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This dissertation, directed and approved by the candidate's committee, has been accepted by the College of Graduate and Professional Studies of Abilene Christian University in partial fulfillment of the requirements for the degree

Doctor of Education in Organizational Leadership

Nannette W. Glenn, Ph.D.

Dr. Nannette Glenn, Dean of
the College of Graduate and
Professional Studies

Date: February 28, 2022

Dissertation Committee:

Irma Harper

Dr. Irma Harper, Chair

Karen Maxwell

Dr. Karen Maxwell

Karan Duwe

Dr. Karan Duwe

Abilene Christian University
School of Educational Leadership

Is There More Than One Way? Examining Alternative Pathway Teacher Effectiveness Through
the Experiences and Perceptions of Principals in Urban, Low-Socioeconomic Schools in
Oklahoma

A dissertation submitted in partial satisfaction
of the requirements for the degree of
Doctor of Education in Organizational Leadership

by
Julianne Hennessy Denton

April 2022

Dedication

This dissertation is dedicated to my family, who has been by my side for the last 30 years, helping to shape me into the woman I have become today. Although we are not physically together as often as I would like, there is not a day that goes by that I do not thank the Lord that He chose for you to be mine. Thank you for being you.

Acknowledgments

I want to take this opportunity to thank some very special people in my life who have played an integral part in helping me get where I am today. To my husband, Casey, thank you for being my biggest cheerleader as I have pursued this degree and for the endless support you have provided me through every other adventure I have embarked on since the day we met. You have always said “yes” to each new idea, aspiration, or goal I have set for myself, and I am so thankful you are my beloved and friend.

To my parents, who have inspired me through every season of my life thus far and served as my greatest encouragers, thank you for all that you have done for me. To my mom, thank you for picking up every early morning and late-night phone call and coaching me through my toughest days. You always know what to say and your friendship is second to none. To my dad, thank you for never once doubting my abilities and believing in every crazy dream I have ever set out to achieve. Your work ethic and passion for learning are what have helped me get to where I am today. I will forever be grateful for your support.

To my brother, who I have always looked up to as a constant source of laughter and comfort, thank you for cheering me on throughout this whole process and being such a bright light in my life. You have always been one of my favorite people on this planet. To my sister-in-law, who always takes the time to celebrate the big and small, thank you for always rooting for me. You are an advocate and ally, and it is a privilege and honor to call you my friend.

To my sweet nephew, Noah, you are one of the most precious gifts I have ever received. One of my favorite authors, Anne Lamott once said, “There really are places in the heart you don’t even know exist until you love a child,” and there is so much truth to that. I cannot wait to

see the person you become. Do not ever give up on your dreams, I will be cheering you on every step of the way.

To the most incredible leader I have ever known, Dr. Trina Resler, thank you for the knowledge you have instilled in me, for always holding me accountable to my beliefs and values, and for helping me not take life so seriously. Grace Hopper once said, “The most dangerous phrase in the language is, ‘we’ve always done it this way,’” and your innovative and brave leadership has helped me to realize that we must always challenge the status quo. Thank you for showing me how to lead with boldness and courage.

To my phenomenal mentor and chair, Dr. Irma Harper, thank you for guiding me through the dissertation process and supporting me every step of the way. I am grateful for your guidance, mentorship, and steadfast encouragement. It has been a sincere privilege to work with you. I also want to thank my other committee members, Dr. Karen Maxwell, Dr. Karan Duwe, and Dr. Dana McMichael for your time, feedback, and contributions to my study.

And finally, to every educator who has made the conscious decision to dedicate their career to serving historically underserved schools that society deems as difficult or challenging, thank you for the important work you do every day. Regardless of the path you chose to get there, you continue to show up and expand opportunity and access for every child. Thank you for believing in the potential of all children. I am grateful to learn with you and from you.

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Abstract

Teacher quality continues to be recognized as one of the strongest predictors of student success and school improvement. The quality of an educator is also critical to being able to address the growing achievement and opportunity gap in schools and communities that are marked by concentrated poverty. Therefore, principals are under significant pressure to recruit, train, support, and retain highly qualified teachers, so all students have access to quality education. The purpose of this qualitative case study was to generate knowledge of alternative pathway teachers' effectiveness in the classroom from an administrative point of view, specifically in urban, low socioeconomic, high-risk schools. Data were collected from participants using a prequestionnaire and semistructured interviews. The sample population for this study consisted of 11 principals in elementary, middle, and high schools in one large urban school district in the state of Oklahoma. In order to have participated in the study, the participant must have been (a) a principal for a minimum of 2 years and (b) have worked with or currently work with alternatively certified (AC) teachers. The themes that emerged in the data were: (a) personality and innate ability, (b) mindset and coachability, (c) previous experience, (d) all teachers have similar needs, (e) teamwork and mentorship, and (f) classroom management and instructional planning. The findings revealed that AC teachers were effective in the areas of content knowledge, human relation skills, and professionalism, and were less effective in the areas of classroom management and instructional planning, at least initially. In addition, classroom management and instructional planning were also the two areas AC teachers needed more support. AC teacher strengths are also discussed.

Keywords: teacher effectiveness, teacher quality, alternative certification, alternative pathway, alternate route, alternative certification program, content knowledge, classroom management, instructional planning, human relation skills, professionalism

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Chapter 1: Introduction

In 1983, the education reform *A Nation at Risk* was implemented due to issues facing public schools across the United States (National Commission on Excellence in Education, 1983). Since then, the role of educators has progressively changed throughout history, yet the demand for accountability and quality teachers continues to increase (Sutcher et al., 2019). Due to this demand, alternative preparation programs in each state were created to accelerate teacher certification and increase the number of teachers that are able to enter classrooms. However, the effectiveness and quality of these teachers are in question (Linek et al., 2012; Moffett & Davis, 2014). In fact, in the United States today, one of the most deeply rooted and profound policy discussions continues to be the preparation and placement of alternative route teachers and how their effectiveness compares with their traditional route counterparts (Thomas, 2018). Moreover, since the dawn of the teacher shortage, and the enactment of the No Child Left Behind legislation in 2001, there has been a ubiquitous concern for quality teacher preparation and a need for highly qualified teachers to be in every classroom across the United States (U.S. Department of Education. Office of the Under Secretary, 2002). This is because teachers are considered to be the most prominent and influential factor on student learning, achievement, and overall student outcomes (Clotfelter et al., 2010; Fauth et al., 2019; Rockoff, 2004).

Since teacher quality continues to be acknowledged as one of the most considerable measures of student success and school improvement (Hopkins, 2013; Mincu, 2015), it is important to understand the components that make up teacher quality and effectiveness as well as how prepared AC teachers are to step into the classroom.

Statement of the Problem

Despite the signing of the Every Student Succeeds Act in 2015, low teacher effectiveness and the retention of quality teachers continue to be significant issues in schools across the United States (Adler-Greene, 2019; Henry et al., 2014; Moffett & Davis, 2014; Shepherd & Devers, 2017; Sutchter et al., 2019). This, combined with the growing teacher shortage, especially in low socioeconomic urban schools, causes principals to hire teachers from alternate pathways to fill vacancies in classrooms (Chiang et al., 2017; Darling-Hammond, 2000a, 2000b; Hohnstein, 2017; Linek et al., 2012; Torff & Sessions, 2005). However, the problem is administrators lack understanding of ways to support AC teachers in developing their content knowledge, classroom management, instructional planning, human relation skills, and professionalism.

Background

Even with the rapidly increasing number of alternate route programs as state-approved pathways to teaching, it is not clear how prepared these teachers are to be effective in the classroom (Linek et al., 2012; Moffett & Davis, 2014). This lack of clarity is a significant problem for school administrators, as the quality of the classroom teacher directly impacts student achievement (Gagnon & Mattingly, 2015; Moffett & Davis, 2014; Shuls & Trivitt, 2015). Current literature indicates contrasting results on the effectiveness of teachers from alternate pathways; however, teachers who enter into the profession from differing pathways often have varying gaps in teaching effectiveness (Brenner et al., 2015; Fox & Peters, 2013; Linek et al., 2012).

The continued growth of diverse routes to teacher certification has become a norm across the United States (Linek et al., 2012; Moffett & Davis, 2014; Van Overschelde & Wiggins, 2020; Woods, 2016); as a result, studies have been conducted for many decades to determine

how well these varying alternate routes prepare teachers to enter into the classroom and their level of effectiveness. Regardless of the pathway into the classroom, it is the school administrators' responsibility to ensure the teachers they oversee are effective so that students have access to a quality education (Kimbrel, 2019). Because high-risk, low socioeconomic, urban schools often have an increased number of alternative pathway teachers (Chiang et al., 2017; Darling-Hammond, 2000a, 2000b; Hohnstein, 2017; Linek et al., 2012; Torff & Sessions, 2005), it is even more critical for the school administrator to ensure quality.

According to the Oklahoma State Department of Education (OSDE, 2019), 32 emergency teaching certificates were issued in 2012 in Oklahoma, and that number rose to 2,153 during the 2017-2018 school year, 224 of which were issued in Oklahoma City Public Schools. Additionally, by the 2021-2022 school year, that number increased to 3,428 emergency certified teachers in the entire state (OSDE, 2021). Moreover, in 2017, it was reported that the state of Oklahoma ranked 47th in educational quality (Eger, 2017), emphasizing how critical it is to understand the components that make a teacher effective. Teacher quality is pertinent to student learning and bridging the achievement gap; therefore, urban school principals are under grave pressure to recruit and retain highly qualified teachers. Consequently, research on administrative perspectives of AC pathways is warranted to better understand the areas in which AC teachers need additional support and development. Further research will help school administrators better understand the problem of teacher effectiveness and the retention of quality teachers in urban, low socioeconomic, high-risk school settings.

Purpose of the Study

The purpose of this qualitative case study was to generate knowledge of alternative pathway teachers' effectiveness in the classroom from an administrative point of view,

specifically in urban, low socioeconomic, high-risk schools. Administrators are held responsible for teacher effectiveness, student achievement, and monitoring the performance of all students and teachers, while also needing to remain keenly aware of areas in which teachers need to develop. By examining the effectiveness of alternative pathway teachers through the lens of a school administrator, it was anticipated that school administrators can gain a better understanding of teaching gaps and be able to provide the necessary support for AC teachers to grow and develop. The planned design outcomes for this study were to inform administrators and district personnel of specific areas where AC teachers should receive additional professional development. Additionally, this study could inform various AC programs of essential components necessary for teacher training.

Research Questions

The primary research question addressed in this study was, “How do school administrators perceive the effectiveness of AC teachers?” Five secondary research questions were developed based on Nusbaum’s (2002) *teacher effectiveness survey* (TES).

RQ1: How do school administrators perceive the effectiveness of AC teachers regarding content knowledge?

RQ2: How do school administrators perceive the effectiveness of AC teachers regarding classroom management?

RQ3: How do school administrators perceive the effectiveness of AC teachers regarding instructional planning?

RQ4: How do school administrators perceive the effectiveness of AC teachers regarding human relations skills?

RQ5: How do school administrators perceive the effectiveness of AC regarding professionalism?

Significance of the Study

In this study, my goal was to gain an in-depth understanding of alternative pathway teachers and their effectiveness in the classroom from an administrative point of view, specifically in urban, low socioeconomic, high-risk schools. Gathering research from principals provided insight on skills they believed alternative route teachers needed to be effective in their schools. This research therefore provides administrators and district personnel areas in which AC teachers could be better supported in their growth and development in order to improve academic outcomes for their students. By identifying these areas of needed support, principals may be able to keep AC teachers in the profession to attempt to mitigate the teacher shortage and improve teacher quality.

Because of the number and variety of alternative certification programs (ACPs) and routes to the classroom, this study also has the potential to inform local, state, and national ACPs of the necessary and foundational skills individuals should possess prior to entering the classroom. With this knowledge, these programs may be able to better prepare individuals for the teaching profession.

Definition of Key Terms

For the purpose of this study, the following terms and definitions are outlined to provide the reader with understanding and context. Additionally, it is important to note some of the acronyms that are used throughout the study to discuss varying routes to the classroom: alternative certification (AC), traditional certification (TC), and alternative certification program (ACP).

Alternative certification program (ACP). A program that is designed for an individual with a minimum of a bachelor's degree to obtain full teacher licensure (Feistritzer, 2009a; Feistritzer & Haar, 2008).

Alternative route or pathway. A different way to enter into the classroom than a traditional college-based teacher education program (Feistritzer, 2009b).

Classroom management. Classroom management refers to the physical environment and actions of a teacher that aid in creating a system for procedures, routines, and strategies in the classroom that supports learning and establishes a routine for discipline (Bean, 2007; Savage & Savage, 2010; Scherzinger & Wettstein, 2019).

Content knowledge. The specific subject matter knowledge, competence, and skills that teachers should possess in order to help their students learn (Nusbaum, 2002; Shulman, 1987).

Highly qualified teacher. A teacher who: a) has a bachelor's degree, b) has full state certification or licensure, and c) proves that they know each subject they teach (U.S. Department of Education, n.d.).

High risk or at risk. The inequitable conditions, challenging circumstances, or stressful situations that make it more likely for students, individually or collectively, to have poor or harmful school outcomes (Zinskie & Rea, 2016).

Human relation skills. The instructors' philosophical and professional approach/ techniques toward personal and professional interactions and communication, both oral and written, with students, peers and superiors (Nusbaum, 2002).

Instructional planning. The process that teachers use to develop a systematic way of designing their instruction (Kitsantas & Baylor, 2001).

Professionalism. The specific set of standards, or conduct, teachers adhere to, and the personal belief or orientation that influences an individual teacher's actions, attitudes, behaviors, and performance as related to the goals, practices, principles, policies, ethics, and procedures in the teaching profession (Cheng, 1996; Nusbaum, 2002).

Teacher effectiveness. Five core components a teacher must have in order to be effective in the classroom: content knowledge, classroom management, instructional planning, human relation skills, and professionalism (Nusbaum, 2002).

Traditional certification program. Completion of a four or five-year undergraduate college program in education that includes field experience, student teaching, and a display of basic competencies through varying state licensure examinations (Beck-Frazier, 2005).

Summary

This chapter provided a basic overview of the ongoing education reform efforts that have been initiated throughout the last few decades with the hope of addressing the varying, yet dire, needs of public schooling in the United States. However, despite the enactment of these reforms, the shortage, overall quality, and effectiveness of teachers continue to be issues that many have worked to address at the national, state, and local levels for many decades. One area in which states have tried to mitigate these issues is through AC programs and alternative licensing. Though many studies have been conducted on the effectiveness of AC teachers in comparison to TC teachers, few have been conducted to better understand the perceptions of administrators who employ, oversee, and lead AC teachers, specifically in urban, low socioeconomic, or high-risk communities.

Chapter 2 introduces the theoretical framework of this study and provides the reader with an in-depth review of the history of the teacher shortage, attrition, alternative and traditional

routes to teacher certification, the components of teacher effectiveness, the role of the principal, and information on urban, low socioeconomic schools and their intersection with AC teachers.

Chapter 2: Literature Review

The number of qualified teachers who are willing and able to enter classrooms across the United States has been a consistent concern for school, district, and state leaders (Adler-Greene, 2019; Henry et al., 2014; Moffett & Davis, 2014; Shepherd & Devers, 2017; Sutchter et al., 2019). This concern is heightened in schools and communities where concentrated poverty and high minority populations exist (Ingersoll et al., 2019; Liu et al., 2008; U.S. Department of Education, 2015). These areas with critical teacher shortages often have more significant challenges, and are more negatively impacted by teacher quality than schools in higher income areas (Ingersoll et al., 2019; Liu et al., 2008). Because the inequality in teacher distribution is substantial and persistent in classrooms across the United States, school administrators turn to AC teacher candidates to fill positions (Chiang et al., 2017; Darling-Hammond, 2000a, 2000b; Hohnstein, 2017; Linek et al., 2012; Torff & Sessions, 2005).

Alternative teacher certification has continued to rise in the United States (Linek et al., 2012; Moffett & Davis, 2014; Woods, 2016); however, the effectiveness of AC teachers is still in question and difficult to assess (CPRE, 2007). Because teacher quality is directly related to student achievement and school success, school administrators must hire, train, and support AC teachers to ensure students have access to high quality instruction (Gagnon & Mattingly, 2015; Kimbrel, 2019; Moffett & Davis, 2014; Shuls & Trivitt, 2015). However, administrators lack understanding of ways to support AC teachers in developing their content knowledge, classroom management, instructional planning, human relation skills, and professionalism.

The following chapter contains a synopsis of research and literature as it pertains to AC, teacher quality, and teacher effectiveness. The literature review begins with an outline of the search methods used, the theoretical framework used for this study, and background on the

United States teacher shortage and issues with teacher quality through the history of educational policy and events. Following this, topics included in the review are teacher quality distribution, the teacher shortage, the attrition rate of teachers, the routes of education certification, including traditional and alternative, and Oklahoma approved AC routes. Following this, the five core components of teacher effectiveness that include content knowledge, classroom management, instructional planning, human relation skills, and professionalism are discussed. Finally, literature is provided on what studies have told us about AC teachers, critics of AC, advocates of AC, AC and student achievement, the administrator role, administrative views of AC, and urban, low socioeconomic schools and AC teachers. The chapter ends with a summary of the literature review and an introduction to Chapter 3.

Literature Search Methods

The literature search methods included following the three-step process as described by Machi and McEvoy (2016), (a) previewing the material, (b) selecting appropriate literature, and (c) organizing the chosen literature by key descriptors and topics. To search for existing literature, both theoretical and field-based, I used the Abilene Christian University (ACU) OneSearch online library as well as other online public access catalogs, including Google Scholar. The primary databases that were used included EBSCO, ProQuest, SAGE, and JSTOR. Within these databases, the search terms that were used most often were: *teacher effectiveness*, *teacher ineffectiveness*, *teacher shortage*, *teacher attrition*, *teacher quality*, *teacher quality distribution*, *education reform*, *education policy*, *urban schools*, *low socioeconomic schools*, *minority schools*, *minority students*, *alternative certification*, *traditional certification*, *alternative route*, *alternative certification program*, *novice teachers*, *first year teachers*, *second career teachers*, *administrator or principal support and perceptions*, *content knowledge*, *classroom*

management, instructional planning, human relation skills, professionalism, student teacher relationships, inclusion, students with disabilities, etc.

Search modes, such as a Boolean search, were used as recommended by Machi and McEvoy (2016) to input keywords that were connected by logical operators (and, or) to narrow and expand the database searches. From all of the aforementioned searches, books, journals, periodicals, dissertations, and websites were found. Useful studies and information were cataloged by descriptors and topics in an annotated bibliography, and citations were listed in alphabetical order using Google Docs. After this, the literature was organized in an outline according to themes and patterns, and arguments and claims were formed. The following chapter addresses these themes, arguments, and claims in connection with the research problem and questions.

Theoretical Framework Discussion

The theoretical framework for this study was based on two theories. First, Nusbaum's teacher effectiveness survey (TES) theory was used to assess the components of teacher effectiveness (Nusbaum, 2002). Second, the constructivist theory (Dewey, 1938) was used to guide interviews in order to learn through the lived experiences of urban school administrators and their perceptions of AC teachers.

Nusbaum's TES Framework

The first theory for this study was based on the literature on teacher effectiveness as described by Nusbaum's TES theory and served as the framework for the study's research questions. Nusbaum's TES theory outlined five teaching domains in regards to teacher effectiveness. Nusbaum (2002) compared the effectiveness of teachers who pursued TC and AC pathways through the perspective of the school principals; however, the portion of TES used in

this dissertation study focused specifically on the effectiveness of AC teachers only across the five domains used to analyze teacher effectiveness. These five domains are (a) content knowledge, (b) classroom management, (c) instructional planning, (d) human relation skills, and (e) professionalism. All domains are essential skills for teacher effectiveness and student achievement.

Constructivist Theory

The constructivist theory was also used to guide this study. Elliott et al. (2000) described constructivism as an approach to learning that proposes that people actively construct their own knowledge and that everything is determined by the experiences of the learner. According to this framework, learning is believed to be a social activity, something that is done together and in interaction with one another (Dewey, 1938). Using the constructivist theory as a guide, the goal of my research was to learn through the experiences of urban school administrators and their perceptions of AC teachers. Using semistructured interviews and case study research aligned with the constructivist theory helped to facilitate interactions with the participants and gain insight into their lived experiences as administrators.

Constructivist pedagogy, an extension of constructivist learning theory, was used as a more specific lens in this study. Richardson (2003) described constructivist pedagogy as the classroom activities, instructional methods, and overall design of a classroom environment that are embedded in a constructivist theory of learning, with the goal of having students focus on developing in-depth understandings of subject matter, interests, and habits that aid in future learning. In the same way, administrators at school sites have the responsibility of ensuring all teachers are developing the same sense of in-depth knowledge of pedagogy, so they are able to meet the needs of their students. The constructivist theoretical framework served as a structure

and guide for my research approach and decision making from data collection to analysis.

As an administrator seeks to analyze teacher effectiveness, they must also understand that each teacher, regardless of their certification pathway, comes to the classroom with a unique set of experiences and knowledge. Some alternative route teachers enter into the profession from other careers that have helped shape their worldview, which often translates into the classroom. Additionally, because many alternative route teachers come to the classroom with minimal or no teacher preparation courses, they are often required to construct knowledge through their direct experience (Richardson, 2003). Therefore, “learning by doing” becomes a part of their daily lives as educators.

Literature Review and Background

Teacher quality is important and has become a central conversation in educational policy in the United States over the last century. In fact, it is the most critical school-related element impacting student achievement (Clotfelter et al., 2010; Fauth et al., 2019; Goldhaber & Hansen, 2013; Rockoff, 2004). In 1983, the Nation at Risk report (National Commission on Excellence in Education, 1983) was published, and with it, policymakers and the U.S. government demanded changes in public schools across the country. The report detailed international comparisons of student performance and achievement, emphasizing the low achievement of students in the United States in contrast to other countries. Additionally, the report noted that approximately one in eight 17-year-olds were illiterate in reading, writing, and comprehension at that time, as well as nearly 23 million adults in the United States (Strauss, 2018). This report also emphasized that the quality of teachers in the United States was so inadequate that the students graduating and entering the workforce would not be able to compete internationally, which would greatly impact the nation (Cochran-Smith et al., 2017; Lagemann, 2002). Following this, AC and alternate

routes to the classroom began to emerge to try and repair issues facing public schools in the United States.

In 2001, the No Child Left Behind (NCLB) act was initiated to further address issues actuated by the achievement gap between low socioeconomic and minority students and their more affluent peers, as well as related teacher quality concerns in the United States. This reform effort was the reauthorization of the initial passage of the 1965 Elementary and Secondary Education Act and relied heavily on standardized tests to show academic achievement. It also required all public schools to ensure that each classroom had a highly qualified teacher by the 2005-2006 school year (Neely, 2015). If schools did not comply with NCLB regulations, they were at risk of losing federal money (Neely, 2015). A highly qualified teacher was considered a teacher who had: (a) a bachelor's degree, (b) full state certification or licensure, and (c) the capability of proving that they know each subject they teach (U.S. Department of Education Office of Special Education Programs, 2006). However, since AC teachers did not meet these criteria, each state determined criteria on whether specific teacher qualifications met federal law, and specific guidelines were created for ACPs in the United States. As of 2001, AC teachers were required to: (a) have a degree or coursework related to the area they would be teaching and (b) participate in mandatory training and development (Anderson & Bullock, 2004). With the commission of all schools needing highly qualified teachers under NCLB, alternative teacher certification programs began to increase significantly (Anderson & Bullock, 2004).

In 2015, the Every Student Succeeds Act (ESSA) was instituted to replace NCLB and made significant changes to areas like state versus federal authority, annual testing, academic standards, accountability measures, and funding for struggling schools. ESSA also did away with the mandate of “highly qualified teachers,” but now requires states to submit formal plans to the

U.S. government on how they will ensure that a disproportionate number of low-socioeconomic, minority students will not have teachers labeled as “ineffective” (Burnette, 2017). Even with new educational reforms over the past few decades, poor performance of students in the United States continues to be a concern to the public (Cochran-Smith & Villegas, 2015; Dee & Wyckoff, 2013).

