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PERCEPTIONS OF SECONDARY PRINCIPALS REGARDING THE EFFECTIVENESS OF THE PROGRAM OF ALTERNATIVE CERTIFICATION FOR EDUCATORS (PACE) IN SOUTH CAROLINA

A Dissertation

Presented to

the Graduate School of

Clemson University

In Partial Fulfillment

of the Requirements for the Degree

Doctor of Philosophy

Educational Leadership

by

William Kyle Whitfield

August 2022

Accepted by:

Dr. Hans Klar, Committee Chair

Dr. Lee D'Andrea

Dr. Barbara Nesbitt

Dr. Noelle Paufler

ABSTRACT

In this dissertation, I report the findings of a mixed-methods study I conducted in the state of South Carolina with secondary principals (middle and high school). The purpose of this two-phase, sequential mixed methods study was to examine the perceptions of secondary principals regarding the effectiveness of the Program of Alternative Certification for Educators (PACE), South Carolina's state supported alternative certification program. In the first phase, I used quantitative survey research to understand secondary principals' perceptions of the PACE. In the second phase, I identified eight secondary school principals who had experience hiring PACE certified teachers and conducted semi-structured interviews with them to explore their experiences regarding the effectiveness of the PACE program. Specifically, I analyzed three aspects of the PACE program that have been shown throughout literature as vital to alternative certification program effectiveness: 1) the recruitment and selection of PACE certified teachers; 2) the preparation of PACE certified teachers; 3) and the mentoring and support of PACE certified teachers.

Survey and interview results revealed that principals perceived the PACE Program to be effective in the recruitment and selection of PACE certified teachers. Principals perceived the program to be effective in recruiting a diverse pool of candidates, attracting candidates who can teach in critical needs subject areas such as business and STEM backgrounds, and attracting candidates who possess relevant job and life experiences. They also believed the PACE program had robust entry requirements for prospective candidates. Principals expressed concerns that a hiring bias exists towards these prospective PACE candidates as principals are reluctant to hire PACE certified teachers.

Regarding the preparation of PACE certified teachers, principals perceived these teachers to possess strong content knowledge but expressed concerns related to pedagogical weaknesses (especially classroom management) and a lack of student teaching experiences. Moreover, principals believed that PACE certified teachers seemed overwhelmed with the nature of teaching and that these teachers seemed to struggle with educational language and terminology as they come from fields outside of education. Regarding the mentoring and support of PACE certified teachers, principals believed that the program needed more support from PACE decision-makers as most of the responsibility for supporting these teachers rests with school and district leaders. However, principals did acknowledge that PACE certified teachers are provided with high quality mentors and receive targeted support for their specific needs.

Findings of my dissertation are significant as my research suggests that a hiring bias exists towards PACE certified teachers and is attributed to the following factors: poor articulation and communication from PACE decision-makers regarding the entry requirements for prospective PACE candidates; lack of student teaching opportunities; and pedagogical concerns towards PACE certified teachers. Moreover, principals argued that these three areas should be focal points of improvement for PACE decision-makers. Furthermore, my research provides recommendations for practice which were based on perceived areas for improvement in the PACE Program. These three areas for improvement included providing a paid internship with a veteran teacher prior to entering the PACE Program, encouraging prospective PACE candidates to serve in some type of educational role in the school prior to entering PACE (substitute, teacher aid, coach), and reinstating the two-year work experience requirement for prospective PACE candidates.

DEDICATION

This dissertation is dedicated to my wife, Autum, and my two boys, Hayden and Bryson. I was blessed to have them and their support throughout this endeavor.

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I want to begin by acknowleging my committee chair, Dr. Hans Klar. His patience and support was instrumental especially when I needed encouragement to finish the race. There were times when I thought my dissertation was an impossible task and he helped me believe in my potential when I did not see it. Dr. Klar especially understood the business of my life and took an interest in my well-being throughout this process. I appreciate him for always being sincere and genuine, as it never went unnoticed.

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CHAPTER ONE

INTRODUCTION

The purpose of this chapter is to provide a basic overview and summary of this mixed-methods study. In this chapter, I contextualize the problem of research which indicates that alternatively certified teachers continue to find themselves the least desirable teacher candidates and at the bottom of the teacher job queue (Evans, 2010; Darling-Hammond et al., 2005; Darling-Hammond, 2010). This research has raised questions regarding the perceptions of principals regarding the effectiveness of alternatively certified teachers and has prompted my exploration of the Program for Alternative Certification of Educators (PACE), South Carolina's state supported alternative certification program. From my findings on alternative certification program effectiveness, I have developed a research question from which to conduct this investigation of the PACE program: "How do secondary principals perceive the effectiveness of the PACE program in recruiting and selecting, preparing, and supporting PACE teachers?" In this chapter, I also describe the methodological framework of the study and explain the choices I made to facilitate my study. Finally, I review the overall structure of the dissertation with summaries of each of its five chapters. The information provided in this chapter is organized into 11 sections: (1) Background of the Problem; (2) Statement of the Problem; (3) Purpose Statement; (3) Research Questions; (4) Delimitations; (5) Framework Summary; (6) Research Design Summary; (7) Limitations; (8) Study Significance; (9) Terms; (10) Summary; and (11) Organization of the Study.

Background of the Problem

Research indicates that many districts across the country are facing massive recruitment challenges as schools struggle to locate highly qualified teachers to place in the classroom (Evans, 2010; Darling-Hammond et al., 2005; Darling-Hammond, 2010). Many of these recruitment challenges are due in large part to growing teacher shortages across the United States, which are attributed to an aging and retiring workforce, a lack of young educators entering the teacher job queue, and a underrepresentation of teachers of color and men in the teaching profession (Birkeland & Peske, 2004; Carter & Keiler, 2009). In response to these growing recruitment challenges, alternative certification programs (ACPs) have emerged as "state and district policymakers implemented policies designed to bring new candidates into teaching quickly" (Bireland & Peske, 2004, p. 1).

The National Center of Alternative Certification (NCAC) described the intent of ACPs to recruit, prepare, and license individuals who already possess at least a bachelor's degree. Furthermore, ACPs are based on the concept that "a person's life skills and academic knowledge" can have a positive impact on the instructional process for students (Rebore, 2011, p. 60). As to differentiate from alternatively certified teachers, Stoddart and Floden (1995) defined traditional teacher certification as teachers who completed undergraduate teacher preparation coursework and a teaching practicum or student teaching before starting their career as teacher in a school district.

Alternative certification programs have proliferated rather quickly as forty-eight states have ACPs that provide teacher licensure, and there are approximately 200,000

teachers that have been certified through ACPs since 1985 (Birkeland & Peske, 2004; Feistritzer, 2005; Feistritzer, 2011). However, current research indicates that alternatively certified teachers are among the least preferred candidates in the recruitment process as many schools and districts prefer to select candidates from a more traditional education background (Evans, 2010; Darling-Hammond et al., 2005; Darling-Hammond, 2010).

The literature is currently mired with contentious findings as to why alternatively certified teachers are the least preferred teaching candidates. However, at the crux of this literature is a discussion of teacher quality and the effectiveness of these programs in preparing alternatively certified teachers for the classroom. Critics attribute the ineffectiveness of ACPs largely to lack of pedagogical preparation, in particular an absence of critical classes such as classroom management and student teaching opportunities (Darling-Hammond, 2001; Darling-Hammond 2010; Evans, 2010). Moreover, critics have argued that these factors have attributed to higher attrition rates for alternatively certified teachers between years three and five (Darling-Hammond, 2001; Darling-Hammond 2010). However, supporters argue that alternatively certified teachers as they have strong content knowledge, represent critical needs subjects (e.g. science, technology, math, and engineering), work in less desirable schools, and recruit more men and teachers of color (Ballou & Podursky, 2000; Stoddart, 1990; Wilson et al., 2001).

An important consideration in the shifting of the ranking of alternatively certified teachers in the job queue is the role of school principals in the recruitment and hiring of teachers. Research indicates that principals have mixed perceptions regarding the

effectiveness of ACPs (Hall 2008; Finn 2009; Brenner 2015; Wagmeister, 2006; Johnson, 2010; Torff & Sessions, 2005). This research raises concerns as it indicates that principals may be unconvinced of the value of ACPs in preparing teachers to be effective in the classroom (Wagmeister, 2006; Johnson, 2010; Torff & Sessions, 2005; Fin, 2009; Brenner et al., 2015). As principals are ultimately responsible for making personnel decisions at their schools (Rebore, 2011), their perceptions of ACPs may impact whether these teachers are hired for vacancies thus shifting of these teachers further towards the bottom of the teacher job queue.

It is in the context of this conversation that I began to explore the perceptions of principals regarding the effectiveness of PACE. This study evolved from my experience with PACE as I received my teacher licensure as a secondary social studies teacher through this program. As a PACE certified teacher, my experiences gaining my teacher licensure were a positive one and I believe the program is ultimately effective. However, I am aware of both the strengths and weaknesses of the PACE program in preparing teacher candidates, which parallel much of the literature findings which were cited previously.

Furthermore, it is my assumption that many of the principals in South Carolina have both positive and negative experiences supervising PACE teachers. This assumption is based on my experiences as a current administrator and the many conversations I have had with other administrators regarding the effectiveness of the PACE program in preparing teachers. From these conversations, I have learned that some principals possess a negative perception towards the PACE program as they have stated that the PACE

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teachers they have hired or supervised were not very competent or effective in the classroom. However, I have also worked with other administrators who have held a favorable attitude toward PACE teachers and have hired alternatively certified teachers over traditionally certified teachers as they believe these teachers are more qualified for positions in their schools. Ultimately, these experiences have led me to ponder whether a positive or negative perception prevails amongst principals regarding the PACE program. Furthermore, this thought has led me to question what experiences have led principals to develop their perceptions toward the PACE program and PACE certified teachers.

Statement of the Problem

The effectiveness of ACPs is a critical topic of school personnel decision-making as the number of alternative certification programs continue to proliferate across America. While research indicates that alternatively certified teachers are continuing to rank among the lowest valued teachers in the job queue (Evans, 2010; Darling-Hammond et al., 2005; Darling-Hammond, 2010), another important consideration is the role of the school principal in the hiring decisions of vacancies at their schools. Current research indicates that principals' perceptions may be contributing to the decline of alternatively certified teachers in the job queue as many school leaders have elected to hire teacher candidates from traditional certification backgrounds (Brenner 2015; Finn 2009; Hall 2008; Johnson, 2010; Torff & Sessions, 2005; Wagmeister, 2006). It is precisely in this context that the motivations for this study originated.

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An important consideration in the problematization of this study relates to research that principals have mixed perceptions of ACPs and the teachers who are prepared through these programs (Brenner 2015; Finn 2009; Hall 2008; Johnson, 2010; Torff & Sessions, 2005; Wagmeister, 2006). This research raises concerns as some principals may be unconvinced of the value of ACPs and may be less inclined to hire alternatively certified teachers for their schools. Previous studies revealed that principals believed alternatively certified teachers possessed strong content knowledge which allowed these teachers mastery of their given subject matter (Brenner et al., 2015; Fin, 2009; Hall, 2008; Johnson, 2010; Toff & Sessions, 2005; Wagmeister, 2006;).

Furthermore, many studies found that principals perceived alternatively certified teachers to be professional and bring much needed diversity to the classroom such as more men and teachers of color (Brenner et al., 2015; Fin, 2009; Hall, 2008). Many of the studies also found that administrators believed alternatively certified teachers brought valuable life experiences to the classroom, which allowed them to be successful (Hall, 2008; Brenner et al., 2015). In these studies, administrators indicated that these experiences allowed alternatively certified teachers to build rapport with students, establish professional relationships, and communicate with parents and students (Brenner et al., 2015; Fin, 2009; Hall, 2008).

However, many of the studies revealed themes that related to negative perceptions held by administrators towards alternatively certified teachers. One common theme that emerged from the literature pertained to perceptions that alternatively certified teachers had more deficiencies associated with pedagogy (Brenner et al., 2015; Fin, 2009; Johnson, 2010; Torff & Sessions, 2005; Wagmeister, 2006). These studies cited pedagogical issues related to lesson planning and curriculum development, teaching methods and classroom management, and motivating and engaging students, organizing and sequencing lessons, responding to students' learning needs, and encouraging higherlevel thinking. Another important theme revealed that administrators had concerns with the fact that alternatively certified teachers lacked the student teaching opportunities prior to entering the classroom, which are required of traditionally certified teachers (Brenner et al., 2015, Johnson, 2010; Torff & Sessions, 2005).

Although previously reviewed research on principals' perceptions of the effectiveness of ACPs provided some insight into what factors may be contributing to alternatively certified teachers being placed at the bottom of the job queue, there are several areas that remain to be explored. For instance, much of the literature conducted on principals' perceptions of ACPs focused solely on Master of Arts in Teaching (MAT) and nationally recognized ACPs such as Teach for America. Moreover, there appears to exist a dearth of research on principals' perceptions of state supported ACPs such as the PACE program in South Carolina. Ultimately, the shifting of alternatively certified teachers in the job queue garners more attention and there are obvious areas that remain to be explored. Understanding the perceptions of principals is a vital piece in this research as their opinions play a tremendous role in the future of ACPs such as PACE and especially the likelihood of alternatively certified teachers being employed.

Purpose Statement

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The purpose of this two-phase, sequential mixed methods study was to examine the perceptions of secondary principals regarding the effectiveness of the PACE program in South Carolina. In the first phase, I collected quantitative survey research on secondary principals' perceptions of the PACE program. In the second phase, I identified eight principals for semi-structured interviews to explore their experiences regarding the effectiveness of the PACE program. Specifically, I analyzed three processes through the PACE program functions and supported throughout the literature as vital to ACP effectiveness: 1) the recruitment and selection of PACE certified teachers; 2) the preparation of PACE certified teachers; 3) and the mentoring and support of PACE certified teachers. In the second phase of my mixed methods study, I interviewed secondary principals to gather qualitative data regarding their perceptions of the PACE program.

In this study, ACPs were generally defined as programs that recruit, prepare, and license individuals who already possess at least a bachelor's degree (Rebore, 2011). For the purposes of this study, I examined the PACE program which was created by the South Carolina Department of Education to recruit, prepare, and license individuals who have earned a bachelor's degree or above from an accredited college or university with a major in an approved PACE certification field. Applicants of the PACE Program must have earned at least thirty or more semester hours earned in content area coursework pertinent to the PACE certification field, with a grade of "C" or better. Furthermore, twenty-one of these hours must have been completed at the junior or senior level or above; or twenty-four or more semester hours earned in content area coursework at the

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graduate level (South Carolina Department of Education, 2022). Candidates of the PACE Program must also have a passing score on their designated ETS Praxis subject area assessment and clear a FBI/SLED (South Carolina Law Enforcement Division) background check (South Carolina Department of Education, 2022). Through a threeyear process, qualified PACE participants work to gain full licensure by completing various requirements such as week-long classes throughout the summer, weekend seminars, and a minimum of three approved graduate courses (South Carolina Department of Education, 2022). At the end of this three-year process, successful candidates receive a South Carolina teacher license in their related content area.

Research Question

In order to determine secondary principals' perceptions regarding the effectiveness of the PACE program in South Carolina, the following research question was explored through both quantitative and qualitative research methods: What are the perceptions of secondary principals of the effectiveness of the Program of Alternative Certification for Educators (PACE) in South Carolina?

Delimitations

The delimitations I utilized in my study were determined in an effort to explore the perceptions of secondary principals regarding the effectiveness of the PACE Program. My first delimitation pertained to the use of only secondary principals as the population for my study. Currently, the state of South Carolina only provides a pathway for middle and high school teachers to become PACE certified teachers. Therefore, the only participants who have the knowledge and experience of supervising PACE certified teachers are middle and high school principals. Furthermore, I purposively structured my study to focus on secondary principals who have worked extensively with PACE certified teachers as they can provide the most data-rich interviews during the qualitative phase of my research. Utilization of the most experienced secondary principals as participants in my study provided a thorough understanding of the experiences of secondary principals regarding the effectiveness of the PACE program.

My last delimitation related to the three processes I have chosen to explore regarding the effectiveness of the PACE Program, which include: (1) the recruitment and selection of PACE certified teachers; (2) the preparation of PACE certified teachers; (3) and the mentoring and support of PACE certified teachers. One organization that has served as a pioneer in the field of effective alternative certification program research, the National Association for Alternative Certification (NAAC), identified these three processes as vital to program effectiveness and success. Furthermore, the NAAC conducted a vast project, which encompassed an immense review of literature of effective ACPs, to create Quality Indicators on these three processes and have provided rubrics from which ACPs can measure their own success (NAAC, 2016).

Framework Summary

As the main objective of my study was to examine the perceptions of secondary principals regarding the effectiveness of the PACE program, human capital theory served as the theoretical lens for my study as principals have many experiences in the recruitment, selection, preparation, and supportive processes for PACE teachers at their respected schools. Human capital theory is the idea that an individual's accumulative abilities, knowledge, and skills developed through formal and informal education and experience, can provide direct benefits in the form of improved productivity, work performance, career advancements or opportunities, and increased earnings (Becker 1992; Benson, 1978; Pil & Leana, 2009; Walters, 2004). My rationale for focusing on human capital theory pertains to the fact that the PACE program is an ACP for prospective teachers. As the chief human resource director in schools, principals make hiring decisions based on their perceptions or experiences working with the faculty at their schools (Rebore, 2014). If one particular teacher preparation program were inept in developing teachers for the challenges they face in the classroom, then principals would be reluctant to hire teachers based on their experiences with this program.

Human capital theory rests on two major premises that are vital to my study, the first of which is that the workforce can be qualitatively measured based on human capital investments - e.g. education, training, and professional development (Becker 1992; Benson, 1978; Schultz, 1960; Schultz, 1961; Sweetland, 1996). The teachers that qualify for the PACE program have quite different knowledge, skills, experiences, and education backgrounds from traditionally certified teachers. Since human capital theory posits that human investments can have a measurable impact on productivity or effectiveness (Becker 1992; Benson, 1978; Schultz, 1960; Schultz, 1960; Schultz, 1961; Walters, 2004), it is reasonable to presume that principals have developed perceptions about the effectiveness of the PACE program.

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The second major premise of human capital theory posits that human decisionmaking and behavior can be understood or predicted and that these predictions are based on individuals' prior experiences and preferences (Becker, 1976; Elster, 1986; Mandler, 2001; Tan, 2014; Holden & Biddle, 2016). This premise is rooted in rational choice theory, which theorizes that individuals do their best to maximize their decision-making under their given circumstances and these "decisions are meticulously calculated and finely consistent with their past and future decision" (Tan, 2014, p. 418). Rational choice theory is further based on axioms of rationality, which are used to determine preferences in the decision-making process (Mandler, 2001). For the purposes of my research, I chose the axiom of completeness which holds that an individual may prefer "a" to "b", prefer "b" to "a", or be indifferent to "a" or "b." In my study, the axiom of completeness was used to determine if principals have developed preferences toward traditionally prepared teachers and/or alternatively prepared teachers and what experiences have led to the development of these preferences.

Research Design Summary

As my study utilized a two-phase, mixed methods research approach, the qualitative methodology I chose for my study was interpretative phenomenological analysis (IPA), which is a type of qualitative research which focuses on the collective lived experiences within a population of study (Creswell, 2013; Maxwell, 2013). There are three pillars that differentiate IPA from other qualitative methodologies, which include its focus on phenomenology, double hermeneutics, and idiography. The first pillar, phenomenology, is a type of qualitative analysis that is concerned with an individual's personal perceptions, accounts, and experiences (Smith et al., 1999; Smith & Osborn, 2008; Pietkiewicz & Smith, 2014). Phenomenological analysis allowed me to delve into how secondary principals perceived and discussed the effectiveness of the PACE program as this branch of qualitative research analyzes how participants interpret and make meaning of a phenomenon.

Another pillar critical to IPA is hermeneutics (from Greek meaning "to interpret" or "make clear"), which seeks to explain how individuals make sense and interpret the events, objects, and people surrounding a phenomenon (Pietkiewicz & Smith, 2014; Smith & Osborn, 2008). One critical aspect of IPA that differs from other types of phenomenological analysis is its focus on "double hermeneutics", which utilizes a twofold, interpretative process (Pietkiewicz & Smith, 2014; Smith & Osborn, 2008). In the first phase of double hermeneutics, participants are attempting to make meaning of their experiences, while in the second phase the researcher is attempting to make meaning from the participants' experiences (Smith et al., 1999; Smith & Osborn, 2008; Smith et al., 2009). In IPA, and especially the double hermeneutical process, the researcher is an active part of the experience and must therefore be cognizant of their own biases and assumptions.

Lastly, IPA utilizes the methodological approach idiography, or the in-depth exploration of single cases in order to examine the various perspectives of participants in their context (Pietkiewicz & Smith, 2014; Smith & Osborn, 2008; Smith et al., 2009). As IPA is concerned with building data-rich participants from which to understand their unique experiences with a particular phenomenon (Pietkiewicz & Smith, 2014; Smith & Osborn, 2008; Smith et al., 2009), the participants for my study were selected using purposive, homogenous sampling. Moreover, since the PACE program only offers certification pathways for middle and high school teachers, the participants for my study included middle and high school principals. Participant biographies were provided using pseudonyms so that readers might have insight into the participants from my study.

The first phase of my mixed-method study involved quantitative research in which I emailed all secondary principals in the state of South Carolina a survey that contained Likert responses designed to measure principals' perceptions regarding the effectiveness of the PACE program in the areas of recruitment and selection, preparation, and the mentoring and support of PACE certified teachers. At the time of my study, there were 248 middle school principals and 226 high school principals in the state of South Carolina. In order to have a 95% confidence level with a 4% confidence interval, I needed 265 participants to respond to the survey so that my results can be generalizable throughout the state of South Carolina. However, after submitting my survey several times to prospective secondary principals in the state, I came short of my 265 goal, only receiving 106 completed surveys. While I did not reach my 95% confidence level in my survey, it is important to note that it is quite common to have low response rates when conducting survey research, especially web surveys (Kaplowitz et al., 2004; Manfreda et al., 2008). It is important to note that my web survey response rate of 21.9% were similar to the response rates that were cited in the work of Kaplowitz et al (2004) and Manfreda et al. (2008). My survey contained Likert responses from which I performed descriptive statistics, including measures of central tendency.

While the survey served the purpose of gathering quantitative data on principals' perceptions of the PACE program, the other goal of my survey was to identify the most data-rich participants from which to conduct interviews during the qualitative phase of my mixed-method study. The surveys allowed participants to be studied idiographically, which is a critical methodological aspect of IPA as it allows for "rich and detailed descriptions of how individuals are experiencing phenomena under investigation" (Pietkiewicz & Smith, 2012, p. 363).

During the qualitative phase of my mixed-method study, I selected eight secondary principals, identified from the surveys as data-rich participants, from which to conduct semi-structured interviews. These principals were identified from my survey as data-rich as they have extensive experience supervising PACE teachers. As COVID-19 was an ongoing issue effecting schools and districts in South Carolina, participants were given the opportunity to interview either face-to-face at their respected schools or virtually, using Zoom or WebEx. Interviews with participants were transcribed, entered into NVivo, and coded using evaluation coding which is a type of analysis used to "assign judgments about merit, worth, or significance of programs and policies" (Saldana, 2013, p. 119). Specifically, I utilized Patton's (2008) evaluation coding, which includes a four phase analytical process from which to assign meaning from the data. These phases include: (1) analysis of data to determine patterns; (2) interpretation of patterns to determine or assign significance; (3) judgment of results; and (4) recommendations or implications for action/change (Patton, 2008). At the conclusion of my qualitative phase of research, thematic comparisons of coded participants' responses, as well as research from my literature review on effective ACPs, were provided in order to provide recommendations and implications regarding the effectiveness of the PACE program.

Limitations

Two limitations were evident during my study. The first limitation pertained to the instrumentation used in my study, as prior research conducted on principals' perceptions of ACPs is a growing research phenomenon. Currently, there exists a wide variety of instruments on this research topic and researchers have yet to produce a consistent or universal instrumentation which I could utilize in my study. However, one commonality evident with prior research showed that many researchers relied on the use of research produced from nationally recognized ACP organizations, such as the NAAC, to create their own instruments from which to interview and survey principals (Brenner et al., 2015; Hall, 2008; Fin, 2009; Johnson, 2010; Toff & Sessions, 2005; Wagmeister, 2006). Therefore, the survey questionnaire and the semi-structured interview questions I created are an amalgamation from the NAAC's Quality Indicators as well as best practice research on effective ACPs gathered from my literature review. The NAAC's Quality Indicators project was a joint venture with Project KNOTtT (Kansas, Nevada, Ohio, and Texas Transition to Teaching) that began in 2004 and was created from an extensive literature review of effective ACP research. As was stated in my delimitations, my survey and interview questions focus on the following three processes: (1) the recruitment and selection of PACE certified teachers; (2) the preparation of PACE certified teachers; (3) and mentoring and support of PACE certified teachers. These three processes have been

substantially researched and proven to be critical in establishing an effective alternative certification program and contributing to teacher candidate success in the classroom (Ballou and Podgursky, 2000; Wilson et al. 2001; NAAC, 2016).

My last limitation pertained to access to participants due to the high number of COVID-19 cases throughout the state of South Carolina. Many schools and districts are making decisions about education based on the number of COVID-19 cases reported in their communities. Some districts have chosen to conduct school virtually, having faculty and students take part in eLearning, while other districts have decided to meet face-toface in their buildings. During the course of my research, the district I work in has chosen to meet face-to-face but has elected to prohibit non-school personnel (e.g. parents, community members, military recruiters, etc.) from entering the building. Our school's contingency plan in lieu of meeting face-to-face with outside visitors was the utilization of Zoom and/or Cisco WebEx. For the purposes of establishing trust and commitment from my participants, I preferred to meet in person for the interviews. However, some districts and schools prohibited visitors from meeting face-to-face, so my only recourse was to meet with these participants on Zoom or WebEx. Virtual interviews do raise concerns regarding the openness of participants and whether meeting face-to-face, if indeed possible, would produce more robust and candid responses. To mitigate this effect, I talked with each candidate on the phone prior to our virtual interview in order to explain how the process was going to work and answer any questions they had.

Terms

Alternative certification programs (ACPs). While there is not yet a universally accepted definition for alternative teacher certification, these programs are designed to recruit, prepare, and license individuals who already possess at least a bachelor's degree. Furthermore, for the purposes of this study, alternative certified teachers did not earn their certification through an undergraduate or graduate program such as a Master of Arts in Teaching (MAT).

Traditional teacher certification. Traditional teacher certification was defined by Stoddart and Floden (1995) as a qualification for teachers who completed undergraduate teacher preparation coursework and a teaching practicum or student teaching before starting their career as teacher in a school district. For the purposes of this study, teachers who completed a MAT will not be included as these programs have similarities to both traditional and alternative teacher certification programs and could jeopardize the validity of the study.

Program for Alternative Certification of Educators (PACE). The Program for Alternative Certification of Educators (PACE) is the South Carolina Department of Education's program to provide alternative teacher licensure to candidates who have earned a bachelor's degree or above from an accredited college or university with a major in an approved PACE certification field. Applicants of the PACE Program must have earned at least thirty or more semester hours earned in content area coursework pertinent to the PACE certification field, with a grade of "C" or better. Furthermore, twenty-one of these hours must have been completed at the junior or senior level or above; or twentyfour or more semester hours earned in content area coursework at the graduate level. Candidates of the PACE Program must also have a passing score on their designated ETS Praxis subject area assessment and clear a Federal Bureau of Investigation (FBI) and South Carolina Law Enforcement Division (SLED) background check. Through a threeyear process, qualified PACE participants work to gain full licensure by completing various requirements such as week-long classes throughout the summer, weekend seminars, and a minimum of three approved graduate courses. At the end of this threeyear process, successful candidates receive a South Carolina teacher license in their related content area. Until recently, the PACE Program required candidates to have had two years of work experience but has removed this requirement from the program due to teaching shortages across the state.

Secondary Principals. For the purposes of this study, secondary principals are defined as leaders in either the middle school (grades 6-8) or high school (grades 9-12) who are responsible for the recruiting, hiring, and support of teachers in their school. Currently, the PACE program in South Carolina only offers alternative certification routes for middle and high school candidates. Therefore, the participants for this study will be individuals who are currently working as either a middle or high school principal and who have had experience with PACE teachers in their school and are familiar with the PACE program in South Carolina.

Study Significance

Ultimately, my goal and motivation driving this research was to aid alternative certification stakeholders and decision-makers by providing tangible evidence regarding

the effectiveness of the PACE program as perceived by school leaders across the state of South Carolina. As was stated earlier in this chapter, there is much still to be explored regarding the effectiveness of ACPs, especially state-supported programs such as PACE in South Carolina. In fact, while many researchers have examined the effectiveness of ACPs, the perceptions of school administrators is largely absent from the literature. As a practicing school administrator in the state of South Carolina, the dearth of research on principals' perceptions of ACPs was a striking realization for me as I am aware of the critical role that school principals have in the hiring and supporting of both traditionally and alternatively certified teachers. Therefore, my study provided a voice for secondary principals as they have worked directly with PACE certified teachers and their perceptions of the PACE program are shaped by their observations and experiences with these teachers.

Another consideration regarding the significance of my research was whether my findings would mirror previous research or provide new insight into the effectiveness of ACPs. For instance, there once were many merits and concerns that arose from literature on the effectiveness of ACPs and I wondered whether these findings would mirror my study. For instance, the lack of pedagogical training and student teaching opportunities was a major criticism from administrators who participated in previous studies (Darling-Hammond, 2001; Darling-Hammond, 2010; Evans, 2010; Hammerness & Reininger, 2008).

As an administrator and a former PACE certified teacher, I had a preconception that this would be a major criticism with secondary principals throughout the state. My preconceptions were based on prior conversations with administrators, which informed me of such negative perceptions regarding PACE certified teachers. However, my preconceptions also informed me that principals would cite strong content knowledge and a wide array of educational backgrounds and life experiences as a strength of PACE teachers as past conversations with administrators have cited these merits. While my own preconceptions may exist, my hope was that my research would produce unanticipated findings that would provide valuable insight into this growing body of literature on ACP effectiveness.

Organization of the Study

My research study is presented in five chapters. In Chapter 1, I provide the background of my study, which includes a statement of the problem, the overarching research question driving my study, and a brief discussion of my theoretical framework, human capital theory. Additionally, in this chapter I include an explanation of my plan of inquiry, which includes the methodological design of interpretative phenomenological analysis, the selection of participants for my study, and a summary of the two phases of my mixed-method research design. I conclude this chapter with a summary of the significance of this study as it pertains to the state of the research field regarding ACP effectiveness and principals' perceptions of ACPs.

In Chapter 2, I present a review of literature, which opens with a review of the roots of alternative certification and the current state of the teaching workforce as the demand for alternative certified teachers across the United States continues to proliferate.

I next provide the context for alternative certification effectiveness, which involves an ongoing discussion of teacher quality and teacher preparation. In Chapter 2, I also provide relevant research on effective ACP research, as this literature was central to the development of the instrumentation I used in this study. I then shift to review current research on school principals' perceptions of ACPs and previous studies on the PACE program in South Carolina, as this research helps identify gaps in knowledge and lays a foundation for the significance of my study. Lastly, I discuss the theoretical framework for my study, human capital theory, which includes an analysis of this framework and relevant research on the application of this theory.

In Chapter 3, I describe the methodology used for this research study, which begins with readdressing the problem statement, and the purpose of my study, to explore the perceptions of secondary principals regarding the effectiveness of the PACE program in South Carolina. After reviewing the main research question driving my study and discussing my delimitations, I review the methodological choices I employed which are rooted in interpretative phenomenology analysis and survey research. After this section, I provide a discussion of the two phases of my mixed-method research design, which includes survey research during my quantitative phase, followed by semi-structured interviews with purposively selected participants. I conclude Chapter 3 with a discussion of my limitations, underlying epistemology, and positionality statement as I am both a PACE certified teacher and practicing secondary school administrator.

In Chapter 4, I discuss the findings of my mixed-method, sequential research design. I begin this chapter with a review of Chapters 1, 2, and 3, highlighting key

elements of my study. Next, I review the quantitative findings of my study which contains Likert scale data and open-ended questions which were coded using Patton's (2002; 2008) evaluation coding technique. In this section, I discuss key themes that arose from open-ended questions regarding principals' perception on the recruitment and selection, preparation, and mentoring and support of PACE certified teachers. In the next section, I discuss the qualitative findings of my mixed-methods design as I interviewed eight secondary principals who were identified from survey data. In this section, I discuss themes which were identified using Patton's (2002; 2008) evaluation coding technique regarding principals' perception on the recruitment and selection, preparation, and mentoring and support of PACE certified teachers. I conclude this chapter with a summary of my findings from my quantitative and qualitative phases of research.

In Chapter 5, I provide a discussion of key findings on the perceptions of secondary principals regarding the effectiveness of the PACE Program, South Carolina's state supported alternative certification program. I begin this chapter with a summary of my study, which contains my overarching research problem, my purpose statement, the research question driving my study, and the two-phase mixed methods research design for my study. Next, I provide a discussion of findings, which provides an analysis of key findings as they relate to my theoretical framework and prior research on effective alternative certification programs. Next, I discuss implication for practice, focusing on the impact of my research as it relates to the PACE Program. In this next section, I discuss future research focusing on limitations from my findings and recommendations for future research on the effectiveness of the PACE Program and similar alternative

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certification programs. Lastly, I provide a conclusion to my research, as I embarked on my research with the goal to provide insight that could benefit and strengthen the effectiveness of the PACE Program.

