Whereas the other one, it was like a let's move this a little bit. Let's rubber band. This one, because this isn't you.

Easton:

I don't know if the program did it for me, but it helped it helped having kids about this, my own kids, about the same age as the kids that I taught. So, I was, I knew how to, I

knew how to deal with them and I knew their tricks and traps and all that stuff. So, the program just kind of taught me how to, how to structure my ideas to, I guess, how to more so how to teach them not necessarily how to, to, to deal with them or interact with them.

Kendall:

It taught me to be more, like I said, be more relative, like being able to relate to them and their needs talking about like current events and things like that. And it showed me how to a professional, but still be myself. Because like, of course I'm so young so they kind, you know, they don't, they don't get it mixed up. They already know, but it's because I had that support and that experience from that program to show me like you could still be yourself and be professional at the same time.

Courtney:

I would say it gave me that perspective of, you know, you can relate to the student. I teach at a very diverse school. It's probably the most diverse school in Henry County. And so, a lot of my students don't necessarily have my same background. Don't look like me, stuff like that. But I found that it's very easy to connect with them. If you make it personable, if you're like, hey, you know, like these are some of the struggles you're going through that I also have gone through, or I also face in those ways, but it's also important to respect their differences as well, and say like, hey, I can't understand everything that you go through because I'm 28 and you're 18. So, you know, it's a little different. But I think the program helped me realize like my role in their relationship and their role in that as well.

So, I have one student in, we have an IF time instructional focus and it's essentially like a 30-minute block where they can do tutoring, get help, things like that. I don't know if you guys have that, but not everywhere does it. So, but he was late and a lot of times kids skip because we're not far from Chick-fil-A and a little outlet and things like that. So, they're teenagers, they're going to you know, do what they do. So, he came in late one day and I was like, you know, it was kind of that student that like, every teacher wasn't really like a bad student, but they would warn you about, you know, like you have to have that relationship with him and you have to build that relationship. So, he came in and I was like, hey, you know, like where, where were you?

Like you're late IF, blah, blah, blah, blah. And he was like, Ms. [name redacted], I have to tell you something. And I said, okay, what? And he was like, hold on, I'm going to tell you in the hallway. And so, I'm like, okay. So, we walked out into the hallway and he was like, so I have a one-year-old son, or my son's about to turn one. And his mom dropped him off at daycare this morning and didn't give him any diapers. And so, I had to go to the store to get some diapers, to take up to, you know, my son at daycare or whatever. And so, I was like, man, I'm not even like mad at you, like, blah, blah, blah, blah. And I actually went to his kid's first birthday party, a couple like weekends later. And you know, he had like a little circus theme birthday and it was cute and got him a little gift and stuff like that. And I was giving him an extra credit assignment at the end. Like, you can write, thank you notes to anybody in the building. I said, you can write one to me. You don't have to. And he wrote Ms. [name redacted]. I love you. Thank you. And that's all he wrote on his note, but he turned it into me. And he's graduated now, but you know, that story kind of stays with me and reminds me, this is why you do what you do.

Teachers/Peers

Interview question: How did the program impact your relationships with your peers (same-level co-workers/other teachers)?

Alyssia:

> I don't think it really impacted that as much. The, the main focus I would say was probably the students and my curriculum.

Maxie:

> Yeah. So, like general like department wise, because those are my people they were really accepting, I had one that was slightly bullying and I had to just remove myself from her. Um because every time I would just make a random comment, she would have something really mean to say back. And I was like, no, what I ever did to you? And she's retired. Like she retired then this after last year, this is her first year of retirement. So, I think she was just ready to go yeah, she was ready to go. And I think it was somebody new coming in that challenged her. But my school is really welcoming, like super friendly. We cover each other's classes with a smile on our face, to each other, you know I mean, you guys are doing that a lot right now. I'm sure. So, it's like, I'll take one but I don't want to get called so I don't know that the pro the program didn't impact my relationships with them because I'm good at forging those relationships anyway. So, you know, be, I think it's different when you come in from a professional. I didn't come in from, I don't know. I came in from a setting that I had to be able to forge relationships with physicians and patients and stakeholders, so that wasn't any challenge.

Easton:

It is about the same. I mean, I don't think there's much in there. I mean, we all kind of came. I mean, I think there's, there's people that have taught with that have been teachers long, but they also, they, we all, we all pretty much come from industry except for the lady that I teach with. She came straight from college. So, I think it's helped me kind of teach her how to be more confident in the kitchen. And then but she also, you know, she also teaches me how to, to meld my stuff, to be a teacher-teacher. So, I get it's, it's kind of balanced, it's balanced out. I mean, I think the biggest thing for the program and me and other teachers is the lingo and just knowing how to talk to other teachers or being, knowing how other teachers talk so I can talk to them.

Kendall:

I was able to bring new ideas, like things they hadn't even thought of or even considered or better yet being able to show them how to navigate through the new things. Because a lot of the teachers that I was working with were new teachers like me. So, I was able to encourage them and reach out to Dr. [professor name redacted] to try to get them in the program for them to get certifications as well, but being able for them to see what I've learned through the program and sharing with them, made them a little bit more adamant about, oh, let me reach out and see if I can get on, you know, and get into this program too. So just being a piece of evidence for my peers was probably the best part of it all. Yeah.

Courtney:

It allowed me to see more of the programs and how I could relate with them, how I could, you know, instead of, okay, well, I'm going to teach my students the digest system. Also

> get with FACS to see how she's doing it and connect those and say, hey, like, okay, one day we're both classes are going to be in my room and we're going to learn how to do it. And then the cooking class will cook. We'll do vital signs, and then we're going to bring them together. And you're going to talk about how the food you're eating is going to digest throughout the hour or whatever. So, I think it was able or helped me make connections with other programs and bring those in and tie it all together. So, it wasn't just, I'm there teaching it myself.

Intra-system

Intra-system is described as the experiences that impact the teacher within the educational system. The four subthemes emerged are department, district, school, state requirements encompassing the Alternative Teacher Certification Program (ATCP) and edTPA. The department is the CTE department within their school and the district includes the school system. The state requirements encompass the GaDOE standards, ACTE criteria, and Georgia Performance Standards Commission (GaPSC). GaPSC develops the state requirements for certification including completion of education courses such as the ATCP and assessments such as the Georgia Assessments for the Certification of Educators (GACE) and Educative Teacher Performance Assessment (edTPA). EdTPA is a performance-based assessment specifically based on the subject or content area for educator preparation provided and assessed by Pearson Education. Research question: *How did the ATCP impact teachers' understanding of their system (department/school/school system?)*

Department

Interview question: How did the program impact your department?

Alyssia:

> So, when I received my overall observation this past year, my CTAE director said that to see much improvement in my abilities and that I was I had improved the department as a whole because I was then doing things for the district level, as far as CTAE goes and doing videos for level, we did a because I had a better way of organizing my material and my time.

Maxie:

> I guess technically there's really only two of us that teach CTAE because we have an engineering and technology teacher and then computer science. So, there's only the two of us. There's not really a department. We're both pushed in with connections with career connections.

Easton:

> I think it, it, it, it gave, it gave more credibility to the program, just coming, coming from a FACS background between the program and the school, they were all pretty heavy of getting my master's. But at my age I was done with I was done with school, so I wasn't, I wasn't going to let, them push me into that, even though they're like, oh, it's only a little bit more this and that and other, but as far as the, my certification, I think going getting the, the FACS training just helps our us as a career tech department. Just have more credibility.

Kendall:

So, my department, it impacted it, because like I said, I share whatever information I learned. So, when I was department chair, like things that I felt like were necessary in class or was relative to the topics that we were talking about or discussing. I was able to push it through like the resources that we received where we were impacted. I was able to share that with my department to kind of get them ahead because like I said, a lot of them were new just like me. And they had no clue where to find those resources or how to handle certain situations. And most of the time I was called to step in for the classroom management. But other than that, like once I gave them the resources and walk them through it, they were pretty much, they were good.

Courtney:

My department, it allowed us to collaborate more things like that.

School

Interview question: How did the program impact your school and school district?

Alyssia:

We were able to do a, like a March madness music video for the school. And then from there, my CTAE director wanted us to do a district promo for CTAE so we did that promo and the student who worked on it, that helped work on it. She received number two CTAE student award in the district. So, it most definitely impacted my school in my district, me being able to facilitate better in my class, the growth showed a lot.

No. I think that they gave much help in a, not so obvious way that I'm, I'm literally, I went from scoring twos on my observations to fours consistently (on my TKES observations by my administrator). So, the program was very, very helpful.

Maxie:

Well, my first year was I guess, technically the second year of really implementing computer science from business, you know, that transition from business to computer science, that the state mandated. So, I've been able to build the program. I mean, my, my high school level class last year was the first year for it, because that's, you know, let's roll it out on an AB schedule when its times are crazy. And I had 14 this year. I have, like I said, I'm averaging to 22 in that class. So, I feel like that I would continue to build that class. I've continued to build the Cyber Patriot program. But it didn't really have anywhere to go, but upward so.

Easton:

It didn’t impact it.

Kendall:

As far as like school, I feel like it helped us build a relationship with ATCP for other new teachers. Because like I said, when Dr. [professor name redacted] would come in and do the visit, like do her visits and stuff like that, I had, I think she, our principal, it was either our principal or our assistant principal that he, you know, was introduced to her. And she told me about her program. And basically like, he was just like, if I have any that come in, I know where to send them. So just that networking experience was the most, was most beneficial for the school as far as the district. I think they're just lucky to have me. Because I mean, I got the certification.

Courtney:

For the district I don't really know how it impacted the district. I am like a pathway lead for my program, so that was somewhat, you know, it helped me gain that experience. So,

I kind of, I think there's 10 of us that teach this and six of them are new, like first year teachers brand new. So, I've been able to kind of mentor them a little bit and help them along and say like, hey, this is how I do it. You know, this is not how you have to do it, but here's some ideas about how to work with these students and how to troubleshoot and problem solve and things like that for, you know, all these different areas that you have because you come in from industry and there's like 9,000 acronyms, you need to know on the first day. And so, I think, think that has been impactful. And the program has helped me kind of acknowledge that leadership role a little more. And I can't say that without the program that I wouldn't have stepped out of that comfort zone and just, no, I'll just, you know, teach what I need to teach and, you know, things like that. So, it was helpful in that way. I was Henry County School Systems new teacher of the year in 2020.

State Requirements- ATCP/edTPA

Interview question: How did the program impact the state requirements and standards?

Alyssia:

Well, it probably would have, but with COVID I think that kind of took away too. So, like the, end of pathway testing that my students would normally be doing COVID kind of took that away. So, this will be the first year after going through the program that they are counting the end of pathway again. So, we'll see how that goes.

ATCP-

The workload was a lot, but I was able to, through going through the, a program, you broke it down into sizable portions that I was able to kind of get done. And, it all worked out and I feel like I'm a better teacher because of it. And I hope that future employers or

my employer, you know, will see me maybe next to somebody who did not have to go through it and can tell the difference in our work.

edTPA-

Well, I spent a lot of time working on the, the materials for… edTPA. Preparing for edTPA and putting those materials together. So, it kind of took away from my personal life a little bit. I'm not even going to lie. I was a little upset when, after I went to submit edTPA and then it was like a couple months a later they said that they were no longer requiring it for teachers. And I was like, what I did all of that work and literally a month or two, after I get my results back, it's no longer being required. So, but, you know, I don't know if I don't know what the status is for it now, but I will, was very, very upset about that.

Maxie:

No. The state writes the standards.

ATCP-

So yeah, I think that's really the big thing that kind of sticks out to me. Like there wasn't any assignment that I felt was crazy when it came to ATCP. The only class I had an issue with in my whole [institution redacted] experience was one of my psychology classes is my only B. And I reached out to the professor and said, I don't live this stuff. Like I was clearly in a graduate level class with people that were going after their master degrees in this subject matter. And I don't have a clue. So how I would handle it as a civilian in the psychology world and how you would professionally handle it totally different. You know? So, that was my only issue was having to take a class like that. But otherwise, like

all of my classes, like I really enjoyed my technology and education or education technology and education.

Like that was a great class, even though it was like, just do this and turn this in, you know, like it wasn't, I felt like it taught me something or showed me new ways to do things without being a time demanding class, which I feel like was perfect. That was like, yeah, that like, as an overall experience, just that psychology class, I think it was like a motivation that like was horrible. I hated it. I would like have to lock myself in the bedroom and just think, but it was, I, I got through it, but like I said, it was my only be so like, to me, that's a Testament of like what happened here. You know, so.

Yeah, I don't think so. I think I really like there's thing that super stands out. I think [institution redacted] made it as, as smooth of a process as it can be. I think that's a Testament to the organization of everybody involved at all levels, you know, I mean, it was really it was really a good positive of experience. I mean, I, you know, I would definitely recommend it any day of the week to anybody that asked. I think it was good. I, you know, like, like we mentioned before, like it was, it was good being able to start networking with people, but then we got it cut off so, you know that kind of stunk, and I think it probably could have helped some people, like, I think some people didn't realize how much work would go into edTPA based off of that December meeting that we had when people were in tears, you know, that, I think that being able to meet more, would've been nice, but obvious, you know, under the circumstances that wasn't realistic.

edTPA-

I mean, obviously edTPA is like the trauma for everybody.

The researcher prompts Maxie to share more about her experience with edTPA.

Right? You're like, let me write that into a little footnote. Yeah. What's frustrating about edTPA was frustrating is you put its geared towards high school. It is, it is very geared towards high school or content. So, if I were doing it as a middle school, math or science teacher. Okay, great. But because I had to do it as a middle school teacher and gear it towards the business side of things, all the questions were about business. Well, I I'm not teaching business and I would try to adapt them as much as you can while still answering the question, but it was next to nearly impossible. And so, I had to stop a couple times, because I would just find like myself, like whining, like writing diary, like, Hey, this sucks. Cause, or it stinks because I don't teach business and you keep asking me business. And so, it forced me to, like, I had to like dig deep to change my mindset so that I wasn't so negative. But that was definitely a flaw in that process was that everything was high school or content geared, but you're required to do it. But none of it applies to you.

I didn't do very well on edTPA. I barely passed. And I had a lot of extra stuff. Like I, I took y'all's lead, like include as many handouts as you possibly can. And you know, really like dive in deep. And I felt so good about it. But at the same time, I knew I wasn't fully answering questions because I, they weren't relevant to what I was doing. And that was a struggle. So that was, and then to have it taken away, like two weeks after we all turned it in, it was like jerks. Thanks a lot. You know, you couldn't have done that. Like at the end of the school year where at least we could have had that, like going, going forward, not just like, oh, you don't have to do this anymore. Like, that's cool.