Despite the aforementioned educational reform efforts, the need to address teacher quality still exists. In fact, even with the attempted reforms, students in the United States are still not academically performing as well as other countries (Merry, 2013), pointing to the need for higher quality teachers. Some researchers believe teacher quality still remains a significant concern for public schools in the United States and is one of the strongest predictors of student success (Bayar, 2014; Brown & Militello, 2016; Darling-Hammond, 2000a; Ferguson, 1998). In contrast, others blame teachers because of the deep despondency from a lack of results or fundamental failures from education reform efforts (Hirsch, 2016) however, issues facing the education landscape are increasingly complex and cannot be narrowed to solely teacher quality or accountability (Cochran-Smith et al., 2017). Hirsch (2016) placed the blame of teacher quality on inadequate teacher preparation and asserted that the issue of student achievement could be addressed if a better curriculum was in place. Additionally, Ingersoll (2007) stated there is a consensus that quality teaching matters and is one of the most important factors to student growth, but teacher quality is multifaceted and difficult to assess. Ingersoll (2007) stated, “upgrading the quality of teaching will require upgrading the quality of the teaching job” and the real issue is that schools need to change the way they are run as well as the way teachers are managed if we want to attract more talented, quality educators (p. 8).

Although teacher quality is complex and challenging to address, there is a significant amount of research indicating how drastic of an issue teacher quality is in the U.S. public school system. For example, Sanders and Rivers (1996) discovered that students who were taught by ineffective, low quality teachers over the span of numerous years, had significantly lower achievement levels than those who had higher quality, effective teachers. Furthermore, Blomeke et al. (2016) looked at the relationship between teacher quality and student outcomes and found a strong correlation between teacher quality, instructional quality, and student achievement, specifically in mathematics. These studies continue to show that there is a relationship between teacher quality and student outcomes.

Teacher Quality Distribution

It is clear that a quality teacher can positively impact student success and close achievement gaps, but those gaps do not always close because there are not enough quality teachers to be equitably distributed amongst all students in all schools (Goldhaber et al., 2018). Kalogrides and Loeb (2013) found that across three large school districts, low income, minority students were more likely to be assigned a novice, inexperienced teacher. Additionally, Kalogrides et al. (2013) studied one of these school districts further and found that even classroom assignments were inequitable. The researchers found that lower quality, novice teachers were also paired with low achieving students in their classrooms, while experienced, higher quality teachers were given higher achieving students (Kalogrides et al., 2013).

Underprivileged students were also likely to be in a classroom with less experienced teachers, and those teachers also are more inclined to have lower certification exam scores (Goldhaber et al., 2015). This is consistent with earlier literature that better trained teachers are often placed with higher performing students (Clotfelter et al., 2006; Feng, 2009). This is

significant because if low academically achieving students are also paired with inexperienced or lower quality teachers, students will struggle to succeed. More recently, Goldhaber et al. (2018) found that teacher quality is one of the most consequential issues in lower income schools, and that gaps in exposure to inexperienced teachers by student race and poverty have only increased over time. Additionally, Boyd et al. (2005) stated that urban schools and communities with lower-achieving students are much less likely to have quality teachers in classrooms. This indicates that teacher quality and quality distribution, specifically in urban, low socioeconomic, high-risk school settings across the United States is an ongoing issue.

Teacher Shortage

Though the aforementioned educational policy reforms (A Nation at Risk, NCLB, ESSA) highlighted the issue of teacher quality in the United States, the teacher shortage is the result of many other challenges such as the long-term decline in teacher salaries, increase in school accountability measures, and the labor market (Goldhaber et al., 2019). In fact, it was the Great Recession of 2009 that caused a lower demand for teachers. Nearly 300,000 educators, and thousands of newly graduated individuals stepped out into one of the worst job markets in the United States recent history, and had major difficulty securing jobs in education (Malatras et al., 2017). One of the major impacts of this in the field of education was a significant decline in education preparation program enrollment (Malatras et al., 2017), which has been a contributor to the steady decline in quality teacher candidates since. With this decline of education preparation enrollment, AC programs have continued to surface to attempt to address these shortages as well as an increase in the distribution of emergency credentials (Gitomer & Latham, 2000).

Teacher shortages, particularly highly-qualified teachers, have long been an issue (Castro et al., 2018; Ford et al., 2018; Goldstein, 2014; Podolsky et al., 2016); however, certain types of schools and subject areas are more common to shortages. Specifically, urban schools struggle with an increased number of teacher vacancies (Malatras et al., 2017), and a shortage of highly qualified teachers has reached a disastrous level in specific content areas (Castro et al., 2018; Podolsky et al., 2016). For example, difficult-to-staff subject areas such as mathematics, science, special education, and English as a second language are more difficult to fill than other teaching positions (Malatras et al., 2017). In fact, the National Center for Education Statistics (NCES) stated that principals reported the highest difficulty staffing in the subject area of mathematics and special education between the years 1999-2000, 2002-2003, 2008-2009, and 2011-2012.

Teacher shortages are not equally distributed. Teacher shortages do remain an issue in schools across the United States, but mostly in urban schools (Ng, 2003). Schools that are categorized low achieving, as well as high-poverty serving minority students often have immense staffing issues (Borman & Dowling, 2008; Hampden-Thompson et al., 2008; Hanushek et al., 2004; Lankford et al., 2002). Additionally, because suburban communities often have fewer challenging situations, and because many teachers choose to live in suburban rather than urban communities, more affluent schools benefit from higher numbers of teacher applicants and fewer vacancies (Gagnon & Mattingly, 2015). This confirms Haberman's (1986) finding that regardless of the number of certified educators across the United States, the highest number of shortages of professionally trained teachers remain in urban areas. Though shortages do impact schools considered urban more significantly than affluent areas, many individuals criticize urban public schools for being the major cause of the overall teacher shortage; however, it is crucial to

understand that teacher preparation programs and institutions play a significant role in preparing effective teachers for all types of schools across the United States (Jones & Sandidge, 1997).

It has also been found that where teacher education programs are located and where preservice teachers complete their student teaching play a role in the teacher shortage. In fact, Goldhaber et al. (2019) found that labor markets tend to be localized, meaning, where a teaching candidate lives, as well as what teacher preparation program they attended, and where they completed their student teaching play a significant factor in where they choose to teach (Boyd et al., 2005; Goldhaber et al., 2019; Krieg et al., 2016, 2018; Reininger, 2012). Districts that host significantly fewer preservice student teachers tend to have to hire more new teachers with emergency or alternative credentials the following academic year (Goldhaber et al., 2019). Additionally, Boyd et al. (2005) discovered that candidates coming from suburban areas greatly prefer to stay in those areas to teach rather than going to urban or underserved areas. This is important to note because urban districts are impacted by shortages more heavily than their more affluent counterparts (Borman & Dowling, 2008; Hampden-Thompson et al., 2008; Hanushek et al., 2004; Lankford et al., 2002), causing urban districts across the United States to figure out ways to attract these candidates through increased salaries, working conditions, or other school characteristics (Boyd et al., 2005).

Attrition Rate of Teachers

Public school teacher attrition has been a significant issue for many decades and contributes to teacher turnover and the overall shortage in the United States (Fox & Certo, 1999; Liu & Meyer, 2005; Ramos & Hughes, 2020). According to the Alliance for Excellent Education (2014), of 3.4 million public school teachers, 227,016 move to other schools, districts, or states, and 230,122 leave the profession each year. Often, the terms stayers, movers, and leavers are

used to discuss teacher movement in education. According to the National Center for Education Statistics (2015), “Stayers are those teachers who remained at the same school, movers are those teachers who moved to a different school, and leavers are those teachers who left the profession” (p. 2). Though some teachers choose to move to other schools or districts and remain in the profession, for the purpose of this study, attrition can be defined as teachers leaving the teaching profession altogether (Ingersoll & Smith, 2003).

Teacher attrition in the United States is caused by numerous factors and can be attributed to personal reasons, external factors like retirement and moving, or internal organizational issues. Studies have been conducted on major causes of teacher attrition, and findings include serious student discipline and classroom management issues (Ingersoll, 2003; Ramos & Hughes, 2020; Thibodeaux et al., 2015), especially with students who have mental health concerns (Poznanski et al., 2018), lack of support or mentoring from colleagues and leadership (Brown & Wynn, 2009), too much paperwork (Brill & McCartney, 2008; Hughes, 2012; Worth et al., 2018), burnout and stress following policy decisions (Nathaniel et al., 2016; Ryan et al., 2017), neighborhood characteristics like safety (Boyd et al., 2011), compensation (Sutcher et al., 2019), and some believing that financial limitations are one of the strongest reasons (Sutcher et al., 2019). The Alliance for Excellent Education (2014) argued that teachers who receive more comprehensive support in all aforementioned areas, attrition rates, especially for novice teachers, will decline, and even more importantly, student achievement will increase.

Implications of teacher attrition can have detrimental impacts on states, districts, and schools, but especially at the national level, because teacher attrition is a complex, but expensive problem to address. Sutcher et al. (2019) estimated \$8 billion to replace teachers across the United States each year. Because teachers become more effective as they progress in their

careers, training and development costs that schools and districts would spend on a new teacher significantly decline (Ryan et al., 2017). Ramos and Hughes (2020) emphasized that continued teacher attrition not only increases hiring costs, but it has shown to have a large negative impact on student achievement as well. However, it is important to note that not all teacher attrition is negative. Even with the financial loss, Brown and Wynn (2009) believed that teacher attrition can positively impact a school if the teachers that are being replaced were of lower quality or did not fit well into the school culture. However, it is clear that teacher attrition overall, can have a significant impact on schools, districts, and states.

Attrition rates are higher for novice teachers, especially within their first few years in the classroom (Hoigaard et al., 2012; Struyven & Vanthournout, 2014). In fact, novice teacher attrition rates are higher for those in secondary subjects like math and science (Worth & de Lazzari, 2017). Moreover, because research shows that early-career and novice teachers are generally less effective than their veteran teacher counterparts (Rockoff et al., 2011) and develop in their craft over time (Kraft & Papay, 2014), when novice teachers leave their schools or the profession entirely, the quality of education students receive decreases (Ramos & Hughes, 2020), especially in urban, high risk, or disadvantaged communities where staffing is even more difficult (Alliance for Excellent Education, 2014; Bruno et al., 2020). Some studies have shown that approximately 40% of new teachers leave the profession within their first 5 years, and consequently, in high poverty urban schools, attrition rates are approximately 50% higher than in affluent schools (Ingersoll et al., 2019). This research illustrates that teacher attrition is greatly impacted by early career teachers, especially those who opt to work in urban, high risk communities.

Routes of Education Certification

There are two main pathways to teaching, traditional and alternative. Traditional pathways to the classroom typically include a four-year university degree in education, or a similar field and some level of student teaching and field experience prior to entering the classroom. Alternative pathways to the classroom vary, but include nonprofit, for-profit, university-based, and local and state created programs with differing requirements (Humphrey et al., 2008; Van Overschelde & Wiggins, 2020). Candidates who enter through an alternative pathway program have, at minimum, a bachelor's degree, with some completing alternative teaching programs immediately after their undergraduate program, while others step into the teaching profession as a second career. Conversely, traditional teacher preparation programs usually have undergraduate students who earn bachelor's degrees and will often receive their degree and then enter into the teaching profession (Policy and Program Studies Service, Office of Planning, Evaluation and Policy Development, U.S. Department of Education [PPSS], 2015). Candidates tend to enter alternative route programs with at least a bachelor's degree and often are professionals switching from other careers into teaching. In contrast, traditional route teacher preparation programs tend to enroll undergraduate students and confer bachelor's degrees.

Traditional Certification Route

Traditional teacher certification in the United States is the most acknowledged pathway to entering the classroom as a teacher. An individual that obtains a TC, has historically completed a four or five-year degree program in education from an accredited university and has a specialization in the content area that they intend to teach. For example, some universities have programs in early childhood, elementary, secondary, or other specific content areas. In addition to this, teacher candidates must pass teacher licensure exams that vary by state (Office of

Postsecondary Education [OPE], 2016). In 2016, it was reported that among the three types of teacher preparation programs (TC, AC at higher education institutions, and outside AC programs) 69% were categorized as TC programs (OPE, 2016). Traditional teacher certification programs remain the most prominent pathway to the classroom.

Alternative Certification Route

Since the demand for teachers in the United States surpasses the supply of new teachers (Sutcher et al., 2016, 2019; U.S. Department of Education, 2017), AC programs have become prominent pathways to teaching (Feistritzer, 1994; Feistritzer & Haar, 2008; Linek et al., 2012; Moffett & Davis, 2014; Woods, 2016). These programs include nonprofit, for-profit, university-based, and local and state created programs with differing requirements (Humphrey et al., 2008; Van Overschelde & Wiggins, 2020). Goals of AC programs often include filling content area shortages and teaching positions in schools with higher needs (Bowling & Ball, 2018; Hohnstein, 2017; Wright, 2020).

These AC pathways have significantly increased over the past few decades. In 1983, only eight states had approved pathways for AC; by 2003, 46 states and the District of Columbia had some type of alternative certification process, and by 2006, nearly every state in the United States had an AC program (Birkeland & Peske, 2004; Zeichner & Hutchinson, 2008). The development of these AC programs in states across the United States has continued to increase as the need for high quality teachers continues to be the top priority for schools. Kwiatkowski (1999) and Woods (2016) outlined four prominent goals that AC programs aim to address: (a) increasing the number of teachers in subject areas with significant demand, such as math and science, (b) increasing the number of teachers in under-represented groups, (c) increasing the number of qualified teachers in urban schools or hard to staff settings, and (d) decreasing the

need for emergency certification in order to mediate teaching shortages. Though these primary goals continue to be the focus of many AC programs, today, AC has been widely embraced as a way to enlist talented individuals in all academic subject areas who do not have a traditional background in education, but are passionate about becoming teachers (Teacher Certification Degrees, n.d.).

The percentage of AC teachers in public schools has increased parallel to the increase in AC programs. According to the National Center for Education Statistics (NCES), in the 2007-2008 school year, 13.2% of public school teachers reported they entered teaching through an ACP. This number increased to 14.6% by the 2011-2012 school year (NCES, 2012). In the 2015-2016 school year, of the 3.8 million public school teachers in the United States, approximately 18% (676,000) had entered into the classroom by taking an alternate route (NCES, 2018a).

Every U.S. state has its own AC pathways and certification requirements for individuals who have a bachelor's degree in a subject outside of education and are interested in entering the classroom. In most states, earning AC through a nontraditional route includes completing an approved AC teacher preparation program, which is often condensed and offers a fast-track entry into classrooms (Hawley, 1990). With this fast-track entry, these AC programs are often focused on job-embedded training rather than pedagogical theory that most traditional paths include (Woods, 2016).

National, state (both for-profit and nonprofit), and school district programs are the various types of alternative teacher certification in the United States whose primary purpose is to fill classrooms with quality teachers. Because these types of AC programs vary in candidate eligibility, length, curriculum, program components and requirements, it is difficult to share a common definition or set of requirements from program to program (Feistritzer, 2009a; PPSS,

2015). Most commonly, the goal of AC programs is to provide a more expeditious route into the teaching profession than a traditional program would, while also supplying teacher candidates with more preparation and support than an emergency teaching certificate (Woods, 2016).

There are, however, common themes that exist across most alternative route programs. Teachers in alternative route programs must be:

- (1) receiving high-quality professional development that is sustained, intensive, and classroom focused in order to have a positive and lasting impact on classroom instruction, before and while teaching;
 - (2) participating in a program of intensive supervision that consists of structured guidance and regular ongoing support for teachers or a teacher mentoring program;
 - (3) assuming functions as a teacher only for a specified period of time not to exceed 3 years; and
 - (4) demonstrating satisfactory progress toward full certification as prescribed by the state.
- (PPSS, 2015, p. 4)

Though each program varies, the aforementioned components are guidelines that many AC programs should include.

State of Oklahoma Approved AC Routes

Oklahoma has recognized alternative routes to teacher certification for many decades, and the number of AC teachers in Oklahoma has significantly increased. In the 2012-2013 school year, 7.8% of Oklahoma's public school teachers (4,065 teachers) were alternatively certified, while in 2018, that number increased to 5,746 teachers and 11.6% (Eger, 2018).

There are currently five categories of alternative teacher certification in Oklahoma: (a) alternative placement programs, which make up the highest percentage of AC educators, (b)

career tech instructor certification, (c) Troops to Teachers, which assists prior US military service members in obtaining certification and employment as teachers, (d) four-year olds and younger certification, which allows child development associates in Head Start programs to teach in public schools, and (e) Oklahoma Title I paraprofessional teaching certification, which is a path for teaching assistants in Title I schools to acquire teaching credentials (Oklahoma State Department of Education, 2021). This study focused on the requirements of teachers who opt for alternative placement programs.

The Oklahoma Alternative Placement Program grants individuals with bachelor's degrees outside the field of education the opportunity to teach in accredited schools in Oklahoma (Oklahoma State Department of Education, 2019). In order to be eligible for this program, individuals must first have at least one of the following:

- Baccalaureate degree with a retention GPA of 2.5 or higher from an institution whose accreditation is recognized by the Oklahoma Regents for Higher Education (OSRHE).
NOTE: A master's degree is required for School Counselor, Reading Specialist and Library-Media Specialist.
- Baccalaureate degree from an institution whose accreditation is recognized by OSRHE, plus 2 years of qualified work experience in a field corresponding to the area(s) of certification you intend to seek. "Qualified work experience" means an experience that can be documented through standard employment verification procedures, and that is relevant to a certification area or area of specialization as determined by the State Board of Education (OSBE), the Office of Educational Quality and Accountability (OEQA), the Department of Career and Technology Education (ODCTE), and/or OSRHE.

- Terminal degree in any field from an institution accredited by a national or regional accrediting agency recognized by the U.S. Department of Education. Examples of terminal degrees include doctorates of philosophy or education (PhD, EdD); professional doctorates (MD, DO, JD, DVM, etc.); and masters of fine arts (MFA) or library science (MLIS). Other types of terminal degrees must be verified by OSRHE. (Oklahoma State Department of Education, n.d., p. 1)

Beyond the education requirement, individuals must also show proficiency in a specific area that correlates to the certification area they are pursuing.

Proficiency can be shown through documentation of a least one of the following:

- An academic major in a field that corresponds to a certification area (or 30+ relevant credit hours on higher education transcript).
- An academic minor (or 15+ relevant credit hours) in a field that corresponds to a certification area, plus at least 1 year of qualified work experience or relevant volunteer experience (volunteer experience may be confirmed by verifiable references).
- At least 3 years of qualified work experience and/or relevant volunteer experience, plus a written recommendation from an employer or volunteer coordinator.
- Publication of a relevant article in a peer-reviewed academic or trade journal.
- Other documentable means of demonstrating competency, subject to the approval of the State Department of Education. (Oklahoma State Department of Education, n.d., pp. 1–2)

If the teacher candidate meets the above requirements, they are eligible to be approved for the Oklahoma Alternative Placement Program. Following this approval, candidates must take two exams, the first being the Oklahoma General Education Test and, second, the Oklahoma Subject Area Test in the specific certification areas that have been approved for the candidate

based on the aforementioned requirements (Oklahoma State Department of Education, 2019). After passing these two exams, to receive an alternative standard certificate in the state of Oklahoma, the candidate must (a) complete six to 18 college credit hours of professional education, or (b) complete 90-270 professional development hours that are approved by an Oklahoma school district. The number of courses or hours varies by candidate, as it depends on the previous experience and education of each individual. Moreover, the candidate must also take and pass the Oklahoma Professional Teaching Exam (OPTE). These college courses, professional development hours, and the OPTE exam must be completed within 3 years after beginning the Oklahoma Alternative Placement Program. Individuals who do not complete these requirements in the first 3 years will not receive a certificate and will be unable to continue in the profession (Oklahoma State Department of Education, 2019).

Teacher Effectiveness

Teacher effectiveness and overall quality continue to be acknowledged as one of the leading predictors of student and school success (Hopkins, 2013; Mincu, 2015). However, defining effectiveness can be difficult, as studies have used varying components to measure a teacher's effectiveness. However, five areas of effectiveness have continued to surface: content knowledge, classroom management, instructional planning, human relation skills, and professionalism (Nusbaum, 2002).

Content Knowledge

A teacher's knowledge is important to the success of their students. For example, content area knowledge impacts a teacher's instructional abilities (Connelly et al., 1997; Fernandez, 2014; Jensen et al., 2016; van Driel et al., 2014). Shulman (1987) described content knowledge as the specific subject matter knowledge and skills that teachers should possess in order to help

their students learn. An individual must see content knowledge as the premise for teaching, where one cannot be effective without this as the first knowledge base (Shulman, 1987). Many researchers believe that teachers should have a significantly more advanced understanding of their content areas than their students (Baumert et al., 2010; Evens et al., 2017; Kleickmann et al., 2017), and in certain content areas like special education, teachers must have advanced understanding of multiple subject areas (Brownell et al., 2010; Leko & Brownell, 2011; Powell, 2015). This emphasizes the need for teachers to enter into the profession with background knowledge on the subjects they are teaching.

Researchers have argued that it is not adequate to simply be an expert in a subject area or field; teachers must also have pedagogical content knowledge (PCK). Shulman (1986) introduced PCK which combines content area knowledge with the understanding of how to help students understand what they are learning. Beyond just subject area expertise, teachers need to be able to develop pedagogical content knowledge, where they develop the skills to teach that subject to all students with varying levels of needs (Bucat, 2005; Jensen et al., 2016; Shulman, 1987). In Shulman's (1986) book, *Knowledge Growth in Teaching*, he sought to understand teachers' thinking processes about content area and pedagogical practices. The question was posed: "How do teachers decide what to teach, how to represent it, how to question students about it and how to deal with problems of misunderstanding?" (Shulman, 1986). This emphasizes the need for both content knowledge and PCK. This means teachers need to be able to look at the content, identify the steps for learning, understand how to model and represent these steps so students can understand, how to connect prior knowledge to new knowledge, as well as help diverse students with varying needs grasp complex ideas in the content area (Jensen et al., 2016). However, it is important to mention that pedagogical knowledge is developed and

strengthened through practice and is not something that all teachers need to have mastered prior to entering the classroom (Hanuscin, 2013).

Pedagogical Skills

While content knowledge is important for teachers to have prior to entering the classroom, many researchers believe teachers must also have an understanding of pedagogical practices (Darling-Hammond, 2000b). Hashweh (2013) described PCK as “a set or repertoire of personal content-specific pedagogical constructions which teachers develop as a result of repeated planning, teaching and reflection on the teaching.” Though some findings show that teachers who have degrees in specific subject areas in which they teach can help improve their teaching effectiveness and have an impact on student achievement, other studies have shown that teachers who have a clear, in-depth understanding of their content area, pedagogical practices, how to actually teach the content to students, and reflect on their own teaching may be more effective (Darling-Hammond, 2000b). Ward et al. (2012) argued that PCK should be the focal point for all teachers, where they combine their knowledge of pedagogy and content together. Moreover, Berliner (1986) emphasized that teachers with content area knowledge, or basic knowledge of the field they are in, should be differentiated from expert teachers in the field who have also developed PCK.

Specifically related to PCK, Baumert et al. (2010) determined that there is a substantial positive effect of pedagogical content knowledge on an increase in student learning in mathematics. A specific example is in a case study conducted by Eisenhart et al. (1993) where the teacher had strong conceptual understanding of dividing fractions, but was incapable of modeling for her students the appropriate mathematical process and representation of the problem for them to understand. This emphasizes the critical need for a teacher to have both

content knowledge and PCK, especially with historically low achieving students. Kahan et al. (2003) posited that having strong content knowledge may allow teachers to take advantage of teachable moments, but without more than content knowledge, it does not guarantee students will have powerful learning experiences.

Findings from a study on the correlation between teachers' knowledge and pedagogy skills and the impact on student performance were conducted at the secondary level. Surprisingly, Khalid et al. (2021) teachers' advanced knowledge was found to be insignificant in its impact on student academic performance; however, a teacher's pedagogical skills had a statistically significant effect on student performance. Additional studies have added to the literature on content knowledge and PCK like Zembylas (2007) and Rosiek (2003), who expressed the importance of understanding students' needs and feelings as well as how to use content knowledge and PCK to design their courses and plan content so students can be successful. Each of the aforementioned studies continues to emphasize the importance of teachers having both content knowledge and PCK.