CHAPTER TWO

LITERATURE REVIEW

Introduction

In this chapter, I present the rationale for conducting research on the perceptions of secondary principals in regards to the effectiveness of the Program of Alternative Certification for Educators (PACE), South Carolina's alternative certification program, in preparing alternatively certified teachers. Current research indicates that many districts across the country are facing massive recruitment challenges as schools struggle to locate highly qualified teachers to place in the classroom (Evans, 2010; Darling-Hammond et al., 2005; Darling-Hammond, 2010). Many of these recruitment challenges are due in large part to growing teacher shortages across America, which are attributed to an aging and retiring workforce, a lack of young educators entering the teacher job queue, and an under representation of teachers of color and men in the teaching profession (Birkeland & Peske, 2004; Carter & Keiler, 2009). In response to these growing recruitment challenges, alternative certification programs have emerged as "state and district policymakers implemented policies designed to bring new candidates into teaching quickly" (Bireland & Peske, 2004, p. 1). In fact, alternative certification programs (APCs) have proliferated rather quickly since 2005. Forty-eight states have ACPs that provide teacher licensure, and there are approximately 200,000 teachers have been certified through ACPs since 1985 (Birkeland & Peske, 2004; Feistritzer, 2005; Feistritzer, 2011).

However, current research indicates that many alternatively certified teachers are among the least preferred candidates in the recruitment process, as many schools and districts prefer to select candidates from a more traditional education background (Evans, 2011). The literature is currently mired with contentious findings as to why alternatively certified teachers are the least preferred teaching candidates. Critics of alternative certification programs attribute this fact to alternatively certified teachers lacking pedagogical training, lacking the "highly qualified" status according to No Child Left Behind, and leaving the profession between years three to five Darling-Hammond, 2001; Darling-Hammond 2010; Evans, 2010). However, supporters of alternative certified programs argue that these teachers are viable candidates as they possess strong content knowledge, represent critical needs subjects (e.g. science, technology, engineering, and math), work in less desirable schools, and recruit more men and teachers of color (Ballou & Podursky, 2000; Stoddart, 1990; Wilson et al., 2001).

An important consideration is the lack of interest in the recruitment and selection of alternatively certified teachers as current research indicates that principals have mixed perceptions regarding the effectiveness of alternative certification programs (Hall 2008; Finn 2009; Brenner 2015; Wagmeister, 2006; Johnson, 2010; Torff & Sessions, 2005). Research also supports that many alternatively certified candidates are finding themselves at the bottom of the job queue for teacher openings as many principals are selecting candidates from traditional certification programs (Evans, 2010). This research raises concerns as to principals' perceptions of alternative certification programs as some principals may be unconvinced of the value of these programs and might be less inclined to hire alternatively certified teachers for their schools.

In this chapter, I examine literature surrounding alternative certification program effectiveness in order to provide a theoretical framework to analyze principals' perceptions of the PACE program in South Carolina. Secondary principals throughout the state of South Carolina have had experience hiring PACE certified teachers, which provides the context from which to examine the effectiveness of this alternative certification program. These principals have direct experience with the components and characteristics of the PACE program as their perceptions of this program have been shaped by the effectiveness of the PACE teachers they have hired.

Research Search Strategy

The following review of literature represents the literature pertinent to this research study, and is organized specifically into four sections: (a) Roots of Alternative Certification Programs; (b) Teacher Certification and Teacher Quality; (c) Effective Alternative Certification Programs; (d) Program of Alternative Certification for Educators (PACE); (e) School Administrator Perceptions of Alternative Certified Teacher; and (e) Human Capital Theory. My strategy for conducting searches for studies pertinent for this literature review started with a literature review outline by utilizing keywords used in various search databases. Keywords included, but were not limited to, *principals, administrators, secondary, perceptions, alternative certification, teacher quality, teacher preparation, effectiveness, recruitment, retention, pedagogy, human*

capital theory, and *rational choice theory*. I utilized the following databases for studies pertinent to the research topic which included ProQuest, EBSCOHOST, ERIC, Google Scholar, Education Full Text, and Education Research Complete. The sources I used for this literature review included dissertations, theses, peer-reviewed journal articles, books, and statistics provided by government organizations and other agencies pertinent to this study. My literature review included over 70 sources, dating from 1776 to the present. I included older sources to provide the reader with a perspective of the endurance and history of this topic, especially as it pertains to human capital theory as this topic dates to the 1700s and was influenced by Enlightenment thinkers and philosophers. However, most of the research I utilized in my study was published over the last five to ten years. A full list of sources utilized in my literature review is provided in the reference section of this dissertation.

Roots of Alternative Certification and the State of the Teaching Workforce

In the realm of teacher certification, there are two main pathways to the classroom: traditional teacher certification and alternative teacher certification. Stoddart and Floden (1995) defined traditionally certified teachers as individuals who completed undergraduate teacher preparation coursework, participated in a teaching practicum, or student teaching before starting their career as a teacher in a school district. However, alternative certification programs have emerged as "state and district policy-makers implemented policies designed to bring new candidates into teaching quickly" (Bireland & Peske, 2004, p. 1), which was a direct response to the anticipated shortages of qualified teachers across the nation. While there is not yet a universally accepted definition of

alternative teacher certification, these programs are designed to recruit, prepare, and license individuals who already possess at least a Bachelor's degree.

The roots of alternative certification programs can be traced back to the teacher shortages that occurred during the "late 1990s, as educational experts projected an unprecedented need for new teachers, anticipating that public schools would need to hire 2.2 million teachers during the first decade of the new century" (Bireland & Peske, 2004, p. 2). Another issue that contributed to the rise of alternative certification programs was an aging workforce and a lack of young educators entering the teaching profession. This trend was substantiated by Young (2003) who found that by the early twenty-first century, 30% the nation's three million public school teachers would be over fifty years of age. Moreover, Kantrowitz and Wingert (2000) predicted that one-half of current teachers would retire or be eligible for retirement by the year 2010.

In a recent study conducted by Ingersoll et al. (2018), the authors illustrated the concern for an aging teacher workforce finding that "the number of public school teachers 50 years or older increased, from less than 500,000 in 1988 to a peak of 1,174,000 in 2008" (p. 9). However, Ingersoll et al. (2018) also indicated that this trend of an aging teacher workforce slightly decreased as the number of teachers age 50 or older declined to 1,113,00 as of 2015-2016. Nevertheless, an aging workforce is still problematic as these retirees are being met by new teachers and the "flow of newcomers has become a flood" (Ingersoll et al., 2018, p. 10).

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Another concerning trend of the teaching workforce relates to the fact that the field is growing exponentially in size and is currently outpacing the growth of students across the nation (Ingersoll et al., 2018). From 1987-1988 to 2015-2016, the teaching workforce grew at a rate of 64% while K-12 students increased at a rate of only 20% (Ingersoll et al., 2018). Furthermore, Ingersoll et al. (2018) found that the increase in the teaching workforce was largely attributed to growth in private schools, growth in high-poverty schools, and increases in the certification areas of bilingual or ESL teachers.

Furthermore, research indicated that the workforce was not only aging and growing exponentially but was increasingly predominated by Whites with few teachers of color either entering or currently in the teaching profession. According to Synder et al. (1997), teachers of color represented as little as 13.4% the teacher workforce while Jorgenson (2000) found as few as 9% in the profession. Moreover, research indicated that not only is the student population growing exponentially but the demographic makeup of students is increasingly racially diverse. Eubanks and Waver (1999) discovered in 1996, that one-third of public school students were teachers of color and that the population of these students is growing at a faster rate than White students.

Furthermore, the United States Department of Commerce predicted that the percentage of students of color will climb to 50% by the year 2035 while 40% of America's schools have no teachers of color (Bireland & Peske, 2004). Clearly, the lack of teachers of color is an alarming fact especially to "those who believe that sharing a common race and cultural background facilitates more productive student teacher relationships" (Bireland & Peske, 2004, p. 4). Ingersoll et al. (2018), provided insight

into the lack of teachers of color in the teaching profession citing that "teaching remains primarily white, non-Hispanic workforce and that a gap continues to persist between the percentage of minority students and the percentage of minority teachers in U.S. schools" (p.15). Ingersoll et al. (2018) found that during the 2015-2016 school year, 51% of public students were students of color while only 19.9% of public school teachers were teachers of color. Ingersoll et al. (2018) attributed this disproportion to a rapid increase in the percentage of students of color students that has outpaced the growth of teachers of color which increased from 13.1% (305,200) to 19.9% (760,000) in the years from 1987 to 2016.

It was in response to these challenges facing educators that many states across America began to implement alternative certification programs as a means to attract more teacher candidates from diverse experiences and backgrounds. In fact, the rate at which alternative certification programs sprang forth was so swift that as of 2003 forty-six states and the District of Columbia reported having some type of alternative certification programs in comparison to 1983, when only eight states offered such programs (Bireland & Peske, 2004). Furthermore, of the remaining four states that were not currently offering alternative certification tracks, these states have considered or adopted alternative certification programs (Bireland & Peske, 2004). In sum, as of 2003, states reported a total of 144 alternative certification routes for prospective teacher candidates (Bireland & Peske, 2004).

While there has been a proliferation of alternatively certified teachers entering the workforce, many alternatively certified teachers are finding themselves in less desirable

urban and rural schools due to being placed lower on the worker queue as traditionally trained teachers "are the most preferred workers in the educational labor market" (Evans, 2011, p. 292). The stratification of teachers in the recruitment process was discussed by Darling-Hammond (2001) who attributed the value of teachers to several factors which include experience, the prestige of college attended, subject matter expertise, and especially certification. Consequently, these factors have led to "experienced, fully certified teachers at the top of the job queue, and inexperienced, uncertified teachers... at the bottom of the queue" (Evans, 2011, p. 268). This evidence suggests that advantaged schools will continue to be more desirable and maintain their success by employing novice teachers with a traditionally certified background (Evans, 2011).

Alternative Teacher Certification and Teacher Quality

As alternative certification programs continue to proliferate throughout the United States, many critics have raised questions concerning the quality of candidates that are produced from these programs. Evans (2011) acknowledged that as the quantity of alternatively certified teachers increase throughout the United States, "the rankings of alternatively certified teachers in the worker queue may shift" (p. 269), which would provide more opportunities for these teachers to make their way into the teaching profession. However, there is no guarantee that the teacher job queue will shift in favor of alternatively certified teachers as many critics have argued for more regulations of these programs and more rigorous certification standards. Moreover, critics have argued that teacher candidates that participate in alternative certification programs lack pedagogical training, are not "highly qualified" according to NCLB, and have higher attrition rates between years three and five when compared to traditionally certified teachers (Darling-Hammond, 2001; 2010; Evans, 2010).

However, proponents of alternative certification programs argue that increased barriers would make it even harder for alternatively certified teachers to enter the teaching workforce. Supporters of alternative certification programs argue that alternative certification programs provide an influx of potential candidates who would not otherwise be able to enter the teaching profession providing much needed qualified teachers to fill the growing vacancies across the country. Moreover, proponents argue that alternative certification programs produce candidates that have strong content knowledge, represent critical needs subjects (e.g. science, technology, engineering, and math), are willing to work in less desirable schools, and include more men and teachers of color (Ballou & Podursky, 2000; Stoddart, 1990; Wilson et al., 2001).

However, the crux of the argument over alternative certification program is a discussion over teacher preparedness and whether alternatively certified teachers are qualified to enter the classroom. Kaplan and Owings (2001) defined teacher quality as teacher who possess "content knowledge and have studied instructional ideas and practices that increase student learning" (p. 22). In Kaplan and Owings' (2001) definition of teacher quality, they raise the importance of teacher preparation which is intrinsically tied to the type of certification teacher candidates receive. Moreover, the debate over alternative certification programs is particularly focused on teacher certification as scholarship has examined the preparedness and effectiveness of alternatively certified teachers in meeting the needs of students. Therefore, I will provide an overview of

literature which emphasizes the importance of teacher quality, linking it directly to teacher certification and training, and its impact on student achievement. Moreover, I will examine literature on alternative certification and traditional certification program and their impact on student achievement.

Research suggests that the single most important nexus in student achievement is the quality and training of teachers (Kaplan & Owings, 2001; Darling-Hammond, 2010; Sanders & Rivers, 1996). According to Kaplan & Owings (2001), staffing all classrooms with highly qualified teachers is a national concern especially in light of legislation such as No Child Left Behind, which required a certified content area teacher in every core subject area classroom by the 2005-2006. No Child Left Behind placed pressure on school and district leaders to ensure that all schools were staffed with highly qualified teachers and that unlicensed teachers were required to gain a professional teacher license. Subsequently, NCLB required educators and administrators to stay abreast to literature related to teacher quality and understand that "teaching is a complex activity that is influenced by the many elements of teacher quality" (King-Rice, 2003, p. 8).

One such study that further demonstrated the importance of teacher quality was conducted by Sanders and Rivers (1996), who used the Tennessee Value-Added Assessment System (TVAAS) which "was designed and has demonstrated to be an efficient and effective method for determining individual teachers' influence on the rate of academic growth for student population" (p.1). Using this system, Sanders and Rivers (1996) reported that low-achieving students showed 53% achievement gains with highly effective teachers as compared to 14% achievement gains with less effective teachers. However, the most intrinsic finding for educators regarding Sander and Rivers' (1996) study was the reality that teachers were the most important factor in student achievement surpassing students' socio-economic status (SES), the curriculum, and students' peers. Sanders and Rivers (1996) also found that as teacher effectiveness increases, lower achieving students are among the first to benefit.

Research has continuously supported the idea that teacher quality has a significant impact on student achievement (Darling-Hammond, 2010; Kaplan & Owings, 2001; Sanders & Rivers, 1996). Therefore, it is critical to explore how alternatively certified teachers are measuring up to traditionally certified teachers as these are the two major pathways to teacher certification. One area that is absent from the literature on alternatively certification programs is the impact of these programs on student achievement. Wilson et. al (2001) stated that out of the 14 studies that were reviewed on alternative certification, only two addressed the issue of student achievement. Furthermore, one caveat to all of these studies is that there is no agreed upon definition of alternative certification programs. Many studies have focused on university-based MAT programs and national alternative certification programs such as Teach for America, but there is a dearth on literature that examined state supported programs like PACE in South Carolina.

Moreover, research examining the impact of teacher certification on student achievement has produced contentious and contradictory findings. Some studies have revealed that teachers of traditional certified programs have shown greater achievement levels with students than that of alternatively certified teachers (Felter, 1999; DarlingHammond et al. 2005, Darling-Hammond, 2010), while other studies have revealed that alternatively certified teachers have the same if not more of an impact on student achievement than traditionally certified teachers (Miller, McKenna, and McKenna, 1998; Tuttle, Anderson, and Glazerman, 2009). Therefore, I will provide an overview of the impact of alternatively certified teachers on student achievement.

Darling-Hammond (2010) found that teacher quality, especially those teachers who pursue advanced degrees such as master's and doctoral programs, increases the likelihood of teacher retention (teachers staying within the profession) and that these teachers have more of a positive impact on student achievement. Furthermore, Darling-Hammond et al. (2005) used regression analysis to examine the student achievement of fourth and fifth graders and found that traditionally trained teachers produced greater gains than alternatively certified teachers on six different reading and math tests over a six-year period. Felter (1999) conducted a regression analysis and found that a higher percentage of alternatively certified teachers was associated with lower test scores.

However, other research indicates that alternative certification programs can have the same impact on student achievement as traditional certification programs. While Tuttle et al. (2009) found that traditionally trained teachers out performed alternatively certified teachers in student achievement on state math testing in Florida, they discovered no difference in the reading achievement scores. Miller et al. (1998) arrived at similar findings as they found that there was no difference in math and reading scores between alternatively certified teachers and traditionally certified teachers. Furthermore, Miller et al. (1998) stated that what was most apparent from their study was "that certification programs did not differentially affect teachers' performance" (p. 170). Furthermore, many studies have found that alternative certification programs can have a positive impact on student achievement. Raymond et al. (2002) discovered that Teach for America teachers, a national alternative certification program, had a more positive impact on student achievement than traditionally trained teachers. In fact, other studies have found that alternatively certified teachers reached higher student achievement gains, albeit this is typically in mathematics and not reading (Decker et al., 2004; Glazerman et al., 2006; Raymond & Fletcher, 2002; Xu et al., 2007).

Effective Alternative Certification Programs

As one of the central focuses of this study is the examination of principals' perceived effectiveness of the PACE program, it is therefore important to explore the literature relevant to alternative certification effectiveness. Over the years, scholars have argued over the effectiveness of alternative certification programs. Critics of alternative certification programs argued that these programs produce teachers who lack pedagogical training, are not highly qualified and therefore struggle to meet the needs of students and have high attrition rates between years 3-5 (Darling-Hammond, 2001; 2010; Evans, 2010; Hammerness & Reininger, 2008). However, proponents argue that effective alternative certification programs produce teachers who possess strong content knowledge, represent critical needs subject areas, work in less desirable schools, and recruit more men and teachers of color (Ballou & Podursky, 2000; Johnson et al., 2012; Boyd et al., 2012; Klagholz, 2000; Shen, 1998; Stoddart, 1990; Wilson et al., 2001).

In recent years, the literature on this topic has shifted from contention towards accepting that there are many effective alternative certification programs across the country. Therefore, scholars began to examine the essential characteristic that have allowed many programs to be quite successful in preparing teachers for the classroom. While no particular alternative certification program has been found to be more effective in preparing teacher candidates, scholars have reached agreement regarding the characteristics and components of effective programs. One scholarly organization which has served as a pioneer in the field of effective alternative certification program research is the National Association for Alternative Certification (NAAC). According to the NAAC, the organization is dedicated to promoting standards-driven alternative educator preparation which leads to effective teacher candidates to fill vacancies in schools. Furthermore, the NAAC developed National Quality Indicators for Nontraditional Teacher Preparation Programs, in order to provide a framework to assist alternative certification programs in examining the characteristics and components of their programs (NAAC, 2022).

The NAAC also provides Quality Indicator Rubrics in the areas of recruitment, selection, preparation, and support in order to measure the overall effectiveness of alternative certification programs. The development of the NAAC Quality Indicators was a joint venture with Project KNOTtT (Kansas, Nevada, Ohio, and Texas Transition to Teaching) that began in 2004. The project had several milestones, the first of which occurred from April to August 2008 as the task force began working on the indicators, which was based on an extensive literature review of effective ACPs. From this literature

review, the task force developed a matrix comprising critical components of effective ACPs, including recruitment, selection, preparation, and support. Another important milestone occurred in January 2010 at the NAAC Annual Conference, as the organization unveiled the full Quality Indicator document. The NAAC also began pilot testing the Quality Indicators with members of the organization as well as providing trained evaluators to collect and analyze data in the pilot process. At the NAAC Annual Conference in 2011, the Quality Indicator task force met and revamped the project using data collected from the pilot study as well as analysis from the Georgia Quality Indicator project. In December 2013, the Quality Indicator project was finalized and the NAAC continues to provide publicly available resources on their website for the utilization of alternative certification programs, state education agencies, and other stakeholders involved in the teacher preparation process.

I utilized the NAAC's National Quality Indicators as well as pertinent scholarship on effective alternative certification programs as the theoretical framework for this study. Therefore, I provide research to support effective alternative certification programs in the following processes: (1) recruitment; (2) selection; (3) preparation; and (4) support. These three processes have been substantially researched and proven to be critical in establishing an effective alternative certification program and contributing to teacher candidate success in the classroom (Ballou & Podgursky, 2000; Wilson et al. 2001; NAAC, 2016). In Figure 2.1, I provide a summary of best practice research from effective alternative certification programs within the areas of recruitment and selection, preparation, and support. This will research will be discussed in greater detail in the following three sections: recruitment and selection of alternatively certified teachers; preparation of alternatively certified teachers; and mentoring and support of alternatively certified teachers.

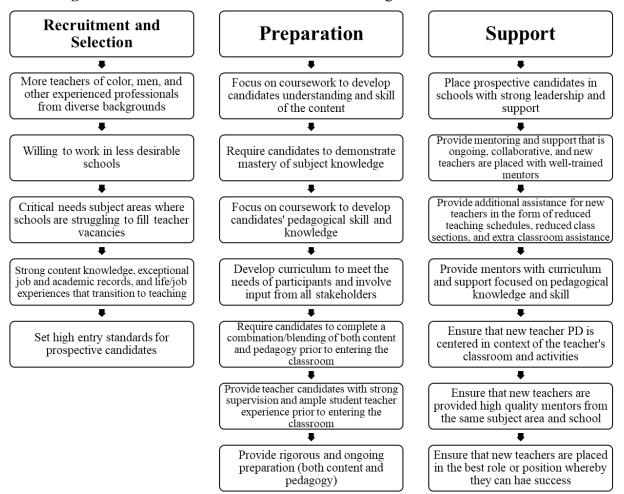


Figure 2.1 - Effective Alternative Certification Program Research

Recruitment and Selection of Alternatively Certified Teachers

As was addressed earlier in the literature review, alternative certification programs were created to address many of the looming teacher shortage concerns across America. These concerns pertained to an aging workforce, lack of young educators, and an under representation of men and teachers of color in the workforce. These concerns motivated researchers to investigate whether alternative certification programs were diversifying the teaching profession. Research revealed that these programs do recruit more teachers of color, men, and other experienced professionals from other backgrounds than traditional certification programs (Birkeland & Peske, 2004; Carter & Keiler, 2009; Feistritzer, 2011; Gatlin, 2009). Many scholars have attributed this diversity in the teaching profession to the fact that alternative certification programs provide flexible and accelerated schedules which attract candidates who would otherwise be unable to teach if these programs did not exist (Humphrey & Wechsler, 2005; Humphrey & Wechsler, 2007; Humphrey et al., 2008). Humphrey and Wechsler (2007) found that alternative certification programs were able to attract more males into teaching as many of these programs' mission of social change and leadership development appealed to men.

Many alternative certification programs have also been able to attract candidates to disadvantaged or struggling schools which Evans (2010) described as "low achieving with limited resources, high proportions of poor and minority students, and located in urban and rural areas" (p. 268). Wilson et al. (2001) discovered that this is perhaps one of the greatest strengths of alternative certification program stating that "alternative routes are attracting a more diverse pool of prospective teachers in terms of age and ethnicity" who are eager to teach in urban settings and with minority students (p. 27). Chin and Young (2007) found that many alternative certification programs are able to attract a more diverse pool of candidates as participants were motivated to enter the teaching profession "by their beliefs about the need to reform schools" as they were students in

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schools that were underfunded and poorly staffed (p. 82). While many studies have revealed that alternative certification programs are attracting a higher percentage of minority teachers into the profession than national averages of traditionally certified teachers (Boyd et al., 2006; Humphrey & Wechsler, 2005; Humphrey & Wechsler, 2007; Humphrey et al., 2008), many alternatively certified teachers have had great success in disadvantaged schools. Stoddart (1990) found that alternatively certified teachers in disadvantaged schools were able to establish and maintain high expectations for low income and minority students and even created their own curriculum to address the diverse needs of the students. Furthermore, the only studies that Wilson et al. (2001) reviewed that displayed negative effects of alternatively certified teachers on student performance were attributed the fact that "higher percentages of those teachers were teaching out of subject area" (p. 28).

While alternative certification programs have been able to provide diversity to the teaching profession, these programs have also attracted teachers in critical needs subject areas where schools are struggling to fill teacher vacancies. Shen (1997) found that in high-need STEMs subjects (science, technology, engineering, and mathematics), alternatively certified teachers are answering the call in higher percentages than traditionally certified teachers. Furthermore, alternative certification programs have also been able attract teachers in other critical needs areas such special education, foreign languages, and fine arts classes (Birkeland & Peske, 2004; Johnson et al., 2005; Barclay et al., 2008).

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Another major characteristic in the recruitment of selection process was addressed by Wilson et al. (2001) was the fact that alternative certified programs do have a "mixed record" but can attract the "best and brightest" (p. 28). Stoddard (1990) found that in the Los Angeles Unified School District, alternatively certified teachers had grade point averages that met or exceeded the national averages of traditionally certified teachers. Another important consideration is that alternative certification programs recruit and select candidates who possess strong content knowledge. The emphasis of alternatively certified teachers as being highly capable intellectually in comparison to traditionally trained teachers was discussed by Ballou and Podgursky (2000) who placed a high value on alternatively certified teachers and their expertise in content knowledge. Ballou and Podgursky (2000) discussed that individuals should be recruited based on their "high levels of general intelligence and academic ability" rather than their "exposure to knowledge about teaching" (p.62). Ballou and Podgursky (2000) also argued "against requirements for pre-service education or even for specific subject matter training for teachers, suggesting that subject matter tests are a better indicator of competence" (p. 60). Ballou and Podgursky (2000) also argued that pedagogical knowledge is not as important as a person's innate ability to teach.

The importance of content knowledge was further substantiated by the work of Stoddart and Floden (1995) who stated that "if one knows a subject, one can teach it" (p.9). Stoddart and Floden (1995) further stated that "one learns to teach by doing it" which is similar to the ideas of Ballou and Podgursky (2000) that individuals can learn through experience rather than preservice educational programs. However, Stoddart and Floden (1995) added another beneficial factor of alternative certified programs stating the "mature individuals with prior work experience make better teacher and expand and diversify the teaching pool" (p. 12). Since a majority of alternatively certified teachers are considered career changers, they bring a valuable repertoire of experiences and knowledge that cannot simply be gained through traditional educational backgrounds (Ballou & Podgursky, 2000).

One of the most important considerations on the effectiveness of alternative certification programs is whether these programs set high entry standards and rigorous screening of potential candidates in the recruitment and selection process. Research revealed that the goal of effective alternative certification programs is to recruit and select candidates who possess strong content knowledge, exceptional job and academic records, and life/job experiences that will provide a smooth transition into the teaching profession (Hess, 2001; Legler, 2002; Humphrey, Johnson, Birkeland, and Peske, 2005; Wechsler & Hough, 2008).

While research suggests that teacher shortages are a growing concern for school leaders across the country (Young, 2003; Kantrowitz & Wingert 2000), school leaders must be highly selective when searching to fill vacancies in their schools. Darling-Hammond (1990) found that the most effective alternative certification programs set high standards for entry such as maintaining a 3.0 GPA, passing subject area, basic skills, and pedagogical examinations, possess a bachelor's degree with a major in the content field in which they plan to teach, and complete 45 hours of graduate level coursework. Walsh and Jacobs (2007) found that ineffective alternative certification programs have been shown to be non-selective in their recruiting and selection process which has led to substandard teachers entering the workforce. In some instances, Walsh and Jacobs (2007) found that many of the 49 alternative certification programs they reviewed accepted 90 to 100% of candidates. However, Walsh and Jacobs (2007) found that 16% of alternative certification programs accepted less than half of potential candidates while Teach for America accepted less than 17% of their applicants.

In summary, effective alternative certification programs share the following characteristics in the recruitment and selection of alternatively certified candidates:

- Effective alternative certification programs recruit and select more teachers of color, men, and other experienced professionals from other backgrounds than traditional certification programs (Birkeland & Peske, 2004; Carter & Keiler, 2009; Feistritzer, 2011; Gatlin, 2009).
- Effective alternative certification programs recruit and select candidates who have a desire to work in less desirable schools – schools that are lower achieving with limited resources, high proportions of poor and minority students, and located in urban and rural areas (Stoddart 1990; Wilson et al. 2001; Evans, 2010).
- Effective alternative certification programs recruit and select candidates in critical needs subject areas where schools are struggling to fill teacher vacancies such as STEM, foreign languages, and special education (Shen, 1997; Birkeland & Peske, 2004; Johnson et al., 2005; Barclay et al., 2008).

- Effective alternative certification programs recruit and select candidates that have strong content knowledge, exceptional job and academic records, and life/job experiences that will provide a smooth transition into the teaching profession (Hess, 2001; Legler, 2002; Humphrey et al., 2005; Wechsler, and Hough 2008).
- Effective alternative certification programs set high entry standards such as requiring potential candidates to maintain a 3.0 GPA, passing subject area, basic skills, and pedagogical examinations, possess a bachelor's degree with a major in the content field in which they plan to teach, and complete 45 hours of graduate level coursework (Darling-Hammond, 1990; Hess, 2001; Legler, 2002; Humphrey et al., 2005).

Preparation of Alternatively Certified Teachers

Another important characteristic of effective alternative certification program is the preparation of teacher candidates who take part in these programs. Due to the variance in preparation of alternative certification programs across the country, alternatively certified candidates may receive quite different training than that of traditionally certified teachers. However, an important characteristic of effective alternative certification programs is an emphasis on candidate preparation that focuses on coursework to develop candidates' understanding and skill of the content they will be expected to teach in the classroom (Ballou and Podgursky, 2000; Johnson et al., 2005; Legler, 2002; Hess, 2001). Research suggests that a strong grasp of the subject matter and the knowledge of how to teach a particular subject contributes to successful student learning (Allen, 2003; Hill, Rowan, & Ball, 2005). Research further suggests that teachers with strong academic backgrounds (or content knowledge) possess more selfefficacy than less prepared or educated teachers and are therefore better prepared to meet the needs of students (Ballou & Podgursky, 1997; Wayne & Youngs, 2003). Another consideration is the importance of having alternatively certified teachers assess or demonstrate subject knowledge by having candidates complete a subject area examination, a state licensure test, or a portfolio to showcase their knowledge of the content (Allen, 2003; Washington, 2008).

While teacher content knowledge can be critical for student success, effective alternative certification programs also embed coursework focused on pedagogical skills and knowledge (Allen, 2003; Darling-Hammond, 1990; Darling-Hammond, 2003; Darling-Hammond, 2010; Humphrey et al., 2008; Ingersoll et al., 2012). Research has supported that the most effective alternative certification programs should be lengthier, such as MAT programs, as they include a substantial amount of ongoing preparation in educational theory and foundations such as child development, learning theory, teaching methods, assessment practices, and intense supervised internships and student teaching experiences (Darling-Hammond, 1990; Darling-Hammond and Sykes, 2003; Darling-Hammond, 2010; Humphrey et al, 2008). Effective alternative certification programs also understand that teacher preparation courses are cardinal for both short-term and long-term success in the classroom. Darling-Hammond (2010) found that teacher preparation was of utmost importance as initial pedagogical preparation can increase the likelihood of staying on the job long enough to become more experienced and effective, which

especially increases after the third year of teaching. Furthermore, strong pedagogical preparation can lead to higher retention rates as less prepared teacher are much more likely to leave the profession over their first few years of teaching (Darling-Hammond, 2010; Ingersoll et al., 2012). Another important consideration pertains to avoiding placing new alternatively certified candidates in challenging teaching position that require the use of seasoned pedagogical skills and knowledge as this can lead to teacher attrition (Allen, 2003).

The most effective alternative certification programs also guarantee a combination or blending of both content knowledge and pedagogy prior to entering student teaching or the classroom as a full-time teacher. Wenglinsky (2002) measured teacher quality in terms of content background and teacher preparation and found that student achievement was strongly influenced by both content knowledge and pedagogy. However, Wenglinsky (2002) found that teacher preparation had the strongest impact on student achievement. Darling-Hammond and Sykes (2003) further discussed that the strongest guarantee of teacher effectiveness is a combination of strong content knowledge, a teacher's professional knowledge, and added the importance of teacher characteristics. Darling-Hammond and Sykes (2003) stated that teacher characteristics, such as enthusiasm, flexibility, perseverance, a general concern for students, altruism, makes a profound difference for learning in the classroom.

Humphrey et al. (2008) found that coursework was an important factor in the support and success of alternatively certified candidates. Participants in this study reported that the most impactful courses related to specific ideas for teaching curriculum,

classroom management, and learning strategies to utilize immediately in the classroom (Humphrey et al., 2008). Research has also found that the quality of coursework can have a significant impact on teacher self-efficacy as alternatively certified teachers who felt that their coursework was valuable believed they were better prepared for the classroom (Darling-Hammond, 2003; Humphrey et al, 2008).

Another characteristic of effective alternative certification programs research is that these program developed their own curriculum to meet the needs of participants which involves input from all stakeholders including local universities, participants, and school or district leaders (Burkett & Gimbert, 2009; Humphrey et al., 2008; Washington, 2008). Burkett and Gimbert (2009) stressed the importance of involving school leaders and participants in the process of curriculum development as they found that candidates from the PACE program, South Carolina's alternative certification program, needed more support in the areas of assessment, classroom management, and planning and development of curriculum. Burkett and Gimbert (2009) also emphasized the importance of collaboration between alternative certification programs, local universities, and schools or districts in the development of coursework to ensure consistency in the curriculum and better prepare teachers for the classroom.

Effective alternative certification programs also provide teachers with strong supervision and ample student teaching experiences prior to entering the classroom as a full-time teacher. Allen (2003) stated that because of limited pre-service training offered by alternative certification programs, alternatively certified participants experience more difficulties than traditionally certified teachers at the beginning of their teaching positions. Research supports that the most effective alternative certification programs ensure that candidates take part in high quality field experiences with strong supervision by well-trained teachers, university faculty, and/or program directors and that candidates have a solid grasp of subject matter and a basic understanding of pedagogy prior to student teaching (Allen, 2003; Darling-Hammond, 1990; Darling-Hammond & Sykes, 2005). Effective alternative certification programs also provide candidates with ample training and coursework in the areas of content knowledge and pedagogy prior to the assignment of student teaching practicums as this will optimize the success of teacher candidates (Darling-Hammond, 1990; Darling-Hammond, 2005; Humphrey et al, 2008).