No matter what the only, my only issue with the assignments was we would be told, all right. You know, when you come back in December, you need to have your binder or like through, you know, this section needs to be done, but then we were the ones looking over

it and kind of self-analyzing each other. And that wasn't really that beneficial because what I thought was fantastic might not be fantastic in the group. I'm do that cause they don't know anything about it. You know? So I think that that, that was really frustrating was to, to show up in [city redacted], early on a Saturday, give up your Saturday and there wasn't a professional evaluating what you brought in and, and I mean, how do you do that with 25 people in the room it's next to impossible and you can't leave it either to say, I'll get it back in January or I swing back by and pick it up next week after you get a chance to glance at it and make some like, that's, it's probably kind of like a dissertation. Like you can't expect somebody in the beginning stages. Obviously, they do it eventually where they comb through it for you. But, you know, it's just like, that was really frustrating was you spend all this time on it and then it's like, okay. That we would have to bring like sections one and two, you know, make sure you have these done and then we bring it and it's like, that's nice. Good for you with the (edTPA) teaching notebook was definitely overwhelming, but at least there was a grade tied to that, you know, and there was more formative assessing going on, you know what I mean? Like, okay. Change this. Like it was, it was definitely, probably more beneficial than bringing the edTPA stuff because we would leave the (assignment) teaching notebooks or we would present those and have, you know, we'd have those at our evals, right. Like at our onsite evals or whatever, or we'd have to email you stuff, you know, like that was definitely way better than the edTPA notebook.

Easton:

I don't, I don't think so. I mean, not, I don't, I don't think, no, I don't think so.

ATCP-

No. I mean, I think I'm glad, I mean kind of apprehensive at first of, of doing the, the, the [institution redacted] the FACS program, just the travel and, and expense of it. But I think it, in the grand scheme of things, it was, it was worth, it was worth all of it, of just the experience and the knowledge that's all brought. And then just I mean, having that, that certificate, you know, the FACS certificate kind of carries some weight. Probably more, I mean, I think if I was a younger teacher, I think it, I it'd be way more beneficial to me, but, you know, I doubt I'll carry this on past [School name redacted], so but yeah, I would, I I'm glad I did this instead of either an online program or, or going to a different, to a different program.

edTPA-

Okay. Well, no, I mean, I think, I mean, I think just the general, like I said, like coming from industry, like some of what we did that first week of class, you know, this stuff of how here's, how to teach and then the actual, like getting up and teaching that stuff in front of the other people in the class. That, but then having to do that, that, that edTPA turning it in, and then a month later, the governor whoever's saying it wasn't a requirement anymore. That was kind of a punch in the mouth. But I, you know, I did it, I passed it and I can say I did it. So, well, just picking the class the, the class that I focused on picking them, videoing them and just their involvement because they were, and they were, they were pretty supportive, pretty supportive of it. So, I mean, so it did, it did have an impact on them and they also, they did kind of keep up with it along with it, but just other, other than it being sometimes hurting my brain. But other than that, it just I think it helped, it helped me connect with, with that, because that was only my second full year

of teaching. So, it kind of helped me connect with those kids that were in that class. So, they kind of, you know, they were kind of cheering me on. So that was probably the best thing ever.

Kendall:

I think it has a strong impact. Because I feel like if I'm not mistaken with the people that I was still talking to I feel like we all did well as far as the preparation to get to where we were supposed to go. So, I feel like it just shows that what we are learning in the program is beneficial. What we're learning in the program, we are implementing it, what we are learning in the program, we are taking it. And whether we stay in that district or go to another or go to a state, we could say, hey, we brought this. Like, this is for all education, not just for my school or for my district. This is for me to be able to share with other teachers.

ATCP-

Because I felt like when I first started, I was thrown to the wolves. So, like before I started the program, I had already been teaching a year and some of the practices that I had already adopted for myself, they were like kind of set in stone for me when I got to [program name redacted and changed to ATCP], because it was like okay. I can end up like try to add this into it, to be a little bit more innovative with what I already had. So, it helped me to be a, a whole lot more stronger come that August when I got into the classroom and it was like, okay, I, I know I like at first year it was like, I think I got it. But after I did [program name redacted and changed to ATCP] like that summer and then that August, I was like, oh, I got this, this is in the bag. Because when I came back, I

ended up being department chair. So yeah. So, it was just like, it was, it was very beneficial. Like it really helped like get my confidence in the classroom. Yeah.

edTPA-

The edTPA is not for the weak. It is not like it, like that was another thing that taught me discipline. That was another thing that taught me sacrifice. Like that was another thing that taught me how much the students really do enjoy. Even if you don't think they do or they're not learning. Like I was able to see my own results. Like they would just turn around just because they thought they was in the camera or, Ooh, Ooh, can I go up to the board? Just because they thought they were being recorded. Like, and luckily, I had another teacher that was going through the edTPA with me. I think she had, she finished that January and I submitted that February. So, she was very helpful. There were some nights where she stayed and I would like be like, hey, you can, I'm going to tell you and you just type. Because I just couldn't type no more. And like I was like, can you just type it? I'm telling you what to write. And she was helping me with the checklist to go off on everything. There were some times when you have to be savvy in technology. Because one time I thought I had lost my videos. Yeah. Luckily, I had it saved on my phone. So I was, because I almost had a nervous breakdown. I think I did. I literally had put my kitchen table in my living room. Like I had, yeah. My kitchen table was in my living room. It was papers and it was, it was a lot and every time and I have not unpacked the cart yet. You remember you had told us to carry a cart to keep it. The cart is still sitting by the door at my house and it's been a whole two years. A year and a half. Then, you know, we submitted maybe like that the 27th and then that next month they were like, oh, it's obsolete. We don't need it. I was like, I know you lying. And then some of my

coworkers, they were doing the TAPP program and they were rubbing it in. I'm like, but y'all still have to go through the same thing. You know? So at least I had an edTPA under my belt. I can show that, you know but that edTPA is no joke like you. And one thing that you guys showed us was to follow the rubric. And that helped me, like I made sure everything that was addressed in the rubric is what I follow. Like when I did my checklist, I made sure I answered everything that, that rubric was expecting. And that's how I teach my students. When I'm doing assignment. Use your rubric as your guide. And yeah, just like I said, that's my only advice for edTPA use your rubric as your guide and don't wait until the last minute to do anything. Anything.

Courtney:

It definitely gave me more like ideas and materials instead of like, hey, here's this worksheet to do it, you know, helped me like, get ideas about how to bring that stuff to life and how to get kids involved and things like that. And just like when we would be in person, you guys would do like the icebreakers and things. Like, I still, I now make my kids like make a note card so I can learn their names too, because I remember us doing that and like, things like that. So, it just gave me more like the standard is written, how it's written, but it gave me more like leeway of like, okay, it doesn't specifically say like, you have to teach it using a worksheet. Like you can teach it however these kids are going to learn it. And that's probably what the biggest impact that the program had on me is you don't have to do it, you know, sit there, do it, I'm going to teach it, you do it. But more so like get them involved and things like that.

edTPA-

> So, I liked [the program], the edTPA not so much, it was kind of awful. It did, they canceled it a couple weeks after we finished. It was long like this other than like the length of it, like, it was kind of repetitive, like it asked you the same question. I felt like five or six different types and I'm like, okay, well I just answered this in the last one, but let me change up my wording a little bit. And so, I think it was kind of tedious. And as someone coming from industry sorry, I was making sure they weren't coming in, but we're good as someone coming from industry, like it was a little confusing, you know, because the terminology and things like that that was used. I'm like, okay, well I didn't, I'm my background's not in education. My background's not, you know, teaching and things like that. So, I think it could be a little confusing for those that don't have that background in education, but I got it done.

Extra-system

Community is the one domains in the extra-system level which includes the experiences outside of the educational system. The researcher expanded the community domain to include the teachers' experiences with Career, Technical Student Organizations (CTSOs). Therefore, one subtheme emerged in the extra-system as the CTSO and is unique to CTE due to the co-curricular requirement of the standards. Research question: *How did the ATCP impact teachers' connection to their community (your influence on the community or participation in community events)?*

Community- CTSO

Interview question: How did the program impact your community involvement, event attendance, and social interactions?

Alyssia:

> So, we actually had community business out to us about doing a, helping them do a commercial for their business. And we're going to use that as like our capstone project for the year. So, the, the issue that they came to us was they they're bounce house, and so they needed help doing a dos and don'ts video to send out to their customers prior to coming and setting up their bounce. So, the capstone project will be how to successfully create the dos and don'ts video for their customers, so that they, you know, can go and quickly watch it. They'll also have to fill out their form. But they'll also need to watch the video prior to, so I'm pretty excited about that those businesses are reaching out to the program to help. I think that says a lot and it's a great opportunity for the kids.

Maxie:

> Well, I don't know that it really did. I think like you have a whole nother dissertation on like pandemic year teachers, like going into teaching in a pandemic, you know, like I think the program didn't impact it initially. I think growing as a teacher personally, and wanting to connect with my students has made me want to attend. I mean, because this is middle school. It's not high school. I'm not going to high school football games. I'm not, you know, basketball games and stuff like that, but it's made me want to volunteer for working the games so that my students see me or show up for a game, even if it's for 10 minutes. So, I can be like, hey, I saw you last night. You know what I mean? Like I think that, that, I don't know that the program did that, but I think maybe the program talked

about cultivating those student relationships and that, and I remember Dr. [professor name redacted] saying like, they noticed you with those things. They remember it, you know? So, maybe that stuck with me a little bit more.

Maxie is not an advisor of a CTSO.

Easton:

I think it well, I don't know, because I've always, like from the time I got to [School name redacted] and started teaching, I, I brought my contacts in and built a pretty good support system for the culinary program, just with, with, outside, with the chefs and suppliers around us. I mean, I guess as far as the program, it just kind of opened or taught me that, that you needed to build, you know, build that support around you as far as the parents and the community. So, I don't know if there is a big emphasis on how to interact with the community and stuff. I think that's, I mean, it seems like it's more of a personal thing than a, been a program, been a program thing. No. I mean, it, as far as like what I needed to do, like my, my homework and things like that, it didn't, it didn't, it was doable around normal. My normal work schedule. I mean, there's, I mean, there was times that, you know, I had to do extra stuff after or before or on the weekends, but it wasn't, I didn't have to skip, I didn't have to skip anything.

Kendall:

So, for last year with virtual, it was pretty cool because like parents were able to see what was going on in the classroom. Because they had virtual learning, like when we were talking about financial literacy and financial education and all those things like that and all those things like that you had parents were like listening in the background, like, Hey, did you know, they learned this in school? I didn’t learn this until I was grown. You

know? So just for the parents to be able to actively like, see like this is what my child is learning and wow. Like I didn't get this information until I was grown is like really big in a community. And of course, you know, it would spread. So, when we would have events like fundraisers, the parents were more than willing to help.

So, the one thing, well, the first thing that stood out to me was the FCCLA like the CTSO. Okay. Okay. Granted, when I was in high school, we had, we had, but we only heard about HOSA and FFA and FBLA and things like that. We never really hear about all the other great CTSOs that, that are available to students and what you can get from being a part of them. So that is one thing that stood out to me, especially when I was able to connect with another middle school teacher. She was like national level when it came to FCCLA. So, and I'm not going to lie. It kind of had me like, Ooh, you know, this is a bit much, but it was just exciting to see the students preparing for the competitions and just to see how into they be like, did you see how many points I had? Or, you know, like they, they be ready to fight over these points and why did I get dinged on this? And just to see because like when I was in high school, another thing that stood out is we didn't really have too many.

You had some that were even willing to donate, you know, food. So, yeah. We were always pretty much engaged in any type of activities. Like we were the host, like we had a every Monday we had like a wellness Monday and the principal would do like a, a, an assembly where he may have had guest speakers and my students, we were the hospitality committee. So, I would pull students to like prepare breakfast or have like a continental breakfast for like the speakers and the parents that would come in. So, the

parents were able to see the students be represented and what they actually do in the classroom when they come in too.

Courtney:

So, I've brought in actually this year we've brought in an anesthesiologist from Emory to talk to the program. So that was pretty cool. He was a lot, he was pretty, he was really good for the students. And I think I would have thought to reach out to people like that, just because like, oh, y'all are busy and COVID and overworked and all this. So, but people are receptive and want to help students and want to them to learn that like, Hey, this is our career path that like, you might be interested in. I had a student that was in my third-year class, told me every day, Ms. [teacher name redacted], I'm going to be a surgeon. I'm going to be a surgeon every single day. I'm like, okay, okay. Okay. You know? And he went to the hospital and he saw a spinal tap and passed out like the first five minutes and I had to go in there and I was like, okay. Like they called me in. They were like, oh, so your student passed out in the, OR (Operating Room) he's sitting outside. So, I had to like, go get him. And he was like, so maybe I'm not going to be a surgeon, Ms. [teacher name redacted]. But that whole you know, relationship with our partner is Piedmont Henry. So those guys allowing the students to come in and say, I'd rather you figure out now than after you finish medical school and you're in all this debt. So, things like that are impactful and helpful for the students and the community and growing the program.

We got more involved. We've hosted blood drives before COVID hit and nobody's allowed in the school now. But we hosted blood drives for the community. We did like a health fair, so marketing (class) marketed, it work-based kids came and kind of helped us

with that. And we, they were able to take blood pressures on life and things like that. So, I would say it definitely increased my involvement in the community and in the school.

Chapter Summary

In this chapter, the five participants provided their perspectives and shared their early teaching experiences in CTE during their career transition. The teachers were bound by many facets such as CTE, transition to teaching in Georgia, and their shared experience in the ATCP. In contrast to their similarities, many factors such as demographics, familial status, economics of school and school systems develop differences to create a full picture of their teaching career. The major themes materialized after the coding process of the interviews includes *(a) personal characteristics, (b) professional skills, (c) interpersonal relationships, (d) intra-system, and (e) extra-system*. The findings report provided in-depth descriptions and stories of the teachers' early experiences using the teacher proximity continuum as a framework and in the final chapter the results are explored.

CHAPTER 6

DISCUSSION AND CONCLUSION

Introduction

When the researcher first transitioned to teaching, she went through the Alternative Teacher Certification Program (ATCP) with other Career and Technical Education (CTE) teachers, which sparked her interest in the transitions to teaching from industry. While this dissertation is based on the shared experience and bounded by the ATCP, the research is not a program evaluation and served as an outlet for ATCP certified CTE teachers to tell their story of transition. In this chapter, the researcher delineates the findings from the participants' early teaching experiences related to the research questions using the teacher proximity continuum. Discussions in this chapter include CTE, ATCPs, and the early teaching experiences of transitioning teachers. Other considerations in this chapter included implications, limitations, and recommendations for future research.