Classroom Management

Classroom management refers to the physical environment and actions of a teacher that aids in creating a system for procedures, routines, and strategies in the classroom that supports learning and establishes a routine for discipline and is a critical component of effective teaching (Bean, 2007; Jackson & Miller, 2020; Savage & Savage, 2010; Scherzinger & Wettstein, 2019). Moreover, classroom management requires the teacher to give clear expectations in order to help students remain on task (Sayeski & Brown, 2014) and also involves the teacher developing principles and strategies that establish a positive classroom environment (Akman, 2020). Akman stated that a teacher's self efficacy along with classroom management has the ability to impact

student attitudes towards their learning and, if done effectively, can positively impact a student's overall growth and development. Darjan (2012) also discovered that a teacher's level of self efficacy toward classroom management directly impacts how they respond to students with behavior challenges or stressful classroom situations. Conversely, in the classroom where the teachers' self efficacy with classroom management is low, students may engage in disruptive and disorderly conduct, which can negatively impact the classroom environment and students' abilities to learn (Oliver et al., 2011). Decades of literature corroborate that one of the most critical components of pedagogical knowledge is being able to successfully manage students in a classroom setting (Borko & Putnum, 1996; Hogan et al., 2003).

Berliner (1988a, 1988b) argued that teachers' abilities, skill sets, and inadequacies with classroom management also dramatically vary, and often vary by the teachers' level of experience and preeducation programs. In fact, in varying teacher training programs, there are discrepancies in teachers' preconceptions and core understanding about what classroom management is (Wolff et al., 2015) and variance in how much coursework preservice teachers are exposed to in classroom management prior to entering the classroom. This is important to understand because classroom management is frequently identified as a challenge for novice teachers (Blake, 2017; Marks, 2010; Melnick & Meister, 2008). According to the NCES in 2011-2012, only 55.6% of early career teachers were prepared to handle a wide range of discipline or classroom management circumstances in the classroom. This lowers to 49.6% for those teachers in schools categorized as urban (NCES, 2018b). This information is critical because if teacher training programs do not work to adequately prepare preservice teachers in the area of classroom management, novice teachers may struggle when they enter the classroom.

According to Flower et al. (2017), in a study that included 74 education programs and their directors in a large southwestern state, only a small percentage of teacher certification programs (both traditional and alternative) provided coursework in behavioral management to support students who have behavior challenges. Each participant in the study was the education preparation program director and was asked to take a survey on each concept, skill, term, or strategy that was included in their teacher preparation courses in relation to behavior and classroom management. Though special education certification programs were more likely to address these concepts, many other programs did not. This is a significant issue because students in both general and special education classroom settings have behavior challenges that can negatively impact the environment and ability to learn (McKenna et al., 2015) and effective classroom and behavior management are vital components of the overall skill set of highly qualified teachers (Flower et al., 2014). Additionally, with inadequate training prior to entering the classroom, teachers may face many classroom and behavior challenges that impact their students' ability to succeed.

Though classroom management is a major concern for all teachers: preservice, novice, and career teachers (Emmer & Sabornie, 2015; Melnick & Meister, 2008), there is support in the literature that shows a connection between a teachers' level of experience and their effectiveness with classroom management. In fact, many researchers have concluded that teachers that are new to the profession will often struggle with classroom management (Blake, 2017; Marks, 2010; van Tartwijk et al., 2011). In a study that investigated preservice teachers' understanding of classroom management skills, Poznanski et al. (2018) concluded that there are extreme knowledge gaps for new teachers in the areas of recognizing effective commands, ability to positively reinforce students, and the assessment of on-task behavior. Along the same lines, van

den Bogert et al. (2014) found that when preservice teachers noticed an event taking place in their classroom, their fixation on a specific event prevented them from noticing other events in the classroom. This can be a significant issue in a classroom with varying behavior needs.

Other studies have declared that teachers who are more experienced have been found to have a direct impact on how teachers observe and respond to student interactions in the classroom (Hattie, 2003; Livingston & Borko, 1989; Wolff et al., 2016). A unique study conducted by Wolff et al. (2016) used an exploratory analysis of teachers' eye movements and the monitoring of classroom events through classroom videos. Findings included that teacher expertise and experience are connected to their ability to visually process a classroom environment and their overall awareness of classroom management. Experienced teachers were more likely to notice and monitor important cues and events taking place in the classroom before they became conspicuous. Similarly, though weak, Martinussen et al. (2011) found a positive association between years of teaching experience and how often teachers reported the use of effective classroom management strategies with students who struggled with behaviors. This research on classroom management knowledge and skill discrepancies between teachers who are new to the profession and those who are experts is important because researchers argue that a teacher must develop classroom management strategies before effective teaching can take place (Berliner, 1988a).

Many teachers enter the profession without adequate training in classroom management and continue to experience challenges throughout their careers (Begeny & Martens, 2006; Simonsen et al., 2014). If teachers do not develop this skill, it is likely that behavior challenges in the classroom will increase, and in turn, academic learning and achievement will be negatively impacted (McKenna & Ciullo, 2016). Moreover, teachers who struggle with classroom

management have reported feelings of incompetence, stress, and overall negative job satisfaction (Brunsting et al., 2014; Nelson et al., 2001) as well as professional burnout, turnover, and emotional exhaustion (Aloe et al., 2014; Wang et al., 2015).

Regardless of these varying skill sets and beliefs, classroom management goes far beyond procedures, rules, and discipline in the classroom. Classroom management requires a dynamic skill set that includes but is not limited to, “the structure and atmosphere of the classroom space, the instructional choices of the teacher, the pedagogical and practical knowledge driving these decisions, and the stream of interaction and exchange occurring inside (and outside) the classroom” (Wolff et al., 2015). However, it is important to note, like pedagogical content knowledge that was outlined in the previous section, classroom management is a skill that can be developed and strengthened through experience (Ersozlu & Cayci, 2016).

Instructional Planning

Instructional planning connects curriculum to instruction in the classroom (Byra & Coulon, 1994; Clark & Yinger, 1987; Hughes, 2005; Rizwan & Khan, 2015) and is one of the most important components of the teaching profession (Bassett et al., 2013) because the majority of what takes place in the classroom is based on the teacher’s ability to plan (Young et al., 1998). Clark and Yinger (1979) emphasized that although there are different types of planning teachers engage in, daily lesson planning was found to be one of the most important types of planning a teacher does. Instructional planning can be considered a process that helps teachers develop a systematic way of designing their instruction (Kitsantas & Baylor, 2001).

Though there have been many different kinds of instructional planning models that have been developed over time, a systematic approach to instructional planning has proven to be successful in classrooms. Researchers have found that there are multiple phases of instructional

planning that include identifying goals and objectives for learning, planning instructional content and activities that align to the objectives, developing assessments to measure student progress, and adjusting instruction based on student data (Ball et al., 2007; Reiser & Dick, 1996).

However, other studies have emphasized that in addition to this, teachers spend a great deal of their instructional planning time considering available resources and student interests and individual needs (Ball et al., 2007). However, Danielson (2007) encompassed all of the aforementioned components of instructional planning into his belief of what an effective teacher must be able to do: design instruction and organize content that reflects the disciplines they teach, and use pedagogical techniques to help students understand important concepts and teach skills (p. 45).

Effective planning is a critical part of what makes a teacher quality, and instructional planning impacts student learning and achievement. A study conducted by Zahorik et al. (2003) discovered that effective teachers must be effective planners, and that the type of content that is taught and how well it is taught in the classroom, also known as the instructional orientation, is extremely important. Though teachers can improve their instructional planning abilities overtime, it is important to note that this aspect of teaching is complex (Marshall, 2012) and deserves attention.

When planning for instruction, teachers must consider the diversity in their classrooms. Students in classrooms across the United States are coming to school with numerous linguistic backgrounds, varying levels of English proficiency, learning styles, gaps in academics, and varying needs (Rutt & Mumba, 2020). Though they noted the complexity of the instructional planning process, Emmer and Sabornie (2015) emphasized the importance of teachers planning for individualized instruction and support so students' needs can be met. In a study of preservice

teachers' perceptions of lesson planning and the connection between plans and effective learning processes, results indicated that preservice teachers understood the importance of lesson plans, but had a difficult time understanding how to address varying students' needs and how to find appropriate activities for students of different learning levels (Sahin-Taskin, 2017). Choy et al. (2013) determined that lesson plans often mirror a teacher's understanding of their content area. Setyono (2016) added to this by stating that it is not enough for teachers to simply have an understanding of content; they must also have pedagogical knowledge and critical thinking skills in order to effectively plan a lesson. These studies show how complex instructional planning can be and the importance of proper training on how to plan for meeting varying needs in the classroom.

Instructional planning is vital for all subjects, but especially for content areas like special education. High quality teacher preparation is needed for content areas like special education because teachers need to enter into the classroom prepared to plan instruction for multiple subjects, different learning styles, student needs, and strategies (Leko et al., 2015). The use of proper inclusion strategies to meet students' needs in the general education classroom has proven to be challenging (Lohrmann et al., 2006). Moreover, because the majority of students with disabilities are taught in the mainstream, general education classroom (Dewey et al., 2017; McLeskey et al., 2012), it is imperative that teachers have the skills to plan for these students' unique needs. However, research shows that many general education teachers are not prepared to meet varying students' needs (Jenkins & Ornelles, 2009; Segall & Campbell, 2012). In fact, in a study by Kim et al. (2020), findings included that teachers expressed their concern for lack of sufficient training in how to plan for and support students with disabilities in the classroom and demonstrated a lack of confidence and certainty in how to carry out inclusion practices,

especially in urban school settings. These findings are significant because general education teachers must receive adequate training on how to plan for and implement instructional practices that meet the needs of students with disabilities or learning gaps.

Jenkins and Ornelles (2009) surveyed over 800 general and special education teachers and their feelings about how equipped they feel about planning and implementing inclusion for students with disabilities, general education classroom teachers felt significantly less confident than their special education counterparts. Similar findings came from Segall and Campbell (2012) when they assessed the current knowledge of educators and students with autism spectrum disorder (ASD). Although it is clear that special education and school psychologists have higher levels of experience, training and knowledge on students with ASD, what was alarming was that general education teachers responded that they did not know the answer to approximately half of the items on the studies survey assessing knowledge of supporting autism students (Segall & Campbell, 2012). This is a significant issue if students with disabilities or exceptionalities are taught more often in the general education classroom (Dewey et al., 2017; McLeskey et al., 2012). This emphasizes that when planning for instruction, teachers must consider students with varying disabilities, learner needs, personalization, individualized instruction, and inclusion strategies (Booth & Ainscow, 2011; Emmer & Sabornie, 2015).

It is clear that teachers need to consider multiple components when engaging in instructional planning. Because student achievement is directly connected to quality classroom instruction (Bayar, 2014; Brown & Militello, 2016; Darling-Hammond, 2000a; Ferguson, 1998), it is even more imperative to ensure that teachers enter the classroom with skills in the area of instructional planning.

Human Relations Skills

Obtaining and developing human relations skills is an ongoing process and an important component of professionalism inside and outside of the classroom (Roby, 2012), but especially with teacher-student interpersonal relationships (Crosnoe et al., 2004; Gehlbach et al., 2012). In fact, student relationships are among the most essential factors in a classroom in order for it to be an environment conducive to learning (Gehlbach et al., 2012; Scales et al., 2020). Students who have stronger relationships with their teachers have increased academic outcomes, motivation, a stronger sense of belonging in their classroom and school, an increase in positive social emotional behaviors, and a decrease in disciplinary issues (Birch & Ladd, 1996, 1998; Crosnoe et al., 2004; Downey, 2008; Gehlbach et al., 2012; Nurmi, 2012; Roorda et al., 2014; Wentzel, 2002, 2010). Patrick (2004) determined that a student's view of their relationship with their teacher and their belief about their teacher's actions towards them and their classmates shape their perceptions of schooling. This is especially true for students who are considered high-risk with low academic achievement (Downey, 2008). These studies show that the connection between a student and teacher can have a positive impact on a student's learning and academic trajectory.

Teachers who have strong human relation skills go beyond supporting students in their academics, but also tending to the social-emotional needs of their students. In fact, how teachers choose to interact with their students can have a significant impact on student learning, but also other factors in the classroom (Birch & Ladd, 1996, 1998; Cazden, 2001; Crosnoe et al., 2004; Downey, 2008; Gehlbach et al., 2012; Nurmi, 2012; Roorda et al., 2014; Wentzel, 2002, 2010). For example, Arbeau et al. (2010) looked at the links between social adjustment, how students experience loneliness, school avoidance, and shyness in relation to teacher-child relationship

quality amongst first grade students. Findings showed that the more a teacher and child experienced closeness, the less shy, anxious, or antisocial they were with their peers (Arbeau et al., 2010).

Other studies have found that relationships between teachers and students also build the foundation for helping to create an inclusive classroom (Jensen et al., 2015; Juul & Jensen, 2017) and many researchers advocate for classrooms to focus more on interpersonal relationships, a love of learning, and instilling a desire for knowledge acquisition rather than just academics (Ravitch, 2010). Other studies have linked teacher-child relationships and their association with how children interact with other students. This is because teachers set the tone and create an environment where children learn how to interact with others (Farmer et al., 2011; Jensen et al., 2015; Juul & Jensen, 2017; Luckner & Pianta, 2011). Ryan et al. (1998) emphasized that teachers who focus on things like this and on creating a classroom that is nurturing, supportive, and encouraging are more likely to have students who feel safe and have an intrinsic desire to interact with their teacher and peers.

Although research has clearly shown the connection between positive student-teacher relationships and academic and social emotional outcomes, it is also true that negative outcomes can surface from a lack of relationships, particularly with students with behavior issues and in urban, low socioeconomic schools. For example, in a meta-analysis of student characteristics and teacher-child relationships, Nurmi (2012) found that teachers who had students with high levels of internal behavior issues (anxiety and depression) and high levels of external behavior issues (shyness, self-consciousness, antisocial) reported they experienced less closeness and more conflict with these students, lowering the quality of the relationship. Conversely, teachers who had students with higher academic performance and increased levels of engagement and

motivation reported closer relationships with their students (Nurmi, 2012). Similarly, Scales et al. (2020) examined middle-school students' motivation, belonging, GPA, and school climate. Findings indicated that developmental relationships between teachers, students, and peers significantly predicted a student's academic motivation. In this same study, the authors found that students from low socioeconomic backgrounds reported lower quality relationships with their teachers than their more affluent peers. All of the findings from the aforementioned studies could pose a significant issue because it is often reported that students in urban, low-socioeconomic schools, have decreased relational quality and motivation (Bridgeland et al., 2013; Yeager et al., 2014) and academic motivation continues to decrease as students move through their K-12 academic careers (Gnambs & Hanfstingl, 2016; Kosovich et al., 2017). This is important to note, because other studies have shown that the single most important factor to motivation in schools is directly connected to the relationship between a student and their teacher (Lazowski & Hulleman, 2016).

Human relation skills are an important factor that contributes to overall teacher effectiveness. This is emphasized by Pianta et al. (2012) who claimed that the main barrier existing in school reform efforts is a lack of relationship between a teacher and student. Because novice teachers have shared that it is difficult to balance their roles as the person in charge and as someone who needs to be a compassionate individual (Aultman et al., 2009), it is critical that teachers enter the profession with relational building skills. This is a skill that is especially needed in schools that are in diverse communities, where teachers must consider the cultural, racial, socioeconomic, ethnic differences of their students (Audley, 2020; Crosnoe et al., 2004) as well as their internal and external behavioral and academic needs.

Professionalism

The concept of professionalism has been widely debated, and no one definition has been agreed upon (Ramadhan, 2021). Some believe that professionalism is a specific set of standards, or conduct, teachers should adhere to, while others see it as a personal belief or orientation that influences an individual teacher's actions, attitudes, behaviors, and performance (Cheng, 1996; Vanassche & Kelchtermans, 2014). According to Vanassche and Kelchtermans (2014), teacher professionalism is a practice where a teacher's actions and behaviors are revealed. However, others see professionalism as a way of operating and a way to assimilate new staff members to an already existing set of school standards or ethics (Cheng, 1996).

Schools often operate through two varying structures: bureaucratic and professional (Tschannen-Moran, 2009); however schools often struggle to find an appropriate balance between these two structures (Darling-Hammond, 1990). Darling-Hammond explained that through the professional lens, schools would lean towards a client-oriented and knowledge-based structure, while bureaucracy tends to be rule-based and procedure-focused. If schools as a whole or teachers within their classrooms focus on either one of these structures in isolation, it may negatively impact student success (Tschannen-Moran, 2009). However, Tschannen-Moran went on to emphasize that combining these structures together, can create a standardization of expectations that professionals should acquire and develop in order to be successful inside and outside of the classroom.

Although professionalism is a subjective term, often more narrowly defined on a tacit and locally-contextual basis, it is worthwhile to establish general guidelines to ensure consistency in message and some minimal adherences. Therefore, the National Board for Professional Teaching Standards outlines five core propositions:

- Teachers are committed to student learning
- Teachers know the subjects they teach and how to teach those subjects to students
- Teachers are responsible for managing and monitoring student learning
- Teachers think systematically about their practice and learn from experience
- Teachers are members of learning communities. (National Conference of State Legislatures, 2011, p. 4)

Teacher professional characteristics are described in various ways by researchers. For example, Weber and Johnsen (2012) stated that characteristics of teachers who possess professionalism are that of having integrity, understanding their role, having motivation, and exemplifying expertise in content and pedagogy. Others describe professional characteristics as having an exceptional attitude and good behavior inside and outside of the classroom (Ramadhan, 2021; Tanang & Abu, 2014). However, according to the Learning Sciences Marzano Center (2013), the characteristics that make up the professionalism of a teacher are: (a) promoting positive interactions about colleagues, (b) promoting positive interactions about students and peers, (c) seeking mentorship for areas of need or interest, (d) mentoring other teachers and sharing ideas and strategies, (e) adhering to district and school rules and procedures, and (f) participating in district and school initiatives. Though the term professionalism and its meaning in schools are widely debated, it is clear that teachers need to obtain professional characteristics in order to be successful and productive members of a school.

What Studies Have Told Us About AC Teachers

Many studies comparing TC versus AC show varying results, some of them showing favor for traditional programs and others for alternative programs (Whitford et al., 2018). Since the inception of AC programs, there have been many critics that question the quality of AC

teachers and alternative pathways to the classroom. However, other studies have shown favor for AC programs, some finding minimal differences between TC and AC teacher effectiveness.

Critics of AC Programs

There has been a longstanding debate on the effectiveness of ACPs and AC teachers. Critics of alternative certification routes argue that AC programs lower the standards of teacher skill and knowledge (Blazer, 2012). Teachers who enter into the classroom through AC routes have had minimal coursework in pedagogy, classroom management, and child development and lack training and experience in teacher preparation (Blazer, 2012; Darling-Hammond, 2010; Feistritzer, 2003; Ludlow, 2013). Those that challenge AC programs also argue that this lack of teacher preparation can have a negative impact on student achievement and the quality of education they receive (Darling-Hammond, 2000a). In fact, although some AC programs recruit individuals with content area skillsets, like those with backgrounds in science and mathematics, teacher unions and researchers have denounced their ability to produce quality teachers and that AC programs that quickly place teachers in the classroom can have a negative impact on students (Finn & Madigan, 2001).

Some researchers have favored TC over AC in the area of teacher quality. A study conducted by Darling-Hammond et al. (2005) found that teachers who completed TC programs had a more significant positive impact on student achievement for fourth and fifth graders in the subjects of reading and math. In another study, Laczko-Kerr and Berliner (2002) supported this assertion that university, or teachers who attend a TC program, are of higher quality than those who opt for an AC program. In fact, they found that students who are taught by under-certified teachers (those that are teaching under an emergency, temporary, or provisional license) make

approximately 20% less academic growth each year than students who are taught by their TC counterparts (Laczko-Kerr & Berliner, 2002, p. 2).

Concerns about AC teachers also include gaps in their teaching knowledge. For example, Linek et al. (2012) conducted a study of first year teachers in both urban and suburban school districts in a large metropolitan area in Texas. One group had completed a TC program, and the other was currently in a year-long AC program. The authors found distinct differences in what teachers valued and needed support based on their type of certification program and that teachers who enter into the profession through AC have different gaps in effectiveness than those who are TC. Findings from this study indicated that AC teachers needed more support and development with lesson planning and classroom management, while TC teachers needed help with improving learning strategies.

Moreover, alternative route programs often cover content differently than courses given to TC teachers and vary in quality, which could impact teachers' sense of preparedness and effectiveness in the classroom (Darling-Hammond, 2010; Moffett & Davis, 2014; Qu & Becker, 2003). In fact, the type and amount of coursework required in AC programs and program duration are also factors that play into how prepared an individual may be for the classroom (Bowling & Ball, 2018; Darling-Hammond & Bransford, 2007; Walsh & Jacobs, 2007). For example, in a study consisting of 2,500 randomly selected K-12 public school teachers from the Market Data Retrieval database, TC teachers rated their preparation program higher than their AC counterparts. In fact, 18% of the AC teachers surveyed were only "okay" or "poor" in quality and preparation for the classroom (Feistritzer et al., 2011).

Moreover, between the 1999–2000 and 2011–2012 school years, Redding and Smith (2016) found evidence that AC teachers are less likely to have had practice teaching or a course

in teaching methods and AC teachers reported having decreased feelings of preparedness when they begin their first year of teaching. Brown et al. (2015) examined the student teaching experiences of early and elementary preservice teachers at a large public university in the southwest to determine how their program experiences impact their teaching efficacy and feelings of preparedness in the following areas: (a) pedagogical content knowledge, (b) planning and preparation for instruction, (c) classroom management, (d) promoting family involvement, and (e) professionalism, findings showed all subcategories related to preparedness to teach to be statistically significant before and after student teaching except for professionalism.

Additionally, when the preservice teachers were asked to describe the parts of student teaching that they felt best prepared them for teaching, three themes emerged: the opportunity for hands-on teaching, the ability to observe experienced teachers, and the relationship they had developed with their cooperating teacher, showing how important it may be for teachers to have these experiences in order to feel prepared to enter into the classroom.

However, it is important to note that other researchers argue that AC teachers believe their programs provided them with adequate preparation. For example, Torres and Chu (2016) conducted a mixed methods study analyzing the perceptions of instruction in a clinically based teacher program with a group of AC teachers who are teaching full-time in low socioeconomic, urban schools, while receiving their alternative certification and Masters degrees in teaching. The participants were categorized as Teach for America (TFA) or non-TFA AC teachers, and the results indicated that satisfaction with their AC program was extremely high across both groups, with TFA being the highest level of satisfaction. The participants believed they received adequate practice and feedback on pedagogical strategies that translated to their classrooms and helped improve their effectiveness. This shows that AC programs can vary by level of

preparation, intensity, rigor, structure, duration, expectations, and many other factors that have the potential to impact a teacher's preparedness or effectiveness (Good et al., 2006; National Research Council, 2010).

Though many researchers and policymakers are harsh critics of AC programs, it is clear that AC programs will remain as long as the teacher shortage continues to be apparent. Because of this, regardless of the positives and negatives AC programs bring, some researchers believe the focus should be shifted on how to train, prepare, and properly support AC teachers to ensure their success (Carter et al., 2011; Good et al., 2006).

AC and Student Achievement

Many researchers believe that the type of teacher preparation an educator has can be directly connected to student achievement in K-12 schools (Milanowski, 2004). On the contrary, other researchers have agreed that it is extremely difficult to assess the extent to which an individual teacher's preparation impacts student learning as there are many components you must consider (Sherman & Ding, 2008). This lack of clarity is significant when trying to determine the impact of a teacher's effectiveness on student achievement.

There is an ongoing debate as to whether AC or TC teachers have a more positive impact on student achievement, and current literature has varying results. Curry et al. (2018) found a statistically significant difference in fourth grade student reading achievement in those who were taught by TC teachers versus their AC teacher counterparts. In another study, Henry et al. (2014) used data sets with value added models for the 2005-2006 through the 2009-2010 school years, and tested-grade/subject teachers in North Carolina with fewer than 5 years teaching experience to examine whether teachers who enter into the teaching profession through an in-state public traditional undergraduate pathway are more effective in comparison to other certification

pathways, as measured by student achievement. Of the 29,934 teacher sample, there were eight types of TC preparation pathways and three AC pathways. The researchers compared this data with student test scores from K-12 schools across all subject areas using a hierarchical linear model; findings indicated that teachers from out-of-state and AC pathways underperformed in comparison to TC teachers who were prepared by in-state public undergraduate programs. However, AC TFA teachers, a national nonprofit AC program, significantly outperformed in-state public undergraduates in mathematics and science courses at the secondary level.