In summary, effective alternative certification programs share the following characteristics in the preparation of alternatively certified candidates:

- Effective alternative certification programs focus on coursework to develop candidates understanding and skill of the content they will be expected to teach in the classroom (Allen, 2003; Ballou & Podgursky, 2000; Hess, 2001; Hill, Rowan, & Ball, 2005; Johnson et al., 2005; Legler, 2002; Wayne & Youngs, 2003).
- Effective alternative certification programs require candidates to demonstrate mastery of subject knowledge by having candidates complete a subject area examination, a state licensure test, or complete a portfolio (Allen, 2003; Washington, 2008).
- Effective alternative certification programs focus on coursework to develop candidates' pedagogical skills and knowledge to optimize success in the

classroom (Allen, 2003; Darling-Hammond, 1990; Darling-Hammond, 2003; Darling-Hammond, 2005; Darling-Hammond, 2010; Humphrey et al., 2008; Ingersoll et al., 2012).

- Effective alternative certification programs provide rigorous and ongoing preparation in educational theory and foundations, child development, classroom management, learning theory, teaching methods, assessment practices, and instructional design (Burkett & Gimbert, 2009; Darling-Hammond, 1990; Darling-Hammond & Sykes, 2003; Darling-Hammond, 2010; Humphrey et al., 2008; Ingersoll et al., 2012).
- Effective alternative certification programs develop their own curriculum to meet the needs of participants and involves input from all stakeholders including local universities, participants or past participants, and school or district leaders (Burkett & GImbert, 2009; Humphrey et al., 2008; Washington et al., 2008).
- Effective alternative certification programs require candidates to complete a combination or blending of both content knowledge and pedagogy prior to entering the classroom as a student teacher or full-time teacher (Wenglinsky, 2002; Darling-Hammond and Sykes, 2003).
- Effective alternative certification programs provide teacher candidates with strong supervision and ample student teaching experiences prior to entering the classroom as a full-time teacher (Allen, 2003; Darling-Hammond, 1990; Darling-Hammond and Sykes, 2005; Humphrey et al., 2008).

Mentoring and Support of Alternatively Certified Teachers

Establishing strong mentoring and support for new teachers is critical for teaching success. Research has shown that new teachers become more effective if given strong mentoring and support throughout their first few years of teaching (Darling-Hammond, 1990; Humphrey & Wechsler, 2007; Moir, 2009; Moir & Gless, 2001). Research also supports a positive relationship between student achievement and the amount of time spent mentoring and supporting new teachers (Darling-Hammond, 2003; Rockoff, 2008; Yusko & Feiman-Nemser, 2008). Moreover, teacher turnover can be greatly diminished through comprehensive mentoring programs (Smith & Ingersoll, 2004). Research has also found that the quality of mentoring support throughout the teacher preparation process can have a significant impact on teacher self-efficacy (Caprano et al., 2010; Fox & Peters, 2013). Therefore, I will provide an analysis of best practice research on effective alternative certification programs in the areas of mentoring and supporting new teacher candidates.

Effective alternative certification programs place prospective candidates in schools with strong leadership and support (Humphrey et al., 2008; Williams, 2011). Chesley et al. (1997) noted that during the first year of teaching, many alternatively certified teachers felt that problems were greatly minimized by having the strong support from their principal. Other alternatively certified teachers who reported less support from their principals stated challenges associated with classroom structure and organization, student discipline, parents, working with at-risk students, and using a variety of teaching strategies (Chesley et al., 1997). Effective alternative certification research also revealed

that leadership can ease the burden for first year teachers by providing additional assistance in the form of reduced teaching schedules, reduced number of preparation or teaching sections, and extra classroom assistance (Smith & Ingersoll, 2004). Williams (2011) found that administrative support was a critical factor in new teacher success as it led to teacher job satisfaction and success in the classroom and teachers felt they could go to their administrators for help and felt confident that they would receive the assistance they needed.

Another important finding from effective alternative certification research revealed that mentoring and support must be an ongoing, collaborative process with welltrained mentors (Bradbury & Koalla, 2007; Humphrey & Wechsler, 2007; Moir & Gless, 2001; Williams, 2013). Humphrey and Wechsler (2007) examined seven different alternative certification programs across the country and found that the most effective programs provided training for school-based mentors. Humphrey and Wechsler (2007) also found that effective alternative certification programs provided mentors with curriculum to follow and checked behind these mentors to ensure that proper support was given to new teachers. Research also supports the importance of mentoring curriculum and support focusing on pedagogical knowledge and skills rather than content knowledge (Bradbury & Koalla, 2007).

Another important consideration with the mentoring and support of alternatively certified teachers pertains to ensuring that these teachers are placed in the position where they can have the best possible chance for success (Fox & Peters, 2013; Reeves, 2003; Williams, 2011; Wilson et al., 2001). Wilson et al. (2001) stated that the most damaging

results of alternatively certified teachers on student achievement was due in large part to the fact that alternatively certified teachers were placed in areas that they were not either certified for or lacked the subject knowledge to be successful. Often, new teachers are assigned teaching placements in which they are ill-equipped or unprepared, causing them to be ineffective in meeting the needs of students and ultimately leaving the profession entirely (Imig & Imig, 2006; Patterson, 2005).

In analyzing effective schools that reached disadvantaged students, Reeves (2003) discovered that many teachers were not properly placed according to their content strengths. Many teachers are placed in teaching positions in which their undergraduate backgrounds fail to match the standards or content in which they are asked to teach, and they are therefore ill-equipped to meet the needs of the students. Reeves (2003) stressed that the focus should be less on fixing the teacher, and more on finding "a job (and accompanying set of standards) that best meets the teacher's abilities and backgrounds...by making decisive moves in teacher assignments which can save not only the careers of teachers but dramatically improve the achievement of their students" (p. 11). Therefore, it is cardinal to acknowledge the role of school leaders, school-based mentors, and alternative program coordinators or mentors in not only recognizing the potential of alternatively certified teachers, but to ensure that these teachers are placed in the right content areas.

Another important consideration for alternative certification program directors and school leaders pertains to research indicating that many new teachers who taught in grades or content with high-stakes testing wanted to transfer to grades that did not require testing (Fox & Peters, 2013; Williams, 2011). It therefore may be important for new alternatively certified teachers to be initially placed in content areas where the pressures and stakes are much lower. Fox and Peters (2013) discussed the importance of alternative certification programs working with school leaders and mentors to focus more on assisting new teacher candidates in acquiring the techniques and tools needed for high-stakes classes in order to be better prepared and optimize student success.

Another important characteristic of effective alternative certification programs is that new teachers are provided high quality mentors from the same subject area and who are located in the same school (Smith & Ingersoll, 2004). Williams (2011) found that 94% of teachers felt that they would experience greater classroom success if they collaborated with other teachers and were given support from their mentor. Moir & Gless (2001) examined the characteristics of quality mentor programs and found that most effective mentors possessed strong interpersonal skills, had credibility with faculty and administration, demonstrated a strong desire to learn, respect for multiple perspectives, and outstanding instructional practices. Research also reveals the importance of these mentors taking part in collaborative pedagogical-based activities with mentees such as common planning to share and plan curriculum, demonstrate lessons, and provide feedback after frequent classroom observations (Humphrey, Weschsler, & Hough, 2008).

Mentoring is further strengthened if these mentoring relationships span across multiple years and include a variety of mentors (Bradbury & Koalla, 2007; Humphrey et al., 2008). Humphrey et al. (2008) proposed a three-fold approach to mentoring and support of alternatively certified teachers arguing for the arrangement of a school administrator, school based content area mentor, and a university or program mentor. Moreover, it is also vital to ensure that alternatively certified teachers are placed with mentors who are well-versed in the state's teaching standards and its assessment system (Darling-Hammond, 2003).

Lastly, effective alternative certification programs provide teachers with support which is centered on the context of the teacher's classroom as it is the most significant form of professional development (Moir & Gless, 2001; Little, 1999). While there are many types of professional development that take place in the classroom, Moir and Gless (2001) stated that the primary focus should be 'on-the-job training' activities that have the most significant impact on new teacher success such as establishing ample time and opportunities for observations and feedback, coaching techniques, model teaching from veteran teachers, goal setting, teacher reflection, analysis of student work, collaborative lesson planning, and assessment focused on teaching standards.

In summary, effective alternative certification programs share the following characteristics in the mentoring and support processes:

- Effective alternative certification programs place prospective candidates in schools with strong leadership and support (Chesley et al., 1997; Rockoff, 2008; Yusko & Feiman-Nemser, 2008).
- Effective alternative certification programs provide mentoring and support that is ongoing, collaborative, and conducted by well-trained mentors (Darling-

Hammond, 1990; Humphrey & Wechsler, 2007; Humprhey et al., 2008; Moir, 2009; Moir & Gless, 2001; Williams, 2011).

- Effective alternative certification programs provide additional assistance for new teachers in the form of reduced teaching schedules, reduced number of preparation or teaching sections, and extra classroom assistance (Smith & Ingersoll, 2004; Williams, 2011).
- Effective alternative certification programs provide mentors with curriculum and support focused on pedagogical knowledge and skills (Humphrey & Wechsler, 2007; Bradbury & Koalla, 2007).
- Effective alternative certification programs ensure that new teachers are placed in the best possible role or position whereby they can have the best possible chance for success (Fox & Peters, 2013; Imig & Imig, 2006; Patterson, 2005; Reeves, 2003; Williams, 2011; Wilson et al., 2001).
- Effective alternative certification programs ensure that new teachers are provided high quality mentors from the same subject area and who are located in the same school (Darling-Hammond, 2003; Smith & Ingersoll, 2004)
- Effective alternative certification programs ensure that new teacher professional development is centered in context of the teacher's classroom and classroom-based activities (Humphrey et al., 2008; Moir & Gless, 2001; Little, 1999).

Principals' Perceptions of Alternatively Certified Teachers

Another consideration in the ranking of alternatively certified teachers in the worker queue is the role of school administrators in the recruitment and hiring of

teachers. I have found that in much of the scholarship on alternative certification programs, there exists a body of literature that supports the hiring of traditionally certified teachers over alternatively certified teachers (Darling-Hammond, 2001; Darling-Hammond 2001; Evans, 2010). Much of this research has dealt with the perceptions of school administrators who play a central role in personnel decisions at their school. When there is a job opening at their schools, administrators decide which candidates to interview, which candidates are most qualified, and ultimately which teachers they want to hire. While literature is contentious and contradictory regarding which certification route is most effective in terms of teacher quality and student achievement, research indicates that principals have mixed perceptions of alternative certification programs (Brenner 2015; Finn 2009; Hall 2008; Johnson, 2010; Torff & Session, 2005; Wagmeister, 2006). Based on these findings, if principals are unconvinced of the value of alternative certification programs, then they might be less inclined to hire alternatively certified candidates thereby perpetuating the decline of these teachers in the job queue. Therefore, it is central to understand the perceptions of principals concerning alternative certification programs as their opinions play an integral part in the hiring process.

Several studies have revealed that principals possess a favorable perception towards alternative certification programs and the candidates that enter the teacher job queue. Hall (2008) examined the effectiveness of an alternative certification program in Arkansas by interviewing 12 cohort members of this program and their school principals. The results from this study revealed that alternatively certified teachers are as effective as traditionally trained teachers in professionalism and classroom management.

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Furthermore, Hall (2008) found that principals were impressed with alternatively certified teachers' willingness to accept constructive criticism and the diversity that alternatively certified teachers brought to the classroom. Ultimately, Hall (2008) revealed that principals had no hiring preferences between alternatively certified teachers and traditionally certified teachers.

Finn (2009) conducted research on the perception of principals with regard to the components of "highly qualified" and "highly effective" teachers as determined by No Child Left Behind. Finn (2009) explored the perceived effectiveness of alternatively certified and traditionally certified first-year teachers in the Dallas Independent School District (DISD) by surveying 82 principals and assistant/associate principals in the district. Using survey research, Finn (2009) examined six categories of teacher effectiveness: (1) classroom management; (2) professionalism; (3) resource development; (4) developing and implementing lesson plans; (5) differentiating instruction to meet student needs; and (6) communication. Results from this study revealed that principals perceived no distinct difference in the effectiveness of traditionally certified and alternatively certified first-year teachers in five out of the six categories. The data revealed that principals perceived ineffectiveness of both traditionally certified and alternatively certified first-year teachers in the category of classroom management.

Brenner et al. (2015) examined principal perceptions of an alternative certification program in rural Mississippi. Brenner et al. (2015) interviewed 10 principals to gain their perceptions regarding alternative certification program effectiveness in the areas of recruitment, selection, preparation, mentorship, support, and retention. Findings suggested that principals' views of alternative certification programs were positive including that alternatively certified teachers would meet the needs of students due to their greater content knowledge, experience, and maturity. However, Brenner et al. (2015) found that these principals did have concerns with alternatively certified teachers lacking student teaching experience, support, and mentoring in their first year.

While these studies (Finn, 2009; Hall, 2008; Brenner et al. 2015) revealed that principals view alternatively certified teachers as equivalent to traditionally certified teachers, there are other studies that have found that principals have negative perceptions towards alternative certification programs. Wagmeister (2006) examined the perceptions of both school principals and traditionally certified teachers in regards to alternatively certified teachers in California. Wagmeister (2006) interviewed 9 principals emphasizing their perceptions in the differences between traditional and alternative certification preparation. The findings from the study revealed that principals favored traditional certification routes on the basis that these teachers have critical student teaching opportunities, possess a better understanding of pedagogy, and are more collaborative with their coworkers. Furthermore, Wagmeister (2006) found that negative principal perceptions of alternatively certified teachers related to these teachers seeming overwhelmed, displaying high stress levels, and being surprised by the large academic range of students. However, Wagmeister (2006) did state that principals believed alternatively certified teachers depended on a strong command of subject content knowledge and utilized their personalities to motivate students.

Johnson (2010) conducted a study to determine the strengths and weaknesses of alternatively certified candidates according to the perceptions of hiring administrators. The findings revealed that administrators perceived alternatively certified teachers to be stronger in content knowledge than traditionally certified teachers but weaker in pedagogy. The findings also showed that administrators were more reluctant to hire alternatively certified candidates if there were more experienced, traditionally certified teachers available in the job queue. Finally, Johnson (2010) found that administrators believed alternatively certified teachers had not paid their dues and that there was a greater risk in hiring these teachers.

Torff and Sessions (2005) asked 242 principals in secondary schools to complete surveys which explored their perceptions on teacher ineffectiveness. The results showed that principals perceived that teacher ineffectiveness was linked to pedagogical weaknesses. Torff and Sessions (2005) found that deficiencies in content knowledge were less prevalent throughout the survey. Finally, the study revealed that alternative certification programs over-emphasized content knowledge rather than pedagogical training and knowledge which may lead to challenges with teacher quality and teacher effectiveness.

While many of these findings provide contradictory perceptions from administrators regarding alternatively certified candidates, there were many positive and negative themes that arose from this literature. I will first emphasize the themes that provided positive insights into alternative certification programs. After review, virtually every study found that administrators believed alternatively certified teachers possessed strong content knowledge which allowed these teachers mastery of their given subject matter (Brenner et al., 2015; Finn 2009; Hall 2008; Johnson, 2010; Torff & Session, 2005; Wagmeister, 2006). Furthermore, many studies found that administrators perceived alternatively certified teachers to be professional and brought much needed diversity to the classroom such as more men and teachers of color (Brenner et al., 2015; Fin, 2009; Hall, 2008; Fin, 2009). Many of the studies also found that administrators believed alternatively certified teachers brought valuable life experiences to the classroom which allowed them to be successful (Brenner et al., 2015; Hall, 2008). In these studies, administrators cited that these experiences allowed alternatively certified teachers to build rapport with students, establish professional relationships, and communicate with parents and students.

However, many of the studies also revealed themes that related to negative perceptions held by administrators towards alternatively certified teachers. One common theme that stood out in the literature pertained to perceptions that alternatively certified teachers had more deficiencies associated with pedagogy (Brenner et al., 2015; Finn 2009; Hall 2008; Johnson, 2010; Torff & Session, 2005; Wagmeister, 2006). These studies cited pedagogical issues related to lesson planning and curriculum development, teaching methods and classroom management, and motivating and engaging students, organizing and sequencing lessons, responding to students' learning needs, and encouraging higher level thinking. Another important theme that was found in the literature dealt with administrators who had concerns with the fact that alternatively certified teachers lacked the student teaching which is required of traditionally certified teachers (Brenner et al., 2015, Johnson, 2010; Torff & Sessions, 2005).

Program of Alternative Certification for Educators (PACE)

Another important consideration from this research on administrators' perceptions is that this body of literature focused solely on MAT and nationally recognized alternative certification programs. Therefore, there appears to exist a dearth of research on administrator perceptions of state supported alternative certified programs such as the Program for Alternative Certification of Educators (PACE) in South Carolina. Therefore, I will provide an examination of the current research that has been conducted on the PACE program.

The Program of Alternative Certification for Educators (PACE) is the South Carolina Department of Education's program to provide alternative teacher licensure to candidates who possess at least a bachelor's degree in a relevant content area and who have worked in other professional fields for a minimum of three years. Through a threeyear process, qualified PACE participants work to gain full licensure by completing various requirements such as week-long classes throughout the summer, weekend seminars, and a minimum of three approved graduate courses. At the end of this threeyear process, successful candidates receive a South Carolina teacher license in their related content area.

Since the inception of the PACE program, there have been a handful of studies conducted on this alternative certification program. Hardie (2007) conducted a

quantitative study on the retention rates of PACE certified teachers compared to traditionally certified teachers in South Carolina. Hardie (2007) used descriptive analysis to examine demographics such as the teacher's gender, age, race, and school district in order to determine trends with retention rates. The results from this study showed that there were higher percentages of males, teachers of color, and older candidates attracted to the PACE program. Furthermore, the results showed that traditionally trained teachers were retained at high percentages than PACE teachers.

Sawyer (2005) conducted a study to examine if PACE teachers' first-year success could be predicted using the Star Teacher Selection Interview instrument. Sawyer (2005) interviewed 33 first-year PACE participants who completed demographic information forms in 2002. A second set of interviews were collected in April of 2003 which consisted of their principal's evaluation. This two-fold principal evaluation form consisted of the state-adopted evaluation instrument along with a survey of the principal's perception of the teacher's performance over the course of the year. Sawyer (2005) analyzed the data and found that no relationship existed between the Star Teacher Selection Interview instrument and the principal's perception of teacher performance. Furthermore, Sawyer's (2005) was more focused on predicting teacher success with less focus paid to understanding principal's perceptions on PACE teacher effectiveness.

Luetzow (2008), reviewed the effects of PACE teachers and traditionally certified teachers on students with emotional disorders. Luetzow (2008) selected fourteen secondyear PACE teachers and eighteen second-year traditionally trained teacher who taught students with emotional disabilities. Luetzow (2008) used a teacher efficacy scale to compare the efficacy of PACE teachers and traditionally certified teachers. The variables for this study included age, gender, ethnicity, school size and location, services delivery model, participation in student teaching, and classroom experiences. The results revealed that there were no significant differences between the efficacy scores of alternatively certified teachers and traditionally certified teachers.

Lastly, Harvey (2005) examined whether teaching differences existed between PACE teachers and traditionally certified teachers. For this study, Harvey (2005) selected PACE teachers and traditionally certified teachers who were in their second year of teaching. Harvey (2005) found that traditionally certified teachers outscored PACE teachers in pedagogical knowledge with a mean score of 174 to 169. Harvey (2005) also analyzed whether there was a distinct difference in administrator's perceptions of teacher's performance as measured by ADEPT evaluations, which was a former South Carolina teacher evaluation measurement. The results revealed that there was no significant difference in perceived performance of PACE teachers and traditionally certified teachers.

As is evident from the research, there is a dearth of research related to principals' perceptions of the PACE program. As was stated in the purpose of this study, I intend to expand this knowledge base by surveying and interviewing secondary administrators who have experience hiring and supporting PACE teachers. Since principals serve as the primary hiring managers for prospective PACE teachers, it is my belief that principals provide an invaluable insight into this body of literature on state in supported alternative certification programs that has been largely remiss.

Human Capital Theory

At the core of the discussion about teacher preparation and teacher quality is the focus on human capital development and human capital theory. Pil and Leana (2009) defined human capital as "an individual's cumulative abilities, knowledge, and skills developed through formal and informal education and experience" (p. 1103). Many studies show that human capital can provide direct benefits in the form of improved productivity, work performance, career advancements or opportunities, and increased earnings (Becker 1992; Benson, 1978; Hlavna, 1992; Jepsen & Montgomery, 2012; Nafukho, Hairston, & Brooks, 2004; Schultz, 1960; Schultz, 1961; Sweetland, 1996; Walters, 2004). Human capital theorists view the workforce as possessing great human potential which can be achieved by making investments in human capital such as training, professional development, and advancements in education (Nafukho et al., 2004; Pil & Leana; Plecki, 2000; Sweetland, 1997; Tan, 2014). One of the chief aims of human capital theory is to address the challenge of how to measure human resource inputs and their impact (Pil & Leana; Plecki, 2000; Tan, 2014).

Human Capital Theory rests on two major premises, the first of which can be traced back to the to the Enlightenment economist Adam Smith (1776/2007) who challenged the traditional notion that economics was purely quantitative in nature. Traditionally, the workforce was viewed through a quantitative lens in that a worker's value or productivity was linked directly to the amount of goods or services they produced. Smith (1776/2007) was one of the first thinker to espouse that a worker's productivity was not necessarily tied to the number of goods they produce but could be viewed in qualitative terms. Smith (1776/2007) observed that 'capital' was viewed in terms of productive resources such as machines, land, and factories. However, Smith (1776/2007) revolutionized the view of capital introducing the concept of one's "acquired or useful abilities" (p. 217) stating that the "acquisition of such talents, by the maintenance of the acquirer during his education, study, or apprenticeship, always costs a real expense, which is a capital fixed and realized, as it were, in his person" (p. 217). Smith (1776/2007) realized that just as the machines and instruments of labor, land, and profitable buildings possessed fixed capital or revenue, a worker's acquired abilities or talents are inherently valuable and therefore affords capital.

Therefore, the first major premise of human capital theory posits that the workforce can be qualitatively measured based on human capital investments (e.g. education, training, and professional development). Many initial studies in human capital theory examined the impact of educational attainment on wage distribution. Schultz (1960) was one of the first human capital theorist to examine longitudinal data comparing high school and college graduates' income earnings and found that college graduates earned more money than high school graduates. Many other studies followed Schultz' (1960) work supporting that college education was an investment towards one's potential income and thus viewed education as a critical factor in one's human capital (Becker, 1992; Benson, 1978; Cohn, 1980; Cornacchione & Daugherty, 2013; Fogg, Harrington, & Khatiwada, 2018; Haveman & Wolf, 1984; Hlavna, 1992; Schultz, 1961).

Human Capital Theory and Education

While human capital theorists have explored many variables related to labor quality, education has remained the focal point for this theory and has been viewed as the key factor in fostering productive human capital (Dai, Sindelar, Denslow, Dewey, & Rosenberg, 2007; Ismail & Awang, 2017; Nafukho et al., 2004; Pil & Leana, 2009;). Moreover, education preparation (e.g. level of education, earned degrees or credentials) is commonly used across many labor markets as a common measurement of labor quality because employers accept that these inputs represent intrinsic value, knowledge, or skills that allow the worker to be more productive in their respected workplace (Benson, 1978; Jepsen & Montgomery, 2012; Nafukho, Hairston, & Brooks, 2004).

In the field of education, human capital theory has been applied to examine various programs, policies, and strategies for improving teacher quality (Dai et al, 2007; Pil & Leana, 2009). Pil and Leana (2009) used survey research to examine the effects of teacher human and social capital on growth in student achievement with students in grades three, four, and five. Pil and Leana (2009) used human capital theory to examine teacher human capital, which they defined as formal education, identifying teachers that possessed a bachelor's, master's, and beyond master's degree. Pil and Leana (2009) also used human capital theory to examine team human capital to identify grade level teams with "better educated, more experienced, and higher-ability members" (p. 1109). The results revealed a positive and significant correlation with the formal education received by the teacher and their impact on student achievement.

Dai et al. (2007) utilized human capital theory to identify the effectiveness of alternative certification programs comparing and contrasting teachers who were certified

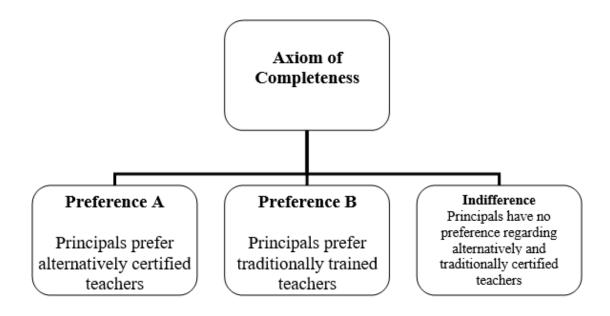
through fast-track programs (candidates previously employed as paraprofessionals in schools) and programs for career changers. Dai et al. (2007) examined aspects of these alternative certification programs such as program location, candidate selection, program cost, financial support, program requirements, practice teaching, and mentorship. Specifically, Dai et al. (2007) utilized human capital theory to focus on the selection process thereby identifying strong candidates for high-needs subject areas, high-need schools, and high-need districts. Dai et al. (2007) found that it is important to focus on candidates who have specialized knowledge, training, and a general enjoyment in the subject area they are certified to teach. Dai et al. (2007) also stated that it is critical to focus on candidates that grew up or lived in a specific high-needs area as they either have a strong desire to teach in the area they grew up in or they possess specific knowledge of that high-needs area.

Rational Choice Theory

The second major premise of human capital theory posits that human decisionmaking and behavior can be understood or predicted and that these predictions are based on individuals' prior experiences and preferences (Becker, 1976; Elster, 1986; Mandler, 2001; Tan, 2014). In fact, human capital theory is rooted in rational choice theory (RCT), which, traditionally applied to economics, has become more widely used in various disciplines such as sociology, political science, and education. Rational choice theory rests on the premise that individuals do their best to maximize their decision-making under their given circumstances and that these "decisions are meticulously calculated and finely consistent with their past and future decision" (Tan, 2014, p. 418). Furthermore, rational choice theorists state that individuals are driven to make decisions based on their preferences, which are determined by axioms of rationality (Mandler, 2001).

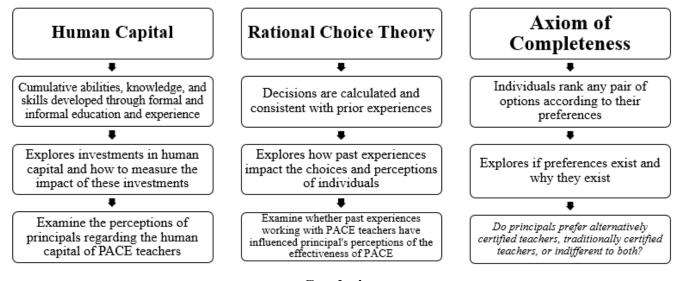
While many axioms of rationality exist, I have selected the axiom of completeness, which is based on the assumption that individuals can rank any pair of options according to their preferences (Mandler, 2001). The completeness axiom holds that an individual prefers "a" to "b", prefers "b" to "a", or is indifferent to "a" or "b." For instance, as illustrated in Figure 2.2, a principal may prefer traditionally prepared teachers to alternatively prepared teachers, alternatively prepared teachers, or may not have a preference between the two groups of teachers. Rational choice theory, and in particular the axiom of completeness, explores the choices made by an individual, how these choices are driven by preferences which are based on past experiences, and how these choices assist individuals in "achieving their objective, given all relevant constraints" (Green, 2002, p. 5). This is precisely where rational choice theory merges with human capital theory as the former seeks to determine what preferences exist while the latter works to describe why these preferences exist and how they factor in the decision-making process.

Figure 2.2 – Axiom of Completeness



My rationale for focusing on human capital theory and rational choice theory, with an emphasis on the axiom of completeness, as a theoretical lens from which to analyze effectiveness of the PACE program is illustrated in Figure 2.3. The teachers that qualify for the PACE program have quite different knowledge, skills, experiences, and education backgrounds from traditionally certified teachers. Since human capital theory posits that human investments can have a measurable impact on productivity or effectiveness (Becker 1992; Benson, 1978; Hlavna, 1992; Jepsen & Montgomery, 2012; Nafukho, Hairston, & Brooks, 2004; Schultz, 1960; Schultz, 1961; Sweetland, 1996; Walters, 2004), it is reasonable to assume that principals have developed perceptions about the effectiveness of the PACE program. As the chief human resource director in schools, principals make hiring decisions based on their perceptions or experiences working with the faculty at their schools (Rebore, 2014). As teacher openings occur, human capital theory suggests that principals are inclined to hire prospective teachers based on their experiences with various teacher preparation programs. If one particular teacher preparation program were inept in developing teachers for the challenges they face in the classroom, then principals would be reluctant to hire teachers based on their experiences with this program. Therefore, in this study I intend to utilize human capital theory as a theoretical framework from which to examine principals' perceived effectiveness of the PACE program.

Figure 2.3 – Human Capital Theoretical Framework



Conclusion

As was stated previously, the research on the impact of alternatively certified

teacher on student achievement is mired in contradictory findings. Nevertheless,

alternatively certified teachers continue to find themselves at the bottom of the

educational job queue (Evans, 2011). The role of school administrators in the recruitment

and hiring of alternatively certified teachers is a critical element in this body of research and must be explored. Using the theoretical frameworks of human capital theory, rational choice theory, and applying best practice research on effective alternative certification programs, I examined the perceptions of secondary principals regarding the effectiveness of the PACE program in South Carolina. I believed that many of the merits and concerns identified in the literature on administrators' perceptions of alternative certification programs were prevalent when analyzing the PACE program's effectiveness. For instance, as a former PACE certified teacher, I believed that a lack of pedagogical training and student teaching opportunities would be a major criticism from secondary administrators who participate in this study. Furthermore, I believed that secondary administrators would cite strong content knowledge, a diverse workforce of men and teachers of color, and a wide array of educational backgrounds and life experiences as a strength of PACE teachers. However, I also acknowledged that there might be unanticipated findings that would come to light and provide valuable insight into the perceived effectiveness of the PACE program. I concluded that if the literature is contradictory regarding the impact of alternatively certified teachers on student achievement, then perhaps the perceptions of administrators might be contributing to the decline of these teachers in the job queue. In the next chapter, I will examine the research methodology utilized to examine principals' perceived effectiveness of the PACE program in South Carolina.

CHAPTER THREE

RESEARCH METHODS

Introduction

As was stated in Chapter 1, the primary goal of this study was to examine the perceptions of secondary principals regarding the effectiveness of the Program of Alternative Certification for Educators (PACE), South Carolina's state supported alternative certification program. In this chapter, I provide the methodological choices I utilized to examine the shared experiences and perceptions of secondary principals regarding the PACE program are presented in this chapter. This chapter is organized into the following sections: (1) Statement of the Problem; (2) Purpose Statement; (3) Research Questions; (4) Delimitations; (5) Methodology; (6) Research Methods; (7) Limitations; (8) Underlying Epistemology; and (9) Positionality Statement.

Statement of the Problem

The effectiveness of alternative certified programs is a critical topic of school personnel decision-making as the number of alternative certification programs continues to proliferate across the United States. While research indicates that alternatively certified teachers are continuing to rank among the lowest valued teachers in the job queue (Evans, 2010; Darling-Hammond et al., 2005; Darling-Hammond, 2010), another important consideration is the role of the school principal in the hiring decisions at their schools. Research indicates that principals' perceptions may be contributing to the decline of alternative certified teachers in the job queue as many school leaders have elected to hire teacher candidates from traditional certification backgrounds (Hall 2008; Finn 2009; Brenner 2015; Wagmeister, 2006; Johnson, 2010; Torff & Sessions, 2005). It is precisely in this context that the motivations for this study have originated.

An important consideration in the problematization of this study relates to research which indicates that principals have mixed perceptions of alternative certification programs and the teachers who are prepared through these programs (Hall 2008; Finn 2009; Brenner 2015; Wagmeister, 2006; Johnson, 2010; Torff & Sessions, 2005). This research raises concerns as some principals may be unconvinced of the value of these alternative certification programs and may be less inclined to hire alternatively certified teachers for their schools. Previous studies revealed that principals believed alternatively certified teachers possessed strong content knowledge which allowed these teachers mastery of their given subject matter (Hall, 2008; Fin, 2009; Brenner et al., 2015; Wagmeister, 2006; Johnson, 2010; Toff & Sessions, 2005). Furthermore, many studies found that principals perceived alternatively certified teachers to be professional and brought much needed diversity to the classroom such as more men and minorities (Hall, 2008; Fin, 2009; Brenner et al., 2015). Many of the studies also found that administrators believed alternative certified teachers brought valuable life experiences to the classroom which allowed them to be successful (Hall, 2008; Brenner et al, 2015). In these studies, administrators indicated that these experiences allowed alternatively certified teachers to build rapport with students, establish professional relationships, and communicate with parents and students.