Discussion of Findings in Relation to Research Questions

The section of the chapter is dedicated to the discussion of the findings related to the purpose and research questions. The purpose of this qualitative case study explored the early teaching experiences of Career and Technical Education (CTE) teachers who participated in an alternative teacher certification program (ATCP) using the teacher proximity continuum as a framework. There are seven broad teacher certification areas in Career and Technical Education: Agricultural Education, Business Education, Engineering and Technology, Family and Consumer Sciences, Health Sciences, Marketing Education, and Career and Technical

Specialization (formerly known as Trade and Industry Education) (GaPSC, 2020). The participants teach the Engineering and Technology, Family and Consumer Sciences, and Health Sciences.

The ATCP under study prepared teachers from industries such as, but not limited to nursing, automobile mechanics, engineers, athletic training, culinary arts, business, and many other career paths into middle and high school teachers. The previous careers of the participants in this study included a marketing consultant, personal trainer, orthopedic technician, computer programmer, chef, certified nurse assistant, nutritionist, medical assistant, and athletic trainer. Beginning CTE teachers participated in the ATCP entered the classroom for the first time as an educator, holding a nonrenewable or provisional certification from the GaPSC.

This study examined these teachers' early experiences using the teacher proximity continuum, summarized in Table 30. It included eight domains at five levels of functional distance from the teacher. The eight domains included internal, pedagogy, curriculum, program, students, peers, system, and community. The five levels of the Teacher Proximity Continuum are personal characteristics, professional skills, interpersonal relationships, intra-system, and extra-system (Camp & Heath-Camp, 1990). The continuum was developed using the documented experiences of a similar group of CTE teachers who participated in an ATCP. These experiences were recorded during interviews, daily tape-recorded logs, Nominal Group Technique (NGT) sessions, and focus group sessions (Camp & Heath-Camp, 1990).

Table 30

Teacher Proximity Continuum (Camp & Heath-Camp, 1990)

Levels	Domains	Description
Personal Characteristics		
	Internal	Experiences within the teacher
Professional Skills		
	Pedagogy	Evaluation, delivery, short-term planning, and improvement of instruction experiences
	Curriculum	Experiences related to planning course content and preparing instructional materials
	Program	Experiences with long-term planning and implementing the pathway or program
Inter-personal Relationships		
	Students	Interactions with students
	Peers	Interactions with same level co-workers
Intra-system		
	System	Experiences within the educational system that impact the teacher
Extra-system		
	Community	Experiences outside of the educational system

Research Questions

The following are questions that guided this research study:

1. Personal characteristics- Internal
    a. How did participation in the ATCP impact teachers' early teaching experiences associated to internal characteristics?
2. Professional Skills- Pedagogy, Curriculum, Program
    a. How did participation in the ATCP impact teachers' early teaching experiences associated to pedagogy, curriculum, and program?
3. Interpersonal relationship- Students and Peers
    a. How did participation in the ATCP impact teachers' early teaching experiences associated to students and peers?
4. Intra-system- System
    a. How did participation in the ATCP impact teachers' early teaching experiences associated to the system?
5. Extra-system- Community
    a. How did participation in the ATCP impact teachers' early teaching experiences associated to community?

Major Themes and Subthemes

Major themes and subthemes developed in the coding process were guided and organized similar to the teacher proximity continuum. The findings report in chapter 5 is a compilation from the interviews and quick document analysis. Themes included *(a) personal characteristics with subthemes such as internal and personal with previous education, (b) professional skills with subthemes curriculum with content area, pedagogy, and program/pathway, (c)*

interpersonal relationships with subthemes students and teachers/peers, (d) intra-system subthemes are department, district, school, and state requirements including ATCP and edTPA, and (e) extra-system with the subtheme of community with the CTSO.

Personal Characteristics

Research Question- *How did participation in the ATCP impact teachers' internal teaching experiences?*

The personal characteristics level encompassed the internal domain according to the teacher proximity continuum. Through coding, two subthemes emerged from the internal domain as personal with previous education.

Internal

As ATCP participants, these teachers brought their experience from previous careers to the education field. Their previous careers created a unique viewpoint, the teachers used their professional expertise from the industry to develop their teaching philosophies in the classroom. The participants described the internal subtheme as a method that developed their practical teaching skills. The ATCP allowed the teachers to learn the proper techniques and strategies for effective teaching. The participants' findings came to the consensus that the program assisted them with structure, focus, and learner differences and promoted engagement. The ATCP went beyond the fulfillment of GaPSC certification requirements and created better teachers for their respective schools and school systems.

Personal

Personal findings included hardships such as commuting an hour or more, being away from their families and home life, and expenses. The teachers discussed sacrifices of time especially away from children and childcare arrangements in the case of Alyssia, Maxie, and

Easton. Work-life balance also included health in Courtney's experience because she balanced her cancer treatments as well. Time and potential interactions were compromised to attend class for 8-hours per day for ten days during their summer vacation and 3-hour classes one Saturday a month during the fall and spring semester. The fall and spring semester were during the school year that required the teachers to work a minimum of 40 hours as a teacher then commute one Saturday while the teachers also maintained the other coursework from their classes. The teachers were accountable for other duties and responsibilities such as differentiated class work and instruction for their diverse range of learners and encouraged active learning with labs, projects, and activities. Another aspect of teaching included athletic duties such as training and coaching on top the CTSO advisor obligations maintained throughout the school year. Other sacrifices addressed were the financial aspect of tuition, transportation, and lodging expenses. The financial were stated as a burden in consideration to the state pay scale for the early years as a Georgia educator ranges from $35,000- $42,000 before local supplements (GaDOE, 2022c). The COVID-19 pandemic was a major factor in their early teaching experiences as well due to the changed education platforms.

Professional Skills

Research question- *How did participation in the ATCP impact teachers' professional skills?*

The teacher proximity continuum includes pedagogy, curriculum, and program/pathway as domains in the professional skills level. Curriculum was expanded and developed another subtheme titled content area.

Pedagogy

The participates were impacted positively because they learned different instructional strategies to increase student engagement. Student engagement was increased because of the

structure learned such as pieces of effective lesson planning, better questioning (directive-type questions), classroom management, differentiation regarding the students' needs, knowledge levels, and how mold industry experience to the students, and the ability to relate to students with real-world application and popular culture or generational references.

Curriculum/Content area

Since the GaDOE established the standards for each course, the participants stated the ATCP allowed them to insert more ideas to become a facilitator role which provided the students to take ownership of their learning compared to a teacher-centered model. The teacher-centered model was discussed as a one direction of knowledge disseminated through the teacher while the facilitator role is student-centered which flowed, shaped, and accompanied the learning process together between the students and teachers. They also acknowledged the ATCP for organization skills and the development of a curriculum through assignments such as a teaching notebook for at least one course as a blueprint for a course which included pacing guide, syllabus, lesson plans, etc.

Program/Pathway

The participants developed their program or pathway with the methods and strategies needed for differentiation of the standards to fit their learning abilities and maturity. The participants also discussed their program growth and pathway completion with the creation of materials for the courses.

Interpersonal Relationships

Research question- *How did participation in the ATCP impact teachers' interpersonal relationships with their students and peers?*

The two subthemes in this level are students and peers/teachers similar to the teacher proximity continuum.

Students

The teachers applied more importance on the development of relationships with their students. Due to the relationships developed with the students, the engagement of the students increased as well. The ability to see the human in the students and be personable with the students allowed the teachers and students a deeper bond in the classroom. The perspective of relatability to the students also allowed the participants to be more understanding of the students' experiences.

Teachers/Peers

Three of the teachers used this domain to discuss their relationship built based on cross curricular implementation. Participants used the skills taught in the ATCP to assist others with classroom management, curriculum evolution, and shared concepts and topics. Examples included the balance of the educational aspects and kitchen skills between Easton and the other FACS teacher, Kendall brought new ideas to her department and recruited teachers to join take courses in the ATCP, and Courtney overlapped her curriculum with other courses with similar topics in their standards. Alyssia and Maxie did not feel the ATCP impacted this domain, but credited their social skills for the forged relationships with the other teachers.

Intra-system

Research question- *How did participation in the ATCP impact teachers' understanding of their system?*

Based on the teachers' early experiences, other subthemes surfaced under the state requirements domain such as the ATCP and edTPA because these two experiences were influential.

Department

The departments were impacted because more teachers were fully certified by GaPSC and some participants obtained higher degrees. Completion of the certification requirements and higher degrees allowed the department more creditability and increased the abilities within the school. Some teachers were recognized by the administrators, school, and school districts then, therefore, offered awards and more opportunities. The teachers shared the information and skills learned from their time spent in the program with the department teachers. The ATCP allowed the teachers more collaboration with the other teachers to share education methods and resources.

School/School district

Although Easton said the ATCP didn't impact his school or school system, the other teachers stated the ATCP gained experiences to share with school and district. The teachers were encouraged to do more around the school and school district to share their expertise based on the growth received from the ATCP. The distribution of collective ideas included being the pathway lead for the school district and department head for the CTE department in their school. The teachers also received higher evaluations from their administrators which proved their more effective teaching methods.

State Requirements- ATCP/edTPA

Since the rise of the COVID-19 pandemic, the teachers acknowledged some of the impacts were skewed. Because of the pandemic, the ATCP was cut short with the final in-person meeting in February 2020 and traditional school was shut down and forced virtual by the Georgia's governor in March 2020. End of pathway assessments along with other standardized testing was suspended in the 2019-2020 school year and optional in the 2020-2021 school year based on GaDOE. After the participants submitted their edTPA portfolio to Pearson, the GaDOE receded the requirement. While edTPA was described as "a lot" of work which took majority of their time outside of their classroom and certification responsibilities. Each of the participants passed the assessment submitted to Pearson and felt that the edTPA made them stronger candidates compared to other teachers that did complete or pass the assessment. The participants felt slighted by the decision to end the requirement after so much of their personal lives were sacrificed to fulfill the requirement. The edTPA and ATCP assignments were managed by the participants because of the organization and chunking methods used by the instructors to create sizable portions. Other aspects taught in the ATCP were educational technology, materials, and ideas like educational technology, ice breakers, and name cards.

Extra-system

Research question- How did participation in the ATCP impact teachers' connection to their community?

The community domain and subtheme emerged with CTSOs as a major factor in the participants' early teaching experiences.

Community- CTSO

Partnerships with community stakeholders emerged from this domain such as Alyssia's students contract with a local company. Guest speakers and community interactions were important which brought people outside of the education system inside the school and provided the students with real-world application. Virtual learning also helped parents get involved because the parents observed the learning process in CTE. Due increased parent involvement, the teachers received buy in and more value for their courses. Community involvement also increased because the school and surrounding areas invested in the students' education. The teachers also discussed a more active role in their attendance of after school activities through sporting events and CTSO involvement. CTSO involvement included competitions and community service events that benefited the community.

Limitations

The researcher applied multiple methods recommended in the qualitative research area to ensure trustworthiness in the study. While the researcher implemented and executed multiple strategies to reduce limitations, limitations cannot be entirely eliminated. As Creswell and Guetterman (2019) stated the researcher is the instrument in qualitative research. The limits or boundaries of this research study are minimal since the researcher is a Graduate Assistant for the cohort and assists in teaching the courses. The researcher has access to the participants and their information, such as interviews, assignments, documents, and observation evaluations. The only limitation is not being able to interview participants in person due to participants living in different locations in the state of Georgia and the current COVID-19 pandemic. Other limits for the researcher included sampling size and methods not going as planned due to a small number of participants being interested in participating in the study and responding. The researcher used

maximal variation sampling because of the different characteristics and traits within the ATCP participants to create a perspective of different views (Creswell, 2013; Patton, 2015). Limits for the participants could be the participants not being completely honest because the researcher is the Graduate Assistant and co-teaches the courses for the cohort. The researcher's role in data collection is the primary and secondary collector when reviewing documents, assignments, archived observation evaluations, and conducting interviews which overlaps with the duties of being a Graduate Assistant.

Implications

In this section, implications and recommendations for CTE teachers, school administrators, ATCPs, and future research are discussed. The implications are representative of the results and conclusions from this study. After more than thirty years, the framework established by Camp (1990) is still relevant and applied successfully to the teachers' early experiences during the study. The teacher proximity continuum is still an effective model for the ATCP and teacher development. Based on what the participants stated in the study, the ATCP was practical and application of instructional strategies was generally useful due to the alignment with the assignments and requirement guidelines from the GaPSC.

Recommendations

This study served as an opportunity for alternatively certified CTE teachers to share their early teaching experiences. Recommendations below are for the CTE teachers, school administrators, universities and institutions with ATCPs, and future studies. This dissertation focused on the CTE teachers, but the researcher included recommendations for school administrators and the certification institutions because all three work together to produce effective teachers that stay in the education field.

Teachers

The continuum of care employed interventions overtime to bridge the gaps within the school by mentoring toward collaboration for new teachers (Soulen, 2020). Soulen, a school librarian, adapted a common continuum of care from medicine to education. The researcher then moved beyond the school librarian adaptation to apply the continuum of care to new teachers. Aspects of the continuum included (a) engage, (b) empower, (c) partner, and (d) co-teach (Soulen, 2020). The engage intervention required the teachers to assess and provide information such as connecting with at least three other contacts. The empower intervention encouraged mentoring and introduction to identify areas of strength and celebrate success with administrators. The partner intervention builds skills and relations to collaboratively plan and develop lessons. The co-teach intervention puts all aspects together to allow a professional relationship with others in the building to implement the planned lesson. After co-teaching, the teachers can assess, reflect, and discuss the implementation. The incorporation of this continuum allows the teachers the ability to advocate for help and promote their programs.

School administrators

Tatto et al. (2016) accredited education attrition rates to, but not limited to ineffective preparation, life changes, lack of instructional resources, weak school leadership, and conditions related to community poverty resulting in a need for more teachers. Some participants felt as though they were “thrown to the wolves”, therefore, the researcher recommended more support from administrators in the school and school district. New teachers especially teachers seeking alternative certification would benefit from mandatory mentorship programs with a team of assigned experienced teachers before and during the school year. Mentorship would include monthly assistance and unofficial teacher observations from administrators and other teachers

such as the department head and experienced teachers. The CTE department head as a mentor is essential to the transition because as Camp (1990) stated one-fourth of experiences are unique to CTE. Other experienced teachers would provide more instructional strategies and an in-house example of effective teaching. The shared accountability of teacher growth would encourage a shared motivation and decrease the lack of instructional resources and strength the sense of community, and incorporate school leadership in development. Other recommendations for school administrators in the school and school district would be more financial assistance since the participants expressed burdens with finances. A tuition waiver, full guaranteed loan forgiveness, and/or a stipend granted by the school district can alleviate the financial aspect. Administrators could also use alternative certification to recruit experienced industry professional as employment tools and procedures to hire more teachers from underrepresented populations and increase diversity while combatting the teacher shortages.