In another study of 3,766 first year teachers in New York City examining the effects of teacher qualifications on student achievement, the authors found that fourth-eighth grade students who had teachers from traditional university preparation programs had increasingly higher growth in language arts and reading as well as students in fourth-fifth grade mathematics than teachers of students who participated in AC programs like TFA and the New York Teaching Fellows (Boyd et al., 2006). However, Heilig and Jez (2010) examined over a decade of peer reviewed research on TFA student achievement outcomes and found that TFA teachers had a positive impact on student's mathematics scores

Conversely, some researchers have reported minimal differences in student achievement when comparing AC and TC teachers (Boyd et al., 2006; Goldhaber & Brewer, 2000). Shuls and Trivitt (2015) examined the relationship between secondary teacher characteristics and student achievement in algebra, geometry, and 11th grade English Language Arts in Arkansas, using the value-added model. The observable characteristics that were measured were indicators of teacher quality, including content area degrees, level of degree (bachelors, masters), licensure exam scores, experience, and certification route. No evidence was found that advanced degrees (Masters) increased test scores, nor did AC programs have any difference in teaching

effectiveness and productivity. However, findings did reveal that Algebra teachers with math degrees lead to higher student achievement and experience does improve test scores, but are depleted within 6 to 9 years. Similar results were found by Harris and Sass (2011). They found no evidence that specific undergraduate coursework in education affects an individual's later productivity as a teacher, except for high school reading teachers who obtained an undergraduate degree in education significantly outperformed those with alternate degrees. Harris and Sass also confirmed that advanced degrees in education do not improve teacher productivity, with the exception of middle school math. Those that have obtained an advanced degree in this content area, have shown to have higher student achievement. Additionally, Buddin and Zamarro (2009) found no correlation between student achievement and a teacher's years of experience, their level of education, and their licensure test scores, showing that how a teacher is prepared may not be as important.

Varying results were also found in a study conducted by Goldhaber and Liddle (2012). They compared the effectiveness of teacher certification programs inside and outside the state of Washington. The sample included 8,732 teachers from 20 different programs, and findings indicated that in-state teacher preparation programs were as effective as the out-of-state programs, but the authors found significant differences amongst programs that were in-state. The authors noted that credentialing is one aspect of teacher effectiveness, but suggested that a larger emphasis be placed on improving the quality of teacher preparation programs. This same sentiment is held by Carter et al. (2011), who believed the attention should be placed on how to train and support AC teachers to help them be successful in the classroom, rather than the drawbacks of AC programs themselves.

All of these findings point to the possibility that some AC teachers, depending upon their program, could be as effective as TC teachers in the area of student achievement. However, it is clear that some subject and grade level combinations have higher achievement when taught by either traditionally trained teachers or those with advanced degrees.

Advocates of AC Teachers

While some teacher educators argue that alternative route programs are generally inferior to traditional college-based teacher education programs, recent research shows that there is not much difference in the learning of students regardless of which preparation route teachers take (Feistritzer, 2009a). Moreover, some researchers have argued that the United States cannot afford to lose AC teachers, and that AC programs need to be recognized as a significant pathway to the classroom in order to increase teacher quality and decrease the teacher shortage (Wayman et al., 2003).

Many researchers have found minimal differences in terms of teacher quality and efficacy between TC and AC teachers (Fox & Peters, 2013; Shuls & Trivitt, 2015). For example, key findings from a study conducted by Jackson and Miller (2020) show that quantitative data yielded no significant differences in TC and AC sense of self efficacy toward classroom management techniques, student engagement, and instructional strategies. This mixed methods study included 72 undergraduate and graduate teacher education candidates in a southern regional university. Some of the participants were in their senior year of their TC undergraduate teaching program, while others were in their first course in the graduate AC program. Results from this study show that AC teachers have indistinguishable feelings on self efficacy in their approach to classroom management as their TC counterparts. Similar results were found in a mixed-methods study aimed to examine what influence, if any, a teacher certification route had

on a first-year teacher's level of self-efficacy. With over 288 participants, findings indicated that there was no statistically significant difference in reported self-efficacy between first-year teachers graduating from a TC program or an AC program (Fox & Peters, 2013). This is important to note because teacher self efficacy is connected to how a teacher operates in the classroom as well as how motivated students are and their overall achievement (Akman, 2020; Klassen & Chiu, 2010; Tschannen-Moran & Hoy, 2001).

Teacher effectiveness has also been measured in various studies relating to AC and TC teachers. Chingos and Peterson (2011) determined that having a bachelor's degree in education nor a master's degree is correlated with teacher effectiveness in either elementary or middle school. Moreover, Hanna and Gimbert (2011) examined the effectiveness of teachers who earned their certification through TC and AC programs and found that teachers who opted for an alternative pathway were not of lower quality in comparison to their TC teacher peers. In fact, they found that AC programs recruited and trained more preservice teachers from prestigious universities than TC programs (Hanna & Gimbert, 2011).

Additional factors, like classroom management, instructional skills, and the ability to engage students have also been used to compare AC teachers to TC teachers. For example, in a study conducted by Uriegas et al. (2014), the authors sought to determine the differences between the classroom management abilities of TC and AC teachers, as measured by discipline referrals. Of the 232 teachers from five middle schools and 281 teachers from three high schools in a south-central Texas school district, discipline referrals for TC middle school teachers were 5.62 and 5.27 for AC teachers. For high school, the discipline referrals for TC teachers were 6.01 and 4.92 for AC teachers. Although there was no statistically significant difference, AC teachers had a lower number of discipline referrals. In a mixed methods study by Jackson and Miller

(2020), the authors sought to investigate teacher candidates' sense of self efficacy. The study consisted of 72 undergraduate and graduate students from a southern university, 60 of these participants were in a nontraditional (alternative) program and 12 were in a traditional program. They found that quantitative data showed no statistically significant difference between AC and TC teachers in the areas of student engagement, self efficacy, instructional strategies, and classroom management. The qualitative findings indicated that TC and AC candidates understood the importance of creating a student centered classroom environment and the AC teachers displayed a similar level of confidence in their abilities to apply classroom management techniques as TC teachers. These studies are important to note because not only is classroom management noted as one of the most significant reasons why teachers decide to leave the profession (Aloe et al., 2014; Brouwers & Tomic, 2000), but it is also one of the most challenging factors for novice teachers, regardless of their certification (Emmer & Sabornie, 2015; Melnick & Meister, 2008).

What Studies Have Told Us About Administrators' Views

Although many administrators believe teacher certification is one of the most important influences of teacher selection and hiring (Kimbrel, 2019), alternative certification does not always correlate with lesser quality; in fact, it can bring in higher caliber individuals from colleges than TC programs (Gimbert & Hanna, 2011; Kimbrel, 2019). Moreover, many researchers assert that AC programs are a significant pathway for recruiting quality teachers for schools (Wayman et al., 2003).

For example, in a qualitative study aimed to better understand rural principals' perceptions on AC teacher licensure, overall, principals believed alternative route programs were a positive way to address the teacher shortage and that AC teachers may possess advantages over

TC teachers in the areas of content knowledge, experience, and maturity (Brenner et al., 2015). However, it is important to note that the principals in this study did have general concerns about the absence of student teaching experience, social skills, readiness for the classroom, and the amount of support the AC teachers may need in their first year on the job. In another study conducted by Moffett and Davis (2014), the authors examined the perceptions that teachers and administrators in K-12 public and private schools have toward AC and TC routes across seven categories: (a) hiring, (b) special education, (c) teacher quality, (d) classroom management, (e) assessments, (f) subject matter knowledge, and (g) quality of instruction by certification route. Findings indicated that although some administrators believed TC teachers were more effective across five of the seven categories, there was no statistically significant difference between TC or AC teachers and their perceptions of effectiveness across six out of the seven categories (Moffett & Davis, 2014).

Teacher certification is something principals consider when hiring teacher candidates. For example, Kimbrel (2019) examined school hiring processes to determine the amount of teacher quality research and perceptions of effective hiring practices are utilized by school principals when selecting teachers. The elements rated as the most important influences to final teacher selection were (a) the candidate's ability to build relationships with students, (b) their teacher certification, (c) ability to collaborate with other teachers, and (d) content knowledge, proving that certification is a priority when selecting teachers (pp. 9–10). In another study, Mee and Haverback (2017) found that principals preferred to hire teachers with middle school level certification. In fact, the authors argued that having teachers who are trained in middle level education, as opposed to elementary or secondary is crucial. This is consistent with previous literature by Howell et al. (2016) and Ochanji et al. (2016). The authors went on to note that

middle school principals have to ensure that the teachers they hire are not only certified in the areas where they will teach, but that they also understand the developmental needs of young adolescent middle school students and are trained in how to work with them. However, it is imperative to note that of the principals in this study, approximately one-third of them also reported that they did not feel that these teachers were properly prepared to teach mathematics, language arts, science, or social studies, which were the content areas that they were trained to teach in. This shows that principals do prefer to hire teachers with proper certification, but it is still unclear if the certification itself actually properly prepares teachers to be effective (Mee & Haverback, 2017).

When reading and analyzing the literature, it is clear that there are many debates as to the effectiveness of teachers who participate in alternative certification pathways and that teacher quality, in general, is at risk. This suggests that additional research around the effectiveness of certification routes may be warranted.

Urban, Low Socioeconomic Schools and AC Teachers

Many AC program teacher candidates are hired to fill vacancies in critical shortage areas that have higher populations of low socioeconomic, minority students and schools that typically have more challenges (U.S. Department of Education, 2015). Alternative certification is more prevalent in harder to staff communities, such as urban or rural areas, and many researchers believe AC teachers are a creative solution to fill vacancies in schools like this. For example, Ng (2003) found that AC programs establish a larger pool of teachers that may possess qualities that are particularly helpful to working in urban schools. This is important to note because part of the increase in AC teacher preparation programs might be connected to the increase in low income communities and high poverty schools. Aud et al. (2013) stated that one in eight public schools

in the U.S. in the year 2000 was considered high poverty, and by 2011, this increased to one and five United States public schools.

As outlined in the No Child Left Behind authorization, all teachers by the 2005-2006 school year must be considered highly qualified in their academic subjects and prepared with the proper knowledge and skills to be able to teach at a high level, while meeting the diverse needs of the students in their classrooms. Though ESSA removed the terminology “highly qualified,” states and districts still have to prove that disadvantaged, low socioeconomic schools do not have a disproportionate number of ineffective teachers (Burnette, 2017). This is important because individuals who opt for alternative teaching certification routes often teach in hard-to-staff content areas in some of the most challenging districts and schools in the United States (Redding & Smith, 2016; U.S. Department of Education and Office of Innovation and Improvement, 2004).

Minority students that attend urban, low socioeconomic public schools are generally more impacted by teacher quality than schools in higher socioeconomic areas (Ingersoll et al., 2019; Liu et al., 2008). Additionally, novice teachers are more likely to work with minority, disadvantaged, and lower-achieving students than their veteran teaching counterparts (Bruno et al., 2020). Moreover, teachers with alternative certification are more likely to work in urban schools that are categorized as high need, high poverty, and have disadvantaged groups (Darling-Hammond, 2006; Goe, 2002; Redding & Smith, 2016; Zeichner & Hutchinson, 2008). Stoddart (1993) argued that TC teachers are hesitant, some even being unwilling, to work in urban school settings because of the challenges they bring. Neely (2015) outlined some of these challenges like wide ranges of student demographics (e.g., English language learners, low income, poverty, and diverse racial and cultural backgrounds), limited physical space, large class sizes, and more

components that cause shortages and high rates of turnover in urban schools. Because of this, students in these types of schools often have a smaller pool of highly qualified teachers, which can have a detrimental impact on the overall quality of education students receive (Darling-Hammond, 2000a). Gagnon and Mattingly (2015) found an unequal distribution of teacher quality in schools that are categorized as urban serving Black and Hispanic students who are living in poverty. They went on to state, “Students in highly diverse schools in large cities or in poor rural schools are much more likely than those in more affluent locales to have an inexperienced teacher” (p. 253), showing the large discrepancies in teacher quality in different types of schools. Though findings were less significant, Mansfield (2015) discovered that disadvantaged students, whether indicated by race or free and reduced lunch eligibility, were inclined to have lesser quality teachers.

Schools that are categorized as high-risk, low socioeconomic, and urban, usually have a higher percentage of AC teachers. According to the NCES (2019), schools categorized as high-poverty had 7% more teachers who had entered teaching through an alternative route than low-poverty schools. Hohnstein (2017) examined the proportions of ethnic minority students and students in poverty in relation to the number of alternative teacher certificates granted in each state. Using the National Center for Education Information (NCIS) database to gather information from 33 states, including Washington, D.C., during the 2008–2009 school year, findings included an average of 1,370 alternative teaching certifications and the proportion of students in poverty and categorized as an ethnic minority had a weak but positive statistical relationship with the number of alternative teaching certificates. Moreover, there was a strong positive bivariate correlation between the number of alternative teaching certificates and the number of rural and urban schools. This is significant because novice teacher status is related to

overall teacher effectiveness, and researchers argued that this could serve as a way to analyze the imbalanced distribution of teacher quality (Gagnon & Mattingly, 2015).

When reading and analyzing the literature, it is clear that there are many debates as to the effectiveness of teachers who participate in AC pathways and that teacher quality, in general, may be at risk. This suggests that additional research around the effectiveness of AC certification teachers may be warranted.

Summary

Throughout the last few decades, and following the enactments of educational policy reforms in the United States like A Nation at Risk, NCLB, and ESSA, there has been continued widespread debate centered on the issue of teacher quality and the use of alternative routes to the classroom. To remedy the issues of teacher quality and the teacher shortage, AC programs were put into place as an attempt to increase both the quantity and quality of educators across the United States. Though some researchers and practitioners agree that AC programs and AC teachers are a positive way to combat the growing teacher shortage and fill hard-to-staff schools and content areas, others believe these programs and teachers are unprepared and lack the skills to survive in the teaching profession. Others believe AC teachers are equally as effective as their TC teacher counterparts, while some believe they are not and can be detrimental to students' overall success. Although alternative certification was initially created as a short-term solution to issues rising across the educational landscape, the question still exists as to whether AC teachers have the skillset and proper preparation to combat the challenges facing education today. Moreover, do administrators understand the unique needs AC teachers have and how to support them in their growth and development? Regardless of this ongoing controversy and varying results in the literature, AC teachers fill classrooms in nearly every district and state across the

United States, therefore, it is imperative that studies continue to be conducted on their effectiveness.

Chapter 2 discussed the background of teacher quality, the teacher shortage, and attrition in the United States. It also outlined components of teacher effectiveness like content knowledge, classroom management, instructional planning, human relation skills, and professionalism. Finally, it discussed the past and current literature on TC and AC teachers, including critics and advocates of AC, the role of the administrator, their views of AC teachers, and research showing the increased amount of AC teachers that exist in urban, high-risk, low socioeconomic schools in the United States. The theoretical framework that was used in this study, including Nusbaum's TES theory and the constructivist theory, was also introduced in this chapter. Chapter 3 introduces and outlines the methodology that was used in this study.

Chapter 3: Research Method

U.S. alternative teacher certification has rapidly increased (Linek et al., 2012; Moffett & Davis, 2014; Woods, 2016). However, studies of how well alternate route teachers are prepared to enter the teaching profession and how effective they are in the classroom continue to have contrasting results (e.g., Linek et al., 2012; Moffett & Davis, 2014). Of the 3.6 million public school teachers in the United States, approximately 18% (676,000) of teachers in the 2015-2016 school year first began teaching via an alternate certification (National Center of Education Statistics [NCES], 2019). The preparation and quality of instruction a teacher delivers, directly impacts student achievement (Gagnon & Mattingly, 2015; Moffett & Davis, 2014; Shuls & Trivitt, 2015); because this number is continuing to increase, school administrators must ensure that quality instruction is taking place regardless of the route to the classroom (Kimbrel, 2019).

The purpose of this qualitative case study was to generate knowledge of alternative pathway teachers and their effectiveness in the classroom from an administrative point of view, specifically in urban, high-risk schools. It was anticipated that findings from this study would help school administrators to develop a stronger understanding of potential teaching gaps and be able to provide the necessary support for AC teachers to improve in their overall practice.

The primary research question addressed in this study was “How do school administrators perceive the effectiveness of alternatively certified (AC) teachers?” Five additional research questions were developed based on Charles M. Nusbaum’s (2002) Teacher Effectiveness Survey (TES):

RQ1: How do school administrators perceive the effectiveness of alternatively certified teachers regarding content knowledge?

RQ2: How do school administrators perceive the effectiveness of alternatively certified teachers regarding classroom management?

RQ3: How do school administrators perceive the effectiveness of alternatively certified teachers regarding instructional planning?

RQ4: How do school administrators perceive the effectiveness of alternatively certified teachers regarding human relations skills?

RQ5: How do school administrators perceive the effectiveness of alternatively certified teachers regarding professionalism?

The study design, including research methods, population, study sample, data collection, and data analysis procedures, are outlined in this chapter. Additionally, I discuss the ethical considerations, assumptions, limitations, and delimitations present in the study.

Research Design and Method

This qualitative case study was designed to explore the perceptions of K-12 school administrators regarding AC teacher effectiveness and took place in a large urban school district in Oklahoma. A qualitative research design is often used in education and other social sciences for inquiry based exploration (Marshall & Rossman, 2016). Using a qualitative approach to research brings value and depth to people's individual and subjective experiences (Leavy, 2017) and produces outcomes that are reflective in nature (Hatch, 2002). Unlike quantitative research, where researchers start with a hypothesis or theory, a qualitative researcher begins with the perceptions of participants and identifies themes and patterns as they begin to surface (Creswell, 2013). A qualitative approach was appropriate because it facilitated building a rich understanding of the topic through participant perspectives (Bloomberg & Volpe, 2019).

A single case study design was used for an in-depth analysis of the participant's perceptions. The purpose of a case study is to investigate a contemporary phenomenon within its real-life context, provide a holistic description and analysis of the multiple perspectives that are being investigated, and generate a multifaceted understanding of a complex issue (Lichtman, 2013; Merriam, 1998; Yin, 2018). In this context, a single case study was used to help me gain insight on the perceptions of AC teachers and their effectiveness from the administrators' point of view. A holistic approach was used because this helped to facilitate participants and me engaging in systematic reflection (Creswell, 2013; Denzin & Lincoln, 2011) and help me as the researcher to better understand the participants' view of reality and their actions (Baxter & Jack, 2008; Lather, 1992; Robottom & Hart, 1993). This holistic single case study was specifically used to analyze one unit within the same environment as recommended by Baxter and Jack (2008) and Yin (2018): school administrators within one large, urban school district as the unit of analysis.

Population

The setting for this study was City Public Schools (pseudonym), a large urban school district in Oklahoma that serves 66 schools and 45,000 students; 84% of CPS students fall below the poverty line and are considered economically disadvantaged. The target population for this study consisted of Pre-K through 12th grade school principals at 66 schools in CPS.

Study Sample

The sample for this study consisted of CPS principals. Purposeful sampling was employed to select participants who were school administrators who currently had or had previously worked with AC teachers from school sites in CPS, a large, urban school district in Oklahoma. Participants were selected based on access and proximity to the researcher and based

on a set of criteria. In order to have participated in the study, the participant must have been (a) a principal for a minimum of 2 years and (b) have worked with or currently work with alternatively certified (AC) teachers. Purposeful sampling was appropriate for this study because it helped to yield insight and a deeper understanding of the phenomenon that was investigated in the study (Bloomberg & Volpe, 2019; Merriam, 2009). The target sample size was 10 to 15 principals, and the study had 11 principals for the final study sample. To recruit this number, all 66 principals in CPS who were not employed at my current campus were sent a qualifying email for recruitment purposes and to identify individuals who met the basic criterion for the study. The email to potential participants communicated the purpose of the study and ask for their interest in participation.

Instruments

The instruments that were used to gather information from the participants were (a) a qualifying email, (b) a prequestionnaire, and (c) an interview guide to carry out the qualitative semistructured interviews with each participant. By sending a qualifying email, I was able to determine which potential participants met the basic criteria of the study, and a prequestionnaire helped to gather basic information on the potential participant and their school prior to the interview. The interview guide was developed based on the study's primary and secondary research questions and was used to collect in-depth information on the participants.

Qualifying Email

The qualifying email (Appendix B) was sent to all potential participants, including all building principals in CPS (i.e., early childhood, elementary, middle, and high school). All interested potential participants that met the established criteria were invited to participate in the study, with a goal of securing between 10 and 15 participants. The final participants were

selected based on who responded to the email on a first come, first serve basis. Those that were interested received a follow up email from me with the consent form using the HelloSign platform. After receiving consent from the participant, they received a link to the prequestionnaire.

Prequesstionnaire

Following consent, each participant received a link to the prequestionnaire using Google Forms (Appendix C). The prequestionnaire asked each participant to report (a) the number of years they had been a building principal, (b) the number of years they had been a building principal in an urban, low-socioeconomic school, (c) the total number of teachers in their building, (d) the total number of AC teachers in their building, and (e) the grade levels and/or content areas the AC teachers taught when taking the survey. In the prequestionnaire, I included information on the exclusion of teachers who were currently under an emergency certification, but could be under a provisional certification if they were currently enrolled in an AC program. By using a prequestionnaire, I was able to gather basic information that I needed prior to each interview so that I could spend more time on in-depth conversation during the interview.

Interview Guide

The semistructured interviews consisted of questions regarding the participants' experiences and perceptions of AC teachers and their effectiveness. Because I acted as the instrument during interviews, and the quality of the knowledge produced in an interview depends on the researcher's skills (Brinkmann & Kvale, 2018), I outlined 10 questions that guided me as I conducted the interviews. All questions were directly aligned to the research questions developed based on Charles M. Nusbaum's (2002) *Teacher Effectiveness Survey* (TES) in order to generate

knowledge of AC teacher's effectiveness from an administrative point of view, specifically in one urban, low socioeconomic school district.

An interview guide was used to conduct the semistructured interviews. The strength of using an interview guide is that it allowed for each participant to respond to a series of predetermined questions; however, the overall purpose of a semistructured interview process is to allow for a fluid investigation of the research topic (Bloomberg & Volpe, 2019). This means that although I used the interview guide, the participants' responses to the predetermined questions also helped to drive the direction of the interview, allowing for different ideas, concepts, and themes to emerge. I used follow up questions such as "Could you say some more about that?" and "What do you mean by that?" which allowed for the participant to elaborate on their experiences and perceptions. The following questions were used in the interviews:

1. What grade levels and/or content areas are AC teachers currently placed in at your school? If you have previously worked with AC teachers, what grade and/or content areas did they teach in?
2. How do you feel about the effectiveness of AC teachers in the area of content knowledge? Tell me about your experiences.
3. How do you feel about the effectiveness of AC teachers in the area of classroom management? Tell me about your experiences.
4. How do you feel about the effectiveness of AC teachers in the area of instructional planning? Tell me about your experiences.
5. How do you feel about the effectiveness of AC teachers in the area of human relation skills? Tell me about your experiences.

6. How do you feel about the effectiveness of AC teachers in the area of professionalism?

Tell me about your experiences.

7. What gaps, if any, in the area of effectiveness do you see in teachers from alternative routes?
8. What strengths, if any, in the area of effectiveness do you see in teachers from alternative routes?
9. What area(s) do you believe AC teachers need support in?
10. Optional: How likely are you to hire AC teachers?

Prior to beginning, the semistructured interview with each participant, the purpose of the study was reviewed as well as how confidentiality in the participation and responses would be secured. The length of the interview was also discussed. Moreover, I stated that I would be recording the interview, transcribing their responses, and discussed how each transcription was going to be stored safely to ensure confidentiality and safekeeping. After reviewing this process and sharing their participant rights, participants were told they could opt out of the study at any time if they felt it was necessary.

Qualitative Data Collection Procedures

After consent was received, each participant received a link to a prequestionnaire via Google Forms that gathered personal, demographic, and campus information. The prequestionnaire survey gathered basic information on the participant and their experience with AC teachers, which helped to guide the conversation and allow for more in-depth semistructured interviews. I also used the prequestionnaire to help gather basic campus information to allow for triangulation of the study. Triangulation is a commonly used strategy for using multiple methods in a qualitative study (Greene, 2007; Greene et al., 1989; Hesse-Biber & Leavy, 2011; Leavy,

2017). Bloomberg and Volpe (2019) emphasized that triangulation is critically important when attempting to gain an in-depth understanding of the study's phenomenon. I used the prequestionnaire, one-on-one interviews, and member checks to increase the trustworthiness of the study, as recommended by Shenton (2004).