However, many of the studies also revealed themes that related to negative perceptions held by administrators towards alternative certified teachers. One common theme that emerged from the literature pertained to perceptions held by principals that alternative certified teachers possessed more deficiencies associated with pedagogy related to lesson planning and curriculum development, teaching methods and classroom management, and motivating and engaging students, organizing and sequencing lessons, responding to students' learning needs, and encouraging higher level thinking (Wagmeister, 2006; Johnson, 2010; Torff & Sessions, 2005; Fin, 2009; Brenner et al., 2015). Another important theme that was found in the literature dealt with administrators who had concerns with the fact that alternative certified teachers lacked the student teaching which is required of traditional certified teachers (Brenner et al., 2015, Johnson, 2010; Torff & Sessions, 2005).

Although previously reviewed research on principals' perceptions of the effectiveness ACPs provided some insight on what factors may be contributing to alternatively certified teachers being placed at the bottom of the job queue, there are several areas that remain to be explored. For instance, much of the literature conducted on principals' perceptions of alternative certification programs focused solely on MAT and nationally recognized alternative certification programs such as Teach for America. Moreover, there appears to exist a dearth of research on principals' perceptions of state supported alternative certified programs such as the Program of Alternative Certification for Educators (PACE) program in South Carolina.

Purpose Statement

The purpose of this two-phase, sequential mixed methods study was to examine the perceptions of secondary principals regarding the effectiveness of PACE throughout the state of South Carolina. In the first phase, I conducted quantitative research by gathering survey data on secondary principals' perceptions of the PACE program. Specifically, I analyzed three processes through the PACE program functions and have been shown in literature to be vital to alternative certification program effectiveness: 1) the recruitment and selection of PACE teachers; 2) the preparation of PACE teachers; 3) and the support of PACE teachers.

In the second phase, I conducted qualitative research by interviewing eight secondary principals (middle and high school) who were identified from the surveys. These interviews provided an additional data source on the perceived effectiveness of the PACE program. The rationale for following up with qualitative research in the second phase was to better understand the lived experiences of secondary principals in supervising teachers who have received their teaching certification through the PACE program.

My rationale for selecting secondary principals is the fact that the PACE program only offers certification routes for middle and high school teachers. Therefore, only middle and high school principals are likely to be familiar with the PACE program and can provide insight into the effectiveness of this alternative certification program. Furthermore, I surveyed and interviewed secondary administrators who had experience hiring and supporting PACE certified teachers as they were able to provide insight into

this body of literature on state supported alternative certification programs that has been largely overlooked.

In my study, I defined alternative certification programs as programs that recruit, prepare, and license individuals who already possess at least a bachelor's degree (Rebore, 2014). For the purposes of my study, I specifically examined the PACE program which was created by the South Carolina Department of Education to recruit, prepare, and license individuals who have earned a bachelor's degree or higher from an accredited college or university with a major in an approved PACE certification field (South Carolina Department of Education, 2022). Through a three-year process, qualified PACE participants work to gain full licensure by completing various requirements such as weeklong classes throughout the summer, weekend seminars, and a minimum of three approved graduate courses. At the end of this three-year process, successful candidates receive a South Carolina teacher license in their related content area.

Research Questions

In order to determine secondary principals' perceptions of the effectiveness of the PACE program in South Carolina, the following research question was explored through both quantitative and qualitative research methods: What are the perceptions of secondary principals of the effectiveness of the Program of Alternative Certification for Educators (PACE) in South Carolina?

The intended focus of my research is to determine secondary principals' perceptions regarding the effectiveness of the PACE Program as examined through the

following three processes: the recruitment and selection of PACE certified teachers; the preparation of PACE certified teachers; and the mentoring and support of PACE certified teachers. These three processes have been identified as critical steps to the success of alternative certification programs as determined by the National Association for Alternative Certification (NAAC) and I developed several survey and interview questions based on best practice research on these processes which were gathered from my literature review.

Delimitations

The delimitations utilized in my study were determined in an effort to explore the perceptions of secondary principals regarding the effectiveness of the PACE Program. Therefore, my first delimitation pertained to the use of only secondary principals as the population for my study. Currently, the PACE program is an alternative certification pathway that is limited to middle and high school teachers. Therefore, secondary principals would likely have the most experience and knowledge of working with and supervising PACE certified teachers. Furthermore, I am particularly focused on secondary principals who have worked extensively with PACE teachers and who can provide the most data-rich interviews during the qualitative phase of my study. It is my hope that these semi-structured interviews will provide a thorough analysis of the experiences of secondary principals regarding the effectiveness of the PACE program.

My next delimitation relates to the three processes I have chosen to explore regarding the effectiveness of the PACE Program, which include: (1) the recruitment and selection of PACE certified teachers; (2) the preparation of PACE certified teachers; (3) and the mentoring and support of PACE certified teachers. While there are many ways to analyze the effectiveness of the PACE program, research gathered during my literature review showed that these three processes are vital to program effectiveness and success (Birkeland & Peske, 2004; Barclay et al., 2008; Carter & Keiler, 2009; Darling-Hammond, 1990; Evans, 2010; Feistritzer, 2011; Gatlin, 2009; Hess, 2001; Humphrey et al., 2005; Johnson et al., 2005; Legler, 2002; Shen, 1997; Stoddart 1990; Wechsler, and Hough 2008; Wilson et al. 2001). Furthermore, the National Association for Alternative Certification (NAAC) conducted a vast project, which encompassed an immense review of literature of effective alternative certification programs, to create Quality Indicators on these three processes and have provided rubrics from which ACPs can measure their own success (NAAC, 2016).

Methodology

In this section, I describe the choices I made to construct my study on secondary principals' perceptions of the PACE program in South Carolina. First, I will discuss the research tradition of interpretative phenomenological analysis (IPA) as it is the qualitative research methodology driving my study. This discussion features a conversation of the study's focus on the lived experiences of secondary principals regarding the effectiveness of the PACE program. Lastly, I discuss the three pillars of IPA, which include phenomenology, double hermeneutics, and ideography. This discussion includes an exploration of how these three pillars shape the methodological choices of IPA and how they influence the exploration of the lived experiences of the participants in my study.

Interpretative Phenomenological Analysis

Interpretative phenomenological analysis (IPA) is a qualitative research method that was birthed in health psychology and become widely used in the social sciences in recent years (Smith, Jarman, & Osborn, 1999; Smith, Flowers, & Larkin, 2009). IPA is a branch of phenomenological qualitative research which focuses on the collective lived experiences within a population of study (Creswell, 2013; Maxwell, 2013). However, there are three pillars that differentiate IPA from other qualitative methodologies, which include its focus on phenomenology, double hermeneutics, and ideography. I will briefly describe how these three pillars shape not only the methodological choice of IPA but also how these elements influenced my study.

In order to understand the effectiveness of the PACE program, I explored the lived experiences of secondary principals as they have worked with PACE certified teachers and the PACE program. As quantitative research is concerned with producing objective analysis of events or phenomena, IPA - and phenomenology for that matter - is concerned with an individual's personal perceptions, accounts, and experiences (Smith et al., 1999; Smith & Osborn, 2008; Pietkiewicz & Smith, 2014). As was discussed in the literature review, it is fundamental to understand the perceptions of principals concerning ACP effectiveness as their biases play an integral part in the hiring of PACE certified teachers (Hall 2008; Finn 2009; Brenner 2015; Wagmeister, 2006; Johnson, 2010; Torff

& Session, 2005). Phenomenological research allowed me to delve into how secondary principals perceive and discuss the effectiveness of the PACE program as this branch of qualitative research analyzes how participants interpret a phenomenon. Phenomenology, as developed by Edmund Husserl, utilizes the eidetic method, which views meaning and knowing as social constructions shaped by their own experiences (Pietkiewicz & Smith, 2014; Smith & Osborn, 2008; Smith et al., 2009). In other words, it aims at identifying the essential components of phenomena or experiences which make them unique or distinguishable from others.

Another element which is critical to the methodology of IPA and phenomenological analysis is the role of hermeneutics. Hermeneutics derives from Greek meaning "to interpret" or "make clear" and seeks to explain how individuals make sense and interpret the events, objects, and people surrounding a phenomenon (Pietkiewicz & Smith, 2014; Smith & Osborn, 2008). The goal of hermeneutical analysis for a researcher is to attempt to understand what a particular phenomenon is like from the viewpoint of the participants, or as the adage states, 'to walk in someone else's shoes' (Smith et al., 1999; Smith et al., 2009). However, what differentiates IPA from similar phenomenological analysis is its focus on "double hermeneutics", which is a dual interpretation process (Pietkiewicz & Smith, 2014; Smith & Osborn, 2008). In the first phase of double hermeneutics, participants are attempting to make meaning of their experiences, while in the second phase the researcher is attempting to make meaning from the participants' experiences (Smith et al., 1999; Smith & Osborn, 2008; Smith et al., 2009). The role of the researcher is essential in double hermeneutics as they are responsible for not only identifying the essential components that make the phenomenon or experience unique but must also be cognizant that they are a part of the experience or phenomenon (Pietkiewicz & Smith, 2014). Moreover, as the researcher is an active part of the experience and meaning making, it is cardinal that they be aware of their own biases and assumptions. As a former administrator and PACE certified teacher, I am fully aware of my own experiences and biases in this research and have gone to great lengths to express this reflexivity in my positionality statement in this chapter.

The last element, which is critical to the methodology of IPA, is idiography, or the in-depth exploration of single cases in order to examine the various perspectives of participants in their context (Pietkiewicz & Smith, 2014; Smith & Osborn, 2008; Smith et al., 2009). Furthermore, IPA is concerned with building data-rich participants from which to understand their unique experiences with a particular phenomenon (Pietkiewicz & Smith, 2014; Smith & Osborn, 2008; Smith et al., 2009). In order to locate the most datarich participants, I utilized a Google Form survey from which I was able locate secondary principals who have worked extensively with the PACE program and PACE certified teachers. These surveys allowed me to ideographically examine each participant's experience as the goal of IPA is to explore each case before producing any findings regarding the phenomenon in question (Pietkiewicz & Smith, 2014; Smith et al., 1999; Smith & Osborn, 2008; Smith et al., 2009). In the case of my study, each principal's perspective regarding the effectiveness of the PACE program is important and contributes to the overall understand of any themes that may arise.

Research Methods

Selection of Participants

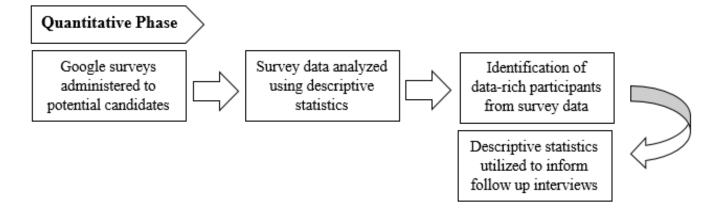
As IPA research involves obtaining information-rich, case-by-case analysis (Smith & Osborn, 2015), the participants for this study were selected using purposive, homogenous sampling. According to Wiersma & Jurs (2009), "homogenous sampling is used when the purpose of the study is to focus on a particular subgroup" (p. 345). Therefore, I purposefully selected principals who had experience with the PACE Program in South Carolina. Currently, the PACE program only offers teacher certification routes for middle and high school teacher candidates. Therefore, I selected secondary principals, in either middle or high schools, for this study as these leaders have direct experience with the recruitment, hiring, and support of PACE certified teachers.

Another sampling consideration, and one that is paramount for the purposes of conducting IPA, is the process of studying individuals ideographically, which "aims at generating rich and detailed descriptions of how individuals are experiencing phenomena under investigation" (Pietkiewicz & Smith, 2012, p. 363). Therefore, I was able to locate secondary principals who provided information-rich accounts of their lived experiences with the PACE program and PACE teachers. I utilized Google Forms in order to locate principals who provided rich and detailed accounts of their lived experiences with the PACE program and PACE certified teachers. This Google Form survey was sent to secondary principals throughout the state which contained Likert scale responses as well as a brief questionnaire to determine which principals had the most experience supervising and working with PACE certified teachers. It is important to remember that the essence of phenomenology is the process of meaning-making from a participant's

lived experience of a particular phenomenon. Therefore, if some of the participants had little or no experience with hiring PACE teachers then they were excluded as potential interviewees for this study.

Quantitative Phase of Mixed Methods Design

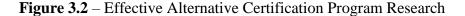


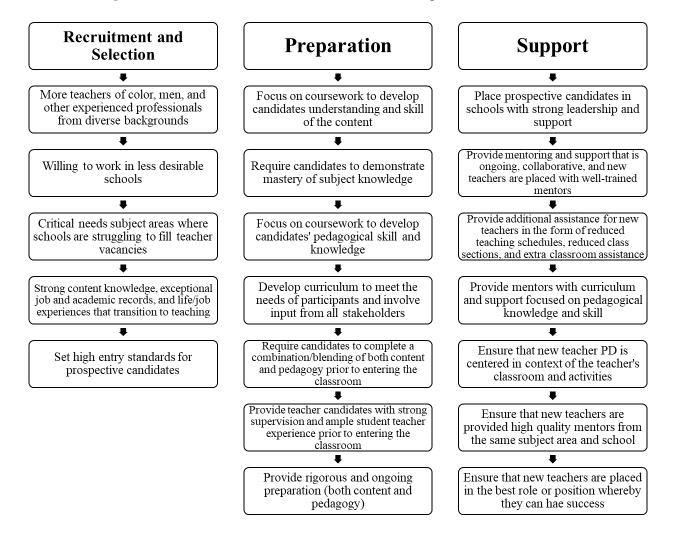


As is depicted in Figure 3.1, I conducted the quantitative phase of my data collection and analysis using surveys which were emailed as a Google Form to secondary principals (with the permission of the district superintendent). At the time of my study, there were 248 middle school principals and 226 high school principals in the state of South Carolina. In order to have a 95% confidence level with a 4% confidence interval, I needed 265 participants to respond to the survey so that my results could be generalizable throughout the state of South Carolina. However, after submitting my survey several times to prospective secondary principals in the state, I came short of my 265 goal, only

receiving 106 completed surveys. While I did not reach my 95% confidence level in my survey, it is important to note that it is quite common to have low response rates when conducting survey research, especially web surveys (Kaplowitz et al., 2004; Manfreda et al., 2008). It is important to note that my web survey response rate of 21.9% were similar to the response rates that were cited in the work of Kaplowitz et al (2004) and Manfreda et al. (2008). The Google Form survey I developed can be found in the Appendix A.

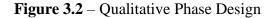
In my quantitative phase of research, I analyzed Likert data and open-ended questions from my survey to determine secondary principals' perceptions regarding the effectiveness of the PACE program. I developed Likert questions and open-ended questions from Figure 3.2, which served as my theoretical framework and was based on the NAAC's National Quality Indicators, as well as pertinent scholarship on effective alternative certification programs from Figure 3.2. As was previously stated, I developed Likert questions and open-ended questions to determine principals' perceptions regarding the recruitment and selection, preparation, and mentoring and support of PACE certified teachers. I utilized descriptive statistics as the primary form of analysis for Likert data, including measures of central tendency. This survey data was instrumental as it allowed me to determine if positive or negative perceptions regarding the effectiveness of the PACE program exist.

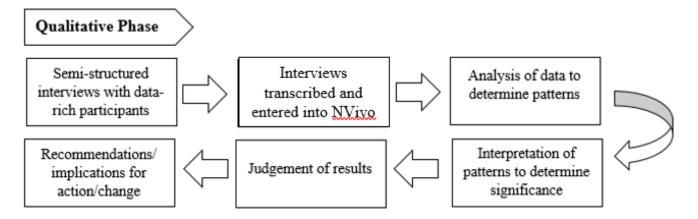




For my open-ended questions, I utilized evaluation coding to identify themes as they emerged from the data. Saldana (2013) described evaluation coding as analysis that is "appropriate for policy, critical, action, organizational, and evaluation studies...that assign judgments about merit, worth, or significance of programs or policies (p.119). I will provide a deeper discussion of my evaluation coding practices in the qualitative phase later on in this chapter. Another consideration as I developed my surveys was to assist in identifying data-rich participants who were invited to take part in semi-structured interviews. These principals were identified from my survey as data-rich as they possess extensive knowledge and experience supervising PACE teachers.

Qualitative Phase of Mixed Methods Design





During the qualitative phase of my research which is illustrated in Figure 3.2, I collected data from semi-structured interviews with eight secondary principals. I selected these eight principals for interviews from survey data during my quantitative phase of research. I identified these eight principals as data-rich participants as they possessed extensive knowledge and experience supervising PACE certified teachers. The purpose of these semi-structured interviews were to examine the shared experiences of secondary principals in regards to the recruitment and selection of PACE teachers, the preparation of PACE teachers, and the mentoring and support provided to PACE teachers. I developed the semi-structured interviews questions from Figure 3.2, which was based on the NAAC's National Quality Indicators, as well as pertinent scholarship on effective

alternative certification programs. My interview protocol planning matrix and interview protocols can be found on Appendices B and C.

The coding methodology I chose for my study is evaluation coding, which Saldana (2013) described as analysis that is "appropriate for policy, critical, action, organizational, and evaluation studies...that assign judgments about merit, worth, or significance of programs or policies (p.119). In the use of evaluation coding and especially the analysis of data, "prediction provides recommendations for change, if needed, and how those changes might be implement" (Saldana, 2013, p. 119). While there are many scholars how have contributed to the development of evaluation coding (Patton, 2002; Rallis & Rossman, 2003; Saldana, 2013), I used the four distinct processes as described by Patton (2008) when determining meaning of my qualitative findings.

In the first phase of Patton's (2008) evaluation coding, I transcribed and coded interview responses which were thematically analyzed to determine patterns that emerged from the data. In the second phase, I interpreted these patterns to determine their significance. In other words, as themes emerged I looked for similarities and differences from each participant's response and determining the significance of these findings. In the third phase, I made judgements regarding the results and ultimately determined what perceptions existed regarding the PACE program and why principals felt this way. Lastly, Patton (2008) states that evaluation coding must lead to recommendations or implication for action and/or change regarding the program or policy under analysis. During this phase, I provided a thematic comparison of coded participant responses as well as research from the literature review on effective alternative certification programs in order to provide recommendations and implications regarding the effectiveness of the PACE program. The canonical representation of the data is presented in narrative form with major themes discussed along with any other major findings.

While many questions during the semi-structured follow up interviews were predetermined, I used survey data to help shape interview questions for the qualitative phase of my research. It was my assumption that the information gathered from my surveys regarding principals' perceptions might be worth exploring more thoroughly during the qualitative phase. Finally, the quantitative data also allowed me to determine secondary principals who had the most experience supervising PACE teachers, as they were able to provide the most data-rich interviews during the qualitative phase of my study. The surveys allowed participants to be studied idiographically, which is a critical methodological aspect of IPA as it allows for "rich and detailed descriptions of how individuals are experiencing phenomena under investigation" (Pietkiewicz & Smith, 2012, p. 363).

Limitations

As limitations are an ever-present reality for any researcher (Wiersma & Jurs, 2008), there were two limitations that were evident during the course of my study. The first limitation related to the instruments chosen for my study as there was no universal survey or interview protocol available based on prior research on the effectiveness of alternative certification programs. The survey questionnaire and the semi-structured interview questions I created are from an amalgamation of both NAAC's Quality

Indicators as well as best practice research on effective ACPs gathered from my literature review. The NAAC's Quality Indicators project was a joint venture with Project KNOTtT (Kansas, Nevada, Ohio, and Texas Transition to Teaching) that began in 2004 and was created from an extensive literature review of effective ACP research. As was discussed in the literature review, many researchers have relied on the use of research from the National Association for Alternative Certification (NAAC) as well as other effective ACP research, to assist in developing their own instruments from which to interview and survey principals (Brenner et al., 2015; Hall, 2008; Fin, 2009; Johnson, 2010; Toff & Sessions, 2005; Wagmeister, 2006). Specifically, my survey and interview questions focus on the following three processes which have been substantially researched and proven to be critical in establishing an effective alternative certification program and contributing to teacher candidate success in the classroom: (1) the recruitment and selection of PACE certified teachers; (2) the preparation of PACE certified teachers; (3) and mentoring and support of PACE certified teachers (Ballou and Podgursky, 2000; Wilson et al. 2001; NAAC, 2016).

The last limitation pertains to access to participants due to COVID-19 protocols across districts and schools throughout the state of South Carolina. Currently, many schools and states are on school schedules that vary from eLearning to full face-to-face instruction. For instance, the school district I work in is currently meeting face-to-face for faculty and students but we are not allowing outside visitors into the school. Our school's contingency plan in lieu of meeting face-to-face with outside guest is the utilization of Zoom and/or Cisco WebEx. Therefore, out of an abundance of caution and to respect each district and school's COVID-19 protocols, I plan to meet with participants on Zoom or WebEx. The use of Zoom and WebEx will also allow me to record the meetings and assist with transcription of the interviews. Furthermore, district and school faculty across the state of South Carolina have become accustomed to using either Zoom or WebEx so participants should be very comfortable utilizing these programs to interview virtually.

Underlying Epistemology

The epistemological foundation of my study is largely influenced by pragmatism, which is a paradigm that focuses on the application of all approaches available to understand or solve problems (Creswell, 2009). Pragmatism, as an epistemological paradigm, is rooted in the utilitarian philosophy that the outcome is more important than the process, or as the old adage states "the ends justify the means" (Doyle, Brady, & Bryne, 2009). Pragmatism does not relegate the research process, as this is a critical aspect of any research endeavor. Rather, pragmatists challenge the debate between positivists and interpretivists over the nature of knowledge (epistemology) and especially which research process, quantitative or qualitative, leads to truth (Crotty, 1998). Pragmatists argue "the mandate of science is not to find truth or reality" (Powell, 2001, p. 884), but should instead focus on the research question or problem where the central concern is what works most effectively (Parvaiz, Mufti, & Wahab, 2016). In fact, early pioneers of mixed methods research were driven by this same pragmatic attitude as they believed qualitative and quantitative methodologies were both useful in addressing their research questions (Johnson et al., 2007).

The utilitarian approach to pragmatism has been particularly well suited to my research interests as it has provided me the liberty to design a two-phase quantitative and qualitative approach from which to analyze principals' perceptions of the PACE program (Creswell, 2009). For instance, without gathering quantitative data during my first phase of research I would not be able to identify data-rich participants from which to interview in my qualitative phase. This initial quantitative phase also allowed me gather survey data on principals' perceptions of the PACE program from which I was able to construct robust follow-up interview questions and protocols. Moreover, providing the researcher freedom and flexibility to employ the proper research methods from which to determine what works most effectively to answer their research questions is perhaps the greatest strengths of the pragmatist paradigm (Creswell & Plano Clark, 2007; Doyle et al., 2009; Johnson, Onwuegbuzie, & Turner, 2007).

Researcher Positionality

Piantanida and Garman (1999) stated that it is important for the researcher to be cognizant of the fact that their "thinking lies at the heart of inquiry" and "the researcher is as much a part of the inquiry as the intent of the study and the inquiry process" (p. 24). As a researcher and a practitioner in the field of education I understand that with scholarship comes my own subjectivity and reflexivity as it "is like a garment that cannot be removed" (Peshkin, 1988, p. 17). However, to become an effective scholarpractitioner it is vital that I first face the unavoidable reality that if I cannot rid myself of this subjectivity, I should at least give it more attention and study (Cheater, 1987, p. 172). Therefore, this positionality statement was created in order to understand how my background as both a PACE certified teacher and a secondary administrator have provided insights into the research purpose of examining the perceptions of secondary principals regarding the effectiveness of the Program of Alternative Certification for Educators (PACE) in South Carolina.

Relationship to the Topic

After receiving a bachelor's degree in history, I applied for teacher licensure through the PACE program in South Carolina. Since I had a degree in history, the PACE program allowed me gain teacher licensure in middle and secondary social studies where I soon found a job at a middle school in the upstate of South Carolina. As a PACE certified teacher, I believe it is important to address my experiences with this program and how these experiences have influenced this research study. My experiences gaining my teacher licensure through the PACE program were a positive experience and I believe the program is ultimately effective. However, I am aware of both the strengths and weaknesses of the PACE program in preparing teacher candidates which parallel many of the literature findings on alternative certification program. For instance, possessing a degree in history allowed me to utilize my strength in content knowledge as I had a greater understanding of the content than traditionally certified teachers. However, my lack of student teaching experiences led to challenges with pedagogy, in particular classroom management, during my first few years in the classroom.

Another important consideration on this topic was my transition from the classroom to serving as a school administrator in the middle school setting. My

experience as a secondary administrator provided me a different lens from which to understand the impact that principals play in the hiring of alternatively certified candidates. My assumptions about this topic have been shaped by many of the positive and negative biases of educators towards alternatively certified teachers. During my tenure as a middle school assistant principal, I experienced a negative bias from other administrators who stated that many of the PACE certified teachers they hired were not very competent and effective in the classroom. However, I have also worked with other administrators who have held a favorable attitude toward PACE teachers and have hired these alternatively certified teachers over traditionally certified teachers as they believe these teachers are more qualified for positions in their schools.

Moreover, my experiences have shaped how I framed my major research question as I want to explore if administrators have a positive or negative perception of PACE teachers and the program's effectiveness. My experiences have also led me to believe that the best way to explore this subject is to conduct a study that investigates this topic in a quantitative and qualitative manner. Since I am currently serving as a secondary administrator, I have developed the assumption that principals know what effective teaching looks like in their schools. Principals serve as the instructional leader of the school and play a vital role in teacher effectiveness by observing teachers, providing feedback, and evaluating teacher performance. Therefore, I believe that principals' perception of ACP effectiveness is an important topic that needs to be further researched. I intend to provide administrators a voice which has been largely remiss in the literature as studies have tended to focus on the experiences of alternatively certified teachers and their impact on student achievement. Furthermore, I have chosen not to focus on the perceptions of alternative certified teachers as I did not truly grasp what effective teaching looked like once I finished the PACE program. It was only after several years teaching and especially my experiences as an administrator that allowed me to understand and identify effective teaching.

Relationship to Participants

From this research study, I intend to address any inherent bias from administrators in the hiring process of PACE teachers. Literature shows that alternatively certified teachers are among the lowest teacher candidates in the job queue (Evans, 2010; Darling-Hammond, 2001; Darling-Hammond, 2010) and that there are mixed principal perceptions of alternative certification program effectiveness (Torff & Sessions, 2005; Wagmeister 2006; Hall 2008; Finn 2009; Brenner 2015; Johnson, 2010). From my experience in working with administrators throughout the state of South Carolina, I believe there exists a dichotomy of both negative and positive views from secondary principals towards the effectiveness of the PACE program. I believe that this dichotomy exist because administrators have mixed experiences with hiring and supporting PACE teachers in their schools which is evident from conversations that I have had with fellow administrators. For the purposes of reflexivity, I believe it is also important to examine my relationship to the participants, and how this relationship may affect their responses to questions regarding the effectiveness of the PACE program. Therefore, it is my belief that my amiable relationship with many of my fellow administrators will allow me to have candid conversations about their perceptions of the PACE program.

Researcher Responsibilities

I have acknowledged my biases on this research topic which are influenced by my experiences as a PACE certified teacher and a secondary administration. However, as a researcher on this topic the most important priority I intend to address with this research study is teacher quality. Research suggests that the single most important nexus in student achievement is quality and training of teachers (Kaplan & Owings, 2001; Darling-Hammond, 2010; Sanders & Rivers, 1996). According to Kapplan & Owings (2001), staffing all classrooms with highly qualified teachers is a national concern especially in light of legislation such as No Child Left Behind, which mandated a certified content area teacher in every core subject area classroom by the 2005-2006 and that leaders of school and district with high numbers of unlicensed teachers have to seek their professional teacher license. Subsequently, NCLB required educators and administrators to stay abreast to literature related to teacher quality and understand the "teaching is a complex activity that is influence by the many elements of teacher quality (King-Rice, 2003, p. 8). Therefore, in the course of this research study, if the findings support that there are strengths and weaknesses with the PACE program, then I intend to present these findings to PACE program decision-makers. I hope that these findings would support PACE program improvement so that future PACE candidates will be more prepared to meet the needs of students.

Chapter Summary

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In this chapter, I began with a summary of the content of the dissertation from Chapter 1 and 2. I then recapped the purpose of my study and the research question driving my research. Next, I discussed my delimitations and explained how this study is rooted in IPA, with its influences from phenomenological analysis, double hermeneutics, and ideography. I followed this section with a description of my research methods, and an explanation of my sampling rationale, and my data sources, and a brief description of the participants in my study. I concluded the section on research methods with a discussion of my data collection and analysis processes, which included four rounds of evaluation coding as described by Patton (2008), as well as the limitations that pertained to my study. I dedicated the final portion of this chapter to a discussion on my epistemological influences and positionality as a researcher in this study.

CHAPTER FOUR

DATA ANALYSIS AND FINDINGS

Introduction

In Chapter 1, I offered an introduction to the basic elements of my study, summarizing and briefly explaining the importance of understanding secondary principals' perceptions regarding the effectiveness of the PACE Program, South Carolina's alternative certification program. In Chapter 2, I presented information pertinent to my study with careful attention to prior research, which reveals that alternatively certified teachers are the least preferred teaching candidates in the job queue (Darling-Hammond et al., 2005; Darling-Hammond, 2010; Evans, 2010). A critical element to understanding why alternatively certified candidates find themselves at the bottom of the teacher job queue relates directly to the perceptions of principals regarding alternative certification program (ACP) effectiveness. Since prior research on this topic reveals that principals have mixed perceptions regarding ACP effectiveness (Brenner 2015; Finn 2009; Hall 2008; Johnson, 2010; Torff & Sessions, 2005; Wagmeister, 2006), understanding the perceptions of principals is a vital piece in this growing body of research. Moreover, principals' opinions play a tremendous role in the future of ACPs and especially in the likelihood of alternatively certified teachers finding employment.

In Chapter 3, I described the research design and methods, the epistemological positionality of my study, and revealed the research question of my study: What are the perceptions of secondary principals regarding the effectiveness of the Program of

Alternative Certification for Educators (PACE) in South Carolina? Therefore, the purpose of Chapter 4 is to detail the findings of my study and reveal central themes from the data collected through my research. I have organized this chapter into the following sections: (1) Quantitative Findings; (2) Qualitative Finding; and (3) Chapter Summary.

Quantitative Findings

I utilized a mixed-methods research approach to understand principals' perceptions regarding the effectiveness of the PACE Program. The quantitative phase of my research entailed the development of a Google Form survey which I emailed directly to all secondary principals in the state of South Carolina. At the time of my study, there were 248 middle school principals and 226 high school principals in the state of South Carolina. In order to have a 95% confidence level with a 4% confidence interval, I needed 265 participants to respond to the survey so that my results could be generalizable throughout the state of South Carolina.

However, after submitting my survey several times to prospective secondary principals in the state, I came up short of my 265 goal, only receiving 106 completed surveys. While I did not reach my 95% confidence level in my survey, it is important to note that it is quite common to have low response rates when conducting survey research, especially web-based surveys. For instance, Manfreda et al. (2008) conducted a metaanalysis of 45 studies examining differences in the response rates of web surveys and other survey models. Manfreda et al (2008) found that the response rate for web-based surveys were on average 11% lower than other survey models (e.g., mail surveys and face-to-face surveys). Another study conducted by Kaplowitz et al., (2004), investigated survey response rates from university undergraduate students. Kaplowitz et al. found that only 21% responded to an email survey, 31% responded to a mail survey, and 92% responded to face-to-face surveys. I think it is important to note that my web-based survey response rate of 21.9% was similar to the response rates that were cited in the work of Kaplowitz et al. (2004) and Manfreda et al. (2008).

In Tables 4.1, 4.2, and 4.3, I provide a profile of the participants for my study including the response rate, ethnicity, gender, and a breakdown of middle and high school respondents. As can be seen in Table 4.1, I received responses from 51 middle school principals and 55 high school principals for a total of 105 responses. This total is 21.9% of the 474 middle and high school principals in South Carolina at the time the survey was conducted.

Table 4.1

Survey Participants

	State Total	Respondents
Middle School Principals	248	51
High School Principals	226	55

*105 out of 474 principals responded at 21.9% respondent rate

As can be seen in Table 4.2, of the 51 middle school principals who participated in my study, 29 participants identified as White and 23 participants identified as Non-White. Moreover, of the 55 high school principals who participated in my study, 42 participants identified as White and 14 participants identified as Non-White.

Table 4.2

Middle School Principals		High School Principals		
	51		55	
White	Non-White	White	Non-White	
29	23	42	14	

As can be seen in Table 4.3, of the 51 middle school principals who participated in my study, 18 participants identified as male, and 33 participants identified as female. Lastly, of the 55 high school principals who participated in my study, 30 participants identified as male, 23 participants identified as female, and 2 participants preferred not to say their gender.

Table 4.3

Participant Gender

Middle School Principals		High School Principals			
	51			55	
Male	Female	Prefer Not to Say	Male	Female	Prefer Not to Say
18	33	0	30	23	2

Recruitment and Selection of PACE Certified Teachers

Based on the results from Table 4.4, it was evident that principals perceived that the PACE Program was effective in the areas of recruitment and selection. When looking at the categories of agree and strongly agree, principals' perceptions on various aspects of the recruitment and selection of PACE certified teachers ranged from 62.8% to 92.5%. When looking at the categories of disagree and strongly disagree, principals' perceptions on various characteristics of the recruitment and selection of PACE certified teachers ranged from 7.5% to 28.5%. While the range of percentages for agree and strongly agree regarding the recruitment and selection of PACE certified teachers was 29.7%, the range of percentages for disagree and strongly disagree was 21%.