Universities/ATCPs

Strengths of the ATCPs from Schribner and Heinen's article (2009) is the flexibility of the program encourages teachers from different backgrounds and fills the teacher shortages (Schribner & Heinen, 2009). Since traditional programs have declined in enrollment around the nation, the universities could use online platforms as a recruitment tool for more teachers (Partelow, 2019). The participants discussed the burden of childcare arrangements and the commute; therefore, completely online education programs would relieve the participates from travel requirements. The ATCP of the study has incorporated an online model since the COVID-19 pandemic and continued on an online platform because of the success from the first online cohort.

Future studies

Since teacher transition rates are so high with about half of the teachers that enter the education field leave by year 5, a future study about the reasons why ATCP teachers exit the field could be useful as a preventive method and promote more teacher retention in school systems. Also, another study could be why universities in the nation have reduced amount of education programs while the need for more educators continues throughout the country. Other studies could include the motivation for career transitions to education including why participants become teachers and/or why education was not their first career choices. The researcher would be interested in other sacrifices made by the teachers based on their career transition since the average person in the country changes jobs 10.7 times (Chi et al., 2016). Another research study could potentially be focused on the participants' perceptions of their sacrifices and if they feel the sacrifices are worth the tradeoffs. These suggested studies would add value to the CTE and ATCP fields and would evolve both areas to support teacher growth.

Conclusion

This qualitative case study offered ATCP participants the opportunity for others to hear their voices through narratives based on their shared lived experiences during their transition to education and early teaching career. In this study, the researcher interviewed five CTE teachers about their early teaching experiences in respect to the teacher proximity continuum. These teachers provided their experiences during their early teaching career and incorporated their personal lives, requirements for certification, and education philosophies. Their stories highlighted their transition to education while the personal factors constructed a full view of the teacher as a whole. In sum, the participants' stories emphasized their resilience through career changes, work-life balance, and a full-time collegiate return.

ATCPs were created to combat teacher shortages and produce effective teachers to fill the needs in education. The ATCP in this study guided the teachers to become effective educators in their CTE discipline. Through an exploration of the teacher proximity continuum levels and domains, the researcher developed themes and subthemes based on the teachers' experiences based on the participants' stories and coursework. The ATCP and implications from this study were completed in an effort to improve the quality of teachers. Due to the success of the ATCP participants, the researcher can confidently support the teacher proximity continuum as a relevant philosophy and the ATCP model does produce effective teachers. As an ATCP graduate, the researcher is pleased with the results and discussions fostered from the study. This study further demonstrated that ATCPs are essential for teacher growth because the program stimulated and cultivated teacher success, which ultimately led to success for the students, schools, school systems, and the community. The impact of the teachers also expanded holistically to develop a stronger society for future generations.

References

Adams, Y., (2014). Alternative teacher certification: The politics, the preparation, and the promise of a quality education. *LSU Doctoral Dissertations.*, *1792*. https://digitalcommons.lus.edu/gradschool_dissertations/1792

Advance CTE career clusters. (n.d.). https://careertech.org/career-clusters/

American Association of Family and Consumer Sciences. (2021). *What is FCS?* https://www.aafcs.org/about/about-us/what-is-fcs

American Association of Colleges for Teacher Education. (2021). About AACTE. https://aacte.org/about-aacte/

Amin, M. E. K., Norgaard, L. S., Cavaco, A. M., Witry, M. J., Hillman, L., Cernasev, A., & Desselle, S. D. (2020). Establishing trustworthiness and authenticity in qualitative research. *Research in Social and Administrative Pharmacy*. RSAP, S1551-7411(19)3091-5. Advanced online publication.

Ashraf, E., Sarwar, A., Junaid, M., Baig, M. B., Shurjeel, H. K., & Barrick, R. K. (2020). An assessment of in-service training needs for agricultural extension field staff in scenario of climate change using Borich needs assessment model. *Sarhad Journal of Agriculture*, *36*(2), 427-446. https://doi.org/10.17582/journal.sja/2020/36.2.427.446

Association for Career and Technical Education -ACTE. (2020). *What Is CTE?* https://www.acteonline.org/why-cte/what-is-cte/

Association for Career and Technical Education. (2021a). *Business education division.* https://www.acteonline.org/about/structure/divisions/business-education-division/

Association for Career and Technical Education. (2021b). *Family and consumer sciences education division.* https://www.acteonline.org/about/structure/divisions/family-and-consumer-sciences-education-division/

Bagheri, M., Ali, W. W., Abdullah, M. B., & Daud, S. M. (2013). Effects of project-based learning strategy on self-directed learning skills of educational technology students. *Contemporary Educational Technology*, *4*(1), 15-29.

Beare, P., Torgerson, C., Marshall, J., Tracz, S., & Chiero, R. (2012). Examination of alternative programs of teacher preparation on a single campus. *Teacher Education Quarterly*, *39*(4), 55-74.

Bendassolli, P. F. (2013). Theory building in qualitative research: Reconsidering the problem of induction [50 paragraphs]. *Forum Qualitative Sozialforschung / Forum: Qualitative Social Research, 14*(1), Art. 25, http://nbn- resolving.de/urn:nbn:de:0114- fqs1301258

Blazer, C. (2012). What the research says about alternative teacher certification programs. *Research Services, 1104*(1), http://drs.dadeschools.net

Borich, G. D., (1980). A needs assessment model for conducting follow-up studies. *J. Teach. Educ.*, *31*(3), 39-42. https://doi.org/10.1177/002248718003100310

Bostrom, E., & Palm, T. (2020). Expectancy-value theory as an explanatory theory for the effect of professional development programmes in formative assessment on teacher practice. *Teacher Development*, *24*(4), 539-558.

Bowen, B., Williams, T., Napoleon, L. Jr, & Marx, A. (2019). Alternative certification programs & pre-Service teacher preparedness. *Journal of Technology Education*, *30*(2), 75-89.

Bowling, A. M., & Ball, A. L. (2018). Alternative certification: A solution or an alternative problem? *Journal of Agricultural Education*, *59*(2), 109- 122.

Boyce, C., & Neale, P. (2006). Conducting in-depth interviews: A guide for designing and conducting in-depth interviews for evaluation input. *Pathfinder International*, *2*(2), 1-12.

Boz, Y., & Belge-Can, H. (2020). Do pre-service chemistry teachers' collective pedagogical content knowledge regarding solubility concepts enhance after participating in a microteaching lesson study? *Science Education International*, *31*(1), 29-40.

Bradley, T. R., Woods, A. D., Lewis, C., Young Wallace, J., Bingham, M. J., & Watkins, D. (2019). Comparative case study of a traditional and alternative physical education student teaching experience. *MAHPERD Journal*, *6*(1), 3-11.

Bradshaw, L. K., (1998). *Policy, politics, and contradictions of alternative teacher certification*.

Briggs, J. E., & Zirkle, C. (2009). Perceptions of alternative-licensed career and technical education teachers about teacher mentoring and teacher retention. In Conference proceeding. *Association for Career and Technical Education Research.*

Burak, S. (2014). Motivation for instrument education: A study from the perspective of expectancy-value and flow theories. *Eurasian Journal of Educational Research*, *55*, 123-136. doi:10.14689/ejer.2014.55.8

Camp, W. G., & Heath, B. H. (1989). On becoming a teacher: Vocational education and the induction process (Monograph No. MDS018). Berkeley, CA: The National Center for Research in Vocational Education, University of California, Berkeley.

Camp, W. G., & Heath-Camp, B. H. (1990). The teacher proximity continuum: A conceptual framework for the analysis of Teacher-related phenomena. *Office of Vocational and Adult Education (ED)*, 1–12.

Camp, W. G., & Health-Camp, B. (2007). The status of CTE teacher education today. *Techniques Connecting Education and Careers (J1), 82*(6), 16-19.

Camp, W.G., & Johnson, C.L., (2005) Evolution of a theoretical framework for secondary vocational education and career- technical education of the past century. J.A. Gregson & J.M. Allen (EDS), *Leadership in Career and technical education: Beginning the 21st Century* (29-66), Columbus, OH: University Council for Workforce and Human Resource Education.

Carlson, J., & Daehler, K. R. (2019). The refined consensus model of pedagogical content knowledge in science education. In: Hume, A., Cooper, R., & Borowski, A. (EDS), *Repositioning Pedagogical Content Knowledge in Teachers' Knowledge for Teaching Science.* Singapore: Springer. 77-92.

Carter, S. M., & Little, M. (2007). Justifying knowledge, justifying method, taking action: Epistemologies, methodologies, and methods in qualitative research. *Qualitative Health Research, 17*(10), 1316–1328. https://doi.org/10.1177/1049732307306927

Charmaz, K. (2014), Constructing grounded theory. Thousand Oaks, CA: Sage.

Chi, W., Li, W., Wang, N., & Song, Z, (2016). Can genes play a role in explaining frequent job changes? An examination of gene-environment interaction from human capital theory. *Journal Of Applied Psychology. 101* (7), 1030-1044. doi:10,1037/apl0000093

Childre, A. L. (2014). Preparing special educators highly qualified in content: Alternative route certification for unlicensed teachers in rural Georgia. *Rural Special Education Quarterly*, *33*(1), 23-31.

Chlup, D. T., & Collins, T. E. (2010). Breaking the ice: Using icebreakers and re-energizers with adult learners. *Adult Learning, 21*(3-4), 34-39.

Clandinin, D. J. (2013). *Engaging in narrative inquiry.* Walnut Creek, CA: Left Coast Press.

Cochran-Smith, M., Baker, M., Burton, S., Chang, W. C., Carney, M. C., Fernandez, M. B., Keefe, E. S., Miller, A. F., & Sanchez, J. G. (2017). The accountability era in US teacher education: Looking back, looking forward. *European Journal of Teacher Education, 40*(5), 572-588, DOI: 10.1080/02619768.2017.1385061

Computer Science Teachers Association. (2021). *About CSTA's K-12 Standards*. https://csteachers.org/page/about-csta-s-k-12-nbsp-standards

Corbin, J., & Strauss, A. (2015). *Basics of qualitative research: Techniques and procedures for developing grounded theory.* Thousand Oaks, CA: Sage.

Cox, E. D., Hernández-Gantes, V. M., & Fletcher, J. C. (2015). Student Participation in Career Academies within a School District: Who Participates, What Makes a Difference?. *Career & Technical Education Research*, *40*(1), 11-27. doi:10.5328/cter40.1.11

Creswell, J. (2013). *Qualitative inquiry and research design: Choosing among five approaches* (3rd ed.). Sage.

Creswell, J. W., & Guetterman, T. C. (2019). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research*. Pearson: Saddle River, NJ.

Creswell, J. W. & Poth, C. N. (2018). *Qualitative Inquiry and Research Design: Choosing Among Five Approaches*. Sage: Thousand Islands, CA.

Denzin, N. K. (1989). *Interpretive biography.* Newbury Park: Sage.

Denzin, N. K., & Lincoln, Y. S. (2011). Introduction: The discipline and practice of qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *The sage handbook of qualitative research* (4th ed.) (pp. 1-20). Thousand Oaks, CA; Sage.

Dillard, C. B. (2006) When the music changes, so should the dance: cultural and spiritual considerations in paradigm 'proliferation', *International Journal of Qualitative Studies in Education,* 19:1, 59-76, DOI: 10.1080/09518390500450185

Duruk, U., & Akgun, A. (2020). Using real engagement in the active problem-solving model in teaching science: An interpretive pedagogical content knowledge study of an experienced science teacher. *International Online Journal of Education and Teaching*, *7*(4), 1741-1772.

Eccles, J., Adler, T. F., Futterman, R., Goff, S. B., Kaczala, C. M., & et al. (1983). Expectancies, values, and academic behaviors. *In Achievement and Achievement Motivation*, ed. JT Spence, 75-146. San Francisco: Freeman https://doi.org/10.17582/journal.sja/2020/36.2.427.446

Eccles, J. S., & Wigfield, A. (2002). Motivational beliefs, values, and goals. *Annual review of psychology*, *53*(1), 109-132.

Evan, A. J., Burden, F. F., Gheen, M. H., & Smerdon, B. A. (2013). Explaining Variability in High School Students' Access to and Enrollment in Career Academies and Career Theme Clusters in Florida: Multi-Level Analyses of Student and School Factors. *Career & Technical Education Research*, *38*(3), 211-243. doi:10.5328/cter38.3.211

Family and Consumer Sciences Educators. (2021). *What is FCS?* https://www.fcsed.net/about/about-fcs

Feistritzer, C. E. (2004). *Alternative teacher certification: A state by state analysis 2004*. Washington, DC: National Center for Education Information.

Fetterman, D. M. (2010). *Ethnography: Step-by-step*. Thousand Oaks, CA: Sage.

Firestone, W. A., (1987). Meaning in method: The rhetoric of quantitative and qualitative research. *Educational Researcher*, *16*, 16-21.

Freeman, M. (2017). Modes of thinking for qualitative data analysis. NY: Routledge. ISBN: 978-1-6295-8179-8

Friedrich, D. (2014). "We brought it upon ourselves": university-based teacher education and the emergence of boot-camp-style routes to teacher certification. *Education Policy Analysis Archives*, *22*(2).

Gay, L. R. (1976). *Educational research: Competencies for analysis and application.* Ohio, Bell & Howell Company.

Georgia Business Education Association. (2021). *About us*. http://www.gbea-online.org/about.html

Georgia Department of Education. (2020). *Student enrollment by grade*. https://oraapp.doe.k12.ga.us/ows-bin/owa/fte_pack_enrollgrade.entry_form

Georgia Department of Education. (2021a). *Agriculture education*. https://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/Agriculture.aspx

Georgia Department of Education. (2021b). *Agriculture, food, and natural resources*. https://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/Cluster-AFNR.aspx

Georgia Department of Education. (2021c). *Business, management and administration; Finance; Information Technology*. https://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/Business-and-Computer-Science.aspx

Georgia Department of Education. (2021d). *Science, Technology, Engineering, Mathematics*. https://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/cluster-STEM.aspx

Georgia Department of Education. (2021e). *Information technology career cluster*. https://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Documents/Introduction%20to%20Software%20Technology.pdf?csf=1&e=6BovX0

Georgia Department of Education. (2021f). *Human services- family and consumer sciences*. https://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/Family-and-Consumer-Sciences.aspx

Georgia Department of Education. (2021g). *Health science*. https://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/Healthcare-Science-.aspx

Georgia Department of Education. (2021h). *Marketing career cluster.* https://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/Marketing,-Sales-and-Services.aspx

Georgia Department of Education. (2022a). *Career, technical, and agricultural education career clusters/pathways.* https://www.georgiastandards.org/standards/Pages/CTAE-Career-Clusters-Pathways.aspx

Georgia Department of Education. (2022b). *College and career ready performance index.* https://www.gadoe.org/CCRPI/Pages/default.aspx

Georgia Department of Education. (2022c). *State salary schedule.* https://www.gadoe.org/Technology-Services/Data-

Collections/Documents/CPI%20Documentation/FY2021/FY2021%20Salary%20Schedul S.pdf

Georgia Engineering and Technology Education Association. (2021). *About us*. https://www.mygetea.org/about.html

Georgia Family, Career and Community Leaders of America. (2021). *History of GAFCCLA*. https://gafccla.com/history-of-gafccla

Georgia Professional Standards Commission. (2020). *Steps to become a Georgia teacher.* https://www.gapsc.com/ProspectiveEducator/StepsToTeach/Home.aspx

Georgia Professional Standards Commission. (2021a). *Approved programs leading to certification.* https://www.gapsc.com/EducatorPreparation/ApprovedPrograms/EducationApprovedPrograms.aspx

Georgia Professional Standards Commission. (2021b). *Teaching.* https://www.gapsc.com/Certification/CertFieldsAndEndorsements/teaching.aspx

Georgia Professional Standards Commission. (2021c). *Career, technical and agricultural education.* https://www.gapsc.com/Certification/CertFieldsAndEndorsements/careerTechnicalAgriculturalEducation.aspx

Georgia Tech. (2021). Traditional routes. http://www.preteaching.gatech.edu/traditional-routes

Gess-Newsome, J. (2015). A model of teacher professional knowledge and skill including PCK Summit. In: Berry, A., Friedrichsen, P., & Loughran, J. (EDS), *Re-examining Pedagogical Content Knowledge in Science Education*, New York: Routledge. p 28-42.