Semistructured, one-on-one, in-person or virtual interviews were used as the data collection method for this study. Qualitative interviewing is based on a conversation with participants (Kvale, 1996), and has a large emphasis on researchers asking questions and listening, and respondents answering (Rubin & Rubin, 1995). Using the aforementioned interview guide, and the responses from the prequestionnaire, semistructured interviews were used to facilitate a focused, yet fluid investigation of the research topic (Bloomberg & Volpe, 2019). Predetermined interview questions were used with each participant, but the data collection instrument also allowed for an emergent research design. This means that I started and guided the conversation with follow up questions, but I also remained flexible and open to the variations of meanings that surfaced during the interview process (Warren, 2001). To lead participants to tell their own stories, the interview guide questions were open-ended (Kvale, 1996).

Utilizing semistructured interviews as the qualitative data collection method helped to capture the understanding of the perceptions of AC teacher effectiveness through the lens of a school administrator. The in-depth interviews allowed me as the researcher to capitalize on the experiences of the participants and derive interpretations from their experiences (Warren, 2001). This is important because interviews within a case study are most valuable when the interviewees are key persons in the organizations, not just the average member of such groups (Yin, 2009). Therefore, I conducted one-on-one, in-depth interviews with each school administrator that was selected.

Data Analysis Procedures

Thematic analysis was employed to look for frequent themes in the interview transcripts, as recommended by Mills et al. (2010) and Smith and Davies (2015). Thematic coding is frequently used in case study research to synthesize findings (Mills et al., 2010). Therefore, groups of codes were put together to make a theme and then I considered the relationship among the categories (Given, 2008). During this portion of the data analysis process, the ultimate goal was to discover overarching patterns (Mills et al., 2010) to explain phenomena, indicate areas of necessary improvement, and provide an in-depth picture of the experiences of the participants (Allen, 2017).

The Framework Method

The framework method (Gale et al., 2013) was used to obtain a holistic and descriptive overview of the entire data set. The framework method uses a systematic way of categorizing and organizing data, and although it is used in many qualitative research studies, it is most frequently used for thematic analysis when the researcher is using semistructured interviews (Gale et al., 2013). The framework method uses a matrix, or spreadsheet, where the researcher places a summary of the data into codes and cells (Gale et al., 2013). Therefore, I used a matrix to provide a structure and systematic way to help reduce the data so that I could analyze it by participant, also known as the interviewee, and by code, also known as a label that was assigned to a portion of the raw data from the transcriptions of the semistructured interviews (Gale et al., 2013).

The framework method was chosen because it provides a systematic method for managing and arranging data, and it allowed me to compare and contrast the identified themes across all of the participants' transcripts (Gale et al., 2013). The framework method has seven

stages for analysis that I followed: (a) transcription of all semistructured interviews, (b) familiarization with the interview, (c) coding, where all data were classified, (d) development of an analytical framework, where codes were grouped together into categories, (e) applying the analytical framework, where categories and codes were indexed, (f) charting the data into the framework method matrix, and (g) interpreting the data (Gale et al., 2013).

Ethical Considerations

As the researcher, it is important that I outline the ethical considerations for the study and that I take all necessary steps to address any potential issues that were present during the study (Bloomberg & Volpe, 2019). Therefore, in order to protect the participants in my study, appropriate procedures were put into place to maintain privacy. This included the use of pseudonyms, so that no participant or location was identified by name to ensure anonymity and confidentiality. Additionally, to protect the school district that was used for the study's population, a pseudonym was also given. Prior to any kind of data collection, each participant received an informed consent form that first explained the purpose of the study and their participant rights. Second, the form acknowledged the participants' agreement to participate in the study. Each participant was given a copy of their form for their records. Institutional Review Board (IRB) approval was submitted to Abilene Christian University and granted before any data were collected.

Prior to interviews, participants were given the same rights, opportunities, and protections. I also explained that all interviews were going to be conducted via video conference using the platform Google Meet. Moreover, I explained the interview transcripts would remain secure and would be stored separately in my personal Google Drive for confidentiality, and safekeeping (Poland, 2001). Following the interview and transcription process, I used the

concept of member checks (Shenton, 2004) and each participant received a copy of their interview transcription to ensure their words matched the intent of their response, increasing the credibility and trustworthiness of the study. As the qualitative researcher in this study, I ensured that an in-depth review of how each step of the research would be conducted was shared so that trustworthiness and credibility would be strengthened (Ryan et al., 2007).

Assumptions

In this study, I assumed that the data that was collected would be accurate, valid, and reliable. A strength of a qualitative study is the validity and the reliability of the study's findings are strengthened because they are based on the perspective of the participants (Creswell, 2013). Validity and reliability are also strengthened through the process of triangulation, which was used in this study to provide a rich and thick description of perceptions of the participants (Leavy, 2017) with a goal to increase the study's trustworthiness (Shenton, 2004). This study assumed that all participants would provide honest, forthcoming responses that reflected their own lived experiences and perceptions (Patton, 2015). Moreover, each participant was provided with a definition and explanation of what an AC teacher is in the state of Oklahoma and what the state-approved alternative paths are to obtaining an alternative teacher certification. This excluded teachers who were currently in the classroom under an emergency certification, but could have included those under a provisional certificate if they were currently participating in an AC program at the time of the study. It was assumed that all participants were able to decipher between these two pathways into the classroom.

Summary

Chapter 3 presented the qualitative case study research design and why it was suitable as the methodology for this study. Researchers who want to better understand the lived experiences

of their participants will opt for this type of methodology. I selected this methodological design so I can better understand the principal's experiences and perceptions of AC teachers and their effectiveness in one urban, low socioeconomic school district in Oklahoma. In this chapter, I also discussed the population and study sample, as well as the qualitative data collection procedures and instruments that were used. Before any sampling procedures took place, I explained that a qualifying email was sent to all CPS administrators and after the initial sample of participants were selected, a prequestionnaire was distributed to gain more insight on the participants, and an interview guide was used to help facilitate the semistructured interviews with each participant.

The data analysis procedures that were used were also described and included the process for thematic analysis that was employed to look for frequent themes in the interview transcripts. The framework method and its seven stages that were used were also explained in this chapter as the systematic way of categorizing and organizing the data as recommended by (Gale et al., 2013). Following this, the ethical considerations were outlined to ensure the protection of participants and that all necessary procedures were put in place to maintain the school district's and participants' privacy, anonymity, and confidentiality. I outlined how I receive IRB approval and informed consent from all participants. Finally, all assumptions, limitations, and delimitations were described and explained.

Chapter 4 provides an in-depth summary of the data collection process and the analysis of the data that was obtained from the semistructured interviews and results. The themes that emerged from the study will be presented and expounded upon.

Chapter 4: Results

The purpose of this qualitative case study was to generate knowledge of alternative pathway teachers' effectiveness in the classroom from an administrative point of view, specifically in urban, low socioeconomic, high-risk schools. While prior studies have compared TC and AC teachers, it was not clear how prepared AC teachers are to be effective in the classroom. Prior literature showed contrasting results on the effectiveness of teachers from alternate pathways. Therefore, this study was designed to determine the areas in which AC teachers need the most support. Data were collected to address the study's primary research question, "How do school administrators perceive the effectiveness of AC teachers?"

This chapter is a summary of the data collection processes, the analysis procedures that were conducted from the semistructured interviews, and the results of the study, including the themes that emerged. Themes are presented and discussed in detail, supported by statements from the participants.

Summary of the Data Collection Process

This study used a single qualitative case study design for data collection. After receiving IRB approval (Appendix A), purposeful sampling was used to select participants 10-15 school administrators who currently or had previously worked with AC teachers from school sites in CPS, a large, urban school district in Oklahoma. A qualifying email was sent to all 66 principals in CPS who were not employed at my current campus to communicate the purpose of the study, to identify individuals who met the basic criterion for the study, and to ask their interest in participation.

Prior to the implementation of the study, a field test was administered to ensure the prequestionnaire, interview guide, and technology that would be used were viable and sought to

answer the study's primary and secondary research questions. One of the field test participants was not eligible to take part in the study as they were employed at the same school site as me; one was eligible to participate in the study, but opted not to due to time restraints, and the last field test participant was a family member. The technology that was tested during the field test was the HelloSign platform where the consent form would be sent, the prequestionnaire using Google Forms, the interview platform using Google Meet, and the transcription add-on service, Google Meet transcription. The feedback given by all three field test participants on the study's instruments and technology platforms were used to improve the validity, reliability, and trustworthiness of the overall study.

The final sample consisted of 11 principals in elementary, middle, and high schools in CPS that agreed to participate in the study by first signing a consent form, then completing a prequestionnaire and a semistructured interview. The prequestionnaire consisted of five questions designed to gain basic insight into the participants' personal, demographic, and campus information. Semistructured interviews were conducted via Google Meet, a video conference platform. Each semistructured interview consisted of 10 open-ended questions designed to gain insight into the lived experiences of the administrators and their perceptions of AC teachers and their effectiveness. The data and thematic analysis process began by using the framework method (Gale et al., 2013), which consists of seven phases. The phases included (a) transcribing the semistructured interviews using Google Meet transcription, (b) utilizing member checks and sending each participant a copy of the transcription via email to check for validity while I familiarized myself with each interview, (c) coding based on keywords and phrases, (d) developing an analytical framework, where codes were grouped together into categories, (e) applying the analytical framework, where categories and codes were indexed, (f) charting the

data into the framework method matrix, and (g) interpreting the data (Gale et al., 2013). The initial matrix used Google Sheets, where I categorized each participant by name and by type of school (elementary, middle, and high). Following this, I began inserting their direct quotes, keywords, and phrases into the matrix by interview question to organize the data. Printed copies of this matrix were also used for readability purposes. The final framework matrix (Appendix E) was organized in a clearer fashion for the reader and contained three columns that include categories, themes, and evidence of paraphrases of direct quotes from the participants on their perceptions of and experiences with AC teachers and their effectiveness. After the framework matrix was created, all transcripts were reviewed again to ensure correct interpretation.

Presentation of Findings

The data were collected from 11 participants who were current principals in CPS, the largest school district in Oklahoma at the time of this study, serving 66 schools and 45,000 students. All participants were assigned a pseudonym consisting of a letter for their school type (i.e., E for elementary, M for middle school, and H for high school) followed by a number. The first part of the presentation of findings includes an overview of the participants' profiles, the second part includes the findings from the prequestionnaire, and the third part includes the interview findings.

Participant Profiles and Prequestionnaire Findings

All 11 participants included in this study were principals for a minimum of 2 years, worked in CPS, and previously worked with or currently worked with AC teachers at the time of the study as these were the study's basic criteria. Table 1 is an overview of the participant profiles.

Table 1*Participant Profiles*

Pseudonym	School type	# of Years as a Principal
ES1	Elementary	7
ES2	Elementary	2
ES3	Elementary	17
ES4	Elementary	12
ES5	Elementary	2
ES6	Elementary	10
ES7	Elementary/Early Childhood	2
MS1	Middle	6
MS2	Middle	12
HS1	High	5
HS2	High	7

Interview Findings

All 11 participants who submitted a prequestionnaire also participated in a semistructured interview using the platform Google Meet. The interviews were scheduled after consent forms were signed and while participants were filling out their prequestionnaire using the platform Google Forms. The interviews took place in December of 2021, and each one lasted between 20 and 45 minutes each.

During the interviews, I used an interview protocol (Appendix D). Interview Question 1 confirmed information that the participant gave in the prequestionnaire about the grade levels

and/or content areas AC teachers were currently placed in at their school or the grade and/or content areas they previously taught. Interview Questions 2-6 were based on Nusbaum's (2002) Teacher Effectiveness Survey (TES), in order to generate knowledge of AC teachers' effectiveness from an administrative point of view. These five questions aligned to the five teaching domains in regards to teacher effectiveness: (a) content knowledge, (b) classroom management, (c) instructional planning, (d) human relation skills, and (e) professionalism. Interview Question 7 was designed to determine what gaps, if any, in effectiveness the participants see, while Interview Question 8 was designed to determine what strengths, if any, in effectiveness the participants see in teachers from alternative routes. Interview Question 9 asked the participants what area(s) they believed AC teachers needed support in, and Interview Question 10 asked the participants how likely they were to hire an AC teacher. The results in this section are based on the responses from the participants from the 10 interview questions.

Content Knowledge. Interview Question 2, "How do you feel about the effectiveness of AC teachers in the area of content knowledge? Tell me about your experiences," was designed to gain insight into the participants' perceptions of and experiences with AC teachers in the area of content knowledge. Of all the areas of teacher effectiveness, responses from participants regarding content knowledge included the most mixed, and contrasting answers. There were four categories into which the participants' responses fell. The first, and most prominent category (stated by four of the 11 participants), was that AC teacher effectiveness with content knowledge varied with the individual person. Many of these participants noted that personality and mindset are the strongest factors that contribute to an AC teacher's effectiveness with content knowledge.

ES1 stated that content knowledge varied amongst the three AC teachers she had, but it "really depended heavily on their kind of mindset, their growth mindset. I would say that,

coming in, they would have almost no content knowledge, but with the right mindset, some of them really improved over time.” ES5 had similar perceptions and experiences, stating “it depends on the person to be honest; it is really based off that individual, and their self-interest and personality.” She further stated that AC teachers who have come from other careers have been so invested in becoming a teacher that they do their own research to learn their content area, while others do not show that same effort. ES3 added a similar sentiment, that “most of what makes you effective is your personality, especially with content” and that some AC teachers have other experiences that contribute positively to their effectiveness with content knowledge, while others might not. Finally, MS2 also agreed that content knowledge effectiveness varies. She stated:

Content knowledge is an area of concern for me because the way our state sets it up is you have to have related experience to your content area to be able to even be qualified for AC. But it appears they have loosely applied what that 2 years of experience really means.

However, MS2 further explained that “it has been a case by case basis at my campus, and it just depends on the person” and that although content area is a concern for her in general, regardless of certification, she has had experience with teachers in her middle school with previous careers in the content area they are currently teaching. For example, MS2 had a teacher who was a practicing scientist and had worked in the field of geology for numerous years before coming to the classroom. MS2 stated:

I have a high level of confidence in her content area knowledge, but another applicant for the same position who had some science background and was able to take an alternative route could not hold a candle in comparison to her content knowledge.

The second category that emerged was AC teachers were knowledgeable in the area of content knowledge. ES4 stated that of the two current AC teachers at her school, “they are actually very knowledgeable about their content area, and those with prior experiences...they really studied, know, and understand it.” ES1 shared a similar belief. She stated, “My gold star was my fourth grade AC teacher. She was a journalist before she became a teacher.”

HS2 had similar experiences with his three AC teachers, and other previous AC teachers he worked with. He stated:

The AC teachers I have worked with have an expert level, or at least proficient, level knowledge of their content, and with this, they are able to make connections between the curriculum and real-life experiences from what they knew in another career and bring that to their classroom.

In a similar response, the other high school participant, HS1, also discussed that in the area of content knowledge, his AC teachers were strong, just like his TC teachers. He stated, “Most of the AC teachers I have hired, when it comes to content knowledge, they have it.” He provided an example of one of his AC science teachers who came to his school as a second career. He shared, “He has great background knowledge of science, and he could stand with the best of them I believe.”

The third category that emerged from the interview responses was the opposite, and participants believed AC teachers’ content knowledge was inadequate. In fact, one of the participants, ES6, described that AC teachers’ and their content knowledge are vastly inadequate, and they do not come to the classroom ready. She compared a surgeon and a teacher. She stated, “You cannot just learn content knowledge. I couldn’t learn to do a surgery while I was doing the surgery. AC teachers need adequate preparation or student teaching before coming to the

classroom.” The other participant, ES7, had similar beliefs but it varied slightly by grade level. The AC teachers she had previously worked with in third through sixth grades, lacked significantly in content knowledge, while she thought previous and current AC early childhood teachers did slightly better in this area. She emphasized that she believed some AC teachers know the concept they are teaching, but lack the ability to teach it and help students understand it. However, she clearly stated, “I feel like children suffer in this area with an AC teacher because they don’t have the knowledge, training, and experience to do the job.”

The fourth and final category in content knowledge was that AC teacher effectiveness in the area of content knowledge is similar to those who are TC, and that all teachers regardless of certification, need continuous support in this area. ES2 emphasized this by explaining that he believed all AC teachers in his school needed the same level of support with content knowledge as his TC teachers. He stated, “I do not see them as different; they’re kind of in the same category as everyone else with content knowledge.” He then went on to state that scripted curriculum and coaching helps his AC teachers in this area. MS1 had similar experiences. Of the 17 AC teachers at her middle school, none of them have come to her with strong content knowledge, but that is similar to her TC teachers. She further stated, “Even as a previous elementary principal, my experience was the same, but it has just been more apparent and evident for me with my current staff because middle school teachers are more content focused.” MS1 continued to explain that all her teachers need support in this area, and their professional development is mainly focused on content knowledge development.

Classroom Management. Interview Question 3, “How do you feel about the effectiveness of AC teachers in the area of classroom management? Tell me about your experiences,” was designed to gain insight into the participants’ perceptions of and experiences

with AC teachers in the area of classroom management. Most of the responses from participants to this prompt were that they had mixed experiences, with the majority of their AC teachers struggling initially with classroom management, or in different ways. Similar to the domain of content knowledge, among the responses, many of the participants reported personality, mindset, temperament, and even an individual's natural ability as factors contributing to an AC teacher's effectiveness with classroom management. Others noted that all new teachers, whether they are TC or AC, struggle with classroom management. A few participants stated that those with previous experience with children in other capacities showed stronger classroom management ability.

Seven participants (ES1, ES2, ES3, ES5, MS1, MS2, and HS2) stated that although their experiences were diverse, all of their AC teachers struggled initially and in different ways with classroom management. For example, ES2, ES3, and MS1 stated that classroom management is something that new teachers need to work on, regardless of their certification. HS2 reported mixed but mostly below average experiences with AC teachers and classroom management and that support needs to be provided. However, he mentioned previous experience with their content does increase effectiveness. He stated:

For example, my visual art AC teachers have such a respect level that when they engage with students, they're able to make connections because of the authenticity of their work and what they're asking students to be able to do that, sometimes, I see a carryover in the overall management, which everything is based in as, you know, respect between the teacher and the student.

MS1 also agreed, stating, "It takes a couple of years to build that confidence and efficacy as a teacher and go into the classroom and do it well." ES2 and ES3 shared similar perceptions, such

as the idea that in classroom management, you “learn as you go” no matter what pathway one takes to enter into the classroom, and it “takes anyone a couple of years to get good at this no matter their certification.”

ES2, ES4, ES6, and ES7 brought a different perspective, discussing AC teachers with previous experience in ACPs or working with children prior to entering the classroom. Although ES4 and ES6 stated most AC teachers needed improvement in the area of classroom management; both principals have worked with AC teachers from the ACP, TFA program. Both shared that, although their classroom management experiences have been mixed, TFA teachers excelled in classroom management. ES4 stated, about one of her AC teachers training with TFA, “The training they received in addition to anything the district provided was very useful. They did an excellent job.” She further explained that two of her AC teachers, “are actually some of my team leads, and they are kind of a step ahead of all the other AC teachers I have.” ES6 shared she thought some people are just natural with classroom management, and an individual either has the with-it-ness and personality or one does not. For example, she stated, “I’ve got seasoned teachers with master’s degrees in education that are not always kind and patient with children,” and then, she explained teachers from the ACP, TFA, did immensely better in this area of effectiveness. ES2 also discussed the previous experience of his AC teachers that helped with classroom management. Talking about one of his AC teachers, he stated, “Even though she is an alternative cert, she grew up in an environment where she's very familiar with how to set up the procedures for a classroom and how to make that work.” The teacher she described is a current Pre-K teacher, but previously worked at her mother’s daycare. ES2 also discussed an AC teacher that worked as a teacher in Costa Rica prior to coming to his school. He shared that her prior experience helped positively impact her ability to manage a classroom. HS1 also had mixed

experiences, but felt as though he actually sees more issues with TC teachers and classroom management based on his unique alternative school setting. He also commended the TFA teachers he had worked with in the past and attributed their success in this area to their training and work ethic. HS1 shared:

AC teachers chose this profession, and they know what's out there as opposed to coming, straight out of, say, college going straight into teaching and really not having any type of work environment outside of education. I have teachers that are ready to retire that have never been in the workforce...never been out of a school environment. So, the only work experience they have is school. I think there's some advantages to that just as much as there is advantages to the second or third career people, but for some reason, my AC teachers do better in this area in my setting.

This shows that some participants believed AC teachers, depending on their previous experience, can be effective in classroom management.

Instructional Planning. Interview Question 4, “How do you feel about the effectiveness of AC teachers in the area of instructional planning? Tell me about your experiences,” was designed to gain insight into the participants’ perceptions of and experiences with AC teachers in the area of instructional planning. As with some previous categories aforementioned above, personality and mindset were factors that were mentioned in some interviews in relation to instructional planning. However, most of the responses from participants to this prompt related to this being one of the weaker areas of effectiveness. Like content knowledge and classroom management, a few participants shared that all teachers struggle in this area and need support regardless of certification. Both middle school participants, MS1 and MS2, shared that all of their teachers need work on instructional planning. MS1 stated, “I have a lot of teachers, AC and

not, who know the basics of lesson planning, but as far as the delivery of the lesson, that seems to be where the disconnect is.” MS2 shared similar perceptions, stating:

I think we’re all struggling with this right now, whether you are traditionally or alternatively certified. Most AC candidates did not set out to be teachers. I think AC teachers come in, and they probably have one expectation, and most of them I’ve seen are completely overwhelmed with the level of planning and complexity that is required just because they haven’t been exposed to it yet.

One of the elementary participants, ES2, also shared that AC teachers need more support in this area, but he believed all teachers on his campus need to work together to grow in instructional planning. He said, “We have all had to rethink the way we approach planning. So, it is definitely a learning process for all of us, not just those who are alternative. It’s about wanting to learn and grow.”

The majority of participants stated AC teachers are extremely weak in the area of instructional planning. About half of the elementary principals believed their AC teachers came to them with large gaps in effectiveness in the area of instructional planning. Both high school principals in the study believed this was the more significant deficiency of their AC teachers. HS1 commented that because AC teachers in the area of instructional planning did not get adequate training or courses on pedagogy, they are left to “learn on the job.” HS2 explained that instructional planning is:

A much more significant deficiency. AC teachers have to quickly learn how to lesson plan, unit plan, wrestle with scope and sequence, and any of the other number of things we ask them to do. We’ll see a much stronger lesson planning strategy from TC teachers.

However, two of the elementary principals had more positive perceptions of AC teachers and their effectiveness with instructional planning. According to ES4, in regards to instructional planning, she stated, “On a scale of one to five, I would say they are probably a four.” She further supported this statement by saying a few AC teachers she has worked with in the past have struggled in this area due to simply lack of experience, but the TFA teachers she has had have been much more successful. She stated:

My TFA teacher, she is phenomenal with instructional planning. In fact, we video her and send her to other teachers because she has an amazing understanding of what we’re doing and how to create and implement a lesson cycle and look at data. I am attributing a lot of that to the extra training she had and her drive.

ES6 further supported these statements by stating, “instructional planning is probably the easiest area” for AC teachers. She explained that we give them the template, much of the curriculum is scripted, and with the right preparation before teaching, an individual can be successful. ES6 also mentioned her AC teachers who are current or previous TFA teachers have done really well with instructional planning.

Human Relation Skills. Interview Question 5, “How do you feel about the effectiveness of AC teachers in the area of human relation skills? Tell me about your experiences,” was designed to gain insight into the participants’ perceptions of and experiences with AC teachers in the area of human relation skills. All 11 participants shared similar perceptions of their experiences with AC teachers and their effectiveness with human relation skills. Unanimously, all participants believed AC teachers have human relation skills, but many commented on the fact that an individual’s personality is what will determine how successful they are in this area of teaching.

ES3 stated, “I think ACs are all fairly professional. But it makes me wonder if so much of it is just your personality and not that you are AC.” Likewise, ES4 commented, “I feel like they are effective. I don’t know if this is a trend just because they are AC or just their personality.” ES6 shared that it all comes down to personality, with-it-ness, and those traits either come naturally, or they do not. ES2 went on to state:

It has a lot to do with your personality. I don’t know if they are any different from people who are TC. If you have a personality that is agreeable, and you can cooperate with others...you’re gonna be fine. If you don’t, no matter what pathway you take, you’re going to struggle.