Principals perceived the recruitment and selection of PACE certified teachers to be most effective in the areas of setting high entry requirements for prospective candidates (92.5% agree and strongly agree), recruiting and selecting candidates from critical needs subject areas where schools are struggling to fill teacher vacancies (86.8% agree and strongly agree), recruiting and selecting candidates with strong content knowledge (86.8% agree and strongly agree), recruiting and selecting candidates with exceptional job and academic records (78.3% agree and strongly agree), and recruiting and selecting more teachers of color, men, and other experienced professionals from diverse backgrounds than traditional certification programs (62.8% agree and strongly agree).

While principals still maintained strong opinions on the effectiveness of the PACE Program in the areas of recruitment and selection, there were areas where principals expressed higher percentages of disagreement. For instance, 28.3% of principals disagreed that the PACE Program recruits and selects candidates who are willing to work in less desirable schools (60.4% agree and 11.3% strongly agree). Lastly, 22.6% of principals disagreed (0.9% strongly disagree) that the PACE Program recruits and selects candidates with life/job experiences that provides a smooth transition into the teaching profession (69.9% agree and 6.6% strongly agree).

Table 4.4

	Strongly Disagree	Disagree	Agree	Strongly Agree
The PACE program sets high entry standards for prospective candidates	0	8(7.5%)	85(80.2%)	13(12.3%)
The PACE Program recruits and selects more teachers of color, men, and other experienced professionals	0	30(28.5%)	62(59%)	4(3.8%)

Recruitment and Selection of PACE Certified Teachers

from diverse backgrounds than traditional certification programs.				
The PACE Program recruits and selects candidates who are willing to work in less desirable schools.	0	30(28.3%)	64(60.4%)	12(11.3%)
The PACE Program recruits and selects candidates from critical needs subject areas where school are struggling to fill teacher vacancies.	0	13(12.3%)	70(66%)	23(21.7%)
The PACE Program recruits and selects candidates with strong content knowledge.	0	14(13.2%)	80(75.5%)	12(11.3%)
The PACE Program recruits and selects candidates with life/job experiences that provides a smooth transition into the teaching profession.	1(0.9%)	24(22.6%)	74(69.9%)	7(6.6%)
The PACE Program recruits and selects candidates with exceptional job and academic records.	0	23(21.7%)	79(74.5%)	4(3.8%)

Principal Comments on the Recruitment and Selection of PACE Certified Teachers

At the conclusion of this section of the survey, I asked candidates if they had any other comments concerning the recruitment and selection of PACE certified teachers. Several principals provided valuable insight into the recruitment and selection of PACE certified teachers which is thematically presented in the following section. These themes included hiring bias, more robust entry requirements, and relevant job and life experiences. These themes were identified using Patton's (2002; 2008) evaluation coding which is a type of coding technique to provide recommendations or implications for action and/or change regarding a program or policy under analysis.

Hiring Bias. One of the first themes that emerged pertained to the fact that several principals believed a negative bias exists towards the recruitment and selection of PACE certified teachers in the job queue. Principals stated that they have noticed that many of their principal colleagues are reluctant to hire prospective PACE candidates even in critical needs areas where applicants are hard to locate. One middle school principal in my study, shared that many PACE teachers he has work with have been strong teachers but not all of his colleagues have a similar perception towards these teachers:

So far, the quality of PACE candidates I have hired has been exceptional. However, I have discussed the performance of PACE teachers with some of my colleagues and they seem to be very reluctant to give these teachers a chance. They have concerns that stem from their prior experiences with supporting these teachers.

Many principals in my study who gained their teaching licensure through PACE offered further insight as to the prevalence of a hire bias towards PACE certified teachers. These principals believed that non-PACE certified principals are unaware of rigorous entry requirements and preparation for prospective PACE candidates. These PACE certified principals believed that they are more willing to hire PACE certified teachers based on their experiences in the program while non-PACE certified principals are reluctant to do so due to their lack of knowledge of the processes in place to become a PACE teacher. One PACE certified principal in my survey discussed her perceptions on the existence of a hiring bias toward PACE certified teachers this way:

As an educator who entered the profession through PACE, I'm very familiar with the criteria for admission to the program and the coursework that must be completed during the cohort meetings (though this may have changed since I participated). In turn, this makes me more open to working with PACE candidates. However, there seems to be reluctance to hire PACE and other ACP candidates among some fellow administrators that I've picked up on over the past several years. This has often made me wonder why?

Whether this reluctance to hire PACE certified teachers is related to lack of knowledge of the program or an inherent bias due to poor experiences with these teachers, many principals believed that a hiring bias exists. While many principals did not leave lengthy or in-depth comments to identify a more robust rationale for the existence of a hiring biases towards PACE certified teachers, many comments were similar to the following principal's insights on the program:

The candidates in PACE are as varied as the teachers selected from traditional teacher preparation programs. However, they are not a concentrated group of high achievers.

As a former PACE certified teacher, I found it surprisingly interesting that some principals elected to leave vague or disparaging comments about PACE certified teachers with no in-depth rationale as to why they felt this way. As these survey questions were open-ended, there was no way to follow up with candidates about their perceptions in this area. However, based on a perceived hiring bias towards PACE certified teachers, I was motivated to explore this topic in more depth in my semi-structured interviews during the qualitative phase of my research.

More Robust Entry Requirements. Another theme that emerged from the surveys pertained to the belief held by principals that the PACE Program has created more robust entry requirements for prospective PACE candidates. Principals stated that in the early stages of the program, many prospective PACE candidates were not the strongest candidates in the teacher job queue. However, principals believed that over time the PACE Program has worked to create a more rigorous process for selecting prospective PACE candidates. One middle school principal provided her observation regarding the increased robustness in the recruitment and selection of PACE certified teachers:

When PACE first started, it was not as strong. However, over the years they have become increasingly rigorous, and our PACE teachers are usually very successful. I don't hesitate to hire a PACE teacher who fits our culture. I am confident they will be successful due to higher standards that seem to have been put in place by the program.

Another high school principal provided his thoughts regarding the entry requirements for prospective PACE candidates:

The PACE program does a better job of vetting and preparing candidates for teaching than similar alternative certification programs. I have seen a remarkable difference in the quality of candidates coming from PACE compared to similar programs out there.

This principal summarized the views of many other principals who were impressed with the quality of candidates that are entering the classroom from PACE especially when compared to other alternative certification programs (e.g., Teachers of Tomorrow and Teach for America). These principals offered similar views regarding the strong vetting processes in place for prospective PACE candidates especially when compared to other alternatively certified candidates in the job queue.

Relevant Job and Life Experiences. The last theme that emerged from survey responses revealed that principals perceived PACE certified teachers to possess relevant job and life experiences. Principals stated that PACE certified teachers, in many cases, bring business world experience that many teachers from traditional certification programs do not. One high school principal provided the following insight when reflecting on the PACE certified teachers she has employed at her school:

PACE teachers, in many cases, bring business world experiences that many teachers from teacher preparation programs do not. I really like how they look at education differently due to their vast experiences in the workforce. Principals reported that PACE certified teachers' experiences outside of education can have a positive impact in the classroom as these teachers are able to make real-world connections to the content. Due to their unique experiences, they bring perspectives that are not learned or taught in traditional certification programs. One high school principal provided the following perspective regarding the impact of job and life experiences that many PACE certified teachers bring to the classroom:

We have had success with most of our PACE teachers. Their backgrounds bring a lot to the table and their lack of indoctrination through formal education programs allows them to be creative and innovative in their instruction. They are also able to bring their diverse work experiences into the classroom and make the content relatable to the real world.

As is summarized in this comment, many principals believed that PACE certified teachers are creative and innovative thinkers due to their prior experience in the workforce. As a majority of PACE certified teachers are considered career changers, principals believed they bring a valuable collection of experiences and knowledge that cannot simply be gained through traditional educational backgrounds. Principals shared that most traditionally certified teachers have worked exclusively in education, while PACE certified teachers have diverse experiences and perspectives which makes them strong teachers.

Preparation of PACE Certified Teachers

As can be seen in Table 4.5, it was evident that principals held mixed perceptions regarding the preparation of PACE certified teachers. When looking at the categories of agree and strongly agree, principals' perceptions on various aspects of the preparation of PACE certified teachers ranged from 33% to 87.8%. When looking at the categories of disagree and strongly disagree, principals' perceptions on various characteristics of the preparedness of PACE certified teachers ranged from 12.2% to 67%. While the range of percentages for agree and strongly agree regarding the preparation of PACE certified teachers was only 54.8%, the range of percentages for disagree and strongly disagree was also 54.8%.

Principals perceived the preparation of PACE certified teachers to be most effective in the areas of focusing on coursework to develop candidates' pedagogical skills and knowledge to optimize success in the classroom (87.8% agree and strongly agree), requiring candidates to demonstrate mastery of subject knowledge prior to entering the classroom (86.8% agree and strongly agree), and focusing on coursework to develop candidates' understanding and skill of the content they are be expected to teach in the classroom (75.5% agree and strongly agree).

While principals cited strengths regarding the effectiveness of PACE Program in preparing PACE certified teachers, there were areas where principals expressed higher percentages of disagreement. For instance, 33.9% of principals disagreed or strongly disagreed that the PACE Program curriculum meets the needs of participants and involves input from all stakeholders including local universities, participants or past participants, and school or district leaders (62.3% agree and 3.8% strongly agree).

Moreover, 33.9% of principals disagreed or strongly disagreed that the PACE Program requires candidates to complete a combination or blending of both content knowledge and pedagogy prior to entering the classroom as a full-time teacher (58.5% agree and 7.6% strongly agree). Lastly, 67% of principals disagreed or strongly disagreed that the PACE Program provides teacher candidates with strong supervision and ample student teaching experiences prior to entering the classroom as a full-time teacher (29.2% agree and 3.8% strongly agree).

Table 4.5

Preparation of PACE Certified Teachers

	Strongly Disagree	Disagree	Agree	Strongly Agree
The PACE Program focuses on coursework to develop candidates understanding and skill of the content they will be expected to teach in the classroom.	8(7.5%)	18 (17%)	80(75.5%)	0
The PACE Program requires candidates to demonstrate mastery of subject knowledge prior to entering the classroom (e.g. requiring candidates complete a subject area examination, a state licensure test, etc.).	0	14(13.2%)	72(68%)	20(18.8%)
The PACE Program focuses on coursework to develop candidates' pedagogical skills	1(.9%)	12(11.3%)	81(76.5%)	12(11.3%)

and knowledge to optimize success in the classroom.				
The PACE Program curriculum meets the needs of participants and involves input from all stakeholders including local universities, participants or past participants, and school or district leaders.	3(2.8%)	33(31.1%)	66(62.3%)	4(3.8%)
The PACE Program requires candidates to complete a combination or blending of both content knowledge and pedagogy prior to entering the classroom as a full-time teacher.	5(4.7%)	31(29.2%)	62(58.5%)	8(7.6%)
The PACE Program provides teacher candidates with strong supervision and ample student teaching experiences prior to entering the classroom as a full- time teacher.	15(14.2%)	56(52.8%)	31(29.2%)	4(3.8%)

Principal Comments on the Preparation of PACE Certified Teachers

At the conclusion of this section of the survey, I asked candidates if they had any other comments concerning the preparation of PACE certified teachers. Several principals provided insight into the preparation of PACE certified teachers which I thematically present the following section. These themes included strong content knowledge and pedagogical concerns. I will provide a brief description of these themes and principals' comments to support these findings. **Strong Content Knowledge**. One strength that was cited by several principals regarding the preparedness of PACE certified teachers revealed that these candidates possess strong content knowledge. While several principals stated that there have been inconsistencies in the performance of many PACE certified teachers, one area that has remained consistent with PACE certified teachers has been their strong level strong content knowledge. One middle school principal summarized the view of several principals citing her observations on the strong content knowledge that PACE certified teachers have possessed:

I believe that I have seen a variety of PACE candidates. Some are strong and some are not. Many bring great life experience which helps with professionalism, real-world application, and especially their strong command of the content they teach.

Many principals also reported that PACE certified teachers' content knowledge often exceeds that of teachers from traditional certification programs. Principals commented on the diverse work backgrounds of many PACE candidates, as they come from a variety of highly qualified positions prior to entering education. One high school principal attributed PACE teacher's strong content knowledge to their real-world experiences, which often have strong application in the classroom:

I think the PACE teachers not only possess strong content knowledge, but they are able to relay this content to students in a unique way, which is in large part due to their real-world experiences working in professions outside of education. They are able to apply this knowledge in ways that traditional teachers cannot.

Moreover, many principals attributed the strong content knowledge that PACE certified teachers possessed not only to their real-world experiences but to the challenging subject matter these teachers completed in college. Many principals highlighted the number of upper-level classes that are required from many of the undergraduate degrees that these candidates possess. Principals discussed the rigorous coursework required to become a chemical engineer, accountant, and physicists, citing the types of professions that many of the PACE certified teachers have left to enter education. Once high school principals highlighted a former meteorologist who she had the privilege of employing as a PACE certified teacher at her school:

I have been really impressed with the content knowledge of many of my PACE teachers. How many principals can say their hired a former meteorologist to teach environmental science? I think anyone who transitions from such an interesting career to teaching has a more fascinating connection to share with kids than someone who goes straight through a content area program.

It is also important to note that strong content knowledge is a theme I will discuss in my qualitative findings as many principals I interviewed believed this was also a strength of many PACE certified teachers they employed. During interviews, many principals cited diverse work backgrounds, real-world experiences, and rigorous college coursework as factors that contributed to PACE certified teachers possessing content knowledge.

Pedagogical Concerns. The most prevalent concern that related to PACE certified teachers' preparation focused on the fact that these candidates displayed pedagogical weaknesses, especially in the area of classroom management. Many principals stated that PACE certified teachers often struggle with classroom management, especially when compared to first-year teachers from traditional certification programs. One principal who completed my survey provided the following statement regarding classroom management concerns:

I currently have three candidates in my building that are using the PACE program to get certified. However, in my 21 years in education, I have worked with a dozen teachers that have come through the PACE program. I have very little concerns with their knowledge of the content. I do, however, have great concerns with their management of students, which in my experience leads to PACE teachers getting out of the profession early.

While many of the comments from principals were prefaced with statements like "Although PACE teachers possess strong content knowledge," these comments ended with criticisms of their classroom management practices. One middle school principal provided the following analysis of PACE certified teachers which was common with principals in my study:

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Although PACE certified teachers enter the profession with strong content knowledge, additional support is always needed for classroom management. There is a lot of theory but no practice.

However, many principals reported that classroom management is something that cannot be taught it has to be an experiential learning opportunity. These principals stated that a critical factor in a teacher's ability to manage a classroom is the opportunity to mold their own class rather than taking over for a cooperating teacher during student teaching. One high school principal summarized the view of other principals stating that "Classroom management can only be taught once the teacher enters their own classroom. It is not a process that can be learned otherwise." In addition to classroom management, principals cited other pedagogical concerns with PACE certified teachers. Principals commented on the importance of PACE decision-makers providing preparation related to specific areas of improvement which included teaching curriculum, lesson pacing, and lack of routines and procedures for PACE certified teachers to utilize in the classroom.

Mentoring and Support of PACE Certified Teachers

As can be seen in Table 4.6, it was evident that principals held mixed perceptions regarding many of the characteristics concerning the mentoring and support of PACE certified teachers. When looking at the categories of agree and strongly agree, principals' perceptions on various aspects of the mentoring and support of PACE certified teachers ranged from 58.5% to 82.1%. When looking at the categories of disagree and strongly disagree, principals' perceptions of various characteristics concerning the mentoring and support of pace.

support of PACE certified teachers ranged from 17.9% to 41.5%. The range of percentages for agree and strongly agree regarding the mentoring and support of PACE certified teachers was 23.6 percentage points, and the range of percentages for disagree and strongly disagree was also 23.6 percentage points.

Principals perceived the mentoring and support of PACE certified teachers to be most effective in the areas of ensuring that teacher candidates are provided professional development that is centered in the context of the teacher's classroom and classroom-based activities (82.1% agree and strongly agree), ensuring that teacher candidates are provided with mentoring and support that is ongoing and collaborative (71.7% agree and strongly agree), and ensuring that mentors are provided the support needed to assist teacher candidates (64.2% agree and strongly agree).

While principals cited strengths regarding the effectiveness of the PACE program providing mentoring and support for PACE certified teachers, there were areas where principals expressed higher percentages of disagreement. For instance, 41.5% of principals disagreed or strongly disagreed that the PACE Program ensures that teacher candidates are provided with mentors from the same subject area (52.8% agree and 5.7% strongly agree). Moreover, 39.6% of principals disagreed or strongly disagreed that the PACE Program ensures that teacher candidates are provided with mentors located in the same school (53.8% agree and 6.6% strongly agree). Lastly, 36.8% of principals disagreed or strongly disagreed that the PACE Program ensures that teacher candidates are placed with well-trained mentors (59.4% agree and 3.8% strongly agree). In the next section, I will explore comments which address some of the concerns that principals

expressed with the mentoring and support of PACE certified teachers.

Table 4.6

Mentoring and Support of PACE Teachers

	Strongly Disagree	Disagree	Agree	Strongly Agree
The PACE Program ensures that teacher candidates are placed with well-trained mentors.	0	39(36.8%)	63(59.4%)	4(3.8%)
The PACE Program ensures that teacher candidates are provided with mentors from the same subject area.	1(0.9%)	43(40.6%)	56(52.8%)	6(5.7%)
The PACE Program ensures that teacher candidates are provided with mentors located in the same school.	6(5.7%)	36(33.9%)	57(53.8%)	7(6.6%)
The PACE Program ensures that teacher candidates are provided with mentoring and support that is ongoing and collaborative (e.g. PACE program, district, and school level mentoring/support).	0	30(28.3%)	68(64.2%)	8(7.5%)
The PACE Program ensures that teacher candidates are provided professional development	0	19(17.9%)	80(75.5%)	7(6.6%)

that is centered in context of the teacher's classroom and classroom-based activities. The PACE Program ensures that mentors are provided the support 2(1.9%) 36(33.9%) 62(58.5%)) 6(5.7%) needed to assist teacher candidates.

Principal Comments on the Mentoring and Support of PACE Certified Teachers

At the conclusion of this section of the survey, I asked candidates if they had any other comments concerning the mentoring and support of PACE certified teachers. Several principals provided insight into the support of PACE certified teachers which I thematically present in the following section. These themes included the need for strong school level support and more support from the PACE Program.

Strong School Level Support. Principals believed that PACE certified teachers received strong support from the school and district in which they are employed. Principals cited this concern as the most prevalent concern regarding the mentoring and support of PACE certified teachers. Many principals commented that they go to great lengths to support PACE certified teachers as they have different needs than those of a traditionally certified teacher. One high school principal provided the following comment when discussing the support of PACE teachers in his school:

Prior to becoming a principal, I was an assistant at a high school and was in charge of all hiring, so I actually have about 12 years with PACE candidates. I have found that PACE teachers tend to be more successful if the support by the district/school that hires them is strong. It is critical that the PACE teacher's mentor be based in the same school and from the same subject area. Otherwise, it can be very challenging for these teachers.

Another common practice which was cited by multiple principals revealed that newly hired PACE teachers are paired with a school mentor who has received mentor training from the South Carolina Department of Education. Furthermore, many principals commented that they do their best to ensure that PACE certified teachers are matched with someone in the school and from the same subject area. One high school principal provided her experience with providing quality mentors for new PACE teachers:

All first year teachers (PACE or otherwise) receive a mentor who has received the South Carolina Department of Education mentor training. This mentor is not only on campus but we ensure that this mentor is from the same content area. I am not aware of additional or separate actions through PACE to assign mentors beyond the PACE leaders of content areas at cohorts.

However, as was mentioned in the quote above, this principal, like many others in my study, acknowledged that they were unaware of any additional support or actions provided by PACE decision-makers to support these teachers. While principals believed that they provide a robust system of supports at the school in which these PACE teachers are employed, principals believed that there is not enough support provided to these teachers from the PACE mentors and instructors. These concerns will be discussed in the following section.

More Support from the PACE Program. Another theme revealed that principals believed PACE decision-makers should provide more support for PACE certified teachers once they enter the classroom. This theme was a manifestation of the belief by many principals that the school and district provide the bulk of the mentoring and support for PACE certified teachers. Many principals discussed the fact when a PACE candidate is hired, the support for these teachers rests entirely on the school and district in which the teacher is employed. Many principals stated that they have never received direct support or collaboration from PACE decision-makers for the PACE teachers they have hired. One middle school principal provided her experiences with hiring and supporting PACE certified teachers in her school:

To my knowledge PACE is not directly involved in the mentor assignment process. This is a district or school function and, in my experience, has never been verified or supported by the PACE organization.

Moreover, many principals recommended that follow up from PACE instructors or mentors would make for a stronger system of support for these teachers. Principals acknowledged that PACE teachers receive training from PACE instructors but felt that there existed a breakdown of support when the schools and districts assumed the bulk of responsibility for mentoring and supporting these teachers. One high principal commented on the lack of support from PACE decision-makers once teachers enter the classroom:

Schools really provide most of the support and mentoring for PACE teachers. I don't necessarily see PACE doing enough to support teachers once they enter the classroom. I think they could do a better job of following up with teachers and perhaps even provide PACE designated mentors to check on them.

This lack of support from PACE decision-makers was also cited as a breakdown in communication from the program. Many principals stated that they have never received any correspondence with the PACE regarding the types of support program decision-makers are providing to PACE certified teachers. One high school principal provided his experience of a recently hired PACE teacher at his school:

The first-year PACE teacher I had in my school worked closely with me and my colleagues, but I am unaware of what support, if any, she received from a PACE mentor. I have never had any contact with the PACE Program regarding the type of support they are providing to teachers.

As will be discussed in my qualitative findings later in this chapter, more support from PACE instructors and mentors is a theme which manifested from interviews with principals. This is obviously an area in which principals believed PACE decision-makers could strengthen the support of PACE teachers hired to fill position in schools.

Comparison of PACE Teachers and Traditionally Certified Teachers

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In the last section of my survey, the results of which can be seen in Table 4.7, I asked principals to compare the effectiveness of PACE certified teachers with traditionally certified teachers. Results from this section of the survey produced more variance of opinions when compared to the three previous sections. When looking at the categories of agree and strongly agree, principals' comparison of PACE certified teachers with traditionally certified teachers ranged from 8.5% to 90.5%. When looking at the categories of disagree and strongly disagree, principals' comparison of PACE certified teachers with traditionally certified teachers ranged from 9.5% to 86.8%. While the range of percentages for agree and strongly agree regarding the comparison of PACE certified teachers was traditionally certified teachers were 82%, the range of percentages for disagree was 77.3%.

Principals' comparisons of PACE certified teachers and traditionally certified teachers revealed higher percentages of agreeableness (agree and strongly agree) toward PACE certified teachers in the following areas: Prior job/life experiences of PACE teachers (career changers) are as important as prior student teaching experience (70.7% agree and strongly agree); PACE certified teachers are as effective as TCTs (68.9% agree and strongly agree); and PACE certified teachers display more content knowledge than TCTs (51.9% agree and strongly agree). However, principals cited opinions in favor of traditionally certified teachers in the following areas: PACE certified teachers display more pedagogical knowledge than TCTs (86.8% disagree and strongly disagree); PACE certified teachers display more classroom management than TCTs (91.5% disagree or

strongly disagree); and Prior student teaching experience and/or practicums are important (65.1% agree and strongly agree).

The last two statements in this section of my survey pertained to whether principals possessed opinions regarding the hiring of traditionally certified teachers and PACE certified teachers. As teacher openings occur, 90.5% of principals agreed or strongly agreed that they look to hire the most qualified candidate regardless of certification. However, as teacher openings occur, only 33% of principals agreed or strongly agreed that they prefer to hire traditionally certified teacher rather than PACE certified teachers (67% disagree or strongly disagreed with this statement).

Table 4.7

	Strongly Disagree	Disagree	Agree	Strongly Agree
PACE certified teachers are as effective as TCTs.	2(1.9%)	31(29.2%)	60(56.6%)	13(12.3%)
PACE certified teachers display more content knowledge than TCTs.	3(2.8%)	48(45.3%)	46(43.4%)	9(8.5%)
PACE certified teachers display more pedagogical knowledge than TCTs.	7(6.6%)	85(80.2%)	12(11.3%)	2(1.9%)
PACE certified teachers display more classroom management than TCTs.	21(19.8%)	76(71.7%)	8(7.6%)	1(0.9%)
Prior student teaching experiences and/or	6(5.7%)	31(29.2%)	39(36.8%)	30(28.3%)

Comparison of PACE Teachers and Traditionally Certified Teachers

practicums are important for teacher candidate success.				
Prior job/life experiences of PACE teachers (career changers) are as important as prior student teaching experience.	4(3.8%)	27(25.5%)	60(56.6%)	15(14.1%)
As teacher openings occur, I look to hire the most qualified candidate regardless of certification.	0	10(9.5%)	40(37.7%)	56(52.8%)
As teacher openings occur, I prefer to hire TCTs rather than PACE teachers.	10(9.5%)	61(57.5%)	28(26.4%)	7(6.6%)

Principal Comments Comparing PACE Certified Teachers and Traditionally

Certified Teachers

At the conclusion of this section of the survey, I asked candidates the following open-ended question: If you had a choice between hiring a PACE certified teacher or traditionally certified teacher, which would you hire and why? The results from this question revealed four themes regarding the type of candidate principals would hire: the best candidate; traditionally certified teachers; PACE certified teachers; and if both candidates are equal, traditionally certified teachers.

The Best Candidate. The most common answer provided by principals regarding the type of teacher they prefer to hire as vacancies occur at their school was the best

candidate or best fit. In fact, 62 principals (58.5%) stated that they would hire the best candidate regardless of the type of certification (e.g. traditionally certified or PACE certified). When principals were asked to support their rationale for this decision, one of the most common themes was that they wanted to hire the best fit for their school and students. Many principals thought the type of certification a candidate received was trivial and cited more important factors determine their hiring decision. One high school principal provided the following comment which summarized the views of many principals on this issue:

There are many factors other than PACE or traditional. The decision would not come down to the type of certification they possess. It would be whoever is the best fit and the one who my team thought provided the best interview responses, knowledge, and experience. I also look at enthusiasm, personality, and signs that the candidate has a desire to learn and grow.

As was evident in the quote above, many principals reported that they would hire the candidate who had the best interview and the best qualifications.

Principals further commented that they look at the individual as a whole and focused on their attributes and strengths. One principal had the following comment regarding certification and the type of teacher candidate she looks to hire:

The candidate who possesses the skill sets needed to be an effective teacher, including pedagogy, classroom management, communication

skills, problem solving skills, logic and reasoning skills, open mindedness, and growth mindset is who I would hire. Certification is just a term of compliance. Our students deserve more than compliance. They deserve the best!

Traditionally Certified Teachers. The second most prevalent answer to the type of teacher that principals prefer to hire was a traditionally certified teacher. Thirty principals (28.3%) cited traditionally certified teachers as their choice candidate. The most common rationale provided by principals regarding the hiring of traditionally certified teachers was their student teaching experiences. Principals stated that prior teaching experiences were critical to teacher effectiveness, which is evident by the following comment from a middle school principal:

The student teaching experience is invaluable. Many PACE candidates are overwhelmed having never been in the classroom before as a teacher. This is an important factor in my preference to hire traditionally certified teachers.

Principals also reported that pedagogical weaknesses, in particular classroom management, as a major consideration for hiring traditionally certified teachers rather than PACE candidates. Lastly, many principals cited the level of support that is required to ensure that PACE teachers are successful as a rationale for hiring traditionally certified teachers. One principal provided the following perspective for hiring traditionally certified teachers when vacancies occur at his school, A certified teacher has gone through the student teaching and practicum experience and has some level of understanding/exposure to teaching in a public-school setting. PACE teachers can be unprepared for what is required to be an effective teacher outside of just content knowledge. They tend to require more support, more training and mentoring at the schoolbased level.

Many of the concerns that were cited above (e.g., prior student teaching and pedagogical weaknesses) were also critical considerations for principals in my interviews with principals. Many principals highlighted similar concerns which indicate a hiring bias towards traditionally certified teachers in the job queue. More consideration to this fact will be discussed in my qualitative findings.

PACE Certified Teachers. The third most common answer to the type of teacher that principals would prefer to hire was PACE certified teachers. Out of the 106 participants, seven principals (6.6%) cited PACE certified teachers as their preferred candidate. Many principals reported that they were impressed with the degree of content knowledge that PACE certified teachers bring to the classroom and often look to hire these teachers when it is the right fit for their schools. Other principals cited the realworld knowledge and experiences that PACE certified teachers bring to the classroom as their rationale for hiring these teachers. Another consideration, which is evident from the following comment from a high school principal, is the lack of bias or indoctrination that some principals believed was a manifestation of traditional certification programs: If there are no outstanding differences, I would take the PACE candidate so I can truly help them without any bias from learning in a traditional university program. I like the real-world knowledge that PACE teachers bring to the classroom. These teachers really know how to make the content applicable for students.

Lastly, principals cited that in many of the Career and Technology Education (CTE) fields, PACE certified teachers are the only teachers they can find to fill vacancies. This was also a consideration that was brought up in my interviews with principals as many of them believed that traditional certification programs were unable to produce teacher candidates in CTE fields. The following middle school principal provided her perspective on the lack of CTE teachers entering the job queue:

In the CTE world, PACE teachers bring more real-world experiences that help in CTE classes. Often times, they are the only teachers I can find for business classes. You just aren't seeing any CTE teachers coming out of traditional programs in the state.

If Both Candidates are Equal, Traditionally Certified Teachers. The seven remaining principals (6.6%) principals cited that if both candidates are equal, they would still prefer to hire traditionally certified teachers. While these principals acknowledged their biases towards traditionally certified teachers, many of these principals cited that they have been impressed with many PACE certified teachers that they have hired and supervised. The following high school principal provided his rationale for preferring traditionally certified teachers in spite of being impressed with several PACE teachers he has hired:

Both candidates being equal, I would hire the traditionally certified teacher. While I have been impressed with some PACE teachers, the classes, practicum, and student teaching experiences better prepare traditionally certified teachers to be ready to take over their own classroom.

Moreover, principals stated that these positive experiences have created a more open-minded perspective towards PACE certified teachers. However, many of the concerns with PACE certified teachers that were mentioned previously (e.g., a lack of student teaching and pedagogical concerns) have led these principals to be more likely to hire traditionally certified teachers for vacancies in their schools. Furthermore, these seven principals reported that strong mentoring and support is critical in order for PACE certified teachers to be successful upon entering the classroom. The following middle school principal provided her rationale for hiring a traditionally certified teacher if both candidates were viewed equally:

I have always preferred to hire traditionally certified teachers. However, after working with the five PACE candidates here at my school, I am much more open to hiring PACE teachers. I feel that with the right mentoring program in place, PACE teachers are just as successful as traditionally certified teachers.

Qualitative Findings

Interview Participants

In the following section, I provide a brief profile of the eight principals who participated in the semi-structured interviews. I identified these eight principals as datarich participants based on their survey responses which indicated they have worked extensively with PACE certified teachers and possess knowledge of the PACE Program and its desired outcomes. In addition, these principals provided insightful comments during the surveys and in fact reach out to me directly to express their interest in participating in my study. It was my hope that their insightfulness and enthusiasm to participate in my study would bring about impactful findings during interviews. Prior to addressing the designated interview questions, each principal was asked to describe their background as it relates to the PACE Program and PACE certified teachers. In Figure 4.8 I provide a profile of these principals and Figure 4.9 illustrates principals' familiarity with the PACE Program.

Table 4.8

Interview Participant Profiles

	Middle or High Principal	Years of Experience	Number of PACE Teachers Supervised
Participant 1	High	0-5	6-10
Participant 2	Middle	0-5	6-10
Participant 3	Middle	More than 20	More than 15

Participant 4	High	6-10	11-15
Participant 5	High	More than 20	11-15
Participant 6	Middle	0-5	6-10
Participant 7	High	11-15	6-10
Participant 8	High	6-10	More than 15

Table 4.9

Interview Participant Familiarity with the PACE Program

	Recruitment and	Preparation and	Mentoring and
	Selection of PACE	Training of PACE	Support of PACE
	Teachers	Teachers	Teachers
Participant 1	Somewhat Familiar	Somewhat Familiar	Somewhat Familia
Participant 2	Very Familiar	Very Familiar	Very Familiar
Participant 3	Very Familiar	Very Familiar	Very Familiar
Participant 4	Somewhat Familiar	Somewhat Familiar	Very Familiar
Participant 5	Very Familiar	Very Familiar	Very Familiar
Participant 6	Very Familiar	Very Familiar	Very Familiar
Participant 7	Somewhat Familiar	Somewhat Familiar	Very Familiar
Participant 8	Very Familiar	Very Familiar	Very Familiar

Principal 1 has been a high school principal for 0-5 years and has supervised approximately 6-10 PACE certified teachers. During the survey, Principal 1 indicated that he possessed strong knowledge of the PACE Program having recruited and supervised several teachers at his high school. Principal 1 also stated that he was familiar with the intended goals and expectations of the PACE Program, having worked closely with the South Carolina Department of Education and the South Carolina Association of School Administrators (SCASA). Principal 1 indicated that most of the teachers he has worked with from the PACE Program have had backgrounds in science, math, and business.