Giang, B. T., & Nga, T. T., (2019). Classroom management styles and teacher-student relationship congruency: Its influence on student learning outcomes. *TNU Journal of Science and Technology 199*(06): 11-16.

Gray, K. C., & Walter, R. A., (2001). Reforming career and technical education teacher licensure and preparation: A public policy synthesis. *National Centers for Career and Technical Education.*

Haberman, M., (1994). Preparing teachers for the real world of urban schools. *The Education Forum,* 58(2), 162-168.

Hanover Research, (2018). *Alternative education models and strategies.*

Heath-Camp, B., Camp, W. G., Adams, E., Talbert, B. A., & Barber, J. D., (1992). On becoming a teacher: An examination of the induction of beginning vocational teachers in American public schools. *National Center for Research in Vocational Education,* University of California at Berkeley.

Heilig, J. V., Cole, H. A., & Springel, M. A. (2011). Alternative certification and teach for America: The search for high quality teachers. *Kansas Journal of Law & Public Policy*, *20*(3), 388–412.

Heinen, E. B., & Scribner, J. P. (2007). Bureaucratic discretion and alternative teacher certification: Understanding program variation in Missouri. *Education Policy Analysis Archives*, *15*(13), 1–22

HOSA- Future Health Professionals. (2021). *The history of HOSA.* https://hosa.org/history/

Humphrey, D. C., Wechsler, M. E., & Hough, H. J. (2008). Characteristics of effective alternative teacher certification programs. *Teaching College Record, 110*(1), 1-63.

Jenset, I. S., Klette, K., & Hammerness, K., (2018). Grounding teacher education in practice around the world: An examination of teacher education coursework in teacher education programs in Finland, Norway, and the United States. *Journal of Teacher Education, 69*(2), 184-197.

Jimenez, T. I., Moreno-Ruiz, D., Estevez, E., Callejas-Jeronimo, J. E., Lopez-Crespo, G., & Valdivia-Salas, S. (2021). Academic competence, teacher-student relationship, and violence and victimization in adolescents: The classroom climate as a mediator. *International Journal of Environmental Research and Public Health*, 18, 1163. DOI:10.3390/ijerph18031163

Jones, L. K., & Hite, R. L. (2020). Expectancy-value theory as an interpretive lens to describe factors that influence computer science enrollments and careers for Korean high school students. *Electronic Journal for Research in Science & Mathematics Education*, *24*(2), 86-118.

Joerger, R. M. (2003). A comparison of the impact of teaching events upon the experience of entry-level agricultural education teachers. *Journal of Career and Technical Education, 20(*3).

Joerger, R. M., & Bremer, C. D. (2001). Teacher induction programs: A strategy for improving the professional experience of beginning career and technical education teachers. *National Dissemination Center for Career and Technical Education*. The Ohio State University.

Katsiyannis, A., Zhang, D., & Conroy, M. A. (2003). Availability of special education teachers. *Remedial & Special Education*, *24*(4), 246.

Kearns, L. L. (2011). High-stakes standardized testing and marginalized youth: An examination of the impact on those who fail. *Canadian Journal of Education*, *34*(2), 112-130.

Kiv, A. E., Soloviev, V. N., & Semerikov, S. O. (2018). CTE 2018- How cloud technologies continues to transform education. *Institute of Information Technologies and Learning Tools of NAES of Ukraine.*

Koehler, A., Feldhaus, C. R., Fernandez, E., & Hundley, S. (2013). Alternative certification programs & pre-service teacher preparedness. *Journal of STEM Education: Innovations and Research*, *14*(4), 45-55.

Kula Unver, S., Ozgur, Z., & Bukova Guvel, E. (2020). Investigating preservice mathematics teachers' pedagogical content knowledge through microteaching. *REDIMAT- Journal of Research in Mathematics Education*, *9*(1), 62-87. http://dx.doi.org/10.17583/redimat.2020.3353

Laster, J. F. (n.d.). *Family and consumer sciences: Goals and purposes, history of family and consumer sciences education, issues major trends and controversies*. https://education.stateuniversity.com/pages/1976/Family-Consumer-Sciences-Education.html

Lee, Y., Patterson, P. P., & Vega, L. A. (2011). Perils to self-efficacy perceptions and teacher-preparation quality among special education intern teachers. *Teacher Education Quarterly*, *39*(4), 61-76.

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Thousand Oaks, CA: Sage.

Lincoln, Y. S., & Guba, E. E., (1988). *Criteria for assessing naturalistic inquires as reports*.

Linneberg, M. S., & Korsgaard, S. (2019). Coding qualitative data: a synthesis guiding the novice. *Qualitative Research Journal, 19*(3), 259-270.

Loera, G., Nakamoto, J., Boal, A. L., Wendt, S. J., Beck, C., & Cherry, C. (2016). Growth in Career Academy Students' Experience, Knowledge, and Self-Confidence Related to Health Care Careers. *Career & Technical Education Research*, *41*(1), 13-31. doi:10.5328/cter41.1.13

Lumpkin, A., Achen, R. M., & Dodd, R. K. (2015). Using technology-nested instructional strategies to enhance student learning. *Insight: A Journal of Scholarly Teaching*, *10*114-125.

Mary Frances Early College of Education, (2020). BSEd in Science Education (Biology). https://coe.uga.edu/academics/degrees/bsed-science-education-biology

Mary Frances Early College of Education. (2021). *Degree programs*. https://coe.uga.edu/academics/degrees

Mason, B. A., Hajovsky, D. B., McCune, L. A., & Turek, J. J. (2017). Conflict, closeness, and academic skills: A longitudinal examination of the teacher-student relationship. *School Psychology Review, 46*(2), 177-189. DOI: 10.17105/SPR-2017-0020.V46-2

Merriam, S. B., & Tisdell, E. J. (2016). *Qualitative research: A guide to design and implementation*. Vancouver, B.C.: Langara College.

Mobra, T., & Hamlin, D. (2020). Emergency certified teachers' motivations for entering the teaching profession: evidence from Oklahoma. *Education Policy Analysis Archives*, *28*(109), 1-29.

Moustakas, C. (1994). Phenomenological research methods. Thousand Oaks, CA: Sage.

National Commission on Excellence in Education. (1983). *A nation at risk: The imperative for educational reform*. https://www.ffa.org/agricultural-education/

National Council for Agricultural Education. (2018). *Agricultural education*. https://thecouncil.ffa.org/ageducation/

National FFA Organization. (2019). *Agricultural education*. Cambridge, MA: USA Research.

Newton, K. J., Fornaro, E., & Pecore, J. (2008). Program completion and retention of career changers pursuing alternative teacher certification: who drops, who commits, and why? *Journal of the National Association for Alternative Certification*, *15*(1), 1-21.

Nichols, S., & Berliner, D. (2008). Testing the joy out of learning. *Educational Leadership*, 65(6), 14-18.

O'Leary, Z. (2014). *The essential guide to doing your research project*, (2nd ed.). Thousand Oaks, CA: Sage Publications, Inc.

Partelow. L. (2019). What to make of declining enrollment in teacher preparation programs. *Center for American Progress*.

Patton, M. Q. (2015). *Qualitative research and evaluation methods*, (4th ed.). Thousand Oaks, CA: Sage.

Popham, J. (2003). The truth about testing. *Association for Supervision and Curriculum Development.*

Prasad, P. (2018). *Crafting qualitative research: Beyond positivist traditions*. Second Edition. New York: Routledge.

PSC Pulse. (2009). *Non-traditional teacher preparation programs are redesigned.* https://www.gapsc.com/Commission/policies_guidelines/Downloads/GaPSC_Pulse_Spring.pdf

Quigney, T. A. (2010). Alternative teaching certification in special education: Rationale, concerns, and recommendations. *Issues in Teacher Education*, *19*(1), 41-58.

Riessman, C. K. (2008). *Narrative methods for the human sciences.* Thousand Oaks, CA: Sage.

Saldaña, J. (2015). *Thinking qualitatively: Methods of mind*. Thousand Oaks, CA: Sage.

Saldaña, J. (2016). *The coding manual for qualitative researchers*. Thousand Oaks, CA: Sage.

Sales, B. D., & Folkman, S. (2000). *Ethics in research with human participants.* Washington, DC: American Psychological Association.

Sarkees-Wircenski, M., & Scott, J. L. (2003). *Special populations in career and technical education*. Homewood, IL: American Technical Publishers.

Sawchuk, S. & Burnette II, D. (2016). Law could spur changes in teacher requirements. *Education Week*, 35(15).

Scott, J. L. & Sarkees-Wircenski, M. (2008). *Overview of career and technical education*. United States of America: American Technical Publishers, Inc.

Scott, L. A. (2016). Where are all the Black male special education teachers? *Penn GSE Perspectives on Urban Education*, *13*(1), 42-48.

Scribner, J. P., & Heinen, E. (2009). Alternative teacher certification: A program theory analysis. *Teacher Education Quarterly*, *36*(2), 179-197.

Serpell, Z. & Bozeman, L. A. (1999). Beginning teacher induction: A report on beginning teacher effectiveness and retention. *The National Partnership for Excellence and Accountability in Teaching, Washington, DC.*

Shulman, L. (1987). Knowledge and teaching: Foundations of the new reform, *Harvard Educational Review*, 57(1), 1-23, https://doi.org/10.17763/haer.57.1.j463w79r56455411

Sicelo, I. D., & Huang, W. C. (2020). Towards intensive co-operated agribusiness: A gender-based comparative Borich needs assessment model analysis of beef cattle farmers in Eswatini. *Agriculture, 10(96), 96.* https://doi.org/10.3390/agriculture10040096

Simola, H. (2005). The Finnish miracle of PISA: Historical and sociological remarks on teaching and teacher education. *Comparative Education 41*(4), 455-470.

Sims, C. (2010). Increasing the minority CTE teacher pipeline. *Techniques: Connecting Education and Careers*, *85*(1), 26-29.

Smalley, S. & Rank, B. D. (2019). Preservice teacher perceptions of the role of an agriculture teacher during their early field experience. *Journal of Agricultural Education, 60*(2), 99-108. DOI: 10.5032/jae.2019.02099

Soulen, R. R., (2020). The continuum of care. *Knowledge Quest, 48*(4), 36-42.

South Dakota State University. (2021). *Family and consumer sciences education B.S.* https://www.sdstate.edu/programs/undergraduate/family-consumer-sciences-education-bs

Spatarelu, E. (2019). Beginner teacher and early education. *Journal of Education Studies.* https://ssrn.com/abstract=3785773

Stake, R. E. (2006). *Multiple case study analysis.* Guilford Press.

Stake, R. E. (1995). *The art of case study research*. Thousand Oaks, CA: Sage.

Stefaniak, J. E., & Tracey, M. W. (2015). An exploration of student experiences with learner-centered instructional strategies. *Contemporary Educational Technology*, *6*(2), 95-112.

Stephens, G. (2015). Uncertified and teaching: Industry professional in career and technical education classrooms. *International Journal for Research in Vocational Education and Training*, *2*(2), 120- 135.

Stone III, J. R., (2017). Introduction to pathways to a productive adulthood: The role of CTE in the American high school. *Peabody Journal of Education, 92*(2), 155-165, DOI: 10.1080/0161956X.2017.1302207

Tamin, S. R., & Grant, M. M. (2013). Definitions and uses: case study of teacher implementing project-based learning. *Interdisciplinary Journal of Problem-Based Learning. 7*(2). 72-101.

Tamir, P. (1988). Subject matter and related pedagogical knowledge in teacher education. *Teaching and Teacher Education*, *4*(2), 99-110.

Tamir, E. (2010). Capital, power and the struggle over teacher certification. *Educational Policy*, *24*(3), 465-499. https://doi.org/10.1177/0895904809335105

Tatto, M. T., Savage, C., Liao, W., Marshall, S. L., Goldblatt, P., & Contreras, L. M. (2016). The emergence of high-stakes accountability policies in teacher preparation: An examination of the U.S. Department of Education's proposed regulations. *Education Policy Analysis Archives*, *24*(21).

Teach for America. (2020). *The History of Teach for America.* https://www.teachforamerica.org/what-we-do/history

Teachers of Tomorrow. (2021). *About us.* https://www.teachersoftomorrow.org/company

Tracy, S. J. (2010). Qualitative quality: Eight “big tent” criteria for excellent qualitative research. *Qualitative Inquiry, 16*(10), 837-851.