All of the secondary participants (middle and high school) shared similar perceptions of human relation skills and personality. MS2 shared:

We can teach you a lot of things but I can’t always teach you personal and interpersonal personality skills. My two AC teachers, their personalities and their temperaments are definitely an asset that compensates for their instructional deficits at times.

HS1 commented, “I think people have people skills regardless of what credentials they hold. You either know how to get along with people or you don’t. I don’t think their certification makes them people-people, but their personality does.” HS1 continued:

I know we don't get that type of training (human relations) in teacher prep courses, you get some classroom management training in teacher prep courses. But I think that these are skills that you either have or you don't, and if you don't have them, you're not going to work out in my building, and you won't stay there long.

Other participants mentioned previous experience in other careers as another concept that helped increase effectiveness with human relation skills, while others without previous

experience may need to improve in this area. HS2 stated, “Their prior careers and their prior authentic experiences in a real world context created a strong ability to make quality relationships and interactions with people.” ES1 shared about AC teachers who worked in a business job prior to coming to her school. She stated, “It seemed very easy, their communication.” She further stated that she had a first grade AC teacher who worked in insurance, and one in upper elementary that worked as a journalist. They had experience working with adults that helped in her school setting. However, ES1 did mention that all three really were unsure how to initially approach children, and they had to work on that.

Professionalism. Interview Question 6, “How do you feel about the effectiveness of AC teachers in the area of professionalism? Tell me about your experiences,” was designed to gain insight into the participants’ perceptions of and experiences with AC teachers in the area of professionalism. Most participant responses fell within the same category with their perceptions of AC teachers and their effectiveness with professionalism. Ten out of the 11 participants believed their AC teachers had adequate professionalism. Personality and previous experience were common factors in many of the participants’ responses to this prompt. ES1 stated, “It always goes back to personality.” Two out of the three current AC teachers at her site had strong professionalism, while the other struggled a bit in all areas, including professionalism. ES5 also discussed personality, stating, “It is the same as TC; it really is just based on their personality more than anything, you know, if they are type A, type B, or something else.” ES3 agreed and commented, “I think all of my AC teachers are fairly professional. But, I wonder if so much of it is just your personality and not that you are alternatively certified?” ES2 felt as though, in his experience with AC teachers, he has never had any issues or concerns regarding professional behavior. MS2 also discussed personality, but also mentioned she sees no difference between AC

teachers and their TC peers in regards to professionalism. In fact, she stated, “I can say that with confidence; unless they’ve told somebody in the building, their colleagues don’t know they’re AC.”

Three of the four secondary participants (middle and high school) made remarks about how the AC teachers they had worked with actually brought a higher sense of professionalism than their TC counterparts. MS1 stated, “I think I probably see it more with alternatively certified teachers” and went on to explain her rationale. In regards to AC teachers, MS1 stated:

They often have no idea what they are doing, and so they’re more like sponges and don’t want to make a mistake and want to adhere to their professional responsibilities versus veteran teachers. A lot of my veteran teachers are really comfortable where they are, which can come out negatively at times in their professionalism.

HS1 shared a similar sentiment and stated that AC teachers “tend to have a little bit more respect for the profession and more professionalism coming in. They are respecting all professional protocols, while some of the long-term teachers tend to treat things with a less degree of professionalism.” MS2 also felt as though her AC teachers had strong professionalism, especially in the areas of timeliness, punctuality, and respecting school expectations.

Gaps. Interview Question 7 was designed to gain insight into the participants’ perceptions of specific gaps of AC teachers. The seventh question was, “What gaps, if any, in effectiveness do you see in teachers from alternative routes?” Responses from participants regarding gaps were varied. There were three categories into which the participants’ responses fell. The first was a gap in classroom management. This was also the category that at least half of the participants mentioned in their interviews as a significant gap for their AC teachers. ES6 stated, “A big need is classroom management and organizational skills.” ES4 shared almost

exactly the same perception. ES4 stated that her “AC teachers have a gap in their ability to manage a classroom and basic organizational skills” but then went on to comment that she sees this gap in any new teacher, not just those who are AC. She stated, “It is just from lack of experience.” ES1, ES2, ES3, and ES7 all mentioned classroom management as the specific gap in their AC teachers.

The second category was a lack of instructional strategies or tools on how to teach and understanding how students learn. HS1 stated, “Gaps I see are not having the toolbox or the right methods that other teachers have to find the way to reach students.” He elaborated, “In my setting, I think the AC teachers are looking for the structure to be there for them if that makes sense. But a lot of it’s just going to be trial and error.” ES5 perceived her AC teachers as having a gap in “just knowing or having strategies and how to present standards to students. They just don’t have any teaching strategies yet because they don’t have the experience.” ES1 also mentioned the lack of instructional strategies, specifically to be able to meet the needs of her high level of English language learners. MS2 shared similar perceptions, but was not sure if she would call it a gap or just a characteristic difference but, “AC teachers have a level of underpreparedness for the complexity that goes into teaching.” However, then she shared:

But we even have regular certified teachers in year five, six, and seven, and they’re still struggling with standards-based instruction and best instructional strategies; it’s all the more of a struggle for teachers who are not TC. However, this is exactly what I would expect to have a gap in.

The third category was understanding child development and how students learn. In regards to gaps that he sees, HS2 stated, “It just goes back to pedagogy. It’s a very intimate understanding of how students learn...and this can be difficult for new and AC teachers without any

experience.” ES3 spoke on the importance of knowing the development level of children. She stated, “It would really help if AC teachers had some childhood psychology classes. With that, I feel like many other areas of teaching would improve because that background knowledge is important. But, I believe people can learn this.”

Strengths. Interview Question 8, “What strengths, if any, in effectiveness do you see in teachers from alternative routes?” was designed to gain insight into the participants’ perceptions of specific strengths of AC teachers. Responses from participants regarding strengths were varied as well. There were two distinct categories into which the participants’ responses fell; however, some participants overlapped into more than one category, pointing out the multiple strengths of their AC teachers. The first strength discussed was their mindset. Specifically, AC teachers’ willingness to learn and desire to improve. ES4, ES5, and ES6 all expressed this was a common experience and perception they had of their AC teachers both past and present. ES4 stated that her AC teachers are “extremely willing to learn.” She further stated, “They take feedback exceptionally well. They don’t always know how to implement it, but they are more receptive than other teachers. They listen. And they’re leaders. Several of them are very strong leaders in my building.” ES5 shared a strength of her AC teachers and stated, “They have a willingness to be coached and a desire to learn. Many of mine take it upon themselves to research and self-teach.” ES6 shared a similar sentiment that all her AC teachers have had a desire to be super successful. HS1 also discussed his AC teachers and their strong work ethic and desire to improve.

The second category was that AC teachers bring previous experience and a new and fresh perspective. ES1 explained her AC teachers brought “a new outlook on life, and sometimes, they bring a little bit more of a fresh perspective, and even a sense of joy to the building.” MS1 shared

her AC teachers had a “blank slate and new perspective.” She further explained that her AC teachers have “a willingness to work towards our school vision” and that with “TC or veteran teachers, I have to help them unlearn a lot of ineffective strategies versus AC teachers. They just kind of jump in with an open mind, and it’s easier for them.” HS2 built on this by sharing how his AC teachers bring a real-world perspective to their students. He also shared that his AC teachers seem to be more prepared to create unique experiences for students and recognize how to meet the needs of students in their distinctive programs they offer than TC teachers. HS1 also shared his AC teachers bring a “sense of excitement and new ideas.” ES2 and ES3 also agreed. ES2 felt as though his AC teachers brought the diversity his team needs and that AC teachers have unique backgrounds that can be positive in the classroom. He also mentioned, “Some of them might be a little bit older and more experienced in life, and so, sometimes, that can be a strength: their level of maturity.” ES3 believed that depending on their previous experience and the subject matter they teach, “they can bring many strengths that make them successful.”

The third category that was identified as a strength was professionalism. For example, ES4 stated, “None of them have an issue with school hierarchy...they don’t try to overstep. Several of them are strong leaders in my building, but they don’t overstep their boundaries.” ES6 stated, “They show up, they’re ready, and they are here every day. They are never absent. That is a big deal in our schools.” MS2 built on this same idea and shared:

Most of the time AC teachers have had jobs previously, and they would look at what other teachers do, and they would say that it would never fly in a real job. You can’t come to work 17 times late and still keep your job in the other world. So, they bring a sense of realness to the position of what happens when you’re not surrounded by certain protections that teachers have.

Many participants continuously reported that AC teachers' professionalism was above average and this was something they valued.

Areas of Support. Interview Question 9, "What areas do you believe AC teachers need support in?" was designed to gain insight into the participants' perceptions of area(s) in which AC teachers need support in. There were also three distinct categories into which the participants' responses fell. First, classroom management was identified as an area in which AC teachers need support. ES6 shared that her AC teachers needed the most support in the area of classroom management. ES4 echoed this by stating, "Classroom management at first is probably the best thing we can do for them. Helping them get those systems in place that are going to make their classrooms run really well." ES2, ES3, and MS1 also shared similar perceptions; however, all three participants mentioned that the need for classroom management support is not isolated to just AC teachers. For example, ES2 stated, "I think classroom management is an area, but I think a lot of people need help with that. So, that is not exclusive to just alt certs." ES3 had comparable responses. She stated, in regards to AC teachers, "At the beginning, how to set up a classroom is necessary because they're really clueless about that. Alternative people and brand new teachers that are TC have the same needs." MS1 shared, "classroom management is a need, but that's all new teachers in general."

The second category that emerged was instructional strategies. Many participants expressed their AC teachers needed support in areas of how an instructional cycle works: how to assess, look at data, and plan for instruction. HS2 explained this by stating AC teachers need support in "instructional planning and that continuum that we know of, how to identify learning targets and standards, unpack those standards, assess students, and then developing instructional cycles. That in and of itself seems to be the weak point for them." MS2 shared, "AC teachers

need support on what does an assessment do and how you use it to plan for meeting different student's needs." ES5 and ES6 both mentioned the need for support in looking at data, standards-based instruction, and developing strategies to teach. ES5 specifically mentioned support with instructional strategies for small group instruction.

The third category that emerged did not determine a specific area in which AC teachers need support, but rather, what participants believed teachers needed in order to feel supported—ongoing support through professional development and on-the-job training. ES1 emphasized the importance of offering targeted and ongoing professional development (PD) opportunities for her AC teachers. ES4 also stated, "Providing PD as they're ready for it without it being overwhelming for them is really important." HS1 also believed his AC teachers needed ongoing professional development and workshops. ES1, ES2, ES4, ES6, and ES7 also all mentioned how imperative it is to have a strong mentor program and for all AC teachers to be assigned to a mentor that can support them. ES7 stated, "AC teachers need a mentor teacher or we're going to continue losing them because we are throwing them into a classroom and we're not giving them support."

Other participants discussed AC teachers who had received immense support from their ACP. ES4 mentioned that her AC teachers that were a part of the ACP TFA had this ongoing opportunity, and she believed this is what made them successful. ES7 shared a similar response. She stated:

They need on the job training. Like TFA for those that are AC teachers that I know are phenomenal, but they get intensive training before and they have on the job training the whole time they are teaching. They feel fully supported and prepared.

ES6 also commented:

My TFA teachers were really successful because of their training and support. I then also place them on teams with my strongest teachers and a mentor so they have people who can lead them in the direction they need to go.

Similar to TFA's training model, a few participants mentioned the need for AC teachers to have a boot camp or ongoing ability to learn with other AC teachers.

Hiring. Interview Question 10, "How likely are you to hire AC teachers?" was designed to gain insight into how likely the participants would be to hire an AC teacher. Nine out of the 11 participants expressed that it was highly likely they would hire an AC teacher. The other two mentioned that although they would consider hiring an AC teacher, their goal was to have a highly qualified TC teacher in all of their classrooms. There were two categories that surfaced from the interviews; however, some participants overlapped into more than one category, pointing out multiple factors they look for when hiring AC teachers. The first was growth mindset and personality. Many participants shared that this was one of their largest determining factors when hiring. ES2 stated, "I think if they have the right mindset...a growth mindset...then I would hire them." He also mentioned looking for candidates that have had some experience with kids. ES1 shared, "if their personalities stick out and you can tell they want to grow" then she would hire the candidate. HS1 and MS2 also look at mindset. HS1 commented:

I'm highly likely to hire a good teacher, and good teacher is someone who likes teaching, likes our children, and has the personality and mindset to do it. The certification comes secondary. So, if an AC teacher was to walk into my office and interview for a job, I'm just as likely to give them the job as I am a TC teacher.

MS1 also stated, “I am more probably likely to hire an AC teacher than a TC teacher. I’ve seen different motivation, different energy, and overall mindset from AC teachers in their risk-taking and willingness to jump in and try new things.”

Other participants mentioned a teacher’s mindset and their ability to receive feedback. For example, ES5 shared, “I focus on coaching; are you coachable? Do you have the mindset to receive feedback and new ideas?” ES6 commented, “If they are open to growing and being coached then it’s extremely likely I will hire them.” ES6 also wanted to ensure they are willing to work with a mentor. ES4 emphasized the importance of AC teachers being willing to learn and be coached, stating:

If they are exhibiting those traits that I’m looking for such as, you know, the passion and the energy, enthusiasm, and the willingness to learn and be coached, they do not need to be TC for me to hire them.

The final category that emerged was that participants would be likely to hire an AC teacher if they were the best fit for the position. For some of the participants, this even meant regardless of the certification. For example, ES1 shared that she likes to look at their degree and if it could be transitioned easily into a content area she needed at the time. ES3 stated, “I am not opposed to considering a teacher that is AC. I think you just go with who you think will be the best fit in your school.” Although MS2 indicated a strong commitment to hiring highly qualified TC teachers for all positions because their school’s unique context, when interviewing AC teachers, she reported looking to see if they can “bring something to our students we otherwise wouldn’t be able to offer without them.” For example, she stated, “Having an actual scientist who has had science experience and a doctorate in geology who wants to teach in a STEM school? That is a ‘no-brainer’ for me.” HS1 shared similar sentiments, stating:

My school has such unique programming that the advantages of an AC teacher really play in our favor (for example, in our theater program, you want the curriculum to drive the day), but when you hire people and they have real-world authentic experiences in theater as a career field...that is a synergy that makes an excellent learning experience for students.

HS1 stated that he looks for those unique backgrounds and experiences in AC teachers and, if they are the right fit, he will hire them.

Emerging Themes

Six themes surfaced after reviewing the participants' basic information on the prequestionnaire, the responses from the interview questions, and utilizing the framework method (Gale et al., 2013) for thematic data analysis. All themes that emerged aligned with the study's primary research question and the five secondary research questions, which sought to determine how school administrators perceive the effectiveness of AC teachers.

The themes that emerged were:

1. Personality and innate ability
2. Mindset and coachability
3. Previous experience
4. All teachers have similar needs
5. Teamwork and mentorship
6. Classroom management and instructional planning

Theme 1: Personality and Innate Ability

The first theme that emerged from the participants' perceptions of and experiences with AC teachers was that personality and innate ability are factors that can contribute to an AC

teacher's effectiveness. The participants' perceptions of and experiences with AC teachers' personality and innate ability were discussed in nearly every aspect of the interviews. For example, many participants expressed that a teacher's personality characteristics were a factor that could positively or negatively contribute to the areas of teacher effectiveness that were examined in this study. For instance, many participants across all domains of teacher effectiveness, discussed how effective a teacher is often depends on the person themselves, the individual skills they possess, their natural ability, and whether or not a teacher has it in their makeup to be successful in the classroom.

Numerous participants stated they believed success in some areas of teaching did not depend on certification, but rather, who the person was in general. Words and phrases, such as, "personality," "individual," "self-interest," "natural ability," "innate ability," "with-it-ness," "temperament," "patience," "willingness," "interpersonal skills," "case by case basis," "depends on the person," and "in their makeup" were common amongst the participants responses. Though personality was a common theme, an AC teacher's personality could still positively or negatively impact their effectiveness. When it came to an AC teacher's personality and how it related to their effectiveness as a teacher, nine participants' perceptions of and experiences with AC teachers were mostly positive, while two participants believed personalities of two of their AC teachers contributed negatively to effectiveness. Some participants stated this impacted their ability to connect with students or colleagues, what was needed in order to navigate the complexities of teaching, or their personality itself hindered their ability to grow in the profession.

Five of the seven elementary participants believed personality characteristics often determined an AC teacher's ability to be effective as a teacher. Personality and innate ability

were mentioned across all five areas of teacher effectiveness examined in this study. For example, ES1 stated, “It really depends on the personality of the teacher if they are successful in certain areas” and ES4 shared the same perception. ES3, ES5, ES7, and HS1 mentioned specific personality traits like patience, willingness, openness, temperament, work ethic, self-interest, intrinsic motivation, and other terms as characteristics of AC teachers who have been successful, specifically in the areas of classroom management and content knowledge. HS1 also used these characteristics to describe AC teachers who were effective at building relationships and managing a classroom.

Within the theme of personality and innate ability, with-it-ness, or the ability and capacity to perceive the needs of your students and respond, was discussed. ES6 and ES7 believed with-it-ness, as a personality characteristic, helped increase their AC teacher’s ability to succeed in classroom management and content knowledge. ES6 commented, “I think it’s in your make up as to whether you’ve got the heart or the with-it-ness to work with kids.” ES6, also discussed that AC teachers need the personality traits of patience, willingness, and openness, in order to remain in the profession, because she has seen a higher turnover rate in education with AC teachers.

ES7 specifically mentioned this was a characteristic she saw only in her early childhood AC teachers. She said of those AC teachers that possessed with-it-ness, “they just had it and they didn’t have to think about how or ponder what to do in the moment.” For those AC teachers who did not excel in these areas of teacher effectiveness, ES7, ES6, and MS2 attributed it to their personal insecurities, lack of self-esteem, efficacy, and confidence. A few participants believed this is developed over time, but some AC teachers do not have it yet. ES7 shared, “In my opinion, if you're comfortable teaching a subject and confident in the classroom, you're going to

get it across to the children a lot easier.” MS2 confirmed this perception by stating that it takes teachers time in their role as a classroom teacher to develop the traits like confidence and self-efficacy to feel prepared and effective.

A few participants emphasized the importance of natural ability and an individual’s make up to describe an AC teacher’s personality or ability to succeed in certain areas of teacher effectiveness. A few participants believed, regardless of certification, some individuals just have the natural ability to be effective in some areas of teaching. ES3 confirmed this perception by stating, “Sometimes I think people are just a natural at teaching and I’ve had traditional and alternative people like that.” ES4 and ES6 specifically emphasized the importance of innate ability and how it impacts classroom management more than an AC teacher’s prior training. ES4 stated, “I don’t necessarily want to call them just naturals, but it seems that way with all of the AC teachers I have hired.” ES6 believed a combination between personality and innate ability is what makes a teacher effective in classroom management and content knowledge as well. She remarked, “Some people are just natural with it and have those instinctive unique skills and the personality that it takes” and “I think it is just in your makeup as to whether you have the patience to work with children and manage a classroom or not.” MS2 firmly believed that as an instructional leader, she can coach you to be effective in some areas of teaching. However, she believes one cannot always teach the personal and interpersonal personality skills an individual needs in order to be successful in the classroom. She mentioned, “Sometimes people just have it, and others just don’t, whether you are TC or AC.”

Personality and innate ability were discussed most often in the domains of human relation skills and professionalism. In fact, 10 of 11 participants mentioned one’s personality and natural ability impact these domains the most. ES3 confirmed this perception by stating, “Sometimes I

think people are just a natural at teaching and I've had traditional and alternative people like that." ES3 wondered if an AC teacher's effectiveness in human relations or professionalism has anything to do with the pathway they took to get to the classroom or if it was simply their personalities. Regardless, she remarked, "All my AC teachers have good human relation skills and professionalism. They all get along and collaborate with each other." ES2 stated if you have a personality that is likeable, and you are able to work with your colleagues in a synergistic way, you will be fine, regardless of your certification. ES1's experiences with her AC teachers were also positive in regards to human relations and professionalism. Of the AC teachers she has worked with, most were able to work together, and communicate well with their teams, but all initially struggled with how to communicate with children at first. However, she stated, "Two of my three AC teachers did this better than some of my TC teachers, because they had the personality and drive to improve."

Other participants discussed personality types that contributed to teacher effectiveness. ES5 had a positive experience with all AC teachers she has worked with, but she attributed their human relation skills to their personality type, allowing them to be successful amongst their teams. Of her AC teachers, MS2 shared that both of the AC teachers were "highly liked by their peers and they were highly responsive to students and staff and understood their instructional deficits." However, she attributed their effectiveness in professionalism and human relations to simply who they are as people and the nature of their personalities. According to ES7, she has never experienced poor human relation skills with her AC teachers, but some have lacked in professionalism. However, she believed it simply came down to who the people were and their personality traits. HS1 shared that he believed a certification doesn't make you a people-person,

but rather, you either have the personality type that will help you be successful with others, or you do not.

Instructional planning was the only domain of teacher effectiveness the theme of personality and innate ability was discussed the least. In fact, only two participants mentioned these terms. ES3 and ES5 both shared a belief that AC teachers need a lot of support in instructional planning, but wondered if their success had more to do with the teacher's personality, experience, or what they brought to the classroom. However, one common belief continued to emerge from the participants' perceptions: personality characteristics have the ability to make a teacher effective in some areas, regardless of certification.

Theme 2: Mindset and Coachability

The second theme that surfaced from the interviews was mindset and coachability, and how this theme contributes to effectiveness was discussed in numerous interviews. Many of the participants shared that an individual's mindset towards teaching and learning can impact their effectiveness in certain areas that were examined in this study. Several participants noted their belief that an individual's mindset, especially with AC teachers, can determine their ability to grow, improve, and be effective. In many of the domains of teacher effectiveness that were examined in this study, participants connected one's ability to be successful to their desire to improve, and in a few cases, persevere. Other participants believed a negative, or fixed mindset, would hinder one's effectiveness, regardless of certification. Eight of the 11 participants shared that with the right mindset, AC teachers could improve in their craft with effort and learning over time in some areas of teacher effectiveness. Words and phrases, such as, "growth mindset," "right mindset," "personal growth," "individual growth," "desire to grow," "wants to learn,"

“receptive to feedback,” and “willingness to be coached,” occurred repetitively amongst participants.

Classroom management and instructional planning were, again, identified as weaker areas of AC teachers; however, some participants thought with the right mindset, they could improve. ES1, ES4, and ES7 all discussed specific AC teachers that struggled in these areas at first, but those that wanted to improve and were willing to listen to feedback improved dramatically. ES1 stated:

If you’ve got someone that just has a natural growth mindset, that wants to learn and grow and be really, really good at what they’re doing, they usually persist and can grasp areas like management and instructional planning quicker than others.

ES1 continued by stating, “AC teachers who wanted to improve, improved. They put in the effort.” She then shared that she re-hired two out of three AC teachers because of this mentality and remarked, “Now, I wouldn’t know anything different 5 years later. They are both excellent teachers, but they had the mindset and desire to improve. So, they did.” ES1 also shared how her AC teachers really struggled with content knowledge at first, but with the right mindset, she saw some of them improve over time. She reiterated, “You have to be willing to persevere in our schools...people who work in our schools have to commit to continuous learning and professional growth if they want our kids to be successful.”

Some participants discussed their AC teachers’ desire to grow had an impact on their effectiveness. For example, ES2 shared a similar perception about instructional planning, by stating his AC teachers improved because they wanted to learn and grow. In regards to classroom management, ES7 shared that her AC early childhood teacher wants to get better and grow and since joining their campus, she has made major strides. MS1 and HS1 also agreed their AC

teachers' open mind and desire to improve aided in their ability to be effective in numerous areas of teacher effectiveness. Both participants stated that their AC teachers' mindsets were their biggest strengths.