Principal 2 has been a middle school principal for 0-5 years and has supervised approximately 6-10 PACE certified teachers. During the interview, Principal 2 indicated that he had a unique perspective of the PACE Program as he received his teaching certificate through the program back in 2006. Principal 2 graduated from college with a degree in Spanish and worked outside education for a few years. Principal 2 was made aware of the PACE Program from an acquaintance in education and enrolled in the program as a prospective candidate. Principal 2 was subsequently hired as a middle school Spanish teacher and received his teaching certification through the PACE Program after a three-year period. Principal 2 stated that he was grateful for the PACE Program as it provided him the opportunity to be an educator.

Principal 3 has been a middle school principal for more than 20 years and has supervised over 20 PACE certified teachers during her tenure. During the interview, Principal 3 stated that she has worked closely with PACE certified teachers since its inception and has seen the program evolve over the years. Principal 3 stated that early on, she did not hire many PACE certified teachers as the colleges and universities had a robust pool of traditionally certified teachers. However, over the past 10 years there has been scarcity in critical needs positions, in particular business and STEMs related teaching positions, which warranted the need to hire PACE certified teachers to fill vacancies in her school.

Principal 4 has been a high school principal for 6-10 years and has supervised 11-15 PACE certified teachers. Principal 4 discussed that her background with the PACE Program has been both as a mentor and administrator. Principal 4 served as a mentor for PACE certified teachers assisting them with the transition to teaching when she was an English teacher. Since becoming principal, she has had the opportunity to hire several PACE teachers, ranging from STEMs and especially business backgrounds.

Principal 5 has served a high school principal for over 20 years and has supervised 11-15 PACE certified teachers. Principal 5 began her career in teaching as a science PACE certified teacher, after graduating from college with a degree in chemistry and a minor in biology. Principal 5 indicated that she had plans to go to medical school but felt a strong calling to go into education. She was hired at a high school where she taught several sections of sciences, with chemistry being her primary emphasis. As a principal, she has had the opportunity to hire and supervise several PACE certified teachers. As a principal at a STEM magnet high school, most of her experience has been with science and math PACE certified teachers.

Principal 6 has been a middle school principal for the 0-5 years and has supervised 6-10 PACE certified teachers. Principal 6 indicated that much of her experience with the PACE program has been as a former PACE certified teacher as well as supervising PACE teachers at the high school and middle school levels. Principal 6 began her career as an alternatively certified candidate in another state, after she graduated from college with a degree in English. At the conclusion of her first year of teaching, she moved to South Carolina where she enrolled in the PACE program and received a job as a high school English teacher. While most of her career has been spent as a high school teacher and administrator, Principal 6 has worked as a middle school principal for the past 5 years.

Principal 7 has been a high school principal for 11-15 years and has supervised 6-10 PACE certified teachers throughout his educational tenure. Principal 7 stated that most of his experience with PACE has been based primarily in a supervisory role, as he has hired and supported PACE certified teachers in his school. Principal 7 indicated that early on, his perspective on the PACE program was negative, but his opinion of the program has changed in recent years. Much of his change in perspective has been influenced by the strong PACE certified teachers he has hired over the past few years. Principal 7 also stated that he had previously work with an assistant principal who was a former PACE certified teacher, and this relationship has also improved his perspective of the program.

Principal 8 has been a high school principal for 6-10 years and has supervised more than 15 PACE certified teachers throughout her career in education. While Principal 8 acknowledged that the PACE program is not without its caveats, she expressed strong interest in being a part of my study due to her favorable attitude towards the program. Much of her perspective towards the PACE program is impacted by the strong evolution in the program over 27 years in education, and she has seen the program produce strong teacher candidates at her respective school. Furthermore, Principal 8 provided an interesting perspective of the PACE program as she has had family members become certified teachers through the program.

Recruitment and Selection of PACE Teachers

The coding and subsequent translation processes from interviewing all eight principals provided several themes regarding the effectiveness of the recruitment and selection of PACE teachers which included: evolution in effectiveness; diverse pool of candidates; subject area background; and entry requirements. As was stated previously, these themes were identified using Patton's (2002; 2008) evaluation coding which is a type of coding technique to provide recommendations or implication for action and/or change regarding a program or policy under analysis.

Evolution in Effectiveness. Interviews revealed that principals held favorable views of potential PACE candidates throughout the recruitment and selection process. Several principals highlighted that they have never held negative predispositions towards potential PACE teachers and have looked to hire the best candidates for positions at their schools. Principal 7 summarized the perspective of many principals during the interview regarding the recruitment and selection of PACE candidates:

So, I've had pretty positive experiences over my career. I would say overall my experience with PACE has been as a positive one and I never look at a resume and say, 'Oh God, this is a PACE candidate.' I always look at their resume, talk to the individual, and then we go from there. Whether they're a PACE candidate or not, we're always looking for the best person for the position.

While many principals held current views that were favorable towards the effectiveness of the PACE Program in the preparation process, my interviews did reveal that more experienced principals stated that in the early stages of the program, many of the PACE candidates were not the strongest teachers in the job queue. Moreover, this was a theme that aligns with survey participants' views as principals expressed similar perceptions with the PACE Program struggling to produce viable candidates in the early stages of the program. These experienced administrators were able to recall the early years of the PACE Program and cited an almost "evolutionary process" in which the program administrators realized that they needed a more robust approach to the recruitment and selection of PACE candidates. Principal 3, who expressed that she has a close relationship with leadership at the South Carolina Department of Education, provided the following insight into what she called a "cathartic process" for PACE decision-makers:

In the early years of the PACE Program, I believe that the program understood that they needed to change some things and they kind of went through that sort of cathartic process as well. I think they realized that the support they offered needed to be much more robust. It needed to be more preparatory in nature, and they needed to do a very good job of getting these folks as ready as possible in their pre-service piece of training.

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Principal 5 provided a similar perspective regarding the evolution of the PACE Program citing that as a former PACE candidate, the program seems to have reevaluated their processes and has become more refined over the years:

But I do feel like that the process has become incredibly refined. I don't hesitate now if I post a position and I have five applicants and one of them is alternative, I look at that person the same way. So I think that shows you from 2005 to now the impact the sort of journey that the program has been under and my journey with the program that we've all kind of come to a stage of refinement and I feel good about it.

As I shared in my qualitative findings, many principals expressed similar beliefs that the PACE Program has created more robust entry requirements for prospective PACE candidates. Comments from principals on my survey indicated that in the early stages of the program, many prospective PACE candidates were not the strongest candidates in the teacher job queue. However, principals believed that over time the PACE Program has worked to create a more rigorous process for prospective PACE candidates.

Diverse Pool of Candidates. Principals were asked their perceptions regarding the diversity of the pool of candidates the PACE Program has recruited. Subsequent interviews revealed that principals did perceive the PACE program to be effective in recruiting a diverse pool of candidates. Subsequently, interviews with principals mirrored opinions held from survey results as principals cited diversity of PACE candidates as a strength of the program. Specifically, principals perceived that the PACE Program was effective in recruiting more men and teachers of color than might otherwise be found throughout the state of South Carolina. Furthermore, some principals felt that the PACE Program was more effective than traditional certification programs in attracting teachers of color into the teaching profession. Principal 1 provided the following perspective regarding the diverse pool of PACE candidates he has hired at his respective school:

I'm just kind of reflecting on the people on our faculty and I know that we have two teachers of color that are PACE teachers. In fact, we are hiring another African American [teacher] who's been certified through PACE that'll be joining our staff next year. And when you look at the makeup of our staff, those are the only minority staff members we have in our building.

Moreover, many principals reported that the demographic makeup of students in their schools is becoming more racially diverse. Many principals believed the PACE Program has brought much needed diversity to the classroom which mirrors the changes in their student demographic makeup. Principal 3 provided her thoughts on the PACE Program attracting more diverse teachers into the profession:

PACE has provided a pipeline to assist us in making sure that we are acquiring educators that represent underrepresented populations as well as represent many different backgrounds. Our students today come from very diverse circumstances and backgrounds and our teaching staff certainly needs to mirror that.

As I shared in my qualitative findings, many principals believed that PACE certified teachers bring diverse job and life experiences to the classroom. This was also evident from findings from principal interviews as they believed these career changers brought a valuable experiences and knowledge that cannot be replicated from traditional educational programs. As was also evident from survey findings, interviews revealed that principals perceived PACE certified teachers to possess diverse experiences which makes them strong teachers compared to traditionally certified teachers who have worked almost exclusively in education.

Subject Area Background. After interviewing all eight principals, it was evident that business related backgrounds were the most prevalent content area from which principals have hired PACE certified teachers. Many principals believed that there exists a strong pipeline for PACE candidates from a business background and that the program has been effective in attracting much needed business candidates. Principal 8 provided insight as to the rationale for the prevalence of business certified teachers in the PACE Program:

I would probably say strongly that the PACE program has had success with recruiting candidates from business backgrounds. A good many business education teachers have come through PACE just because of the natural connections with the private sector and the expansion of career and technology programs throughout the state.

Another perspective that emerged regarding the strong prevalence of PACE certified business teachers pertained to the belief held by many principals that there is a dearth of opportunities for business education certified teachers throughout colleges and universities in the state of South Carolina. Principals stated that without the PACE Program, there would be a shortage of business certified teachers at their respective schools as the PACE Program seems to be the only viable avenue for recruiting these teachers. Principal 7 stated that she views the shortage of business teachers as a critical needs area across the state and that there have been no available candidates entering the teacher job queue from traditionally certified teaching programs:

There are some areas of certification, one in particular, business, that I only use PACE applicants. First of all, that's all I can find because business education has pretty much gone by the wayside at our local universities and our state programs. I don't really think that business education is an emphasis at our local universities and colleges.

While principals agreed that business backgrounds were the most prevalent content area recruited by the PACE Program, STEM (Science, Technology, Engineering, and Math) related content backgrounds were cited as a significant area of recruitment as well. Many of the principals stated that they have hired former engineers, chemists, and accountants from the PACE Program who have brought relevant work and life experiences into science and math classrooms. Principal 2 summarized the principals' perspectives regarding the growing opportunity for STEM related backgrounds, which was attributed to the South Carolina teacher shortage in the areas of math and science:

As we progressed through 2012 to more recent years, more and more areas of certification were being met by PACE again, particularly in science and math. I know from my experiences as a PACE teacher, there were a lot of science and math backgrounds because back then these areas were primarily a critical needs area in the state as schools and district desperately needed STEM related backgrounds.

While business and STEM related backgrounds were widely cited as being most prevalent in the recruitment of PACE certified teachers, principals also stated that they have hired some English, social studies, physical education, and special education teachers from the PACE Program. Principals noted that most of these fields are still dominated by teachers from traditional certification programs who are coming from local colleges and universities. Principals stated that the pool of teachers coming from local colleges and universities is still robust in these certification areas and that it has not reached the critical needs level of business and STEM related backgrounds which has attracted more PACE certified teachers.

Entry Requirements. In their interviews, the principals revealed that they believed the entry requirements established by the PACE Program are rigorous for prospective candidates. However, one theme that emerged revealed that some principals

did not intimately understand all of the entry requirements for prospective PACE candidates. Many principals shared their view that prospective candidates must possess a bachelor's degree from an accredited college or university with a major in an approved PACE certification field, must pass their designated ETS Praxis subject area assessment, and clear an FBI/SLED background check. As is evident from the comment provided by Principals 8, many principals felt that these three requirements were rigorous and integral for PACE Program effectiveness:

I'm not entirely sure all of the entry requirements for PACE teachers but I do know that they must possess a bachelor's degree in specific content area they will be teaching. I also know that they must pass the Praxis test in that related field which I think is critical. That is even a requirement for traditionally certified teachers. Other than clearing a background check, I can't think of any other requirements that would be more robust.

However, a dichotomy existed on some of the more intricate entry requirements of the PACE Program such as requiring candidates to take part in a three-year process to receive teacher licensure, requiring candidates to attend week-long classes throughout the summer, requiring candidates to attend weekend seminars throughout the school year, and completing a minimum of three approved graduate courses. This dichotomy was most evident with principals who received their teacher licensure through the PACE Program as they were knowledgeable due to their experiences in the program. Nevertheless, Principal 6 summarized the views of principals describing the entry requirements for prospective PACE candidates as rigorous enough for entering the teaching job queue:

I think the entry requirements for prospective PACE teachers are rigorous. Honestly, I can't say that I am intimately knowledgeable of all of the requirements, but I think the most important ones are in place. For instance, I believe possessing a bachelor's degree in a relevant subject area, passing the subject area Praxis test, and passing a background check are the three most important criteria for being eligible. Other than these three, I can't recommend too many other entry requirements that would be more beneficial.

Lastly, principals who received their licensure through the PACE Program argued that more articulation from the PACE Program regarding the entry requirements that are in place for prospective PACE candidates would assist these teachers in the job queue. For instance, these principals argued that clearer articulation of the entry requirements from PACE decision-makers would help non-PACE certified principals understand the rigorous entry requirements that are in place for these prospective candidates.

Preparation of PACE teachers

The coding and subsequent translation processes from interviewing all eight principals provided several themes regarding the effectiveness of the preparation of PACE teachers which included: strong content knowledge; pedagogical preparation; language barrier; and lack of student teaching. While principals cited strengths and weaknesses which will be discussed further, ultimately principals held positive perceptions that the program was effective in preparing PACE certified teachers. One theme was that principals who had received their licensure through the PACE program, held more favorable perspectives towards the preparedness of PACE teachers than principals who received their certification through traditional certification programs. Moreover, principals who received their licensure through the PACE program placed more accountability on the prospective PACE candidate rather than the PACE Program. When asked to clarify their perceptions regarding placing more accountability on the individual rather than the program, many principals discussed their positive experiences gaining their licensure through the PACE Program. Principal 2 provided the following perspective regarding the preparation he received as a former PACE candidate:

Based on my experiences when I went through PACE, I think the program is very effective in preparing candidates for the challenges they will face. I think that if they are unprepared that falls on the candidate and that does not fall on the program. It's an indictment on the candidate. It's not an indictment on the program because I think they've gone to great length to prepare candidates.

Strong Content Knowledge. One of the most dominate strengths that principals perceived regarding the preparedness of PACE certified teachers was their strong content knowledge. Many principals highlighted that PACE teachers are required to earn at least thirty or more semester hours in content area coursework pertinent to their certification

field, with a grade of "C" or better. Principals discussed that this far surpasses the requirements of many local college and university traditional teacher certification programs. Many principals used language such as "content experts" or "subject matter experts" when referring to the degree of content knowledge that these PACE teachers possess. Principal 2 described his experiences with PACE teachers, citing content knowledge as a strength:

Typically, PACE teachers are content experts and many times even more so than a traditionally trained teacher that's coming in to teach. If you're coming in to teach math, I'm going to be honest with you. This engineer's probably going to know more math because they've gone through some higher-level content. They're, they're not going to understand classroom management and best practices in pedagogy so we're going to have to train them and get them there.

Another theme that emerged from interviews pertained to the fact that principals believed PACE certified teachers not only possessed strong content knowledge but were able to apply this knowledge in an impactful way in the classroom due to their diverse work and life experiences. Principals discussed the diverse background of the PACE candidates which included chemical engineers, accountants, information technologists, psychologists, meteorologists, and other professionals. Principals discussed the diverse perspective that these PACE teachers possess as career changers compared to traditional certification teachers who have primarily worked solely in education. Principal 1 provided a unique perspective from his experience hiring a former chemical engineer to teach chemistry at his school:

One thing you hear form students all the time when they get into upperlevel math and science is 'When am I going to use this?' Well, our chemistry teacher can talk about her career as a chemical engineer and say, 'This is what I did', or, you know, somebody that's worked in engineering can say, 'this is when you're going to use this calculus.' I think that is very beneficial to students and something that a traditionally certified teachers cannot provide in the classroom.

As I noted in my quantitative findings, many principals commented in the openended section of my survey that content knowledge was a major strength of many PACE certified teachers they supervised. Many of the findings from surveys reflected those of the interviews as principals cited diverse work backgrounds, real-world experiences, and rigorous college coursework as factors that contributed to PACE certified teachers possessing content knowledge.

Pedagogical Preparation. Interviews revealed mixed perceptions as principals were divided over the pedagogical preparation of PACE certified teachers. For instance, some principals spoke about their experiences supporting PACE candidates who struggled with establishing a positive classroom environment for students. Principals cited pedagogical concerns tied to classroom management such as lack of routines and procedures, inability to transition from classroom activities, failure to circulate the classroom, inconsistency with student discipline, lack of parent communication, and not clearly communicating expectations for students. Principal 2 summarized the view of many principals as it relates to concerns with PACE certified teachers' ability to effectively manage their classrooms:

I think you're definitely going to need to focus on their classroom management first and really be intentional on creating a productive class environment. You have to focus on establishing routines, procedures, and helping them understand the importance of winning students over first. Let's win them over in the first week. And like that that's got to be that first thing that we work on.

While classroom management was a commonly mentioned pedagogical concern, other principals argued that they supervised PACE certified teachers who possessed stronger classroom management than that of traditionally certified teachers. One common theme that emerged from this analysis was that there is certainly a degree of inconsistency with prospective PACE candidates and their pedagogical preparation. Many principals attributed this inconsistency to the candidates "innate attributes" rather than the type of preparation that a PACE teacher receives throughout the program. Principal 4 discussed this degree of inconsistency with the PACE certified teachers that she has supervised in her tenure as a school leader:

I think much of a teacher's classroom management is personality dependent. I can think of five teachers off the top of my head who had better classroom management as a PACE teacher than any traditionally trained teacher I've ever seen. They just walked into the classroom and it's completely natural. And I can think of five other PACE teachers and it's like they needed it from the ground up. So it's kind of hit or miss and definitely based on their innate ability for some of them.

Nevertheless, pedagogical concerns, especially classroom management, were dominant themes that arose from survey and interview data. As was discussed in my survey findings, many principals discussed that many PACE certified teachers struggle with classroom management due to their lack of prior student teaching. This is a topic which also emerged from interviews with principals and will be discussed in greater detail in the following section.

Lack of Student Teaching. As PACE certified teachers enter the classroom with no required student teaching experience, this topic generated quite mixed perceptions among principals. Some principals relegated the importance of prior student teaching stating that they have seen traditionally certified teachers struggle with their own classroom after working with a cooperating teacher. These principals stated that the most invaluable experience is for a teacher to finally have the opportunity to take on their own classroom. Principals discussed there is a difference between molding your own classroom in comparison to taking over a classroom from a cooperating teacher. Principals used terms like "trial by fire" and "winging it" to describe the struggle of new teachers, both PACE and traditionally certified teachers, to develop an effective classroom environment. Principal 2 provided his perceptions on the importance of facing challenges as a first-year teacher:

See, I don't think prior student teaching is that important. I have seen many teachers struggle in their first year of teaching, many of which have had the chance to student teach. Getting your own classroom is a trial by fire experience as you have to sometimes figure it out for yourself. I don't think student teaching can prepare you for all the challenges you will face in the classroom, and that applies to PACE teachers and traditional teachers.

Moreover, principals cited that their primary concern for PACE and traditionally certified teachers is not necessarily whether they have had prior student teaching experiences but focused instead on the importance of providing a robust system of supports for these teachers to be effective. Principal 7 made this a point of emphasis when speaking in reference to lack of student teaching opportunities for prospective PACE teachers:

It is not for me, and the reason is that at the school level we have a plan of how we support a teacher. Whether they're brand new, out of a traditional program, or they're coming to us as an alternative certification they are going to get the same level of support. So the fact that they didn't student teach is not huge to me. While some principals relegated the importance of student teaching experiences, other principals argued that student teaching is an invaluable opportunity for any prospective teacher. Principals provided perceptions on the many challenges that they have seen PACE teachers attempt to overcome that could have been avoided if they had prior student teaching experiences. Principal 3 emphasized lack of student teaching as a potentially detrimental factor in PACE teacher effectiveness:

I think the PACE applicants probably have to overcome a few more hurdles in that realm than your typical educator that's had twelve weeks of student teaching and a whole semester of practicum experience. PACE teachers don't have the option to student teach so where I see the lack of student teaching hurting them is after that first year. They've been given extensive support and they have been given incredible lesson design and structure assistance. They've been given everything they need and they still just can't get it.

While, lack of student teaching opportunities was an obvious point of contention, many principals acknowledged that a pivotal role of the PACE Program, and many alternative certification programs for that matter, is to recruit critical needs teachers directly into the classroom. Therefore, many principals felt it was unlikely that requiring student teaching opportunities will be a consideration for PACE decision-makers.

Language Barrier. Another area of concern regarding the preparedness of PACE certified teachers was that principals believed many PACE teachers lacked the

understanding of critical 'educational language' to be effective when initially starting out in education. For instance, when describing the difference between the preparedness of traditionally certified teachers and PACE teachers entering the teaching profession, many principals used the terms "language barrier" or "they don't speak the language" in reference to PACE certified teachers. Principal 3 reported that there is a noticeable difference between traditionally certified teachers and PACE teachers regarding the proficiency of understanding educational language:

The difference between that PACE candidate and that traditionally trained candidate is that they don't speak the language yet. And, you know, if you want to be there and if you love students, I can get you where you need to be and how to navigate a system.

Moreover, one of the common themes that emerged regarding this "language barrier" pertained to all the educational acronyms that are needed to be proficient in education, such as an Individualized Education Plan (IEP), End of Course Testing (EOC), Professional Learning Community (PLC), Career Technical Education (CTE), and so on. Principal 1 made this a point of discussion during his interview citing all the acronyms and vocabulary that are specific to education:

There's like a foreign language that educators have and so things like IEP, 504 Plan, and even the EOC. There's all these abbreviations that we have and we just speak the language as educators. There's just some vocabulary that somebody that's coming through a four-year program has become

familiar with. Whereas somebody that's coming to us from a bank, they've never heard those words. I worry that PACE teachers are sometimes sitting in those faculty meetings at the beginning of the year, not knowing anything.

Lastly, it is important to note that this perceived language barrier was a theme that only emerged in my qualitative findings. While many principals highlighted various strengths and weaknesses with PACE certified teacher which was evident from comments in my survey, no principals discussed this language barrier for prospective PACE certified teachers. Nonetheless, the principals I interviewed recommended that PACE decision-makers be aware that many PACE certified teachers are entering the classroom with an educational vocabulary that is not up to pair with traditionally certified teachers.

Mentoring and Support for PACE Teachers

The coding and subsequent translation processes from interviewing all eight principals provided several themes regarding the effectiveness of the mentoring and support of PACE teachers which included: triad of support; high quality mentors; and targeted support. Once again, these themes were identified using Patton's (2002; 2008) evaluation coding so that I might be able to provide recommendations or implication for action and/or change regarding the effectiveness of the PACE Program.

Triad of Support. The last portion of my interviews with principals pertained to their perceptions of the mentoring and support of PACE certified teachers. Interviews

with principals revealed that the mentoring and support of PACE certified teachers is a rather convoluted topic. While many principals believed that the mentoring and support of PACE certified teachers was ongoing, principals believed more support and collaboration was needed from the PACE Program. Specifically, principals stated that once PACE teachers enter the classroom, much of the responsibility for the mentoring and support for these teachers rests solely with the district and school in which these candidates are employed. Principal 8 provided his perspective regarding the type of support PACE certified teachers receive from the program once they enter the classroom:

Well, really the mentoring and support we provide for PACE teachers is not vastly different from anything we do for a teacher who is new to our school. Honestly, much of the responsibility for supporting a new teacher is on the district and school. I can't think of a time where the PACE Program has reach out to me to provide mentoring and support for teachers. It's really up to me and my staff to take care of them.

While PACE candidates are required to attend weekend seminars and summer training, many principals emphasized that more communication and support from the program would provide an extra layer of support. Principals suggested that a triad of support from the school, district, and PACE Program would strengthen the success of many PACE certified teachers. Principal 2 cited the importance of the PACE Program taking a more supportive role with districts and schools in the mentorship of PACE teachers:

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You're kind of at the mercy of the district and really, even more so at the mercy of the school. Does the district value it? Does the school value it? Unfortunately, in a lot of places the answer is no. Now you might have a mentor on paper, but like what, what does that mentoring process look like? You're kind of at the mercy of your district in school and it think it would be nice for the PACE Program to take more of a leadership role in what this process should look like for these teachers.

As was also evident in my survey findings, many of my qualitative findings mirrored perceptions of principals from surveys regarding the lack of support from PACE decision-makers. Survey participants acknowledged that there needs to be more support from program decision-makers regarding the mentoring and support of PACE certified teachers. Moreover, survey results revealed that principals believed they provide a robust system of supports at the school in which these PACE teachers are employed. Lastly, survey results and interview results found that principals believed that there must be more support provided to PACE certified teachers from the PACE mentors and instructors.

High Quality Mentors. While principals cited that most of the responsibility for the mentoring and support of PACE certified teachers rest primarily with school and district leaders, interviews revealed that principals placed these teachers with high quality mentors. Principals stated that they are very purposeful and conscientious when determining the types of mentors they provided to PACE certified teachers. Principals discussed many of the pedagogical concerns that were previously addressed and ensured that PACE certified teachers were placed with mentors who could strengthen any areas of concern. Furthermore, principals ensured that PACE teachers were assigned mentors that were from the same content area:

I think the challenge sometimes with PACE teachers is they have unique or specialized certification areas like in business or technology. Obviously, it can be challenging to pair a mentor from the same content area in the school so we have to get create in situations like that. However, as much as possible, we are going to ensure that PACE teachers is paired with a strong mentor in the building and in their same content area.

Another interesting theme emerged specifically with principals who received their teaching certification through the PACE Program. As former participants of the PACE Program, these principals believed that the program provided strong instructors for their required trainings and seminars. These principals cited their experiences as former PACE teachers going through the program and believed that their instructors were able to provide a level of support that was effective. Principal 2 recalled the various instructors who worked in the PACE Program to prepare him for the classroom:

I look at my own experience and I was very fortunate because one of my pace instructors was a teacher in the building in which I worked. This is just dumb luck but a teacher, our reigning teacher of the year, who was just 75 feet from my classroom. We had college professors who were really, really good and understood what it's like for us. There were also former retired public educators who had gone on to have the passion, to be part of our preparation. These folks willfully signed on and you know, the preparation was fantastic.

It is also important to note from my survey research, principals provided strong mentors to PACE certified at the school in which they are employed and from the same subject area. However, as was previously noted, principals discussed that much of the responsibility for the mentoring and support of PACE certified teachers rest entirely with the school. This was a major point of contention regarding PACE effectiveness as it manifest several times through survey and interviews findings with principals. As will be discussed in the next chapter, principals were very concerned with this lack of support from PACE decision-makers and highlighted recommendations to improve support and mentoring for these PACE certified teachers.

Targeted Support. Interviews with principals revealed that providing candidates with specific or targeted support is a common practice with newly hired PACE certified teachers. Principals discussed the importance of observing new PACE teachers and providing professional development and support to target their specific weaknesses or needs. Many principals used language such as "out of the box" and "unorthodox" to describe the types of professional development and support they have provided to new PACE teachers. Principals discussed assigning professional development videos, sending teachers to conferences, holding book studies, observing veteran teachers, as well as several other types of supportive tactics to assist PACE teachers. For instance, Principal 3 discussed creating a schedule in which a newly hired PACE teacher was given an extra planning period so that she could observe, and team teach with a veteran teacher:

We simply pulled him out and his class joined another very seasoned veteran teacher's class. She was quite proficient, so she was able to teach both groups and he watched every move. We did that for about six weeks, and then we let him gradually take that class back. We were willing to provide that kind of support because we saw the potential. Again, you don't go through a program as rigorous, as Clemson University's engineering, without some kind of strong content expertise in mathematics. We knew it was there but how to relay it to 16-year-olds was a whole different set of skills.

Another theme that emerged found that principals held perceptions that PACE teachers were more willing to accept support and feedback than traditionally certified teachers. Many principals shared beliefs that as career changers, PACE teachers are willing to improve and accept feedback as a necessity of survival. These teachers have a great deal at stake professionally as many PACE teachers left lucrative careers to enter education. Many of these candidates have families to support, mortgages, and other bills that create an incentive to improve and grow as teachers. Principal 8 discussed the willingness of PACE teachers to accept feedback and support when reflecting on the type of professional development he has provided to these teachers:

In our online professional development program, I'm able to assign videos to our new teachers. So, when you get a PACE candidate I feel like they're much more open to feedback than a veteran or even a brand new teacher that's gone through the traditional system. Many of these folks left good paying jobs and are motivated to be successful in the classroom. I'm able to give them assignments and ask them to go watch this video about classroom management. I try to make sure these teachers know I'm not saying you don't do it well, I'm just saying this could benefit you in your classroom.

Chapter Summary

In this chapter I described my findings that resulted from the mixed-method data collection and analysis for my study. I began this chapter by reviewing the contents of Chapters 1, 2, and 3, and then transitioning into the findings of my quantitative and qualitative phases of research. Survey results during the quantitative phase of my research revealed that principals generally viewed the PACE Program to be effective in the areas of recruitment and selection, preparation, and mentoring and support of PACE certified teachers. Principals cited many strengths and weaknesses in these three areas which were discussed in this chapter. Principals cited many strengths with the program such as recruiting a diverse pool of candidates, attracting teachers for critical needs subject areas such as business and STEM, attracting candidates who possess relevant job and life experiences, and providing robust entry requirements for prospective candidates. However, principals reported that their greatest concerns with PACE certified teachers related to a lack of student teaching opportunities, pedagogical weaknesses (especially classroom management), and requiring more support than traditionally certified teachers. Lastly, while many principals look to hire the best candidate for prospective positions in

their school, many principals believed a hire bias exists that prevents PACE certified teachers from gaining employment.

During the qualitative phase of analysis, interviews with principals provided valuable insight into the perceived effectiveness of the PACE Program. Regarding the recruitment and selection of PACE teachers, principals believed that the program was effective in recruiting a diverse pool of candidates (specifically teachers of color) and attracted teachers from critical needs subject areas backgrounds such as business and STEM, and principal believed that the entry requirements for prospective candidates were rigorous in nature.

While principals believed that PACE certified teachers possessed strong content knowledge, principals did cite concerns regarding teacher preparedness which included pedagogical weaknesses (especially classroom management) and concerns with a lack of student teaching experiences. Moreover, principals believed that PACE certified teachers seemed overwhelmed with the nature of teaching and that these teachers seemed to struggle with educational language and terminology as they come from fields outside of education. Regarding the mentoring and support of PACE teachers, principals believed that the program needed to provide more support from PACE decision-makers as most of this responsibility rests with school and district leaders. However, principals believed that PACE certified teachers are provided with high quality mentors and received targeted support for their specific needs.

CHAPTER FIVE

DISSCUSSION

Introduction

In this chapter, I provide a discussion of key findings on the perceptions of secondary principals regarding the effectiveness of the PACE Program, South Carolina's state supported alternative certification program. I begin this chapter with a summary of my study, which contains my overarching research problem, my purpose statement, the research question driving my study, and the two-phase mixed methods research design for my study. I follow this section with a discussion of findings, providing an analysis of key findings as they relate prior research on effective alternative certification programs. Next, I discuss implication for practice, focusing on the impact of my research as it relates to the PACE Program. In the following section, I discuss future research focusing on limitations of my findings and recommendations for future research on the effectiveness of the PACE Program and similar alternative certification programs. Lastly, I provide a conclusion to my research, as I embarked on my research with the goal of providing insight that could strengthen the effectiveness of the PACE Program.

Summary of Study

Current research indicates that schools and districts throughout the United States are facing massive recruitment challenges which are attributable to a growing teacher shortage, an aging and retiring workforce, a lack of young educators entering the teacher job queue, and a misrepresentation of teachers of color and men in the teaching profession (Birkeland & Peske, 2004; Carter & Keiler, 2009; Evans, 2010; Darling-Hammond et al., 2005; Darling-Hammond, 2010). In order to address these growing concerns, policymakers at the state and local levels began to adopt alternative certification programs (ACPs) which were designed to recruit and prepare individuals who already possess at least a bachelor's degree to gain licensure in education (Bireland & Peske, 2004).

Since 1985, ACPs have proliferated at a rapid pace as 48 states have adopted programs and approximately 200,000 teachers have gained their licensure in these programs (Birkeland & Peske, 2004; Feistritzer, 2005; Feistritzer, 2011). However, research indicates that many alternatively certified teachers are among the least preferred candidates in the recruitment process as many schools and districts have selected candidates from traditional education backgrounds (Evans, 2010; Darling-Hammond et al., 2005; Darling-Hammond, 2010). An important consideration in the shifting of the ranking of alternatively certified teachers in the job queue is the role of school principals in the recruitment and hiring of teachers. Research indicates that principals have mixed perceptions regarding the effectiveness of ACPs which raises concerns that principals may not be convinced of the value of alternatively certified candidates. (Brenner 2015; Finn, 2009; Hall, 2008; Johnson, 2010; Torff & Sessions, 2005; Wagmeister, 2006).

Although prior research on principals' perceptions regarding the effectiveness ACPs provided some insight on what factors may be contributing to alternatively certified teachers being placed at the bottom of the job queue, there were several areas that remained remiss from this body of research. For instance, much of the prior literature on principals' perceptions of ACPs focused on Master of Arts in Teaching (MAT) programs or national programs such as Teach for America (Decker et al., 2004; Glazerman et al., 2006; Raymond & Fletcher, 2002; Xu et al., 2007). An exploration of this literature revealed that there exists a dearth of research regarding principals' perceptions of state supported ACPs, especially the PACE program in South Carolina.