University of Georgia- Office of Research, (2019). Human Research Protection Program-Institutional Review Board (IRB). https://research.uga.edu/hrpp/irb/#1533919485287-70b3542b-bac6

U.S. Bureau of Labor Statistics. (2018). *Career and technical education teachers.* https:www.bls.gov/ooh/Education-Training-and-Library/Career-and-technical-edcuation-teachers.htm

U.S. Department of Education-Institute of Education Sciences, N.C.E.S. (2008). Table H114. Percentage distribution of grade 9 through 12 public school and percentage distribution of their main teaching assignment, by selected school characteristics: 2008. https://nces.ed.gov/surveys/ctes/tables/h114.asp

U.S. Department of Education-Institute of Education Sciences, N.C.E.S. (2008a). Table H115. Number of grade 9 through 12 public school teachers, average years of teaching experience, and percentage distribution of years of teaching experience, by school type and main teaching assignment: 2008. https://nces.ed.gov/surveys/ctes/tables/h115.asp

U.S. Department of Education-Institute of Education Sciences, N.C.E.S. (2008b). Table H118. Average age of grade 9 through 12 public school teachers and percentage distribution of teachers; age, by school type and main teaching assignment: 2008. https://nces.ed.gov/surveys/ctes/tables/h118.asp

U.S. Department of Education-Institute of Education Sciences, N.C.E.S. (2008c). Table H119. Percentage distribution of grade 9 through 12 public school teachers' sex and race/ethnicity, by school type and main teaching assignment: 2008. https://nces.ed.gov/surveys/ctes/tables/h119.asp

U.S. Department of Education-Institute of Education Sciences, N.C.E.S. (2008d). Table H120. Percentage distribution of grade 9 through 12 public school teachers who entered teaching through alternative certification, percentage who were "highly qualified," and percentage distribution of teachers' type of certification, by school type and main teaching assignment: 2008. https://nces.ed.gov/surveys/ctes/tables/h120.asp

U.S. Department of Education-Institute of Education Sciences, N.C.E.S. (2008e). Table H121. Percentage distribution of grade 9 through 12 public school teachers' highest educational

attainment, by school type and main teaching assignment: 2008. https://nces.ed.gov/surveys/ctes/tables/h121.asp

U.S. Department of Education-Institute of Education Sciences, N.C.E.S. (2015). *Teacher turnover: Stayers, movers, and leavers*. https://nces.ed.gov/programs/coe/indicator/slc

U.S. Department of Education-Institute of Education Sciences, N.C.E.S. (2018a). *Characteristics of public school teachers who completed alternative route to certification programs*. https://nces.ed.gov/programs/coe/indicator/tlc

U.S. Department of Education-Institute of Education Sciences, N.C.E.S. (2018b). Table 7.1. Test requirements for initial certification of elementary and secondary teachers, by type of test and state: 2017 and 2018. https://nces.ed.gov/programs/statereform/tab7_1.asp

U.S. Department of Education-Institute of Education Sciences, N.C.E.S. (2021a). *Characteristics of public School teachers*. https://nces.ed.gov/programs/coe/indicator/clr

U.S. Department of Education-Institute of Education Sciences, N.C.E.S. (2021b). Table 209.26. *Percentage distribution of teachers in public elementary and secondary schools, by school locale and selected teacher characteristics: 2017-2018*. https://nces.ed.gov/programs/digest/d19/tables/dt19_209.26.asp

U.S. Department of Education- Office of Innovation and Improvement. (2004). *Alternative Routes to Teacher Certification.*

Van Manen, M. (2014). *Phenomenology of practice: Meaning-giving methods in phenomenological research and writing.* Walnut Creek, CA: Left Coast Press.

Walter, R., & Gray, C. (2002). Teacher preparation and licensure in career and technical education: A public policy analysis. *Journal of Vocational Education Research, 27(1)*, 127-149.

Wigfield, A., & Cambria, J. (2010). Expectancy-Value Theory: Retrospective and Prospective. *The Decade Ahead: Theoretical Perspectives on Motivation and Achievement*. Bingley, 35-70 UK: Emerald Group Publishing, B.C.

Wolcott, H. F. (2008). Ethnography: A way of seeing. Lanham, MD: AltaMira.

Woods, J. R. (2016). Mitigating teacher shortages: Alternative teacher certification. *Education Commission of States.*

Workforce Education. (2020). Workforce Education Concentrations. https://coe.uga.edu/academics/concentrations/workforce-education

Yang, Y., & Mindrila, D. (2020). Probing the underlying structure of modern expectancy-value theory in multicultural education: A Basyesian exploratory factor analysis. *International Journal of Educational Psychology*, 9(1), 55-81.

Yin, R. K. (2014). *Case study research: Design and methods.* London, England: Sage Publication.

Yin, R. K. (2018). *Case study research and applications: Design and methods.* Los Angeles, CA: Sage.

Yin, J., & Partelow, L., (2020). An overview of the teacher alternative certification sector outside of higher education. *Center for American Press.*

Zirkle, C., Jeffery, J., & Shrewe, L. (2019). A longitudinal study of alternatively licensed career and technical teachers. *Career and Technical Education Research*, 44(1), 23-39.

Appendix A

IRB Approval

UNIVERSITY OF GEORGIA

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Human Research Protection Program

EXEMPT DETERMINATION

November 15, 2021

Dear Joyce Adams:

On 11/15/2021, the Human Subjects Office reviewed the following submission:

Title of Study:	ALTERNATIVE CERTIFICATION PROGRAM PARTICIPANTS DETAIL EARLY TEACHING EXPERIENCES USING THE TEACHER PROXIMITY CONTINUUM AS A FRAMEWORK
Investigator:	Joyce Adams
Co-Investigator:	Alexis Williams
IRB ID:	PROJECT00004871
Funding:	None
Review Category:	Exempt 1, 2(ii)

We have determined that the proposed research is Exempt. The research activities may begin 11/15/2021.

Since this study was determined to be exempt, please be aware that not all future modifications will require review by the IRB. For more information please see Appendix C of the Exempt Research Policy (https://research.uga.edu/docs/policies/compliance/hso/IRB-Exempt-Review.pdf). As noted in Section C.2., you can simply notify us of modifications that will not require review via the "Add Public Comment" activity.

A progress report will be requested prior to 11/15/2026. Before or within 30 days of the progress report due date, please submit a progress report or study closure request. Submit a progress report by navigating to the active study and selecting Progress Report. The study may be closed by selecting Create Version and choosing Close Study as the submission purpose.

In conducting this study, you are required to follow the requirements listed in the Investigator Manual (HRP-103).

Sincerely,

Jennifer Freeman, IRB Analyst
Human Subjects Office, University of Georgia

Appendix B

Permission to use Figures/Tables Email

Dear Source,

Hello, my name is Alexis Williams and I am a Ph.D student in the Workforce Education program at the University of Georgia. I am contacting you to request your permission to use your figures/tables in my doctoral research titled: Alternative Certification Program Participants Detail Early Teaching Experiences Using the Teacher Proximity Continuum as a Framework. The purpose of this qualitative case study is to explore the early teaching experiences of Career and Technical Education teachers who participated in an alternative certification program during their early years of their teaching careers.

The figures/tables requested includes: CAP and Georgia Tech

Thank you so much for your support and data!

Kindly,

Alexis Williams, Ed.S

Appendix C

Georgia Tech Permission

Re: Permission to use Figure

To: ALEXIS KELSEY WILLIAMS

certification routes and flow ...
72 KB

[EXTERNAL SENDER - PROCEED CAUTIOUSLY]

Hi Alexis,

You're more than welcome to use them! I've attached the original document, which I'm sure will change as certification rules continue to morph.

Best,
Susan

Susan P. Belmonte, M.Ed. (she/her)
Pre-Teaching and Pre-Graduate Advisor
Pre-Graduate & Pre-Professional Advising (PGPP)
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To make appointments, use Advisor Link. (Advisor Link help)
Weekly virtual drop-in hours: Mon: 8:30 - 9:30 and Th, 3:00 - 4:00
at https://bluejeans.com/4007039561

Georgia Tech Pre-Graduate and Pre-Professional Advising

Georgia Tech Center for Education Integrating Science, Mathematics & Computing

Appendix D

Full Transcript for Dr. Camp and Dr. Heath-Camp

Researcher (00:01):

Okay, there we go. All right. Oh, and I did not even say my name. I'm so sorry. I am Alexis Williams, my elevator. That's my elevator speech. Like Dr. Adams says like, give the quick nitty gritty of it, but I'm excited to be here. And I have a lot of, I have some questions, but a lot of it is very open just to hear what you all have to say about the continuum and education as it's going on right now. So, what do you all want to start with?

Dr. Camp (00:40):

Well, how do you plan to use the teacher proximity continuum?

Researcher (00:45):

So, I plan to do a qualitative, either qualitative interview or either a case study with our teachers basically. And I have a little PowerPoint, but I, if, if that's appropriate or not, I don't know. But so, I'm interviewing them to find out how the, how balancing a new position being in the first three years of teaching because in Georgia, you have to be certified by that third year, by the end of the third year. So, balancing being first three years of teaching, balancing, going back, going back to the school, to complete this program as a full-time student, and then also the home life work life balance, all those things in one, because as being someone that went through it, you know, that's one of the things, you know with alternative certification programs, they kind of don't get the respect.

Researcher (01:48):

There's a lot of misconceptions. That's what led me to be interested in this study in the first place in the program. Because even before I became a graduate assistant was the misconceptions of people that are certified. Alternatively, they just think, Oh, because you did it in a year or two years, it's not the same, or it's not the same as a four-year program. Like it's not the same time-wise, but the program is intense. You're still learning those skills, those, those concepts, you're still learning all those things just in an accelerated amount of time. So that's what influenced me to study it. And just also putting on to say within that year, they're transitioning from an industry majority of the time. And then, so they have that industry, that content knowledge, but then trying to apply the educational skills, the pedagogy. So just making, so that's, that's pretty much it just them focusing on their experience, balancing life and what they, what they experienced. So not a program evaluation is not at all, has to do it. Just the program is a piece because that is a, a level is this is a stressor, that's a current occurring.

Dr. Camp (03:14):

Okay. what do you anticipate being able to use the results of your study to do?

Researcher (03:21):

So, just mainly tell us, tell the, tell the stories or the perceptions or the experience of what an alternative certification certified teacher goes through, because especially with in Georgia, well, this has changed, it's shifted, but the cohort that I will be studying or, or interviewing is, that's the, that's the, that cohort went through. Okay. Certification taking the GACE, which is the content the content tests. And then they took, it took EdTPA. If you're familiar with EdTPA, with the stressor alone, alone, you know, so a lot of them to the EdTPA. So, all these different

things, just telling that experience of becoming certified in Georgia as someone not as an undergrad who is going to school full time, coming home, you know, doing homework or working a part-time job, but someone that's maintaining a full-time job, a full-time curriculum load and a full-time program because CTAE is, and those programs and those pathways. So, someone doing all these things and then still trying to balance life

Dr. Camp (04:38):

Well Dr. Heath-Camp and I have both worked together and in and separately with a lot of alternative certification teachers over the years, as well as the traditional teacher education programs. So, I can appreciate the observations that you've made, because I think that those have not changed in the last 30 years. Have you seen a copy of the paper that we originally presented? Okay. That's, that's got the model anything good. We did not set out to generate a model. What we set out to do was a qualitative study to find out what teachers went through during their initial years of transitioning into, into the classroom as a teacher. And the model kind of emerged from our initial analysis. As you know, if you, if you do qualitative research, one of the, one of the fundamental things you do is, is search for themes that kind of organize your thinking about the massive amounts of data that you've collected.

Dr. Camp (06:06):

And so, this thing came out of our analysis of the original qualitative data that we collected, and we collected it in a number of ways. If you read the paper and I'm sure that you have by now, we actually followed up first-year teachers for three years. And this thing came out in the first year of the at the end of the first year of the study. And what happened was as we were, as we were doing a card sort, essentially, which is the old fashioned way of doing it before, before the new

qualitative data analysis programs came out in the, in the nineties you would take items that you would pull out and put them on a card or a slip of paper, and then you'd sort them physically sort them into piles that seemed alike.

Dr. Camp (07:06):

And, and then what you do is you you'd look at that pile and say, okay, what is this pile? What does it represent? And that's where this model came from. We, we sorted it into essentially one, two, three, four, five, six, seven, eight, eight piles. And it wasn't intentional. We didn't expect it. We expected something, but then when we got the piles laid out and of course we went through several iterations until we could finally agree on what the piles were the, the names that we called personal characteristics or, or domains, rather the items that we, we initiated that we eventually labeled as domains. Those were the piles. And so, we looked at it further and said, you know, what's interesting is consistent with the theoretical frameworks that we were operating from. These look like they are at different conceptual distances from the teacher, and there were some internal characteristics. And then you got all the way up to the, to the broader community. And it became obvious that yeah, there were domains, but their domains were at different functional distances from, from the teacher. And so that's where the model

Dr. Camp (08:40):

You're going to use this study to help categorize the data to analyze the data.

Researcher (08:47):

Yes, sir. I'm actually going to ask questions on my research questions and just questions about each of the levels, each of the levels, namely you know, like how and of course my questions are a work in progress, just a disclaimer, but like how, for instance how did, how, what, like, how

did the program affect or impact your personal, personal characteristics or you internally, so, or how did the program, and it's not a program evaluation and I, and I, and of course, I'm, I'm right now in, in doing my comprehensive exam. So, I have, one of my questions is like a is a pilot study. So, I'm going to rework the questions and figure out how it needs to be worded so that it doesn't come off like a program evaluation, but the program is impacts them. But how did, how did the program impact their professional skills with that pedagogy, the curriculum and the program?

Researcher (09:59):

How, how did PACTE, or how did the alternative certification impact those personal skills and how did the, the alternative certification impact those interpersonal relationships with your students and your peers? How did the alternative certification impact the intra-system with your school system and then your school system your school in general, even the Georgia department, your standards or interaction with your standards, the department of education, and then how did the alternative certification program impact your extra, extra-system with like the community outside of the system? Were you able to, because a lot of sacrifices are made because you have homework, you have class you're working 40, 50, 60 hours in a classroom, and then you're going home and having to do these assignments or come to [city redacted] on a Saturday. And that, that causes sacrifices to transition from an industry that you've been in. And maybe you're able to clock in clock out and go home. And that's it come into education where you can't just clock in and clock out. You go to the school, you work, sometimes you take work home with you, you do lesson plans, you grade papers at home, like all these different things, how those, how that, how that impacted you and your experience at this time,

Dr. Camp (11:36):

Are you, are you going to be looking at the traditional teacher education graduates as well, or is this strictly on alternative certification? Okay. Okay. There's not a lot that I can tell you. We used it over and over to analyze data to get categorized data. We categorize not only qualitative data, but we even were able to categorize quantitative data using, using the model for later studies. Let's see. Okay. So, my wife wants to know what do you, what would you like from us at this point?

Researcher (12:23):

Okay. of course, so a few of the questions have been answered, but what so one, one of my, one of my questions right now is, so with the changes in society and education, do you think that the domains and the levels would stay the same based on the changes in the education right now?

Dr. Heath-Camp (12:43):

Oh, wow. That's a tough question. I, hi, I'm not really qualified to answer that, but maybe you can with your study, if you find that that it doesn't work anymore, you can generate your own model.

Researcher (13:02):

Awesome. And then the next question is do you think there's anything that we need to add to our, to this study or our alternative certification program in general, any like recommendations that you have going on based on the evidence that you

Dr. Camp (13:23):

That's, that's way beyond my pay grade. I'm afraid at this point, I've been retired from Cornell for 11 years. And so, as Betty and we've been retired from Virginia tech even longer than that. So, this study was 30 years ago. The do you have your research questions?