In addition to mindset, coachability was another theme that emerged from the data analysis. For instance, ES5 stated she saw this with AC teachers and content knowledge, noting their willingness to be coached and take it upon themselves to research and ask questions on how to improve. Additionally, ES6 stated that her AC teachers' strength is having a desire to be successful, noting that they often ask for feedback. ES4 discussed that her AC teachers who have been through the ACP, TFA, are extremely responsive to her feedback and that, combined with drive and mindset, allows for them to improve. Furthermore, ES1 discussed two AC teachers and their responses to her coaching and feedback. The first AC teacher was eager to receive feedback, noting that she would always ask the administration to come to her class and wanted to meet regularly to discuss ways she could improve. In contrast, another AC teacher often received frequent feedback from the principal, but she never implemented any of it, and to her, it did not matter. ES1 discussed the vastly different perceptions of effectiveness between these two teachers, and because of this, one was still a teacher on her campus, while the other was not. She stated, "She had a fixed mindset, she didn't want to improve and it showed."

Many participants discussed mindset and coachability as two factors they look for, regardless of certification, when looking to hire potential teacher candidates. In fact, some participants mentioned certification comes second if they believe the candidate has these two characteristics. ES2 reiterated this by stating the importance of a growth mindset. She also stated, if they are "willing to persevere through tough days, I would absolutely hire them." ES6 shared this same perception. She stated, "If they agree that not every day is going to be a good day that

kids can be hard, and our schools can be really difficult because of our unique challenges, then we're all in." ES5 said, when she looked for hires, she focused on mindset and coachability. She stated, "I focus on coaching; are you coachable? Do you have the mindset to receive feedback and new ideas?"

Theme 3: Previous Experience

The third theme that surfaced was the impact of previous experience AC teachers acquired prior to entering the classroom. Every participant discussed, at some point in their interview, the AC teachers they had on their campus and their prior experience. With this, a commonly shared belief from the data analysis process emerged: AC teachers with various experiences prior to entering the teaching profession were often seen as more effective in some of the domains examined in this study. Words and phrases, such as, "prior careers," "another career," "other experiences," "prior experience," "prior preparation," "background knowledge," "level of experience," "real-life experiences," and "real world," were repeatedly discussed by participants.

Many of the participants discussed their AC teachers and their unique pathways to entering the classroom, as well as some who were second or third career teachers. Among the AC teachers that participants discussed, their prior career fields were (a) an artist, (b) visual artist, (c) journalist, (d) business person, (e) insurance person, (f) scientist, (g) geologist, (h) theater production manager, (i) speech language pathologist, and (j) sociologist. Other participants discussed the previous experiences related to working with students before entering the classroom their AC teachers had such as: (a) a daycare worker, (b) international teacher, (c) higher education professor, and (d) paraprofessional. Additionally, a few participants shared their AC teachers had prior experience going through a specific ACP, TFA.

Previous experience in careers that directly align with content areas was discussed amongst the participants. For example, MS2 talked about how her AC teachers' prior career fields brought a unique perspective and skillset to their school. She explained how having a practicing scientist who worked in the field of geology for numerous years before coming to the classroom helped increase the effectiveness of her content knowledge and classroom management. She further explained that the AC teacher's ability to engage her students in rigorous and interesting content helped increase her ability to manage her class and that she brought "something to our students we otherwise wouldn't be able to offer without them." HS2 also talked about his AC teachers who worked in theater production and another as a practicing artist, noting their high effectiveness in content knowledge and their perspective of the real world as a strength they brought to the classroom. HS2 stated:

My AC teachers have a perspective of the real world and when we would engage in discussions about how we get our kids to experience authentic real-world practices that are not in textbooks nor worksheets, I pulled the AC teachers out as an example.

HS2 further stated that he seeks out AC teachers for many of the programs that are offered at his school. He stated, "We have such unique programming that the advantages of an AC teacher really play in our favor." He also noted the synergy between an AC teacher who is a content expert with real-world authentic experiences combined with their students' high motivation to learn, makes an exceptional learning experience. Additionally, ES1 talked about an AC teacher who was a prior journalist and her strong content knowledge. She also stated, with small tweaks and improvements, her classroom management effectiveness strengthened as well. She stated, "She didn't run a classic, typical classroom. It was more like a press room, so students responded well." In contrast, ES1 also discussed another AC teacher at her campus who had no prior

experience in a related field or with students, and she had weak content knowledge, classroom management, and less than average human relation skills and professionalism.

However, two of ES1's other AC teachers that had experience in insurance and business had much higher levels of effectiveness in human relation skills and professionalism. In another example, ES3 shared about an AC teacher that was a trained artist who previously worked for an arts council and is now teaching elementary art classes. ES3 explained that this AC teacher's experience directly connects with what she does with students each day, noting that this increased her effectiveness with content expertise and instructional planning abilities. Conversely, ES3 shared that another AC teacher was sociology major, but struggled in many of the areas of teacher effectiveness. Though she did improve over time, it was not easy at first. However, ES3 explained that individuals are not capable of learning everything that one needs to in college before coming to the classroom. She stated, "Some AC teachers have other previous experience that helps them with the content, and that is great."

Other participants also noted how previous experience related to working with students impacted teacher effectiveness, and those without experience with children, generally needed more support. For example, ES2 discussed an AC teacher who previously worked for a daycare, so she was familiar with strategies for classroom management. He stated, "It was a smooth transition for her." He also talked about an AC teacher who taught previously in Costa Rica. He stated, "She had experience managing kids. So, she was able to kind of transfer that and she didn't struggle quite as much setting up her classroom procedures." Additionally, ES3 had an AC teacher who started as a paraprofessional which helped her be more effective in nearly every domain of teacher effectiveness. ES3 stated, "She had lots of experience in the classroom under the guidance of a really good teacher as a paraprofessional first, so it was like 4 or 5 years of

student teaching before she had her own classroom.” In another example, MS2 shared about an AC teacher who was a higher education adjunct professor before coming to middle school. She also experienced success in content knowledge, classroom management, human relation skills, and professionalism. Conversely, HS2 talked about how he, in many cases, had to provide more support to his AC teachers simply because they had never experienced working with adolescents before. However, he then stated, “There are some carved out instances where you'll see an AC person that has this life experience that positively impacts their classroom management and even the pedagogical aspect of teaching.”

Some participants talked about the connection between prior teacher preparation and training and the impact on teacher effectiveness. ES4, ES6, ES7, and HS1 shared their perceptions of and experiences with AC teachers who had been through the ACP, TFA. Of the TFA teachers these participants worked with, there was an overwhelmingly positive perception of their overall effectiveness.

ES4 and ES6 specifically emphasized how their TFA teachers excelled in the area of classroom management and instructional planning, and even surpassed some of their other AC and TC teachers in these areas of teacher effectiveness. ES4 stated, “All the teachers that had that extra training through TFA were strong. Really strong.” ES4 attributed this to the training TFA teachers receive prior to entering the classroom (through a six to eight week bootcamp) and the ongoing training they have in their 2 years as TFA core members and classroom teachers. ES4 further elaborated on the success of her TFA teachers, stating that one of them is a team lead, mentor teacher, and “a step ahead of all the other AC teachers I have.” Although ES6 also talked about how one’s natural ability and personality contribute to their effectiveness as well, she stated that her TFA teachers who have been through intensive training are more effective in

classroom management and instructional planning than many of her other AC and TC teachers, and those with advanced education degrees. HS1 also compared his AC teachers, some being TFA teachers, to his TC teachers in classroom management. He mentioned he often struggles more with teachers from the traditional track when it comes to building relationships with students. He attributed AC teachers' success with this to their unique experiences prior to making education their career. He stated, "Often times, AC teachers are more successful in my setting with the at-risk students we serve." Although ES7 believed AC teachers were mostly ineffective, she mentioned her AC teachers in the past who were TFA teachers "were phenomenal," and gave credit to the "intensive training before and the on-the-job training they receive the whole time they are teaching."

Many of the participants believed having previous experience was a strength an AC teacher can bring to not only the classroom, but to their school as a whole. For instance, MS2 shared that AC teachers exhibit a variety of skillsets based on their experiences in different places that one would not be able to have otherwise. ES3 explained that her AC teachers display strong content and subject area knowledge from their previous experience. ES2 also mentioned, "Having people from different backgrounds brings the diversity that your school really needs." According to HS2, his AC teachers have a perspective of the real world that makes them more effective in areas like content knowledge, human relation skills, and professionalism. MS2 further supported these statements about her AC teachers by noting they often model human relations skills and professionalism, like timeliness and punctuality, more than her TC teachers. ES4 shared this same perception. Finally, ES2 stated that some AC teachers who are older, carry with them a strength of wisdom and life experiences into the classroom that can positively impact students and the school as a whole.

Nearly every participant discussed their AC teachers' effectiveness in human relation skills and professionalism, and some attributed their real-world experiences and prior careers to this. Additionally, although many of the participants discussed that AC teachers were more effective in content knowledge due to their previous life experiences, the application of that knowledge into instructional planning is where they need improvement and support.

Theme 4: All Teachers Have Similar Needs

The fifth theme that surfaced was that all teachers have similar needs. In many interviews, the participants discussed that AC teachers and their TC counterparts had like needs. Though the goal of this study was to examine AC teachers in isolation, many participants discussed TC teachers as well. A shared belief emerged from the data analysis process: all teachers, regardless of their certification or number of years in the profession, have similar gaps and areas in which they need to receive support. Words and phrases, such as, "all need support," "extra support," "similar needs," "they're the same," "all working to grow," "all teachers," "no difference," "across the board," and "regardless of certification," were repeatedly discussed by participants. Other phrases that were common were, "learning on the job," "learn as you go," "learning by doing," "learning process," "experiential learning," and "acquire overtime." When talking about the comparison of AC and TC teachers, some participants specifically discussed first year teachers, new teachers, or novice teachers. However, most of the participants referenced all teachers, which includes new, novice, and veteran teachers from both AC and TC pathways. Regardless of these differences, most participants shared that their AC and TC teachers had nearly indistinguishable gaps and similar areas that needed improvement.

Several participants talked about how AC and TC teachers all struggle with certain areas of teacher effectiveness, and collectively, they are working to grow in these areas. Though it is

important to note that some participants discussed AC teachers are weaker with classroom management and instructional planning, these were also areas in which participants believed all teachers needed continuous work in. For example, ES2, ES5, MS1, and MS2 all shared experiences where their AC and TC teachers are working to grow in instructional planning. ES2 stated, “I think that’s an area that we’re all working to grow. Whether they are TC, AC, or emergency cert.” He also discussed how instructional planning has shifted in education over the last few decades; therefore, all schools and teachers have had to rethink the way they approach planning and instructional preparation. He stated, “It definitely has been a learning process for all of us, not just those who are alternative.”

ES5 also shared a similar perception that with changes in education and as students evolve, instructional planning and how we navigate classroom management is important to adjust as well. She explained that AC teachers need more support in this area to understand what pieces to really plan for and be effective, but it is important for everyone to continue to grow in these areas of teacher effectiveness if they want to experience whole-school success. Furthermore, ES3 acknowledged that AC teachers might have some unique challenges at first, but in her experience, all of her TC teachers did as well. She explained that she approached all brand-new teachers in the same manner, with the same level of support and guidance, because no one really knows how to be effective until they are “in the trenches, and doing the work themselves.” She also acknowledged that working in inner-city schools may have a steeper learning curve for all educators.

All secondary participants (middle and high school) also shared a similar perception that, across the board, all teachers needed to improve in the areas of content knowledge, classroom management, and instructional planning. For example, MS1 explained that most of her teachers,

regardless of certification, have some ability to plan a lesson, but the gap appears to be with how to actually execute those plans in a way that is meaningful and impactful. She also discussed that none of her teachers have come in exceptionally strong in content knowledge or instructional planning. Therefore, her school-wide PD focus has been on these two areas of effectiveness. Additionally, she shared that teachers in general struggle with effectiveness in these areas, particularly in urban, low socioeconomic settings due to their students' increasingly high needs for which a TC program might not fully prepare one for.

MS2 elaborated by stating AC teachers have more difficulty than TC teachers in the areas of classroom management and instructional planning because they have a level of under preparedness for the complexity that goes into teaching. However, she stated she has TC teachers who are considered veterans, and they are still struggling with standards-based instruction, instructional strategies, and engaging students. Likewise, HS1 had similar experiences with his AC teachers in content knowledge and classroom management. He stated that he has a difficult time telling a difference between an AC and TC teacher, but then elaborated on how his AC teachers were typically more effective with management and relationship building. He again attributed this to the distinctive, alternative context in which they work and how the unique challenges at his campus can often be difficult for TC teachers who are familiar with a certain type of school experience. HS2 also believed novice teachers, whether AC or TC, have similar needs in his building and require ongoing support.

Many participants discussed that regardless of one's certification, teachers often develop their skills overtime in the classroom, and that "learning by doing" is a common theme in the classroom. The concept of "learning by doing" or "learning as you go" was discovered in the data analysis process in numerous interviews, and was not isolated to AC teachers. Two

participants specifically referenced new and novice teachers when comparing AC teachers, while the rest of the participants referenced all teachers in general. ES3 and ES6 both talked about how many of the teachers they have hired struggled at first, but then over time developed the tools they needed to be effective. Both participants mentioned that this experience was true regardless of the teacher's pathway. In regards to content knowledge and classroom management, ES3 stated:

I don't feel like you really learn to be a teacher until the principal says 'here's your room, here's your keys' and they close the door...and you just have to figure things out, of course with support, but you are never really prepared no matter what your preparation looked like.

Similarly, ES6 stated, "We often just say, 'here's your key,' and teachers step into their rooms and learn as they go." Though ES6 did believe TC teachers were stronger in the area of instructional planning, she also felt as though AC and TC teachers do not learn everything they need to prior to coming to the classroom. HS1 agreed that AC and TC teachers have a lot of "on the job" learning that they do, but felt as though TC teachers surpassed AC teachers in the area of instructional planning as well. He attributed this to the lack of pedagogy classes that AC teachers had prior to becoming a teacher. ES2 also noted that all teachers grapple at first with being effective. When he talked about classroom management and instructional planning, he stated, "It is a little bit of an ongoing struggle, and you kind of have to learn as you go, regardless of your certification." ES3 also remarked, "I think AC teachers catch on like the rest of us. You know, it takes a couple of years no matter what your certification is. You just have to keep working at it and growing yourself."

Most of the participants discussed that their AC teachers' needs were the same as TC teachers. Though a few participants believed their TC teachers were more effective than their AC teachers in some domains, like classroom management and instructional planning, others believed all teachers needed an equal amount of work in these areas. Though other participants believed AC teachers were more effective in areas like content knowledge, human relation skills, and professionalism, there were still participants that felt as though every teacher would benefit from growth in these areas. Though there are mixed findings from the data, many participants agreed that regardless of one's certification, all teachers had similar gaps and needed ongoing support to improve their effectiveness.

Theme 5: Teamwork and Mentorship

The fifth theme that surfaced was that AC teachers who have a strong team or mentor tend to be more effective in the areas of teacher effectiveness that were examined in this study. Some participants discussed their strategy of team placement and mentor-mentee assignment when hiring an AC teacher, while others discussed the importance of an effective team and a mentorship program that aims to help all new teachers be successful. Words and phrases, such as, "team," "teammates," "strong team," "support," "collaboration," "veteran teacher," "new teacher," "novice teacher," "mentorship program," "mentor-mentee relationship," and "mentor," were common amongst the participants' responses.

Nearly all of the participants, both elementary and secondary, discussed the concept of teamwork and mentorship. Many of them discussed the importance of a mentor teacher or the implementation of an effective mentorship program and the impact of these on teacher effectiveness for AC teachers. For example, ES1 discussed how having the right mentor teacher is key, especially when helping an AC teacher understand lesson planning and classroom

management. When discussing the areas of needed support for AC teachers, she stated, “When I develop a mentor relationship between a veteran teacher and a new or an AC teacher, our first focus area is setting up their classroom and then discussing what lesson planning looks like.” She further stated that the mentorship program at her school has helped to increase the retention of all teachers, especially the two AC teachers that she considers to be extremely effective. ES2 also reflected on his AC teachers’ effectiveness when working with a mentor. He explained that having a strong mentorship program that starts from the first day the teacher joins his campus through their third year, is important. He stated, “I think that it is critical to have a mentor for walking them through the day-to-day operations, helping them understand their content and how to use the curriculum, and helping them develop best practices.” He further explained that veteran teachers have “been down this road,” and “they have seen what works better and what doesn’t work so well, so they can share those experiences.” Specifically, two of his AC teachers struggled with classroom management. However, since pairing them with a mentor, they have improved dramatically. When asked about the impact on their school’s mentorship program with AC teachers, he said he sees the most improvement with content knowledge, classroom management, and instructional planning. HS2 also expressed the importance of new teachers having someone to go to for any question or concern they may have.

Other participants discussed mentor-mentee relationship placement as well. ES7 always places her AC teachers with her most experienced teachers at her campus as mentors. Though she did not discuss a mentorship program or the duration a mentor works with a mentee, she said that she periodically meets with the mentor and mentee to communicate her expectations. She stated, “AC teachers have to have some sort of support, because, in our schools, it is getting to the point where that is all we have available to hire.” She believed the school district should be

the ones responsible for a stronger mentorship program and ongoing training if they want AC teachers to be effective and ultimately remain in the profession. ES1 placed high importance on considering mentor-mentee placements. She looks at personalities, strengths, and weaknesses. Likewise, ES2 stated that he thinks critically about who he pairs his new and AC teachers with at his site. HS1 has also been intentional about AC teacher and mentor placement. He stated:

When I develop a mentor relationship between a veteran teacher and a new teacher or AC teacher, our focus area is really discussing what lesson planning looks like. Usually, AC teachers I hire know their content, but if you fail to do that, then they do what they think is correct and most of the time, as you can imagine, this leads to issues of effectiveness.

ES6 shared that as a previous AC teacher herself, a mentor teacher played an integral role in her development in becoming an effective educator. She stated that a “mentor teacher is your partner that helps you with something as small as bulletin boards and covering for you when you are late, all the way to observing you teach and helping you become more confident in your craft.” In fact, willingness to work with a mentor teacher is a determining factor for ES6 when hiring an AC teacher. MS1 and MS2 discussed pairing teachers in similar content areas together for support, but did not specifically mention the assignment of an official mentor.

Several participants also expressed the need for a strong team or the role that teamwork plays in the support and overall effectiveness of AC teachers. In fact, a few participants stated that new or AC teachers’ success is dependent on these factors. For example, HS1 stated that an AC teacher’s growth with instructional planning often depends on who their teammates are or who is in their professional learning community (PLC). Though he believed his AC teachers come with strong content knowledge, the planning aspect requires a strong team, especially in his setting where students have extremely diverse learning gaps. ES3 also shared their school

places a high importance on teamwork and collaboration. She stated, “A team has definitely helped with improving instructional planning because they all split content areas. My AC teachers have had multiple years of opportunities to work on a good team which has helped them grow.” However, ES3 also emphasized that personality and who the people are is what makes a good team. She talked about an AC teacher she had that did not like to collaborate with others, even though she had a strong team to work with. Even after moving this AC teacher to other teams, she was still met with major issues. Ultimately, she believed a strong team is important, but so are the teachers’ personalities on the team.

Some participants discussed teammates conducting peer observations as a way to improve AC teacher effectiveness. For example, ES1 talked about one of her AC teachers who works with a team in a departmentalized grade, meaning, each teacher delivers only one content area. The team periodically conducts peer observations to not only help one another improve, but to get new ideas and strategies to bring to their own classrooms. ES1 said this type of colleague relationship helped to improve everyone’s effectiveness in classroom management, content knowledge, instructional planning, and human relation skills. Additionally, ES2 said AC teachers who have teammates to support them and give ideas is key, noting that “If you have a good strong team around you, that can talk you through some of the challenges, and give you some best practices, you will be successful.” ES2 also shared that their teams conduct peer observations as well. He has all of his new and AC teachers visit other classes to see what classroom management strategies their teammates are using. He stated, “It’s an ongoing process, but we have seen quite a bit of growth with AC teachers because of this, so it has been encouraging.”

Additionally, the concept of vertical and horizontal team collaboration and support was discussed in two interviews. ES6 and MS2 specifically emphasized that if they want instruction to improve, teachers need to work with both their horizontal and vertical teams. Typically, a horizontal team means your grade level, while a vertical team may mean meeting with other grade levels or different content areas. ES6 stated that her AC teachers did well with instructional planning because they have a strong process for vertical and horizontal team alignment, which allows for all teachers to collaborate and be successful. ES6 says she strategically picks mentor teachers in other grade levels so they can improve one another's instructional planning abilities. Likewise, MS2 discussed the importance of collaborating with a PLC consisting of multi-grades and various content areas, noting that she has seen an improvement in effectiveness across content areas, instructional planning, and pedagogical knowledge because of it.

Of the participants that were interviewed, only one discussed a negative scenario with an AC teacher and their team. This participant attributed this to the AC teacher's personality that was unable to connect with multiple teams on her campus. Besides this specific incident, nearly all participants discussed how teamwork and mentorship have been able to increase AC teacher effectiveness, especially in the area of instructional planning

Theme 6: Classroom Management and Instructional Planning

The sixth and final theme that surfaced was that most AC teachers' gaps exist within the domains of classroom management and instructional planning. Additionally, most participants identified these domains of teacher effectiveness as the areas in which AC teachers need the most support. It is important to note that these two areas of teacher effectiveness were not all negative; in fact, some participants spoke positively about these areas in regards to AC teachers.

Additionally, it is important to consider that these areas of needed improvement were not isolated to just AC teachers. Many of the participants viewed classroom management and instructional planning as gaps that all new teachers have, some even mentioning all teachers, in general, are continuing to grow in these areas. It is also important to note that other gaps and areas of support were discussed in the interviews as well, but these two domains were consistently mentioned as areas that AC teachers needed to improve in. Words and phrases, such as, “classroom management,” “classroom environment,” “organizational skills,” and “procedures,” were common amongst the participants’ responses for classroom management, and “lesson planning,” and “translate to classroom,” were common for instructional planning.

Classroom management was discussed as a gap and area of improvement for AC teachers. For example, ES2 and ES3 both stated classroom management was an area that AC teachers needed the most support in when they first began teaching. ES2 discussed that, in theory, TC teachers should have completed student teaching, which should help with increased effectiveness in this area in the classroom. However, both mentioned this was not unique to AC teachers, and that all of their teachers needed help setting up a classroom and outlining procedures in the beginning. Likewise, ES4 and ES5 both discussed that classroom management was one of the biggest hurdles for new teachers. They both mentioned that classroom management strategies and basic organizational skills are areas AC teachers need support with, as these are foundational to all other areas of teaching. In fact, both mentioned that lack of organizational skills was common amongst their AC teachers. ES4 stated:

I think a lot has been thrown at a teacher. And they may not have the organizational skills to take care of it at first. That could be a personal thing, but everything moves quickly in our schools; there is a lot to juggle.

ES4 also acknowledged that support with classroom management, in the beginning, is the best thing a principal can do for an AC teacher; helping them get those systems in place that are going to make their classrooms run really well. She said it is a principal's role to help them sharpen those skills. She further stated, "Once they [AC teachers] figure out classroom management, they can be really successful in other areas." However, ES4 thought this gap also exists with TC teachers, simply due to the lack of experience managing a large number of people.

ES1 also stated that her AC teachers needed more help with classroom management, but specifically with navigating their role in the classroom with students. She further elaborated that sometimes, AC teachers will come in and want students to be their friend, and that can cause issues with management. MS2 shared a similar perception, noting the gap with understanding effective classroom management existed with her AC teachers at first, simply because they do not have a strong understanding of basic adolescent development. MS1 also talked about how a lack of understanding student needs can manifest negatively in the management of a class and even relationship building with students. However, she believed this gap existed with all new teachers in general, regardless of certification. Finally, ES5 discussed that all of her new teachers needed support in classroom management. For AC teachers, she believed lack of experience working with students contributed to this gap, while student teaching placement can cause this gap with TC teachers. She stated:

TC teachers are often placed or choose to be placed in more affluent schools for their student teaching experience, which gives them a skewed view of what working in an urban school looks like. I think everyone should do teacher observations in an urban school like ours.

It is important to note that this was also a shared perception with MS1. She discussed how TC teachers often have to unlearn a lot of ineffective strategies that do not work at her school because they are making instructional decisions based on their previous experiences. She explained that since AC teachers typically have less educational knowledge and experience, it is easier for them to improve at a faster rate.