Ultimately, the shifting of alternatively certified teachers in the job queue warrants more attention and there are obvious areas that remain to be explored. Understanding the perceptions of principals is a vital piece in this research as their opinions play a tremendous role in the future of ACPs such as PACE and especially the likelihood of alternatively certified teachers being employed. In order to determine secondary principals' perceptions regarding the effectiveness of the PACE program in South Carolina, the following research question was explored through both quantitative and qualitative research methods: What are the perceptions of secondary principals regarding the effectiveness of the Program of Alternative Certification for Educators (PACE) in South Carolina?

In order to address this research question, I utilized a two-phase, sequential mixed-methods research approach to examine the perceptions of secondary principals regarding the effectiveness of the PACE program in South Carolina. In the first phase of my study, I conducted quantitative survey research on secondary principals' perceptions of the PACE program. Surveys were sent to 248 middle school principals and 226 high school principals in the state of South Carolina. In order to reach a 95% confidence level, my goal was to have 265 secondary principals respond to my survey. However, I

unfortunately fell short of this goal as I received only 106 completed surveys. While I did not reach my 95% confidence level in my survey, it is important to note that it is quite common to have low response rates especially when conducting web survey research (Kaplowitz et al., 2004; Manfreda et al., 2008).

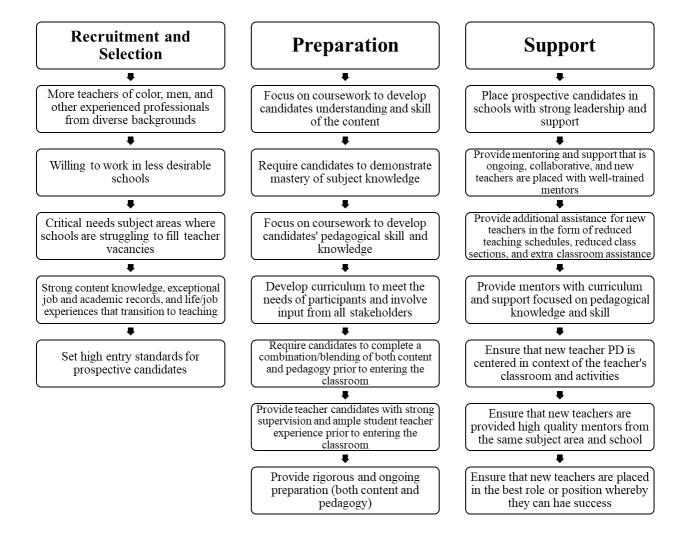
My survey consisted of Likert scale questions and open-ended questions which focused on the three processes through which the PACE program functions and has been shown throughout literature as vital to alternative certification program effectiveness: 1) the recruitment and selection of PACE certified teachers; 2) the preparation of PACE certified teachers; 3) and the mentoring and support of PACE certified teachers. Openended questions were coded using Patton's (2002; 2008) evaluation coding which is a type of coding technique to provide recommendations or implications for action and/or change regarding a program or policy under analysis.

In the second phase, I conducted qualitative research by interviewing eight secondary principals (middle and high school) who were identified from the surveys. These interviews provided an additional data source on the perceived effectiveness of the PACE program. The rationale for following up with qualitative research in the second phase was to better understand the perceptions of secondary principals regarding the effectiveness of the PACE Program.

My rationale for selecting secondary principals is the fact that the PACE program only offers certification routes for middle and high school teachers. Therefore, only middle and high school principals were likely to be familiar with the PACE program and provide insight into the effectiveness of this alternative certification program. Interviews with these eight principals were recorded and transcribed. As I stated previously, I used Patton's (2002; 2008) evaluation coding to identify themes that emerged from my interviews with principals.

Discussion of Findings

Figure 5.1 – Effective Alternative Certification Program Research



In Chapter Two, much detail was spent identifying best practice research on effective alternative certification programs. As was previously discussed, the National Association for Alternative Certification (NAAC) serves as a pioneer in the effective alternative certification program movement. Through a joint venture with Project KNOTtT (Kansas, Nevada, Ohio, and Texas Transition to Teaching) and the NAAC, National Quality Indicators were developed for current and prospective alternative certification programs to serve as a tool in the development, implementation, and evaluation of programs.

As part of my study, I utilized NAAC's National Quality Indicators, as well as pertinent scholarship on effective alternative certification programs, as a framework from which to measure principals' perceived effectiveness of the PACE Program. Specifically, I focused on three processes which have been substantially researched and proven to be critical in establishing an effective alternative certification program: recruitment and selection; preparation; and mentoring and support (Ballou and & Podgursky, 2000; NAAC, 2016; Wilson et al. 2001). Figure 5.1 (formerly Figure 2.1 in Chapter Two) provides a summary of best practice research from effective alternative certification programs within these three areas.

In the following section, I provide a discussion of my research findings from Chapter 4. I provided careful analysis to principals' perceptions and especially whether these perceptions correlate to best practice research on effective alternative certification programs as contained in Figure 5.1. Lastly, while a major consideration in my research rested on whether my findings would mirror previous research, my hope was that my research might produce unanticipated findings that would provide valuable insight into this growing body of literature on alternative certification program effectiveness. Second, it is important to note that some of the characteristics represented in Figure 5.1 were not identified as key findings. Therefore, in the following section I focus on a discussion of key findings from Chapter Four, which were prevalent through survey results and interviews with principals.

Recruitment and Selection of PACE Certified Teachers

Diverse Pool of Candidates. Prior research revealed that effective alternative certification programs recruit and select more teachers of color than from other backgrounds than traditional certification programs (Birkeland & Peske, 2004; Brenner et al., 2015; Carter & Keiler, 2009; Feistritzer, 2011; Fin, 2009; Gatlin, 2009, Hall, 2008; Hardie, 2007). While this is not a new finding to this body of literature, my research supported that the PACE program is effective in recruiting a diverse pool of candidates. In fact, survey results revealed that 62.8% of principals agreed or strongly agreed that the PACE Program was able to attract a diverse pool of candidates. Furthermore, interviews during the qualitative phase of research supported this claim as principals cited that a major strength of the PACE Program was attracting a diverse pool of candidates. Moreover, many principals highlighted the fact that most of the teachers of color that they have hired in their schools have come solely through the PACE Program.

Another interesting point of emphasis related to this finding is that PACE seems to attract candidates from very diverse professional backgrounds which is a finding similar to previous research on effective alternative certification programs (Birkeland & Peske, 2004; Brenner et al., 2015; Carter & Keiler, 2009; Feistritzer, 2011; Fin, 2009; Gatlin, 2009, Hall, 2008; Hardie, 2007). Principals reported the diverse perspective that these PACE teachers possess as career changers compared to traditional certification teachers, who have primarily worked in education. In fact, principals were impressed with the wide variety of professional experiences of PACE certified teachers as they cited professions such as engineers, chemists, accountants, meteorologists, and other highly specialized backgrounds.

Willingness to Work in Less Desirable Schools. Prior research revealed that effective alternative certification programs recruit and select candidates who have a desire to work in less desirable schools – schools that are lower achieving with limited resources, high proportions of poor and minoritized students, and located in urban and rural areas (Evans, 2010; Stoddart 1990; Wilson et al. 2001). On the survey, 71.7% of principals agreed or strongly agreed that the PACE Program was able to recruit candidates who are willing to work in less desirable schools. During interviews, while many principals did not directly discuss topics related to less desirable schools, principals cited that PACE certified teachers possess a strong desire to enter the teaching profession. Many principals did discuss that PACE certified teachers were very motivated to enter the teaching profession using terms like "calling" or "passion" to describe these teachers' attitudes towards entering the classroom. Principals were also impressed with their "coachability" as they stated that PACE certified teachers were eager to accept feedback and improve upon their classroom practices. **Critical Needs Subject Areas**. Prior research revealed that effective alternative certification programs recruit and select candidates in critical needs subject areas where schools are struggling to fill teacher vacancies such as STEM, foreign languages, and special education (Barclay et al., 2008; Birkeland & Peske, 2004; Johnson et al., 2005; Shen, 1997). After conducting the survey and interving principals, it was evident that principals perceived the PACE Program to be effective in attracting prospective candidates from critical needs subject areas as 87.7% of principals agreed or strongly agreed with this statement.

As was discussed in Chapter 4, the most prevalent critical needs subject areas that were cited by principals were business and STEMs backgrounds. When especially looking at business subject areas, principals felt strongly that without the PACE Program there would be no teachers to fill these vacancies. Principals expressed that many of the traditional certification programs throughout the state of South Carolina are not producing business education teachers, thus creating a critical needs area in this field. Furthermore, high school principals stated that they are struggling to fill higher level math and science positions (e.g., physics, calculus, and AP math and science classes) as many traditionally certified teachers are ill-equipped for the rigor of these subject areas. These high school principals stated that they remedied this situation by hiring PACE certified teachers with engineering, physics, and chemistry backgrounds as they have the content expertise to prepare students for these higher-level courses. According to prior research, effective alternative certification programs were able to recruit candidates from variety of subject areas, specifically citing foreign languages, special education, English, and the social sciences. It is important to note that while principals acknowledged that the PACE Program does recruit candidates from these subject area backgrounds, the program falls short when compared to traditionally certified programs.

High Entry Requirements. Prior research on effective alternative certification program found that successful programs held rigorous entry requirements for prospective candidates (Darling-Hammond, 1990; Hess, 2001; Legler, 2002; Humphrey et al., 2005). The findings for this particular topic revealed that principals were unsure of all the entry requirements for prospective PACE certified teachers. Many principals were able to articulate some of the entry requirements which included requiring prospective candidates must possess a bachelor's degree from an accredited college or university with a major in an approved PACE certification field, requiring a passing score on their designated ETS Praxis subject area assessment, and clear a Federal Bureau of Investigation (FBI) and South Carolina Law Enforcement Division (SLED) background check.

While principals felt that these three requirements were rigorous and integral for PACE Program effectiveness, there are more entry requirements that principals were completely unaware of that could further shift principals' perceptions of the program. For instance, as will be later discussed in the preparation of PACE certified teachers, many principals believed that the PACE Program failed to provide prospective candidates with effective pedagogical preparation. However, as was stated previously, many principals were completely unaware that the PACE Program provides a two-week in-service training to all new PACE teachers prior to entering the classroom which focuses on lesson planning, classroom management strategies, and other integral pedagogical training. Furthermore, all PACE certified teachers are required to attend weekend seminars and complete three graduate level classes (many of which focus on pedagogical preparation) throughout a three-year process to gain their teacher licensure. It could be argued that PACE decision-makers could do a better job of articulating the preparation and entry requirements of prospective PACE certified teachers to make these candidates appear more enticing in the teacher job queue.

Hiring Bias. As I embarked on my study, one of my primary motivations was to provide more insight into the effectiveness of alternative certification programs, especially state supported programs like the PACE Program in South Carolina. Much of the literature I reviewed found that many alternatively certified teacher continue to be the least preferred candidates in the recruitment process (Evans, 2010; Darling-Hammond, 2010; Darling-Hammond et al., 2005). After surveying and interviewing principals, there seems to be strong evidence that principals perceive the PACE Program to be effective in the recruitment and selection, preparation, and support of PACE certified teachers. In fact, 68.9% of principals agreed or strongly agreed that PACE certified teachers were as effective as traditionally certified teachers. Another interesting comparison between traditionally certified teachers and PACE certified teachers held that 90.5% of principals stated that they look to hire the most qualified teacher candidate regardless of certification.

However, while these statistics are important considerations into principals' perceived effectiveness of the PACE Program, 67% of principals stated that they would

prefer to hire a traditionally certified teacher rather than a PACE certified teacher. Furthermore, while 58.5% of principals stated that they would hire the best candidate for vacancies in their schools, 34.9% of principals stated that they would hire traditionally certified teachers over PACE certified teachers. These principals cited that traditionally certified teachers display more pedagogical knowledge, display more classroom management, and have prior student teaching experience as their rationale for preferring traditionally certified teachers. Lastly, only 6.6% of principals stated that they would hire PACE certified teachers over traditionally certified teachers, citing prior job and life experiences and strong content knowledge as their rationale for preferring PACE certified teachers.

One of the driving factors behind my study pertained to prior research which indicated that many alternatively certified teachers are among the least preferred candidates in the recruitment process as many schools and districts have selected candidates from traditional education backgrounds (Evans, 2010; Darling-Hammond, 2010; Darling-Hammond et al., 2005). One of the focuses of my research was to determine if a hiring bias existed towards PACE certified teachers as evident from principal perceptions. As is depicted in Figure 5.2, it can be argued that a hiring bias exists towards PACE certified teachers which can be attributed to the following factors: poor articulation and communication from PACE decision-makers regarding the entry requirements and preparation which are in place for prospective PACE candidates; lack of student teaching opportunities; and pedagogical concerns towards PACE certified teachers.

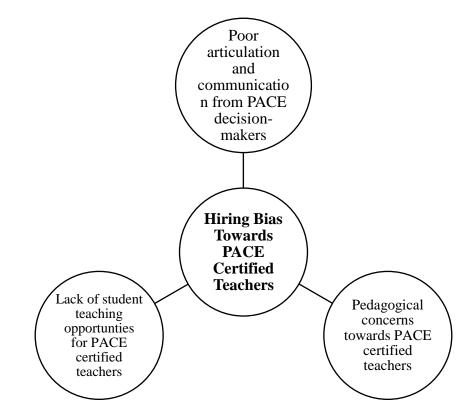


Figure 5.2 – Hiring Bias Perceptions Towards PACE Certified Teachers

Preparation of PACE Certified Teachers

Content Knowledge and Coursework. Prior research revealed that effective alternative certification programs require candidates to demonstrate mastery of subject knowledge by having candidates complete a subject area examination, a state licensure test, or complete a portfolio (Allen, 2003; Washington, 2008). After conducting survey research and interviews, principals overwhelmingly believed that one of the greatest strengths of prospective PACE certified teachers was their content knowledge and that the program did an effective job in requiring prospective candidates to demonstrate their mastery of this knowledge. For instance, in my survey, I found that 86.8% of principals agreed or strongly agreed that the PACE Program was effective in requiring candidates to demonstrate mastery of their subject knowledge. Many principals supported this claim by referencing the requirement of prospective PACE candidates to earn a passing score on their designated ETS Praxis subject area assessment. It is important to note that earning a passing score on the ETS Praxis subject area assessments is also a critical component and requirement of teachers traditionally certified teachers demonstrating mastery of subject knowledge.

Furthermore, prior research revealed that effective alternative certification programs focus on coursework to develop candidates' understanding and skill of the content they will be expected to teach in the classroom (Allen, 2003; Ballou & Podgursky, 2000; Hess, 2001; Hill et al., 2005; Johnson et al., 2005; Legler, 2002; Wayne & Youngs, 2003). Results from surveys revealed that 75.5% of principals agreed or strongly agreed that the PACE Program was effective in preparing candidates for the content they will be expected to teach. Many former PACE teachers who are now principals, highlighted the fact that they received effective preparation prior to entering the classroom. These principals highlighted the two-week in-service prior to entering the classroom which focus on instructional delivery, lesson planning, and other pedagogical strategies to maximize the strong content in which they possessed.

Pedagogical Skills and Knowledge. Prior research revealed that effective alternative certification programs focus on coursework to develop candidates' pedagogical skill and knowledge to optimize success in the classroom (Allen, 2003; Darling-Hammond, 1990; Darling-Hammond, 2003; Darling-Hammond, 2005; DarlingHammond, 2010; Humphrey et al., 2008; Ingersoll et al., 2012). Out of the many areas in which principals provided perceptions regarding the effectiveness of the PACE Program, principals were most divided over the pedagogical skills and knowledge that PACE certified teachers possessed. When looking at the survey results, 87.8% of principals either agreed or strongly agreed that the PACE Program focuses on coursework to develop candidates' pedagogical skills and knowledge to optimize success in the classroom. However, when PACE teachers were compared to traditionally certified teachers (TCTs), 86.6% of principals believed that TCTs displayed more pedagogical knowledge and 91.5% of principals believed that TCTs displayed more classroom management. While I will later discuss the implications of a hiring bias that may negatively impact PACE certified teachers in the teacher job queue, it is important to note the apparent dichotomy of these results. On the one hand, principals perceive the pedagogical coursework that PACE teachers receive to be effective (e.g., 87.8% agreement), while on the other hand there exist an overwhelming perception that PACE teachers are less prepared than TCTs in many pedagogical areas.

Prior Student Teaching. Prior research revealed that effective alternative certification programs provide teacher candidates with strong supervision and ample student teaching experiences prior to entering the classroom as a full-time teacher (Allen, 2003; Darling-Hammond, 1990; Darling-Hammond and Sykes, 2005; Humphrey et al., 2008). It is important to note that the PACE Program, like many alternative certification programs, do not require prior student teaching as a prerequisite to entering the classroom. However, it was evident from the results of my research that a majority of

principals valued the importance of prior student teaching opportunities. In fact, surveys results revealed that 70.7% of principals agreed or strongly agreed that prior student teaching experiences were important for teacher success. Moreover, 67% disagreed or strongly disagreed that the PACE Program provides teacher candidates with student teaching experiences prior to entering the classroom.

The lack of student teaching opportunities for PACE certified teachers was also a point of contention raised during interviews with principals. While some principals relegated the importance of prior student teaching experience, many principals cited prior student teaching an invaluable opportunity for any prospective teacher. Principals provided perceptions on the many challenges that they have seen PACE teachers attempt to overcome that could have been avoided if they had prior student teaching experiences. However, the most pivotal role of the PACE Program, and many alternative certification programs for that matter, is to recruit critical needs teachers directly into the classroom which bypasses the required student teaching requirements of traditional certification programs. Further consideration to this matter will be discussed in the recommendations later in this chapter.

Mentoring and Support of PACE Certified Teachers

Same Content Area and Same School. Prior research revealed that effective alternative certification programs ensure that new teachers are provided high quality mentors from the same subject area and located in the same school (Darling-Hammond, 2003; Smith & Ingersoll, 2004). When looking at the PACE Program, 58.5% principals

agreed or strongly agreed that the PACE Program provided mentors from the same content area and 60.4% of principals agreed or strongly agreed that these mentors were located in the same school. When looking at principals' perceptions regarding the effectiveness of the PACE Program in providing mentoring and support to PACE certified teachers, these two areas ranked lowest in percentages of agree and strongly agree.

However, interviews revealed that principals believed that the mentors provided to PACE teachers were high quality. Specifically, many principals stated that a great deal of thought and consideration was placed into types of mentors that are provided to PACE certified teachers. In fact, 63.2% of principals agreed or strongly agreed that PACE certified teachers were placed with well-trained mentors. Moreover, principals discussed many of the pedagogical concerns that PACE certified teachers possessed and ensured that these teachers were placed with mentors that could strengthen areas of concern. However, as will be discussed in the next section, principals were very critical that much of the responsibility for the mentoring and support of PACE certified teachers rest solely with the school and district in which these teachers are employed.

More Collaboration from the PACE Program. Prior research found that effective alternative certification programs provide mentoring and support that is ongoing, collaborative, and teachers are placed with well-trained mentors (Darling-Hammond, 1990; Humphrey & Wechsler, 2007; Humprhey et al., 2008; Moir, 2009; Moir & Gless, 2001; Williams, 2011). Survey research found that 71.7% of principals agreed or strongly agreed that the PACE Program provided teacher candidates with mentoring and support that is ongoing and collaborative. However, interviews with principals revealed contrary findings especially related to the PACE Program providing mentoring and support that is collaborative.

Principals believed that much of the responsibility for the mentoring and support of PACE Certified Teachers rests solely on the schools and districts in which the teachers are employed. Principals stated that this is an area where they would like to see more involvement with PACE Program decision-makers to ensure that PACE teachers are provided with a triad support system: the school, the district, and the PACE Program. For instance, many principals stated that more communication and follow up from PACE instructors or mentors would make for a stronger system of support for these teachers. Principals acknowledged that PACE teachers receive training from PACE instructors, but there exists a breakdown of support when the schools and districts assume the bulk of responsibility for mentoring and supporting these teachers.

Professional Development Focused on the Classroom. Prior research found that effective alternative certification programs ensure that new teacher professional development is centered in the context of the teacher's classroom and specific to each teacher's needs (Humphrey et al., 2008; Moir & Gless, 2001; Little, 1999). Results from my survey revealed that 82.1% of principals believed that these teachers are provided professional development that is centered in context of the teacher's classroom and classroom-based activities. While traditionally certified principals once again stated that PACE certified teachers needed more support in the classroom, a dichotomy existed with former PACE teachers who participated in my study as principals. These former PACE certified teachers provided unique insight into the preparation provided by the PACE Program that traditionally certified principals would not be privy. These principals were able to recall their many required trainings and seminars citing that their instructors were able to provide a level of support that was effective and prepared them for the challenges they faced in the classroom.

Additional Supports. Previous research also revealed that effective alternative certification programs provide additional assistance for new teachers in the form of reduced teaching schedules, reduced number of preparation or teaching sections, and extra classroom assistance (Smith & Ingersoll, 2004; Williams, 2011). Many of these best practice supportive measures were reflected throughout my interviews with principals. For instance, principals discussed providing specific supports to target PACE certified teachers' specific needs or concerns. Many principals discussed assigning professional development videos, sending teachers to conferences, book studies, observing veteran teachers, reducing teaching schedules to provide for an additional planning period, as well as other supportive strategies.

Implications for Practice

As I stated earlier, the goal and motivation driving my research was to aid PACE decision-makers by providing tangible evidence regarding the effectiveness of the PACE program as perceived by school leaders. After reflecting on my findings, I have provided several recommendations that I believe will strengthen effectiveness of the PACE program. Many of my recommendations were developed from findings that highlighted areas of improvement, insight from principals, and my own experiences as a former PACE certified teacher. These three recommendations included: paid teaching internship; prior experience in the school setting; and two-year work experience.

Paid Teaching Internship. One of the most common themes that emerged with principals and that caused hesitation with hiring PACE certified teachers was lack of prior teaching experience for PACE certified teachers. For instance, many principals discussed the importance of prior student teaching as a factor of success for prospective PACE teachers. One recommendation that would make PACE certified teachers more attractive in the job queue is to provide some type of internship program for prospective teachers. An ideal situation would be to provide a stipend-based program where prospective PACE candidates would be paid while interning with a veteran teacher, much like the experiences of traditionally certified teachers at colleges and universities. It is important to remember that many of these PACE teacher are career changers who have left jobs and need monetary support to pay bills and support their family. However, a major caveat to this recommendation would be funding which would need to come from South Carolina Department of Education which funds the PACE Program.

Prior Experience in the School Setting. Another recommendation from my research is to encouraging prospective PACE teachers to gain more exposure to the classroom prior to entering the PACE Program. During my research, many principals reported that some of the most effective PACE teachers they have supervised were successful because they had prior experiences that were tied to education. For instance, principals reported former substitute teachers, teacher assistants or aids, youth pastors,

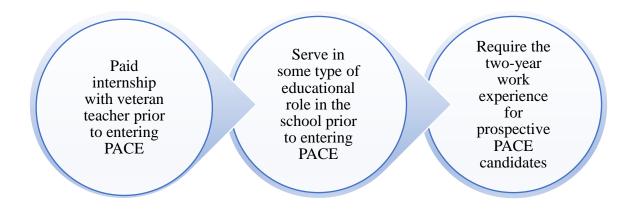
and coaches who transitioned to teaching through the PACE program and attributed their success in the classroom to these prior experiences. The more exposure that prospective PACE teachers get in the classroom will only help mitigate many of the struggles that were cited by principals in my research. As a former PACE certified teacher, I would agree with these principals that prior exposure to the educational setting would have made a tremendous difference in my preparation for entering the classroom.

Moreover, as was stated in my research, many prospective PACE candidates have worked in demanding and rigorous positions outside of education, but are oftentimes unprepared for all the responsibilities that fall on teachers. The fast-paced lifestyle for teachers can be quite overwhelming for PACE teachers as they have to balance frequent meetings, constant supervision of students, continual communication with parents, and consistent grading of student assessments, all while ensuring that the classroom is a productive environment for students to learn. However, one major caveat to recommending that prospective PACE teachers get more exposure to the classroom completely depends on the flexibility of their own work schedule. Many career changers who have demanding jobs would struggle to find time to enter the classroom as a substitute teacher.

Two-Year Work Experience. Several years ago, PACE decision-makers recommended that due to the shortage of teachers across the state, it was imperative to remove the two-year work experience requirement for prospective PACE candidates. While I understand the rationale for the PACE Program removing this work waiver, I believe that the two-year work experience was a critical component in the program's

success and should be reinstated. While there is nothing inherently wrong with 21-year old college graduates suddenly deciding they want to enter the teaching profession, career changers bring intangibles that beneficial to the classroom. For instance, effective alternative certification program research reveals that career changers bring exceptional job and academic records and life and job experiences that can be highly beneficial to the classroom (Hess, 2001; Legler, 2002; Humphrey et al., 2005; Wechsler, and Hough 2008). Moroever, Stoddart and Floden (1995) stated that career changers provide "mature individuals with prior work experience, make better teacher, and expand and diversify the teaching pool" (p. 12). In much of my research, principals acknowledge the important intangibles that these career changers bring to the classroom. Therefore, I believe it to be vital for PACE decision-makers to revisit this two-year work experience as career changers bring a valuable repertoire of experiences and knowledge that cannot simply replicated without prior work experience.

Figure 5.3 – PACE Program Recommendations



Future Research

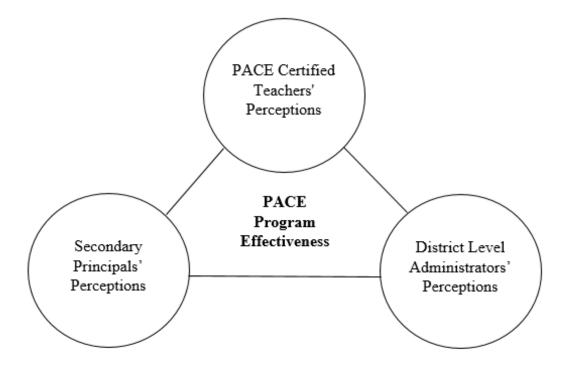
As I reflect on my research and the direction of future research on the PACE Program and similar alternative certification programs, my first consideration is the limitation of my survey research. Specifically, I was unable to reach the 95% confidence level for my survey results to be generalizable throughout the state of South Carolina. At the time of my study, there were 248 middle school principals and 226 high school principals in the state of South Carolina. Unfortunately, I came short of my 265 goal, only receiving 106 completed surveys. While I did not reach my 95% confidence level in my survey, I acknowledge that lower response rates are common with web surveys and my response rate of 21.9% is similar to other web survey research designs (Kaplowitz et al., 2004; Manfreda et al., 2008). While the scope of my research was targeted towards secondary principals, I have come to learn that there are other voices that can provide valuable insight into the effectiveness of the PACE Program. These voices are not only critical to understanding the effectiveness of the PACE Program but can also strengthen the robustness of survey research on this topic by expanding the pool of participants and the generalizability of research in this field.

One group that has been largely remiss from the body of literature and one that I believe can be very impactful in this research are the perceptions of district level administrators. Specifically, many principals questioned why I choose not to include district level personnel, in particular directors of personnel and/or assistant superintendents of personnel. Personnel directors play a very active role in the recruitment and support of many types of teachers, including PACE certified teachers. Many principals considered their perspective to also be a vital piece in growing body of literature on the effectiveness of the PACE Program.

Moreover, as a former PACE teacher, I think it vital to explore the perspectives of former and current PACE certified teachers regarding the effectiveness of the program. For instance, as a former PACE certified teacher, my experiences gaining my teacher licensure through the PACE program had a powerful impact on my perspective of the program. Throughout the process of gaining my teacher licensure through the PACE Program, I am aware of the strengths and weaknesses of the program which were based on my own experiences. Therefore, I believe the perspectives of PACE certified teachers can serve as a vital piece of information regarding the effectiveness of the PACE Program and would allow for a more robust comparison to the perceptions of principals.

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Another recommendation for further research took form as an interesting phenomenon that surfaced during my research and was quite unanticipated. As I searched for data-rich principals to interview, I was looking for candidates who had extensive knowledge of the PACE Program and could provide insight into the program's effectiveness. Ironically, four out of the eight principals who agreed to participate and were selected to be interviewed in my study received their teaching certification through the PACE Program. While many principals expressed similar perceptions regarding the effectiveness of the PACE Program, PACE certified principals possessed a unique knowledge and understanding of the program. These PACE certified principals were able to recall their own training, mentors, and various experiences that were both positive and negative providing a unique perspective into the effectiveness of the program. It is my recommendation that further research be conducted from the view point of previous PACE teachers who have entered in to leadership at the school level. Their insight could further grow the body of literature on PACE effectiveness. **Figure 5.4** – Future Research of PACE Program Effectiveness



Conclusion

Through my study, many secondary principals highlighted strengths and weaknesses in the PACE Program regarding the recruitment and selection, preparation, and mentoring and support of PACE certified teachers. Regarding the recruitment and selection of PACE certified teachers, principals perceived the PACE Program to be effective in recruiting a diverse pool of candidates, attracting teachers able to teach in critical needs subject areas such as business and STEMs backgrounds, attracting candidates who possess relevant job and life experiences, and robust entry requirements for prospective candidates. Careful analysis of the preparation of PACE certified teachers revealed that principals perceived these teachers to possess strong content knowledge but expressed concerns discussing related to pedagogical weaknesses (especially classroom management) and lack of student teaching experiences.

Moreover, principals believed that PACE certified teachers seemed overwhelmed with the nature of teaching and that these teachers seemed to struggle with educational language and terminology as they come from fields outside of education. Regarding the mentoring and support of PACE certified teachers, principals believed that the program needed to provide more support from PACE decision-makers as most of this responsibility for supporting these teachers rest with school and district leaders. However, principals did cite that PACE certified teachers are provided with high quality mentors and received targeted support for their specific needs.

In my section on implications for practice, I argued that a hiring bias exists towards PACE certified teachers and is attributed to the following factors: poor articulation and communication from PACE decision-makers regarding the entry requirements for prospective PACE candidates; lack of student teaching opportunities; and pedagogical concerns towards PACE certified teachers. Moreover, principals argued that these three areas should be focal points of improvement for PACE Program decisionmakers.

Furthermore, I provided recommendations for practice which were based on perceived areas of improvement in the PACE Program. These three areas of improvement included providing a paid internship with veteran teacher prior to entering the PACE Program, encouraging prospective PACE candidates to serve in some type of educational role in the school prior to entering PACE (substitute, teacher aid, coach), and reinstating the require the two-year work experience for prospective PACE candidates which was previously in place by PACE Program decision-makers.

Lastly, I reflected on the limitations of my research and provided recommendations for future research on the effectiveness of the PACE Program and similar alternative certification programs. Once again, I acknowledged the shortcomings of my research, specifically noting that I did not reach my 95% confidence level in my web surveys which were disseminated to secondary principals in the state. I also acknowledged that lower response rates are common with web surveys and that my response rate of 21.9% were similar other web survey research designs (Kaplowitz et al., 2004; Manfreda et al., 2008). However, I provided recommendations to strengthen the robustness of my research in the future by including the perceptions of PACE certified teachers and district level administrators (specifically human resource directors as they have a hand in the recruitment, preparation, and support of PACE certified teachers), and former PACE certified teachers who are now administrators.

As I stated earlier, the goal and motivation driving my research was to aid alternative certification stakeholders and decision-makers by providing tangible evidence regarding the effectiveness of the PACE program as perceived by school leaders across the state of South Carolina. While there is much still to be explored regarding the effectiveness of ACPs, my research was able to provide more insight into this much needed and growing body of literature, especially state supported ACPs like the PACE Program. Moreover, my research provided a focal point on the perceptions of school principals which has been is largely absent from the literature. As I stated in my positionality statement, my experiences gaining my teacher licensure through the PACE program were a positive experience and I am grateful to have the opportunity to enter what I consider to be the greatest profession – teaching. In conclusion, it is my hope that my research will serve only to benefit and strengthen the PACE Program.

APPENDICES

Appendix A

Survey Questionnaire

Information about Being in a Research Study Clemson University

Perceptions of Secondary Principals Regarding the Effectiveness of the Program of Alternative Certification for Educators (PACE) in South Carolina

Description of the Study and Your Part in It Dr. Hans Klar and Kyle Whitfield would like to invite you to take part in a research study. Dr. Klar is an associate professor at Clemson University. Kyle Whitfield is a graduate student at Clemson University, who is conducting this study with the help of Dr. Klar. The purpose of this study is to gain a better understanding of the perceptions of secondary principals regarding the effectiveness of the PACE program, South Carolina's state supported alternative certification program. Your part in the study would be to respond to questions in an online survey. It will take you about ten to fifteen minutes to be in this study.

Risks and Discomforts We do not know of any risks or discomforts to you in this study.

Possible Benefits We do not know of any way you would benefit directly from taking part in this study. However, this research will provide valuable insight into the effectiveness of the PACE program and assist in making recommendations to PACE stakeholders.

Protection of Privacy and Confidentiality We will do everything we can to protect your privacy and confidentiality. We will not tell anybody outside of the research team that you were in this study or what information we collected about you in particular. All data collected will be kept confidential and saved on a password protected computer in accordance with Clemson University policy.

Choosing to Be in the Study You do not have to be in this study. You may choose not to take part and you may choose to stop taking part at any time. You will not be punished in any way if you decide not to be in the study or to stop taking part in the study.