Researcher (13:49):

I do now. Can you see a PowerPoint? Yeah, I can. Okay, awesome. So again, like I said, I need to, I need to work on them. Of course.

Dr. Camp (14:26):

Well, yeah. What you have is, is five, very nice dissertations.

Researcher (14:47):

So, do you think I should just focus on one?

Dr. Camp (14:52):

If, if you were my graduate student, I would be telling you to think about how you could pair this down some, but you can't answer broad questions by paring down your research. If you're going to use the model, what you are here as, as a guide for your questions. I think that works nicely. But those, you've got an awfully big study there. I'm assuming that Dr. Adams has, has reviewed these already, although she says, they're good then by golly, they're good. I think a lot of her,

Researcher (15:49):

Yes. And she thinks and speaks very highly of you too. So, if I were your graduate assistant, what, or if you were to do this study, which ones, which research questions, or you said, like how it's five separate things, which ones would, would you focus on?

Dr. Heath-Camp (16:08):

My question is what does she really want to know?

Dr. Camp (16:12):

Uh I'm, I'm translating from my wife over here, who has her, her microphone off. What is it that you really want to know?

Researcher (16:20):

I really want to know their experience in the program their experience of maintaining a social, their personal life transitioning to a brand new job in education, because education has so many requirements and so many expectations that like, like one of the articles is like, they handed me a key and said, here you go.

Dr. Camp (16:44):

Yeah, I remember that one.

Researcher (16:47):

That's what I mean, because I know I've been there. I've been handed a key and I work at, I worked at DFACS and then I became a FACS teacher and it was like, here you go. And I was like, how do I? Right. Okay. So, what do I need on a syllabus where do I find the standards? Like

all those different things just their experience and what goes on, because I just, I just want to know their experience and the continuum helped me place, put it with different things. And it like, in those, in those categories to say like, yes, it was in, it was internal, but it was an internal strife. Then we have keeping myself motivated, trying to do everything. Then we have the pedagogy, the curriculum and the program. These are things that the program definitely helped me with. Yes, it was stressful to do these assignments for the first time.

Researcher (17:48):

And, but I like the benefit is, is greater than and because I know, I know not to toot my own horn, but there are some, there are some traditionally certified, traditionally prepared teachers that I can write objectives around. I can write lesson plans around them. I can do circles around them and they actually did four years in a program, but, you know, misconception is that, you know, they just threw us a certification. And then how did it affect your, your, your ability to build relationships? Because that's one of the important things, and then even their ability to work in this system, their department of school, or even the, the, the district as a whole, and then community. Because again, like I said, there are a lot of sacrifices that have to be made. Like you can't go to the game. Sometimes you can't do all these things because you're balancing becoming a full-time teacher, working all those hours, going to school and just personal life. So, I just,

Dr. Camp (19:03):

Excuse me, I'm looking at this first question. How did the alternative teacher certification program impact teacher's internal teaching experiences? I'm not sure that's the question that you're really asking. Excuse me. One, I think you're asking is how did it impact them as an individual how did it, how did it impact the teachers on a, on a personal basis as individuals?

And so, what's, you're going to be getting at, is, did, did they change anything about their own perceptions of themselves? Because their internal teaching experiences will come out in, in the later ones. I like the other, the other questions.

Researcher (19:58):

Okay.

Dr. Camp (20:02):

You get down to the intra system question,

Researcher (20:13):

She said,

Dr. Camp (20:14):

Are you, are you looking at how they understand their system or how they interact with their system?

Dr. Heath-Camp (20:22):

How does it impact each one of these things that we should go into?

Dr. Camp (20:31):

You need to turn on your microphone so she can hear you just not your speaker.

Researcher (20:42):

Yes, ma'am.

Dr. Heath-Camp (20:43):

Okay. I go here to study anyway, as I said, alternative teacher education, problem impacts different things here, right? Yes.

Researcher (21:07):

Yes, I am.

Dr. Heath-Camp (21:14):

Just a second. So, thank you. In terms of how are you going to determine the different things that be different things in the alternative teacher certification program? How are you going to interpret that as to how it affects the teachers internal teaching experiences? Does that make any sense?

Researcher (21:46):

Yes, and I like Dr. Camp said, I need to rework that first one. Because I do want to know what's going on with them internally, how internally they process the, the program just their experiences, whether negative positive. Was it stressful, was what, what happened inside of them? What kind of experiences they had internally, especially when it comes to time management just maybe, maybe they're overwhelmed or maybe they were cool as a cucumber and they're ready to rock and roll when they got that key handed that key and said, go like, so how internally did they process or their experience, or even how did they react to being handed a key and told go, or handed the key told go, and then also register for this full-time program to be certified. So, like, like Dr. Camp said, just putting that impact as individuals, like, how did it,

how did it internally impact them as an individual or did impact, their motivation? Did it impact them internally?

Dr. Heath-Camp (23:09):

It seems like you'd have to come up with things about, items about the alternative teacher certification program and look at it, and then you'd have to have the internal teaching experience and do some kind of impact between the two. And I, I, what I'm trying to figure out is what components in the alternative teacher certification program, or you're going to be related to the internal teaching experiences. And if that's true for each one of these, I guess I'm looking at what are you doing with the alternative teacher certification program comparing it to national skills and relationships with students and parents.

Researcher (24:08):

Okay. Okay. Yeah, those are good thoughts. Okay. Let me think about that though, I guess, because that's the shared experience. You're right. That's a thought. Okay. Thank you.

Dr. Heath-Camp (24:44):

Then making sense to you. Yes, it does. I'm writing it down now. I think this is my last question.

Researcher (25:00):

Um if you did the research now, how would you use the continuum? Oh, I think you're on mute. You're both on mute.

Dr. Camp (25:25):

Our response was the same way we did it before. I'm not sure. I think I might try something interesting. I might at least brainstorm about using a matrix approach where you go across the top with these categories here pedagogy, curriculum program, internal students, peers, et cetera, et cetera, the domains, and then go down the side, or you could reverse that of course, with aspects or components of the alternative certification program and come up with a research question, not a research question, but a leading question in the interviews that would approach each of the cells.

Dr. Camp (26:28):

How many interviews are you going to do? How many, how many subjects are you going to have?

Researcher (26:38):

Three.

Dr. Camp (26:38):

You're going to be pretty well in depth then, if, if were, if I were doing this, I might think in terms of, and, focus, or consider using it, you know, at your own choice, but an interesting way to provide some, some validation for what you're doing is to use these as one, one set of characteristics across another set of characteristics of the alternative certification program. There are undoubtedly classroom things that you do with it. There are undoubtedly observation things that you do with it. There are undoubtedly, having people come in and, and evaluate your instruction, and you're getting feedback from them. You might look at those as the other axis of a

matrix to give you some guidance as to what questions to ask them that will fill in that cell. But that would, that would give you some guidance for substance.

Researcher (27:54):

I love it. Thank you so much. And then, so for the most part, you two answer all of my questions in the introduction, well, when we first started but do you have any questions for me?

Dr. Camp (28:13):

I've already asked my questions. Okay. I wish you luck on this. Please share the results of your research with us if you will.

Researcher (28:25):

Yes, sir. I sure will.

Dr. Camp (28:32):

Betty said she would be interested in seeing your interview questions. Okay.

Researcher (28:38):

I don't know. They're on this one. Why did it make today? Oh, okay. Yeah. Okay. Sounds good. Thank you so much again, for meeting with me and talking to me, I really enjoyed it.

Dr. Heath-Camp (28:57):

Well, if you need to get back with us.

Researcher (29:00):

Okay. Thank you so much, Dr. Heath-Camp and Dr. Camp. I loved it. And again, I feel like I had a fan sighting. I hear a lot about you Dr. Adams seeks very highly about you guys. And I'm very excited. Thank you.

Dr. Camp (29:21):

Good to meet with you. Give Elaine our love.

Researcher (29:24):

Yes, I sure will. Thank you so much. Okay. Bye. Have a great day.

Dr. Heath-Camp (29:30):

Bye-Bye.

Appendix E

Pilot Study Results

Kenya

Kenya is a Business education teacher in a rural, southwest Georgia county on the Georgia and Alabama border. She teachers the Business Management and Administration Career Cluster and Finance Career Cluster. The Business and Technology Pathway includes (a) Introduction to Business and Technology, (b) Business and Technology, and (c) Business Communications. The Finance Services Pathway includes (a) Introduction to Business and Technology, (b) Financial Literacy, and (c) Banking, Investing, and Insurance. In her high school, she is the only full-time CTE teacher. There are two part-time instructors that teach on campus from a local Georgia technical school. The part-time programs at her high school are Marketing and Criminal Justice.

This participant began the ATCP between the end of her first-year teaching and before her second-year teaching. Her educational background includes a Bachelor's degree and a Master's of Business Administration degree, both in Healthcare Administration from Albany State University. Previous work history includes Healthcare Administration and Marketing as a Multimedia executive for a major newspaper. The main motivation for leaving the industry and entering education was her mother's influence as a retired teacher and she also hoped to achieve the goal of being able to spend more time with her young daughter. Initially, Kenya joined the ATCP as a non-degree student which is a student that holds a postsecondary degree and only wants to obtain the teaching certification from the GaPSC. During the summer, she reconsidered obtaining a degree based on the advantages that were presented to her and she applied for the

Educational Specialist degree program to expand her knowledge and certification level higher than her Master's degree.

Rose

Rose is a Family and Consumer Sciences teacher in a rural, south central high school in Georgia. She teaches the Nutrition and Food Science pathway that includes the courses Nutritional Wellness, Food for Life, and Food Science. Her school's CTE department pathways include an Education and Training teacher, two Government and Public Administration- Army JROTC teachers, two Business and Computer Science teachers, an Agriculture, Food and Natural Resources teacher, a Health Sciences teacher, a Marketing teacher, and an Arts, A/V Tech and Communications teacher. The local technical school provides additional courses such as (a) Construction, (b) Emergency Medical Responder, (c) Nurse Aide, (d) Transportation, Distribution, and Logistics, and (e) Metals Technology.

As a previous stay-at-home mother, Rose choose to return to the workforce full-time as a Family and Consumer Sciences teacher. Rose obtained her undergraduate degree from the University of Georgia in Family and Consumer Sciences, with her key focus of study being Child and Family Development currently named Human Development and Family Sciences. Over the years, Rose worked as a part-time instructor and owned a small embroidery and digitizing company while being a full-time stay-at-home mother. She credits her mother's influence as a teacher as motivation for becoming a teacher. She also has two daughters in the sixth and ninth grade. Rose applied as a Master of Arts in Teaching student and began the program the summer between the end of her second-year teaching before starting her third-year in the classroom.

Results

The researcher uses the different levels and domains of the teacher proximity continuum as themes to classify of the ATCP's impact on teacher development:

Level 1: Personal characteristics- Domain 1: Internal

Kenya: As a first-year teacher, she felt like she was "thrown to the wolves" because she had to "figure out things out by yourself". Kenya confessed that she did not want to return to the classroom after her first year, but after attending the ATCP during the summer she developed a different outlook and internally changed her mindset and attitude about teaching. The ATCP also allowed her to gain structure and instructional strategies to apply to the classroom. Kenya attributed her increase in classroom management and organization as an internal progression due to the ATCP. The EdTPA assessment also attributes to focusing because she was preparing for the portfolio assessment at the end of the cohort year.

Rose: Choosing the ATCP had a positive impact on Rose internally. She chose the ATCP program over her local RESA because she wanted to obtain a higher degree while completing her teacher certification and attend this major university in Georgia.

Level 2: Professional Skills- Domain 2: Pedagogy

Kenya: Before attending the program, Kenya states that she did not know what pedagogy was before Summer 2019. She recognized a shift in her teaching methods once she learned more about theories and models. The ATCP was her first exposure to pedagogy and allowed her to change into a mentor to guide the students through Business career exploration.

Rose: The ATCP created the foundation of her pedagogy and helped her "understand the science of teaching".

Level 2: Professional Skills- Domain 3: Curriculum

Kenya: The program allowed Kenya to use more technology in the classroom such as YouTube videos, Zoom, Nearpod, and Flipgrid. As technology use increased in her classroom, she reduced paper assignments because of the availability of a class set of iPads. The lesson plan assignments allowed Kenya to elaborate and differentiate based on students' needs.

Rose: The ATCP allowed Rose to organize her curriculum and materials to deliver the content. The program prepared her to transfer the content of her undergraduate degree to the students on their level.

Level 2: Professional Skills- Domain 4: Program

Kenya: The syllabus, pacing guide, and instructional calendar created during the summer allowed her to organize and create a plan for her pathways. She reflected on her first interactions with her school's new Academic Director. The Academic Director was truly impressed with her pacing guide and instructional calendar. She acknowledged that she only creating the documents because of the requirements of the ATCP.

Rose: The ATCP allowed her to use her Career and Technical Student Organization (CTSO), Family, Career and Community Leaders of America (FCCLA) as the application strategy to use the knowledge from the pathway courses. The ability to allow students to cater and complete hands-on activities after competing in FCCLA events and/or passing the ServSafe certification end of pathway exam.

Level 3: Interpersonal Relationships- Domain 5: Students

Kenya: Kenya compared the differences between interactions with her students during the first year and second year of teaching. She said she was seen and known as the "mean teacher" her first year because she didn't want a relationship with the students. While

transitioning from the industry, she was accustomed to being alone with a "business mindset of not making friends or communicating with the students or others". After the program, she decided to not make the classroom feel like a prison and try to build relationships with the students and apply more relatable material to her courses. In correlation, she states that enrollment in her CTSO, Future Business Leaders of America (FBLA) increased along with her positive interactions with the students.

Rose: Since Rose teaches the same students for three years, Rose is able to reflect with her students about her videos and teacher observations from the previous year. She stated these experiences with her students "build camaraderie" and presents her as human because she is a student in a program doing assignments similar to her high school students.

Level 3: Interpersonal Relationships- Domain 6: Peers

Kenya: She states more of her same-level co-workers attend her classes due to real-world application of her Finance classes after attending the ATCP.

Rose: She doesn't feel like there was much impact with her peers because most of her coworkers are fully certified and veteran teachers. She and the A/V teacher developed a close relationship because they both were going through certification programs at the same time. The A/V teacher went through the local RESA for certification while she went through the ATCP. Rose compared her experience in the ATCP as "more rigorous" than her peer's RESA program. Rose also stated the peer was not able to complete her requirements due to lack of organization while Rose submitted her EdTPA early during COVID-19 closures. The reflection reinforced Rose's decision to attend the ATCP.

Level 4: Intra-system- Domain 7: System

Kenya: Since Kenya is the only CTE teacher at her school, she represents the department. The department and her position went through multiple transitions due to yearly turnovers of teachers over the past five years before Kenya arrived. She discussed the CCRPI scores increasing due to her pathway completers every year since she started at her school. The ATCP provided her with resources from Georgia's Department of Education to obtain standards and instructional resources from Business teachers around the state.

Rose: While Rose reflects on her stress level being high during the ATCP and EdTPA process, she does accredit the smaller goals and checklists for making the large and overwhelming assessment as attainable. She says the ATCP impacted her department and school system by developing her as a teacher with "new, fresh ideas and technology skills". She said the program also made her prepared for Zoom meetings. She thinks of herself as an asset to the school system because she learned new teaching techniques, pedagogy styles, and how to apply different theories to the classroom. The program allowed her to set a path with a direction to organize her thoughts.

Level 5: Extra-system- Domain 8: Community

Kenya: During the first week of the ATCP, the breakout session with the FBLA state representative inspired Kenya to incorporate fun and meaningful events for the advisor and students. Kenya merged her previous experience attending community events with community service projects with her FBLA members. Her FBLA members were also presented with the opportunity to volunteer at the local nursing home, cleaning the highways, and as ambassadors for the Chamber of Commerce.

Rose: Rose says the biggest adjustment was not being able to spend as much time with her children and their disappointment when she has class. Personally, she likes being an example of continued education for her daughters and climbing tiers while completing goals. Rose says the sacrifices during the program are worth the knowledge obtained during the ATCP year. The ATCP has inspired her to apply for the Doctoral program as well.

Appendix F

Informed Consent Form

Dear Participant Name,

You are invited to participate in a case study conducted as part of the requirements for Alexis Williams's doctoral research at the University of Georgia. For this case study, I will be reviewing previous documents from your cohort year such as your observation evaluations, lesson plans, and other assignments. I will also be conducting interviews to examine your experience in an Alternative Certification Program at a major university in Georgia. The research will be supervised by my committee chair, Dr. Elaine Adams.

The purpose of this research is to examine the experiences of alternatively certified teachers at the beginning of their careers to learn more about the experiences of CTE teachers. The information will be used for academic research and/or publication. All information obtained will be treated confidentially.

For this research, you will participate in a virtual interview via Zoom and I want to use your archived assignments as well from Rubric A/Portfolio, Rubric B/Portfolio, Lesson Plans, Observational evaluation, Teaching notebook evaluation, Dispositions, Keys, and Standards reflection.

For this research, I will conduct the interview on Zoom and use previous documents as reference points such as assignments from your 2019 cohort year.

You are free to withdraw your participation at any time should you become uncomfortable with it. If you have any questions or concerns, feel free to contact me at alexis1@uga.edu and/or (706)662-8624 or the committee chair, Dr. Elaine Adams, at adamsje@uga.edu. I hope you will enjoy this opportunity to share your experiences and viewpoints with me. Thank you very much for your help.

Sincerely,

Alexis Williams

Please sign both copies, keep one copy and return one to the researcher.

_____

Signature of Researcher Date

_____

Signature of Participant/Gatekeeper Date

Appendix G

Syllabus/Pacing Guide/Instructional Calendar Rubric

Syllabus/Pacing Guide/Instructional Calendar					
Assignment: Create a detailed syllabus/pacing guide/instructional calendar for at least one of your courses.					
	Beginner: 0 points	**Novice: 2 points**	**Intermediate: 4 points**	**Expert: 6 points**	**Teacher Evaluation**
Behavior expectations	Not included.	Class expectations written in negative terms.	Includes positively worded class expectations, but lacks consequences for inappropriate behavior, or parent/student contract	Includes classroom expectations written in a positive manner. Consequences listed for inappropriate behavior. Parent/student contract included.	
Content and Organization	Not included.	Includes major instructional units.	Includes major instructional units and major instructional goals but lacks major but lacks major projects or assignments.	Includes major instructional units, goals or objectives, and projects. Any special course costs or requirements are listed.	
Evaluation	Not included.		Either points system or major evaluations listed. One of these not present.	Details regarding major evaluation. Points system included, noting any special projects.	
Pacing Guide	Not included.	Includes 1 component of pacing guide requirements.	Includes 2 components.	Includes functional units, standards, and estimated time.	
Instructional Calendar	Not included.	Includes 1 component of the instructional calendar requirements.	includes 2 components.	Includes major and minor units, topics per day, sub-standards, and estimated time.	
Mechanics	Includes 6 or more grammatical errors, misspellings, punctuation errors, etc.	Includes 4-5 grammatical errors, misspellings, punctuation errors, etc.	Includes 2-3 grammatical errors, misspellings, punctuation errors, etc.	Grammar, spelling, punctuation, capitalization are correct. No errors in the text.	
Scale: 33 - 36 = Expert 32 - 29 = Intermediate 28 - 25 = Novice 24 - 21 = Beginner				**Total Points**	

Appendix H

Evaluation of Lesson Plan

EVALUATION OF LESSON PLAN
Teaching Internship – Student Teaching
NTI-PACTE

Directions – Develop and compile complete lesson plans. The T-plan format, as taught and described in instructional strategies should be used including all components. All supplemental materials must be included as part of your overall lesson plans. Your lesson plans must be detailed including all teaching notes, suggested questions, and real-world examples.

Evaluation Code

EXCELLENT	VERY GOOD	GOOD	FAIR	POOR
10	9	8	7	6 or below

Components	***CODE***
General Information Subject – Course; Instructor; Title of Lesson; (other identifying information as appropriate)	
Objectives and/or Essential Questions Objectives and/or essential questions are provided and used to guide the lesson. These should be are behavioral, observable, and measurable. Link course objectives to appropriate Georgia Performance Standards.	
References All resources used in the development of the lesson plan are identified. A minimum of 2 resources are required for each lesson plan (textbooks, websites, videos, etc.).	
Materials/Supplies All materials that will be required to conduct the lesson are listed and where appropriate are provided as supplemental items that support the lesson (Power Point, handouts, computer, construction paper, etc.).	
Set Induction Activity Instructions/guidelines are clear and materials needed to complete the set induction activity are provided. Specific and relevant information is provided.	
Sequence of Activities	

Order of class instruction and/or activities must be listed down the left side of the T-Plan. Sequence of activities must be organized and reflect lesson objectives. Specific and relevant information is provided.	
Instructional Aids/Strategies All instructional aids and strategies used to support the sequence of activities must be listed down the right side of the T-Plan and correspond to the appropriate sequence of activities. Teaching notes, discussion, questions, and real world examples should be included. Teaching information provided in other locations (i.e. Power Point) must be noted and provided. Specific and relevant information is provided.	
Summary Activity A summary activity must be included. Instructions/guidelines are clear and materials needed to complete the summary are provided. Specific and relevant information is provided.	
Assessment/Evaluation The type of evaluation that will be used to assess student learning must be included. Instructions/guidelines are clear. Specific and relevant information is provided.	
Learning Styles A comprehensive discussion is provided detailing how different learning styles are represented in the lesson. Discussion should focus on the needs of visual learners, auditory learners, read/write learners, and kinesthetic learners.	
Special Needs Accommodations A comprehensive discussion is provided detailing special needs accommodations. Discussion should focus on special needs learners: vision impaired, hearing impaired, wheelchair bound, intellectual challenges, attention deficit disorder, hyperactivity disorder, dyslexia, and English as a second language.	
General Quality Organization and clarity.	
TOTAL POINTS EARNED	

Appendix I

Teaching Evaluation Form

Teaching Evaluation Form

Teacher's Name: Date:
Evaluator: Class:

Evaluation Code

EXCELLENT	GOOD	FAIR	POOR
5-4 = A	3 = B	2 = C	1 = D

Teaching Skill	CODE	COMMENTS
1. Teacher explains, in specific terms, the objectives of the lesson at beginning of class period and relates material to be covered to previous lesson.		
2. Teacher develops student interest in lesson at beginning of class period. (Set Induction)		
3. Teacher displays enthusiasm for content of lesson.		
4. Teacher raises questions during class that stimulates discussion and assesses student understanding.		
5. Teacher encourages and rewards student contributions to class participation and discussion.		
6. Teacher provides "real world" examples each time a major idea or concept is presented to students.		
7. Teacher uses appropriate teaching methods.		
8. Teacher utilizes appropriate instructional aids.		
9. Teacher is organized and uses time efficiently.		
10. Teacher uses acceptable written and oral expression.		
11. Teacher demonstrates command of subject being taught.		

12. Teacher communicates at appropriate pace and level.		
13. Teacher keeps all students involved and on task.		
14. Teacher evaluates student learning.		
15. Teacher summarizes major points covered during the lesson near the end of the class period.		
TOTAL POINTS EARNED		

Additional comments:

Appendix J

Qualtrics Survey

Dear Teachers,

Please complete this survey:

Are you still in teaching? Yes or No

Are you fully certified by Georgia Professional Standards Commission (GaPSC)? Yes or No

What year did you receive your full certification? -Fill in the blank

What was your program of study? – Certification-only, Non-degree certification, Master's, Educational Specialist

What is your CTE discipline?- Business Education, Career and Technical Specializations, Family and Consumer Sciences, Marketing, Engineering and Technology, Computer Science, or Health Sciences

Appendix K

Interview Protocol Outline

I. Procedure: Arrangements made via email and interview is via Zoom. A consent form is signed and delivered before the interview.

   a. Thank you for allowing me to interview you about your early teaching experiences as a teacher in an Alternative Teacher Certification Program (ATCP). Even though you are familiar with me, I will introduce myself. My name is Alexis Williams and I am a Graduate Assistant for the ATCP and conducting this interview with you. This interview is confidential and your records will be held in a password-protected program and, on a password- protected flash drive as stated in your informed consent form. Do you have any questions about the informed consent form or this process?

   b. Ask for verbal permission before recording the interview.

   c. Ask if the interviewee is ready to start the interview.

   d. Ensure the device is recording, then state:

      i. Date

      ii. Time

      iii. Location is on Zoom

      iv. Pseudonym for the participant

      v. Alexis Williams

   e. Ask for verbal permission to record again.

   f. Before getting into my interview questions, I would like to get some background information about you.

i. Name

ii. What content area you teach? What are the specific classes/pathways? Are you a sponsor of a Career and Technical Student Organization (CTSO)?

iii. Previous degrees/certifications- undergraduate or graduate institutions?

iv. How many years have you been teaching?

v. What school district/school/grade level?

vi. Describe the Career, Technical and Agriculture Education (CTAE) department at your school.

vii. Briefly describe your home life- significant other, child(ren), etc.

viii. Before teaching, what other careers did/do you have previously?

ix. Is there any other personal information that you want to give for the study?

g. Conduct the interview

h. Monitor time- approximately 45 minutes

i. Stop Zoom recording.

j. Thank the participant again verbally and follow-up with thank you card or email.

II. Protocol outline

a. What is the context/topic of your study?

i. The context of my study is the early teaching experiences of participants of an Alternative Certification Program at a major university in Georgia using the teacher proximity continuum as a framework.

b. Who are you going to be interviewing?

i. The researcher will be interviewing Alternative Teacher Certification Program (ATCP) teacher candidates from a major university in Georgia. These teachers participating in the ATCP are Georgia teachers transitioning from the workforce industry and with more than three years in teaching. Georgia Professional Standards Commission (GaPSC) allows teachers from the industry the ability to teach provisionally on a non-renewable certificate.

c. Topic- Research Question
    i. How did participation in the ATCP impact teachers' early teaching experiences associated to internal characteristics?
d. Leadoff question
    i. How did the program impact you personally?
e. Covert categories
    i. Domain- internal
f. Possible follow-ups
    i. Personal characteristics
g. Topic- Research Question
    i. How did participation in the ATCP impact teachers' early teaching experiences associated to pedagogy, curriculum, and program?
h. Leadoff questions
    i. How did this program change your pedagogy in the classroom?
    ii. How did this program change your curriculum?
    iii. How did this program change your program of study/pathway?

i. Covert categories
    i. Pedagogy
    ii. Curriculum
    iii. Program
j. Possible follow-ups
    i. Professional Skills
k. Topic- Research Question
    i. How did participation in the ATCP impact teachers' early teaching experiences associated to students and peers?
l. Leadoff questions
    i. How do you think the program impacted your relationships with your students?
    ii. How did the program impact your relationships with your same-level peers (co-workers)?
m. Covert categories
    i. Students
    ii. Peers
n. Possible follow-ups
    i. Interpersonal relationship
o. Topic- Research question
    i. How did participation in the ATCP impact teachers' early teaching experiences associated to the system?
p. Leadoff question

i. How did the program impact your department, school, school system, state requirements, and standards?

q. Covert categories
    i. Department
r. Possible follow-ups
    i. Intra-system
s. Topic- Research question
    i. How did participation in the ATCP impact teachers' early teaching experiences associated to community?
t. Leadoff question
    i. How did the program impact your community involvement, event attendance, and social interactions?
u. Covert categories
    i. Community
v. Possible follow-ups
    i. Extra-system
w. Thank you so much again for allowing me to interview you! I appreciate you giving up your time to help with my research. I am ending the recording if you do not have any other comments, concerns, or questions.

Appendix L

Invitation Email to Participants

Dear Teachers,

Hello again, my name is Alexis Williams and I am a Ph.D student in the Workforce Education program at the University of Georgia. I am contacting you to request your participation in my doctoral research titled: Alternative Certification Program Participants Detail Early Teaching Experiences Using the Teacher Proximity Continuum as a Framework. The purpose of this qualitative case study is to explore the early teaching experiences of Career and Technical Education teachers who participated in an alternative certification program during the early years of their teaching careers.

My study involves using in-depth interviews to obtain a deeper understanding of the teachers' transition to education and early experiences in the classroom while completing certification. Participation in this study is voluntary and will be greatly appreciated. You have the right to withdraw at any time.

If you would like to participate in the study, please read the informed consent form attached to this email for more details. Please ask any questions as I would love to have a discussion based on any of your concerns. You can reply to this email if you are willing to participate in the study then we can move forward with scheduling a date and time for the interview via Zoom.

Thank you so much for your continued support!

Kindly, Alexis Williams, Ed.S

Appendix M

Member Checking Email

Hello again Participant,

I hope you're having a great week so far!

To reiterate your consent form, this part of the study is optional. You can respond "no" to participating in member checking process to this email.

Member checking is a tool for triangulation, I am using this strategy to determine participant accuracy and credibility. You will have the opportunity to provide feedback on my interpretation of your findings report. You have the option to participate in formal or informal member checking. Formal member checking requires all willing participants to meet together as a team via Zoom and Google Docs, which we would have to coordinate a formal date and time. Informal member checking can be done one by one on Google Docs. You will be asked to review and comment if discrepancies are found in your findings report.

Again, this is optional and will not negatively affect the study if you decline. If you decide to accept, please respond to this email with your preference for formal or informal member checking. Thank you for your time! ~AKW