Contact Information If you have any questions or concerns about this study or if any problems arise, please contact Dr. Hans Klar at Clemson University at 864-656-5091. If you have any questions or concerns about your rights in this research study, please contact the Clemson University Office of Research Compliance (ORC) at 864-656-0636 or irb@clemson.edu. If you are outside of the Upstate South Carolina area, please use the

ORC's toll-free number, 866-297-3071. Clicking on the "agree" button indicates that: You have read the above information; You voluntarily agree to participate; You are at least 18 years.

You may print a copy of this informational letter for your files.

- 1. Last Name (which will be kept anonymous for the purposes of the study)
- 2. First Name (which will be kept anonymous for the purposes of the study)
- 3. Email Address (information is important to locate data-rich subjects for interviews)
- 4. District (which will be kept anonymous for the purposes of the study)
- 5. Do you work in a middle or high school?
 - a. Middle
 - b. High
 - c. Other (6-12)
- 6. How many years have you worked as a secondary principal?
 - a. 0-5
 - b. 6-10
 - c. 11-15
 - d. More than 20
- 7. Approximately, how many PACE teachers have you supervised as a secondary administrator?
 - a. 0-5
 - b. 6-10
 - c. 11-15
 - d. More than 15
- 8. How familiar are you with recruitment and selection processes for prospective PACE candidates?
 - a. Excellent
 - b. Good
 - c. Fair
 - d. Poor
- 9. How familiar are you with preparation and training processes for PACE certified teachers?
 - a. Excellent
 - b. Good

- c. Fair
- d. Poor
- 10. How familiar are you with mentoring and supportive processes for PACE certified teachers?
 - a. Excellent
 - b. Good
 - c. Fair
 - d. Poor
- 11. How willing are you to participate in follow up interviews regarding the effectiveness of the PACE program?
 - a. Very willing
 - b. Willing
 - c. Unsure
 - d. Not Willing

Based on your experiences working with PACE certified teachers, please complete the following survey regarding the recruitment and selection of PACE teachers.

Recruitment and Selection of PACE Teachers				
The PACE program sets high entry standards for prospective candidates	Strongly Disagree	Disagree	Agree	Strongly Agree
The PACE Program recruits and selects more teachers of color, men, and other experienced professionals from diverse backgrounds than traditional certification programs.	Strongly Disagree	Disagree	Agree	Strongly Agree
The PACE Program recruits and selects candidates who are willing to work in less desirable schools.	Strongly Disagree	Disagree	Agree	Strongly Agree
The PACE Program recruits and selects candidates from critical	Strongly Disagree	Disagree	Agree	Strongly Agree

needs subject areas where school are struggling to fill teacher vacancies. The PACE Program recruits and selects candidates with strong	Strongly Disagree	Disagree	Agree	Strongly Agree
content knowledge. The PACE Program	Strongly	Disagree	Agree	Strongly
recruits and selects candidates with life/job experiences that provides a smooth transition into the teaching profession.	Disagree		6	Agree
The PACE Program recruits and selects candidates with exceptional job and academic records.	Strongly Disagree	Disagree	Agree	Strongly Agree
Based on your experiences working with PACE certified teachers, please complete the following survey regarding the preparation of PACE teachers.				
Pre	eparation of	PACE Teache	rs	
The PACE Program focuses on coursework to develop candidates understanding and skill of the content they will be expected to teach in the classroom.	Strongly Disagree	Disagree	Agree	Strongly Agree
The PACE Program requires candidates to demonstrate mastery of subject knowledge prior to entering the classroom (e.g. requiring candidates complete a subject area examination, a state licensure test, etc.).	Strongly Disagree	Disagree	Agree	Strongly Agree

The PACE Program focuses on coursework to develop candidates' pedagogical skills and knowledge to optimize success in the classroom.	Strongly Disagree	Disagree	Agree	Strongly Agree
The PACE Program curriculum meets the needs of participants and involves input from all stakeholders including local universities, participants or past participants, and school or district leaders.	Strongly Disagree	Disagree	Agree	Strongly Agree
The PACE Program requires candidates to complete a combination or blending of both content knowledge and pedagogy prior to entering the classroom as a full-time teacher.	Strongly Disagree	Disagree	Agree	Strongly Agree
The PACE Program provides teacher candidates with strong supervision and ample student teaching experiences prior to entering the classroom as a full-time teacher.	Strongly Disagree	Disagree	Agree	Strongly Agree
Based on your experiences working with PACE certified teachers, please complete the following survey regarding the mentoring and support of PACE teachers.				
Mentoring and Support of PACE Teachers				
The PACE Program ensures that teacher candidates are placed with well-trained mentors.	Strongly Disagree	Disagree	Agree	Strongly Agree

The PACE Program ensures that teacher candidates are provided with mentoring and support that is ongoing and collaborative (e.g. PACE program, district, and school level mentoring/support).	Strongly Disagree	Disagree	Agree	Strongly Agree
The PACE Program ensures that teacher candidates are provided with mentors from the same subject area.	Strongly Disagree	Disagree	Agree	Strongly Agree
The PACE Program ensures that teacher candidates are provided professional development that is centered in context of the teacher's classroom and classroom-based activities.	Strongly Disagree	Disagree	Agree	Strongly Agree
The PACE Program ensures that teacher candidates are provided with mentors located in the same school.	Strongly Disagree	Disagree	Agree	Strongly Agree
The PACE Program ensures that mentors are provided the support needed to assist teacher candidates.	Strongly Disagree	Disagree	Agree	Strongly Agree
PACE Teache	rs and Trad	litionally Cer	tified Teache	rs

Traditionally certified teachers (TCTs) are teachers who completed undergraduate teacher preparation coursework and a teaching practicum or student teaching before starting their career as teacher in a school district.

PACE certified teachers are as effective as TCTs.	Strongly Disagree	Disagree	Agree	Strongly Agree
PACE certified teachers display more content knowledge than TCTs.	Strongly Disagree	Disagree	Agree	Strongly Agree
PACE certified teachers display more pedagogical knowledge than TCTs.	Strongly Disagree	Disagree	Agree	Strongly Agree
PACE certified teachers display more classroom management than TCTs.	Strongly Disagree	Disagree	Agree	Strongly Agree
Prior student teaching experiences and/or practicums are important for teacher candidate success.	Strongly Disagree	Disagree	Agree	Strongly Agree
Prior job/life experiences of PACE teachers (career changers) are as important as prior student teaching experience.	Strongly Disagree	Disagree	Agree	Strongly Agree
As teacher openings occur, I look to hire the most qualified candidate regardless of certification.	Strongly Disagree	Disagree	Agree	Strongly Agree
As teacher openings occur, I prefer to hire TCTs rather than PACE teachers.	Strongly Disagree	Disagree	Agree	Strongly Agree

Appendix B

Interview Protocol Planning Matrix

Research Question: What are the perceptions of secondary principals of the effectiveness of the Program of Alternative Certification for Educators (PACE) in South Carolina?

Source	Concepts	Interview Questions
Birkeland & Peske, 2004; Barclay et al., 2008; Carter & Keiler, 2009; Darling-Hammond, 1990; Evans, 2010; Feistritzer, 2011; Gatlin, 2009; Hess, 2001; Humphrey et al., 2005; Legler, 2002; Shen, 1997; Stoddart 1990; Wechsler, and Hough 2008; Wilson et al. 2001	 Characteristics of effective ACPs in the recruitment and selection process: Recruits more teachers of color, men, and experienced professionals Willing to work in less desirable schools Attracts more critical needs subject areas where schools are struggling to fill teacher vacancies Recruits candidates that possess strong content knowledge, exceptional job and academic records, and life/job experiences that transition to teaching Sets high entry standards for prospective candidates to demonstrate mastery of subject knowledge by complete a subject area examination, a state licensure test, or complete a portfolio 	 Tell me about your experiences with the recruitment and selection of PACE certified teachers. How successful has the PACE program been in recruiting men and teachers of color? How successful has the program been in recruiting experienced professionals from diverse background? Would you say the program has been more or less successful than TCPs in attracting a diverse pool of candidates and why? Would you say the program has recruited candidates that possess strong content knowledge and why? Would you say the program has recruited candidates with exceptional job and academic records and why? Would you say the program has recruited candidates with life/job experiences that transition well to teaching? Why or why not? Tell me about your experiences and observations regarding the entry requirements for prospective PACE
		candidates.What are the entry requirements of the program?

		 Do you believe the program requirements are rigorous enough for prospective candidates? Why? Should additional requirements be put in place and why? Based on your experiences, what type of subject/content areas has the program recruited? Would you say that the program has been more or less successful than TCPs in attracting critical needs subject areas and why?
Allen, 2003; Ballou & Podgursky, 2000; Burkett & Gimbert, 2009; Darling- Hammond, 1990; Darling-Hammond, 2003; Darling- Hammond, 2005; Darling-Hammond, 2010; Darling- Hammond & Sykes, 2003; Hess, 2001; Hill, Rowan, & Ball, 2005; Humphrey et al., 2008; Ingersoll et al., 2005; Legler, 2002; Washington et al., 2008; Wayne & Youngs, 2003; Wenglinsky, 2002	 Characteristics of effective ACPs in the preparation process: Focus on coursework to develop candidates understanding and skill of the content they will be expected to teach in the classroom Focus on coursework to develop candidates' pedagogical skills and knowledge to optimize success in the classroom Provide rigorous and ongoing preparation in educational theory and foundations, child development, classroom management, learning theory, teaching methods, assessment practices, and instructional design Provide teacher candidates with strong supervision and ample student teaching experiences prior to entering 	 Tell me about your experiences and observations regarding the preparedness of PACE certified teachers. How prepared are PACE teachers regarding the content and skills they are expected to teach? How prepared are PACE teachers regarding pedagogical knowledge and skill necessary to be effective teachers? What areas regarding preparedness have PACE teachers performed strongly? What areas regarding preparedness have PACE teachers performed poorly? Based on your knowledge of the PACE preparation process, are PACE teacher prepared for the challenges they face in the classroom? Why or why not? Is lack of student teaching opportunities an important factor in

	the classroom as a full-time teacher	 PACE teacher effectiveness? Why or why not? Do you believe that PACE teachers are more or less prepared than TCPs and why?
Bradbury & Koalla, 2007; Chesley et al., 1997; Darling- Hammond, 1990; Darling-Hammond, 2003; Fox & Peters, 2013; Humphrey & Wechsler, 2007; Humprhey et al., 2008; Imig & Imig, 2006; Little, 1999; Moir, 2009; Moir & Gless, 2001; Patterson, 2005; Reeves, 2003; Rockoff, 2008; Smith & Ingersoll, 2004; Williams, 2011; Wilson et al., 2001; Yusko & Feiman-Nemser, 2008	 Characteristics of effective ACPs in the mentoring and supportive process: Provide mentoring and support that is ongoing, collaborative, and are placed with well-trained mentors Ensure that new teachers are provided high quality mentors from the same subject area and who are located in the same school Provide additional assistance for new teachers in the form of reduced teaching schedules, reduced number of preparation or teaching sections, and extra classroom assistance Provide teacher professional development that is centered in context of the teacher's classroom and classroom- based activities 	 Tell me about your experiences and observations regarding the mentoring and support of PACE certified teachers. Describe the type of mentors that have been provided to support PACE certified teachers? Have the mentors provided to PACE certified teachers been effective in supporting teachers? Why or why not? As a supervising principal, what types of support or assistance have you provided to PACE certified teachers? Describe the type of professional development that has been provided to PACE certified teachers. What types of content has this professional development focused on and why? How effective has this professional development and support been for PACE teachers and why?

Appendix B

Interview Protocol

Thank you for agreeing to meet with me to talk about your perceptions regarding the effectiveness of the PACE program in South Carolina. I am going to begin by asking you about your experiences with the recruitment and selection of PACE certified teachers. From there I will move to your experiences with the preparedness of PACE certified teachers. Finally, I will ask about your experiences with the mentoring and support of PACE certified teachers.

- Tell me about your experiences with the recruitment and selection of PACE certified teachers.
 - Tell me about your experiences with the type of candidates the PACE program has recruited and selected.
 - How successful has the PACE program been in recruiting men and teachers of color?
 - How successful has the program been in recruiting experienced professionals from diverse background?
 - Based on your experiences, what type of subject/content areas has the program recruited?
 - Would you say the program has been more or less successful than TCPs in attracting a diverse pool of candidates and why?
 - Would you say the program has recruited candidates that possess strong content knowledge and why?
 - Would you say the program has recruited candidates with exceptional job and academic records and why?
 - Would you say the program has recruited candidates with life/job experiences that transition well to teaching? Why or why not?
 - Do you have any more to add regarding the recruitment and selection of PACE certified teachers before we move to the next series of questions?
- Tell me about your experiences and observations regarding the preparedness of PACE certified teachers.
 - What are the entry requirements of the program and do you believe the program requirements are rigorous enough for prospective candidates? Why?
 - Should additional requirements be put in place and why?
 - How prepared are PACE teachers regarding the content and skills they are expected to teach?
 - How prepared are PACE teachers regarding pedagogical knowledge and skill necessary to be effective teachers?
 - What areas regarding preparedness have PACE teachers performed strongly?

- What areas regarding preparedness have PACE teachers performed poorly?
- Is lack of student teaching opportunities an important factor in PACE teacher effectiveness? Why or why not?
- Do you believe that PACE teachers are more or less prepared than TCPs and why?
- Do you have any more to add regarding the preparedness of PACE certified teachers before we move to the next series of questions?
- Tell me about your experiences and observations regarding the mentoring and support of PACE certified teachers.
 - Describe the type of mentors that have been provided to support PACE certified teachers?
 - Have the mentors provided to PACE certified teachers been effective in supporting teachers? Why or why not?
 - As a supervising principal, what types of support or assistance have you provided to PACE certified teachers?
 - Describe the type of professional development that has been provided to PACE certified teachers.
 - What types of content has this professional development focused on and why?
 - How effective has this professional development and support been for PACE teachers and why?
 - Do you have any more to add regarding the mentoring and support of PACE certified teachers before we conclude this interview?

References

- Ballou, D., & Podgursky, M. (2000). Reforming teacher preparation and licensing: What is the evidence? *Teachers College Record*, 102(1), 5-27.
- Barclay, R., Feistritzer, E., Grip, R., Haar, C., Seaton, G., Sherman, S. (2008). The New Jersey alternate route program: An analysis of the perspectives from alternate route teachers, Alternate Route Instructors, and Alternate Route Mentors.
- Becker, G. S. (1976). *The economic approach to human behavior*. Chicago, IL: University of Chicago Press.
- Becker, G. S. (1992). Human capital and the economy. Proceedings of the American Philosophical Society, 136(1), 85-92. Retrieved from <u>https://www.jstor.org/stable/986801</u>
- Becker, G. S. (2002) The age of human capital. In E. P. Lazear (Ed.) *Education in the twenty-first century*. The Hoover Institute.
- Becker, G. S. (1964). *Human capital: A theoretical and empirical analysis, with special reference to education*. New York, Columbia University Press.
- Benson, C. S. (1978). The economics of public education (3rd ed.). Houghton Mifflin School.
- Bireland, S.E. & Peske, H.G. (2004). Literature review of research on alternative certification. National Education Association. Washington, D.C. http://www.teach-now.org/NEAFullText.pdf

Brenner, D., Elder, A., Wimbish, S., & Walker, S. (2015). Principals' perceptions about alternate route programs in rural areas. *Rural Educator*, *36*(2), 38–46. Retrieved from

http://search.ebscohost.com.libproxy.clemson.edu/login.aspx?direct=true&db=eft &AN=110783784

- Carter, J. & Keiler, L. (2009). Alternatively certified teachers in urban small schools: Where policy reform meets the road. *The Urban Review*, *41*. 437 - 460
- Cochran-Smith, M. & Donnell, K. (2006). Practitioner inquiry: Blurring the boundaries of research and practice. In J. L. Green, G. Camilli, & P. B. Elmore (Eds.), *Handbook of complementary methods in education research* (pp. 503-518).
 Philadelphia: Lawrence Erlbaum Associates.
- Cornacchione, E., & Daugherty, J. L. (2013). Trends in Opportunity Costs of U.S.
 Postsecondary Education: A National HRD and Human Capital Theory Analysis.
 New Horizons in Adult Education & Human Resource Development, 25(2), 62–
 82. Retrieved from
 http://search.ebscohost.com.libproxy.clemson.edu/login.aspx?direct=true&db=eric@c@aN=EJ1009426
- Creswell, J.W. (2009). Research design: Qualitative, quantitative and mixed methods approaches (third edition). Thousand Oaks, CA.: Sage
- Creswell, J.W. (2013). *Qualitative inquiry & research design: Choosing among the five approaches*. Thousand Oaks, CA: Sage.

- Creswell, J.W. & Plano Clark, V.L. (2010). *Designing and conducting mixed methods research* (2nd ed.). Thousand Oaks, CA: Sage.
- Crotty, M. (1998). *The foundations of social research: Meaning and perspective in the research process*. London: Sage Publications.
- Dai, C., Sindelar, P.T., Denslow, D., Dewey, J., & Rosenberg, M.S. (2007). Economic analysis and the design of alternative-route teacher education programs. *Journal of Teacher Education*, 58(5), 422-439. Retrieved from http://search.ebscohost.com.libproxy.clemson.edu/login.aspx?direct=true&db=eri c&AN=EJ778013
- Darling-Hammond, L., Berry, B., & Thoreson, A. (2001). Does teacher certification matter? Evaluating the evidence. *Educational Evaluation and Policy Analysis*, 23(1), 57-77.
- Darling-Hammond, L., Holtzman, D.J., Gatlin, S.J., & Heilig, J.V. (2005). Does teacher preparation matter? Evidence about teacher certification, Teach for America, and teacher effectiveness. *Education Policy Analysis Archives*, 13(42).
- Darling-Hammond, L. (2010). Teacher education and the American future. *Journal of Teacher Education*, 61(1-2), 35-47.
- Decker, P. T., Mayer, D. P., & Glazerman, S. (2004). The effects of Teach for America on students: Findings from a national evaluation. discussion paper no. 1285-04.
 Institute for Research on Poverty. Institute for Research on Poverty. Retrieved

from

http://search.ebscohost.com.libproxy.clemson.edu/login.aspx?direct=true&db=eri c&AN=ED485778

Doyle, L., Brady, A., & Byrne, G. (2009). An overview of mixed methods research. Journal of Research in Nursing 14(2), 175-185.

Elster, J. (1986). Rational choice. Oxford, England: Basil Blackwell.

- Eubanks, S. C., and R. Weaver. (1999). Excellence through diversity: Connecting the teacher quality and teacher diversity agendas. *Journal of Negro Education* 68(3): 451–459.
- Evans, L. (2011). Job queues, certification status, and the education labor market. *Educational Policy*, 25(2), 267-298.
- Fan, W., & Yan, Z. (2010). Factors affecting response rates of the web survey: A systematic review. *Computers in Human Behavior*, 26(2), 132-139.
- Feistritzer, C.E. (2005). Alternative routes to teacher certification: An overview. National Center for Education Information, Washington, D.C. Retrieved from <u>http://www.ncei.com/Alt-Teacher-Cert.htm</u>.
- Feistritzer, C.E. (2008). Report on the evaluation of Mississippi's alternate route programs for the preparation of teachers and school administrators. National Center for Alternative Certification Report to the Mississippi Department of Education, Office of Quality Professionals & Special Schools.

Feistritzer, C.E. (2011). Profiles of teachers in the U.S. 2011. National Center for Education Information, Washington, DC.

Fetler, M. (1999). High School Staff Characteristics and Mathematics Test Results. *Education Policy Analysis Archives*, 7(9). Retrieved from <u>http://search.ebscohost.com.libproxy.clemson.edu/login.aspx?direct=true&db=eri</u> <u>c&AN=EJ588920</u>

- Fin, V. L. (2009). Alternatively-trained versus traditionally-trained teachers: The principals' perspective. Doctoral Dissertation, University of Texas at Dallas.
- Fogg, N., Harrington, P., & Khatiwada, I. (2018). Skills and earnings in the full-time labor market: The impact of human capital in the American labor market series.
 ETS Center for Research on Human Capital and Education. Retrieved from http://search.ebscohost.com.libproxy.clemson.edu/login.aspx?direct=true&db=erica.cw
- Green, S. L. (2002). Rational choice theory: An overview. Waco, TX: Baylor University.
- Hall, V. L. (2008). The effectiveness of the non-traditional teacher certification training program in Arkansas based on the interviews by supervising principals and nontraditional teachers from the 2006-2008 cohort. Doctoral Dissertation, University of Arkansas.
- Hardie, S. (2007). Analysis of retention rates of alternatively certified teachers compared to traditionally certified teachers in South Carolina (Order No. 3272451).

Available from ProQuest Dissertations & Theses Global. (304818836). Retrieved from <u>http://libproxy.clemson.edu/login?url=https://search-proquest-</u>com.libproxy.clemson.edu/docview/304818836?accountid=6167

Harvey, M. F. H. (2005). A study of the differences between alternatively and traditionally certified teachers in South Carolina based on performance evaluations (Order No. 3201338). Available from ProQuest Dissertations & Theses Global. (305437845). Retrieved from http://libproxy.clemson.edu/login?url=https://search-proquestcom.libproxy.clemson.edu/docview/305437845?accountid=6167

Haveman, R. H., & Wolf, B. L. (1984). Schooling and economic well-being: The role of nonmarket effects. *The Journal of Human Resources*, 19(3), 377-407. Retrieved from

https://www.researchgate.net/profile/Barbara_Wolfe/publication/46553172_Scho oling_and_Economic_Well-

Being_The_Role_of_Nonmarket_Effects/links/09e4150edf9fe457b0000000/Scho oling-and-Economic-Well-Being-The-Role-of-Nonmarket-Effects.pdf

Hlavna, D. P. (1992). Economic Development, Human Capital Theory and the Community College. *Community College Review*, 19(4), 47–51. Retrieved from <u>http://search.ebscohost.com.libproxy.clemson.edu/login.aspx?direct=true&db=eri</u> <u>c&AN=EJ444867</u>

- Ingersoll, R., Merrill, L., Stuckey, D., & Consortium for Policy Research in Education. (2018). Seven trends: The transformation of the teaching force. Updated October 2018. CPRE Report. #RR-80. In Consortium for Policy Research in Education. Consortium for Policy Research in Education. Retrieved from <u>https://repository.upenn.edu/cgi/viewcontent.cgi?article=1109&context=cpre_rese</u> <u>archreports</u>
- Ismail, R., & Awang, M. (2017). Quality of Malaysian teachers based on education and training: A benefit and earnings returns analysis using human capital theory. *Quality Assurance in Education: An International Perspective, 25*(3), 303–316. Retrieved from http://search.ebscohost.com.libproxy.clemson.edu/login.aspx?direct=true&db=eric@c&AN=EJ1147818
- Jepsen, C., & Montgomery, M. (2012). Back to School: An Application of Human Capital Theory for Mature Workers. *Economics of Education Review*, 31(1), 168– 178. Retrieved from <u>http://search.ebscohost.com.libproxy.clemson.edu/login.aspx?direct=true&db=eri</u> c&AN=EJ953985
- Johnson, P. J. (2010). Principals' perceptions of the alternative certification of teacher candidates in a southeastern suburban school system as measured by their attitudes and hiring practices. Doctoral dissertation, University of West Georgia, Carrolton, GA.

- Johnson, R. B., Onwuegbuzie, A. J. & Turner, L. A. (2007). Toward a definition of mixed methods research. *Journal of Mixed Methods Research*, 1(2), 112-133.
- Jorgenson, O. (2000). The need for more ethnic teachers: Addressing the critical shortage in American public schools. *Teachers College Record* September 13.

Kantrowitz, B., & P. Wingert. (2000). Teachers wanted. Newsweek October 2: 37-42.

Kaplan, L. S., & Owings, W. A. (2001). Teacher quality and student achievement: Recommendations for principals. NASSP Bulletin, 85(628), 64–73. Retrieved from http://search.ebscohost.com.libproxy.clemson.edu/login.aspx?direct=true&db=eri

c&AN=EJ636999

Kaplan, L.S., & Owings, W.A. (2002). The politics of teacher quality: Implications for principals. NASSP Bulletin, 86 (1), 22-41. Retrieved from <u>http://search.ebscohost.com.libproxy.clemson.edu/login.aspx?direct=true&db=eri</u> c&AN=EJ779624

- Kaplowitz, M.D., Hadlock, T.D., & Levine R. (2004). A comparison of web and mail survey response rates. *Public Opinion Quarterly*, 68(1), 94-101.
- King-Rice, J. (2003). Teacher quality: Understanding the effectiveness of teacher attributes. Washington, DC: Economic Policy Institute.
- Luetzow, C. V. (2008). A comparison of perceived teacher efficacy among teachers of students with emotional disabilities based on alternative certification routes and

traditional certification routes in South Carolina (Order No. 3332261). Available from ProQuest Dissertations & Theses Global. (304459682). Retrieved from <u>http://libproxy.clemson.edu/login?url=https://search-proquest-</u> <u>com.libproxy.clemson.edu/docview/304459682?accountid=6167</u>

- Mandler, M. (2001). A difficult choice in preference theory: Rationality implies completeness or transitivity but not both. In E. Millgram (Ed.), Varieties of practical reasoning (373-407). Cambridge, MA: Massachusetts Institute of Technology.
- Maxwell, J.A. (2013). *Qualitative research design: An interactive approach*. Thousand Oaks, CA: Sage
- Miller, J., McKenna, M., & McKenna, B. (1998). A comparison of alternatively and traditionally prepared teachers. *Journal of Teacher Education*, *49*, 165-176.
- Nafukho, F.M., Hairston, N.R. & Brooks, K. (2004). Human capital theory: Implications for human resource development. *Human Resource Development International*, 7(4), 545-551. Retrieved from http://cardinalscholar.bsu.edu/bitstream/handle/123456789/193418/Jatha_2009-2_BODY.PDF?sequence=1
- Patton, M. Q. (2002). *Qualitative research & evaluation methods* (3rd ed.). Thousand Oaks, CA: Sage.

Patton, M. Q. (2008). Utilization-focused evaluation (4th ed.). Thousand Oaks, CA: Sage.

- Pietkiewicz, I., & Smith, J.A. (2014). A practical guide to using interpretative phenomenological analysis in qualitative research psychology, *Czasopismo Psychologiczne*, 20(1), pp. 7-14.
- Pil, F. K., & Leana, C. (2009). Applying organizational research to public school reform: The effects of teacher human and social capital on student performance. *Academy* of Management Journal, 52(6), 1101-1124. Retrieved from http://www.pitt.edu/~fritspil/Pil% 20and% 20Leana% 20AMJ.pdf

Plecki, M. (2000). Economic perspectives on investments in teacher quality. *Education Policy Analysis Archives*, 8(33). Retrieved from <u>http://search.ebscohost.com.libproxy.clemson.edu/login.aspx?direct=true&db=eri</u> <u>c&AN=ED444938</u>

- Powell, T. C. (2001). Competitive advantage: Logical and philosophical considerations. *Strategic Man-agement Journal*, 22(9), 875-888
- Rallis, S. F., &Rossman, G. B. (2003). Mixed methods in evaluation contexts: A pragmatic framework. In A. Tashakkori & C. Teddlie (Eds.), *Handbook for mixed methods in social and behaviorial research* (pp. 491-512). Thousand Oaks, CA: Sage.
- Raymond, M., Fletcher, S. H., & Luque, J. (2001). *Teach for America: An evaluation of teacher differences and student outcomes in Houston, Texas*. Stanford, CA:
 Center for Research on Educational Outcomes, the Hoover Institution, Stanford University.

- Raymond, M., & Fletcher, S. (2002). The Teach for America Evaluation. *Education Next*, 2(1), 62–68. Retrieved from <u>http://search.ebscohost.com.libproxy.clemson.edu/login.aspx?direct=true&db=eri</u> <u>c&AN=EJ776559</u>
- Rebore, R. W. (2011). *The essentials of human resources administration in education*.Boston: Pearson.
- Rebore, R.W. (2014). *Human resource administration in education* (10th ed.). Upper Saddle River, NJ: Pearson.
- Reeves, D. (2003). *High performance in high poverty schools: 90/90/90 and beyond*. Denver, CO: Center for Performance Assessment.
- Saldana, J. (2013). *The coding manual for qualitative researchers*. Thousand Oaks, CA: Sage.
- Sanders, W.L., & Rivers, J.C. (1996). Cumulative and residual effects of teachers on future student academic achievement. Knoxville, TN: University of Tennessee Value-Added Research and Assessment Center.
- Sawyer, G. B. (2005). A study using the star teacher selection interview to predict the successful performance of teachers in South Carolina's program of alternative certification for educators (Order No. 3173188). Available from ProQuest Dissertations & Theses Global. (305386463). Retrieved from

http://libproxy.clemson.edu/login?url=https://search-proquestcom.libproxy.clemson.edu/docview/305386463?accountid=6167

Schultz, T. W. (1960). Capital formation by education. *Journal of Political Economy*, 68(6), 571–583. Retrieved from

https://www.journals.uchicago.edu/doi/10.1086/258393

- Schultz, T. W. (1961). Investment in human capital. *The American Economic Review*, 51(1), 1–17. Retrieved from <u>https://www.jstor.org/stable/1818907?seq=1</u>
- Shen, J. (1997). Has the alternative certification policy materialized its promise? *Educational Evaluation and Policy Analysis, 19*, 276-283.
- Shen, J. (1998). Alternative certification: A complicated research topic. *Educational Evaluation and Policy Analysis*, 20, 316-319.
- Shen, J. (1999). Alternative certification: Math and science teachers. *Educational Horizons*, 78(1), 44-48
- Smith, A. (2007). An inquiry into the nature and causes of the wealth of nations. S.M. Soares (Ed.). MetaLibri Digital Library. Retrieved from <u>https://www.ibiblio.org/ml/libri/s/SmithA_WealthNations_p.pdf</u>
- Smith, J. A., Jarman, M., & Osborn, M. (1999). Doing interpretative phenomenological analysis. In M. Murray & K. Chamberlain (Eds.), *Qualitative health psychology* (pp. 218-240). London, Sage.

- Smith, J. A., & Osborn, M. (2008). Interpretative phenomenological analysis. In J. A.
 Smith (Ed.), *Qualitative psychology: A practical guide to research methods* (2nd ed., pp. 63-80). London, Sage.
- Smith, J.A., Flowers, P., & Larkin, M. (2009). Interpretative phenomenological analysis: Theory, method, research. London: Sage.
- South Carolina Department of Education. (2022). *Program of alternative certification for educators (PACE)*. Retrieved May 31, 2022, from https://ed.sc.gov/educators/alternative-certification/pace/
- Stoddart, T. (1990). Los Angeles Unified School District Intern Program: Recruiting and preparing teachers for an urban context. *Peabody Journal of Education*, 67, 84-122.
- Stoddart, T., & Floden, R.E. (1995). Traditional and alternative routes to teacher certification: Issues, assumptions, and misconceptions. New York: National Center for Research on Teacher Learning.
- Sweetland, S.R. (1996). Human capital theory: Foundations of a field of inquiry. *Review* of Educational Research, 66(3), 341-359. Retrieved from <u>https://journals.sagepub.com/doi/pdf/10.3102/00346543066003341</u>
- Synder, T.D., Hoffman, C.M., & Geddes, C. M. (1997). Digest of education statistics: 1997. Washington, DC: National Center for Education Statistics.

Tan, E. (2014). Human Capital Theory: A Holistic Criticism. *Review of Educational Research*, 84(3), 411-445. Retrieved from http://search.ebscohost.com.libproxy.clemson.edu/login.aspx?direct=true&db=eric@c&AN=EJ1034263

Torff, B & Sessions, D.N. (2006). Principals' perceptions of the causes of teacher ineffectiveness. *Journal of Educational Psychology*, 97(4), 530-537.

Tuttle, C. C., Anderson, T., & Glazerman, S. (2009). ABCTE teachers in Florida and their effect on student performance: Final report. Princeton, NJ: Mathematica Policy Research. Retrieved from <u>https://www.mathematica-mpr.com/our-</u> <u>publications-and-findings/publications/abcte-teachers-in-florida-and-their-effect-</u> <u>on-student-performanceeducation/ABCTE_FL_Teachers.pdf</u>

Wagmeister, J. F. (2006). A comparison of graduates' and principals' perceptions of California teachers prepared through alternate and traditional certification.
Doctoral dissertation, California Lutheran University, Thousand Oaks, CA.

Walters, D. (2004). The relationship between postsecondary education and skill:
Comparing credentialism with human capital theory. *Canadian Journal of Higher Education*, 34(2), 97–124. Retrieved from
http://search.ebscohost.com.libproxy.clemson.edu/login.aspx?direct=true&db=eri
http://search.ebscohost.com.libproxy.clemson.edu/login.aspx?direct=true&db=eri

- Wilson, S. M., Floden, R. E., & Ferrini-Mundy, J. (2001). Teacher preparation research: Current knowledge, gaps, and recommendation. Seattle, WA: Center for the Study of Teaching and Policy.
- Young, B. (2003). *Public school student, staff, and graduate counts by state, 2001–02*. Washington, DC: National Center for Education Statistics.
- Xu, Z., Hannaway, J., & Taylor, C. (2011). Making a difference? The effects of Teach For America in high school. *Journal of Policy Analysis & Management, 30*(3), 447–469. https://doi-org.libproxy.clemson.edu/10.1002/pam.20585