Instructional planning was also discussed as a gap and area of improvement for AC teachers. Some participants discussed weaknesses in overall instructional planning, while others talked about specific components of instructional planning that were difficult for AC teachers. For example, HS2 discussed his AC teachers struggled with understanding and planning for an instructional cycle. He explained that they struggle with the continuum of unpacking state standards, writing learning objectives, creating assessments, and how to provide proper support and interventions for students. He stated:

It can be difficult for all new and AC teachers to understand how to create instructional events that maximize learning; however, with the right support, AC teachers can pick it up pretty quickly. But I do not think that's an innate thing.

HS2 further stated that when interviewing candidates, especially AC teachers, he designs questions around instructional planning and mindset to see who might be a good fit. Likewise, MS2 also talked about the instructional cycle, specifically creating and using appropriate assessments to drive instruction, and how planning for this can be difficult for AC teachers. She explained that AC teachers need support with how to plan for students with differences, like individuals with learning disabilities or those who are gifted and talented. She explained that providing differentiation can be complex for AC teachers, and monitoring student progress using data can also be challenging if one does not have any experience with it. However, it is important

to note that MS2 expressed that this is a gap she would expect to see in all new educators. ES5 also agreed that planning for small group instruction and intervention could be intricate, and when an AC teacher does not have the strategies to plan for these components, it is even more difficult to actually implement them in the classroom.

HS1 shared his AC teachers have gaps in planning for meeting the unique needs of the students on his campus. He expressed that teachers “develop their instructional toolbox over time,” and as he spoke about the distinctive context of his school, he explained that their unique factors and diverse student population could often make building this instructional toolbox even more challenging. He stated that TC teachers typically have some skill with planning and have an idea of instructional strategies simply because they have had experience with student teaching. However, all teachers in his context struggle at first. ES7 agreed that instructional planning was her AC teacher’s weakest area of effectiveness; however, she elaborated more on a teacher’s with-it-ness than the planning itself. She stated:

You can plan, but you need to be able to turn on a dime. When you see that a class is not getting a lesson that you have planned, you need to be able to correct that at the moment as a teacher.

The last few participants all discussed instructional planning as a weakness of AC teachers but described specific components. For instance, MS1 talked about a lack of understanding of the vocabulary that is needed to plan and instruct. Her AC teachers lacked the background knowledge they needed to plan effectively, but a lot of their school’s PD is focused on this area in order to help the AC teachers improve. In another example, ES1 explained that her high population of English language learners was a focus when planning lessons, and this can be difficult for AC teachers. She also explained that teachers need to have a basic understanding of

how students learn, and without any knowledge of pedagogy, it can be difficult to plan for the diverse needs of students. Similarly, ES3 shared that in order to effectively plan for student needs, AC teachers need to have some knowledge of child development and pedagogy. She believed the child psychology classes TC teachers receive in their traditional preparation programs could help with this, but AC teachers do not always have access to this type of training.

ES2 believed his AC teachers needed support with instructional planning as well, but specifically with reading. He stated, “We focus a lot on reading instruction, specifically phonics. AC teachers probably have never had any coursework or training on how to teach these.” Finally, when discussing overall gaps of AC teachers, MS2 expressed what many of the participants reiterated by stating, “Sometimes people have an image in their head of what teaching is like, and that image is based on what they experienced as a student.” She further elaborated, “We all know that what we experienced as a student was probably less than 20% of the actual work that went in from a teacher’s standpoint, right?” She explained the gap really goes back to understanding the art and science of teaching. She concluded with, “There is so much more to it than just standing in front of a class of students and teaching from a textbook.”

Though classroom management and instructional planning were identified as the largest gaps and areas for needed improvement of AC teachers, ES4 and ES6 thought their TFA teachers excelled in these areas, and even exceeded some of their other AC and TC teachers. Both participants credited this to the intensive and rigorous training these AC teachers receive prior to entering the classroom and the support they have throughout their time as TFA core members. HS2 also shared that every once in a while, he will hire an AC teacher that excels in these areas, but he attributed this to their previous life experiences that prepared them. Nearly all participants

believed AC teachers, with the right personality, mindset, and level of coachability, have the ability to improve in these areas and become effective.

Summary

Chapter 4 included the participant profiles, prequestionnaire responses, interview findings, and the overarching themes that emerged from the data. After using the framework method (Gale et al., 2013) to code and analyze responses that were obtained from the participant interviews, six themes surfaced:

1. Personality and innate ability
2. Mindset and coachability
3. Previous experience
4. All teachers have similar needs
5. Teamwork and mentorship
6. Classroom management and instructional planning.

These aforementioned themes that emerged provided a comprehensive understanding of the participants' responses. During the interview process, the goal was to learn through the lived experiences of urban school administrators and their perceptions of AC teachers. During the interviews, the 11 participants shared their current and past experiences with AC teachers. They also shared their perceptions of AC teacher effectiveness across five domains according to Nusbaum (2002): (a) content knowledge, (b) classroom management, (c) instructional planning, (d) human relation skills, and (e) professionalism. Additionally, AC teacher strengths, gaps, areas of needed support, and hiring practices were discussed. Chapter 5 elaborates on the findings from Chapter 4. It also suggests the implications for current practice, limitations for this study, and future research recommendations.

Chapter 5: Discussion, Conclusions, and Recommendations

With the growing teacher shortage, alternative teacher certification is on the rise in the United States (Chiang et al., 2017; Darling-Hammond, 2000a, 2000b; Hohnstein, 2017; Linek et al., 2012; Moffett & Davis, 2014; Torff & Sessions, 2005; Van Overschelde & Wiggins, 2020; Woods, 2016). This shortage and the number of AC teachers in classrooms has significantly increased in schools categorized as low socioeconomic and urban. With this, teacher quality is in question, and the concern of students receiving access to a high quality education continues to be magnified in schools and communities of concentrated poverty and minority groups enduring the consequences of long-term socioeconomic inequalities (Ingersoll et al., 2019; Liu et al., 2008; U.S. Department of Education, 2015). These inequalities also transfer to the inequitable distribution of well-qualified teachers in America and, ultimately, schools serving low-income or minority students have considerably different experiences with teacher quality in comparison to their more affluent peers (Goldhaber et al., 2018; Ingersoll et al., 2019; Liu et al., 2008). Therefore, because teacher quality is directly related to student achievement and school success, school administrators must hire, train, and support AC teachers to ensure students have access to high quality instruction (Gagnon & Mattingly, 2015; Kimbrel, 2019; Moffett & Davis, 2014; Shuls & Trivitt, 2015). This study is relevant due to the high number of AC teachers in urban, low socioeconomic schools that are hired to fill critical teaching shortages, and the critical role administrators must play to ensure success for all students.

Discussion of Findings in Relation to Past Literature

The purpose of this qualitative single case study was to generate knowledge of alternative pathway teachers' effectiveness in the classroom from an administrative point of view, specifically in urban, low socioeconomic, high-risk schools. Bayar (2014), Brown and Militello

(2016), Darling-Hammond (2000a), and Ferguson (1998) suggested that a highly qualified teacher is one of the strongest predictors of student growth, achievement, and overall school success. As more teachers enter the classroom through alternative routes to certification, the quality of teacher preparation in the United States has come into question (U.S. Department of Education. Office of the Under Secretary, 2002). In fact, it is the most critical school-related element impacting student achievement (Clotfelter et al., 2010; Fauth et al., 2019; Goldhaber & Hansen, 2013; Rockoff, 2004). However, current research also indicates contrasting results on the effectiveness of teachers from alternate routes; moreover, it is unclear what gaps exist with AC teachers and the areas in which they need more support (Brenner et al., 2015; Fox & Peters, 2013; Linek et al., 2012).

There was one primary research question and five secondary research questions that guided this study. The primary research question for this qualitative case study was: How do school administrators perceive the effectiveness of AC teachers? The five secondary research questions were as follows:

RQ1: How do school administrators perceive the effectiveness of AC teachers regarding content knowledge?

RQ2: How do school administrators perceive the effectiveness of AC teachers regarding classroom management?

RQ3: How do school administrators perceive the effectiveness of AC teachers regarding instructional planning?

RQ4: How do school administrators perceive the effectiveness of AC teachers regarding human relations skills?

RQ5: How do school administrators perceive the effectiveness of AC regarding professionalism?

Qualitative case study research was used to explore the perceptions and experiences of K-12 school administrators regarding AC teacher effectiveness. The final sample for the study included 11 principals across elementary, middle, and high school campuses who had been principals for at least 2 years and had previously worked with or currently had AC teachers on their campus. The participants first completed a prequestionnaire providing information on their role and the demographics of their campus. After this, each principal participated in one semistructured interview, using an interview guide consisting of ten questions. Participants were encouraged to share their honest feelings, experiences, and perceptions of AC teachers. With intentionally designed interview questions, I was able to better understand the perspectives, experiences, and observations of my participants in their specific school context. Stake (2006) stated that some of the most meaningful data methods are through learning from the observations of your participants. In addition to asking participants about their experiences and perceptions of AC teachers across the five domains of teacher effectiveness (Nusbaum, 2002), participants shared their AC teacher's strengths, gaps, areas of needed support, and their likeliness to hire AC teachers. After the interviews were conducted and transcribed, the data were analyzed. Following this, the results were coded and categorized, which resulted in the development of six specific themes in relation to the study's research questions.

The six major themes that emerged from the data were discussed in Chapter 4, and in Chapter 5, a summary and the interpretation of the study's findings is discussed. The implications of each of the themes are discussed. Additionally, this chapter discusses the

implications of the study's theoretical framework and the implications of practice. Finally, limitations, recommendations, reflections, and conclusions are also addressed.

Interpretation of Research Findings

The study's primary research question was designed to gain insight into AC teacher effectiveness from an administrative point of view. The five secondary research questions were designed to address the specific domains of teacher effectiveness examined in this study: (a) content knowledge, (b) classroom management, (c) instructional planning, (d) human relation skills, and (e) professionalism. Table F1 (Appendix F) lists the secondary research questions, the number of themes that were present, and the themes.

Secondary Research Question 1

How do school administrators perceive the effectiveness of AC teachers regarding content knowledge?

Content knowledge, according to the perceptions and experiences of the participants, was one of the strongest areas of effectiveness for AC teachers. Content knowledge effectiveness, as described by the participants, was determined by multiple factors, first being the AC teachers' personality and innate ability. According to the participants, most of the AC teachers whose personalities included traits like patience, willingness, openness, temperament, work ethic, self-interest, intrinsic motivation, confidence, self-efficacy, and with-it-ness were most successful in the area of content knowledge. For AC teachers who lacked some of those personality traits and struggled with insecurity or low self-efficacy, they struggled more than other AC teachers.

Additionally, many of the AC teachers with previous experience in certain areas that either partially or directly aligned to their content/subject areas they were teaching were seen as more effective with content knowledge. Having specific background knowledge or expertise in a

particular area helped many AC teachers excel in this area. For example, some AC teachers that were discussed in this study were practicing scientists, artists, journalists, and speech language pathologists. Having this degree area or content specific career path prior to coming to the classroom helped increase the effectiveness in the domain of content knowledge. Moreover, some participants discussed AC teachers who previously worked with children. Those that have worked with children in structured settings like a daycare, abroad, or as a paraprofessional teaching assistant also excelled in the area of content knowledge. Many participants explained that AC teachers who had previous experience bring unique skillsets to their buildings, and this was one of the greatest strengths an AC teacher has in comparison to TC teachers. For example, MS2 stated, “They can bring you skillsets based on their experiences in different places that you wouldn’t have otherwise.” Likewise, ES3 shared that one of the greatest strengths she saw in AC teachers was “their strong content or subject matter knowledge and their previous experience.” She said, “They can bring many strengths that make them successful.”

In addition to these areas, participants also noted the importance of mindset and coachability in relation to content knowledge. Those who may not have had previous experience in content areas, but maintained a growth mindset and a willingness to receive feedback, improved in the area of content knowledge over time. For example, ES1 stated, “I would say coming in, they would have almost no content knowledge, but with the right mindset, I saw some of them improve over time.” Participants shared that those AC teachers who were committed to professional growth and invested in their own improvement, increased their content knowledge effectiveness over time as well. Additionally, teamwork and mentorship were mentioned by many participants as an indicator to determine AC teacher effectiveness in the area of content knowledge. Those that are assigned a mentor and establish a good relationship with their

teammates were able to increase their effectiveness of content knowledge. It is also important to note that AC teachers who went through the ACP, TFA, were more successful in content knowledge because they not only had previous training, but they received a coach and mentor that supported them in their development during their time in the program. This helped increase the AC teachers' content knowledge as well.

Finally, many participants noted that all AC and TC teachers need continuous support in the area of content knowledge, showing that all teachers have similar needs in this domain. Though many participants believed some AC teachers were stronger in the area of content knowledge, it is worth noting that some participants believed AC teachers struggle to translate it into effective planning, stating they have a lack of pedagogical knowledge to implement the content well.

Research supported these findings. The participants in this study had similar perceptions and experiences with AC teachers in regards to content knowledge as prior studies. Brenner et al. (2015) found that principals believed that AC teachers might possess advantages over TC teachers in the areas of content knowledge, prior experience, and maturity. Darling-Hammond (2000) found that teachers who have degrees in specific subject areas in which they teach can improve their teaching effectiveness and have an impact on student growth and achievement. Moreover, Torres and Chu (2016) found that all AC teachers, especially those in the ACP, TFA, had high levels of satisfaction with their ACP and felt as though it helped improve their sense of self-efficacy and preparedness for the classroom. Their coursework also focused primarily on content knowledge. This showed that personality characteristics may contribute to an AC teacher's effectiveness in content knowledge. Additionally, the participants valued the feedback they received and believed it helped them improve, showing that mindset and coachability may

be a contributing factor to their effectiveness. Moreover, Finn and Madigan (2001) discussed that AC programs and schools specifically recruit individuals with content area skillsets as this is a strength of teachers from alternative pathways.

Finally, though participants felt as though AC teachers had strong content knowledge, the concern was how to combine this with pedagogy and effectively implement these pieces, so students learn. This is also consistent with previous research. Darling-Hammond (2000) agreed that AC teachers bring strong content knowledge, but those who also have a thorough understanding of pedagogical practices and how to implement the content they know so that students can understand, may be more effective. Likewise, Eisenhart et al. (1993) also found that teachers with strong conceptual understandings could excel, but those who could not model or help students process information could fall short. Lastly, Kahan et al. (2003) found that strong content knowledge helped teachers make good use of teachable moments, but it must be combined with pedagogy in order for authentic and powerful learning experiences to take place. However, the feedback obtained from the participants in this study indicated their AC teachers, past and present, were mostly effective with content knowledge.

Secondary Research Question 2

How do school administrators perceive the effectiveness of AC teachers regarding classroom management?

Classroom management, according to the perceptions and experiences of the participants, was one of the weakest areas of effectiveness for AC teachers, at least initially. Classroom management was determined by multiple factors, first being the AC teachers' personality and innate ability. Many of the participants noted that their AC teachers who were more effective in classroom management had the right temperament, patience, and with-it-ness to work with

students. Others believed AC teachers either had the natural ability or it was within their makeup to manage a room of students, or they did not. ES6 stated, “Some people are just natural with it and have those instinctive unique skills and the personality that it takes.” Additionally, mindset and coachability were discussed by some participants as a way to improve and become more effective in classroom management. Specifically, these participants discussed their AC teachers’ desire to grow. Even though they were initially ineffective with classroom management, with the aspiration to grow and intrinsic motivation to do so, they improved over time. For example, ES7 stated that her AC teachers seriously struggled with classroom management without proper support; however, she saw her early childhood teachers improve significantly in their effectiveness in this area with the right growth mindset.

AC teachers with previous experience in a related field or with prior work with children were more effective in classroom management than those that did not. A few AC teachers that were mentioned in the interviews worked previously in settings with children or young adults, so they already had some foundational skills on how to manage larger groups of children. Conversely, other participants discussed AC teachers who did not have prior experience with children, like those who worked in business or insurance, struggled immensely more than the other AC teachers who had some level of prior experience. HS2 confirmed this by stating, “Generally I need to provide additional guidance to an AC person just because they've never had experience working with adolescents in many cases.” However, he emphasized there were some specific circumstances where AC teachers that had obtained unique previous life experience were stronger in classroom management. Though it is important to mention that some participants discussed the ACP, TFA, and their AC teachers who had received their intensive

training prior to entering the classroom did much better in the area of classroom management than other AC peers, and even some TC teachers.

Additionally, teamwork and mentorship were mentioned by a few participants as a contributing factor to improving AC teachers' effectiveness with classroom management. Participants discussed pairing AC teachers with mentors and having them do peer observations were ways that they provided AC teachers with support to improve their classroom management. Participants also stated that placing AC teachers on a strong team with seasoned educators helped the AC teachers improve in this area as well. ES2 stated, "We've had them do classroom observations to see what other classroom management strategies their teammates are using...we have seen quite a bit of growth with AC teachers because of this, so it has been encouraging."

Finally, many participants noted that all AC and TC teachers, mostly when they first start teaching, needed continuous support in the area of classroom management, showing that all teachers have similar needs in this domain. Though some participants mentioned that veteran TC teachers also needed work in this area, most participants felt that all new teachers, regardless of their certification route, needed training and support in this area. ES3 mentioned, "I think they just catch on like the rest of us. You know, it takes you a couple of years no matter what your certification is." Likewise, MS1 felt as though all first year and novice teachers need help in classroom management and that it takes a few years to gain one's footing in this area.

Research supported the findings in this study. Classroom management is one of the weaker areas of AC teacher effectiveness when they first begin teaching. The participants in this study had similar perceptions and experiences with AC teachers in regards to classroom management as prior studies. Emmer and Sabornie (2015) and Melnick and Meister (2008) found that classroom management is one of the most challenging factors for novice teachers,

regardless of their certification. In fact, there are decades worth of literature that has found that successfully managing students in a classroom is frequently identified as a significant challenge for new and novice teachers (Blake, 2017; Borko & Putnum, 1996; Hogan et al., 2003; Marks, 2010; Melnick & Meister, 2008). Emmer and Sabornie (2015) and Melnick and Meister (2008) also found that classroom management is a notable concern for veteran teachers as well, though there are some studies that have shown the connection between a teacher's effectiveness with classroom management and their level of experience and years in the profession (Hattie, 2003; Livingston & Borko, 1989; Martinussen et al., 2011; Wolff et al., 2016). On another note, Poznanski et al. (2018) and van den Bogert et al. (2014) found immense gaps with knowledge of classroom management in preservice teachers as well. Additionally, Begeny and Martens (2006) and Simonsen et al. (2014) found that many teachers who enter into the teaching profession without proper training in classroom management experience challenges throughout their entire careers. Therefore, not only is the effectiveness of AC teachers who lack preparation a concern, but also the quality of AC and TC preparation programs could be in question as well.

Blazer (2012), Darling-Hammond (2010), Feistritzer (2003), and Ludlow (2013) found that AC teachers had minimal coursework in classroom management. Linek et al. (2012) indicated that AC teachers needed more support and development in this area. The participants in this study agreed. However, it is worthwhile to note, Ersozlu and Cayci (2016) found that classroom management is a domain that can be developed and strengthened over time with experience for all teachers, regardless of their pathway to the classroom. The feedback obtained from the participants in this study indicated their AC teachers, past and present, had a gap in effectiveness with classroom management and needed initial support in order to improve, with the exception of TFA teachers. However, many participants believed that AC teachers'

classroom management improved over time for those with specific personality traits, a growth mindset and desire to be coached, and willingness to work with their team and mentor.

Secondary Research Question 3

How do school administrators perceive the effectiveness of AC teachers regarding instructional planning?

Instructional planning, according to the perceptions and experiences of the participants, was another weak area of effectiveness for AC teachers, at least initially. Instructional planning was determined by multiple factors, first being the AC teachers' personality and innate ability, though only a couple participants mentioned this as a major factor. A couple of participants mentioned that although AC teachers need support in this area, they wondered if their effectiveness in this area had more to do with their personality and natural ability than their certification, preparation, or prior experience. For example, ES3 and ES5 thought that it depended on the person and their personality characteristics, as opposed to what they brought in. An AC teacher's mindset and coachability were also discussed by a few participants in relation to instructional planning effectiveness. Unanimously, the participants who discussed mindset and coachability agreed that AC teachers do not come in with all the skills needed in order to effectively plan for instruction; however, many thought that those who had a growth mindset, wanted to improve, and implemented the feedback they were given, eventually increased their effectiveness in this area. ES1 stated, "If you've got someone that has a natural growth mindset, that wants to learn and grow and be really, really good at what they're doing, they usually persist and can grasp areas like instructional planning quicker than others." Conversely, she stated those with a fixed mindset, were unable to improve in this area.

Previous experience was another factor that participants mentioned that contributed to an AC teacher's effectiveness with instructional planning. For example, ES3 and MS2 discussed that AC teachers, who were previously trained in specific areas like art and science, now teach those content areas to students. They discussed how this helped them create engaging and rigorous lessons. They mentioned instructional planning was still difficult at first, but they were able to catch on quicker than other AC teachers. The other participants discussed the ACP, TFA, noting that AC teachers who had been through the TFA summer intensive program and who had mentors and coaches throughout their time in the ACP, excelled in the area of instructional planning. ES4, ES6, and ES7 both discussed, in detail, how their previous and current TFA teachers had a strong understanding of this domain, and some were lead teachers, now modeling and guiding other teachers towards success in this area.

Teamwork and mentorship were discussed as contributing factors to an AC teacher improving their effectiveness in the area of instructional planning. Participants shared that AC teachers who had a strong mentor-mentee relationship and/or a strong grade level team were more successful with instructional planning. ES3 mentioned, "A team has definitely helped with improving instructional planning...the AC teachers, they have had multiple years of opportunities to work on a good team which has helped them grow." ES6 said her AC teachers could learn from their peers, while MS2 discussed vertical and horizontal teams that meet weekly to support one another with instructional planning. HS1 said, of his AC teachers, that their instructional planning growth depended on who their teammates were and who was in their PLC. Other participants mentioned that they assigned mentors to work with AC teachers so they could receive support in the area of instructional planning.

Like other domains in this study, participants discussed how all teachers, regardless of certification, have gaps in instructional planning that need to be addressed and supported. Nearly every participant discussed that instructional planning was a focus for improvement campus-wide. ES2 stated, “That's an area that we're all working to grow. Whether they are traditional cert, alternative, or emergency cert, but I think AC teachers need extra support in that for sure.” Some participants mentioned that AC and TC teachers had some level of understanding of how to plan for instruction, but because of its multifaceted nature and complexity, the true gap was ensuring all components were quality, and that the planning translated into a meaningful and effective lesson with students. For example, MS1 stated, “I have a lot of teachers, AC and not, who know the basics of lesson planning but as far as the delivery of the lesson, that seems to be where the disconnect is.” HS1 felt as though instructional planning was his AC teacher’s weakest area, but he found similar gaps in TC teachers.

Research supported the findings of this study. Instructional planning was one of the weaker areas of AC teacher effectiveness when they first begin teaching. The participants in this study had similar perceptions and experiences with AC teachers in regards to instructional planning as prior studies. The feedback obtained from the participants in this study indicated their AC teachers, past and present, had a gap in effectiveness with instructional planning and needed initial support in order to improve. Ball et al. (2007) and Reiser and Dick (1996) found that there were many complex phases of instructional planning that included but were not limited to, identifying standards, goals, and objectives, developing assessments, planning content and activities that align to the standards, and learning how to adjust plans based on student data. Danielson (2007) reiterated the complexities of instructional planning, stating that teachers must have strong content knowledge and pedagogical techniques in order to effectively plan and

implement a lesson. Booth and Ainscow (2011) and Emmer and Sabornie (2015) stated that when planning, teachers have to consider diverse learner needs, students with disabilities, and individualized instruction, while Rutt and Mumba (2020) added additional layers, like planning for various linguistic backgrounds, English proficiency levels, academic gaps, and student learning styles. Setyono (2016) added to this by stating it is not adequate for teachers to simply have content knowledge, they must have pedagogy and the creative critical thinking skills to effectively plan and carry out a lesson. Kim et al. (2020) found that teachers themselves even expressed concern for lack of training on how to plan for some of these elements. Research has shown that many teachers, AC and TC, are not prepared to meet varying students' needs (Jenkins & Ornelles, 2009; Segall & Campbell, 2012).

Being an AC teacher with minimal preparation, instructional planning poses as even more complex. Blazer (2012), Darling-Hammond (2010), Feistritzer (2003), and Ludlow (2013) found that teachers who join the teaching profession through an AC pathway have had minimal preparation and coursework in pedagogy and child development, making the intricacies of instructional planning even more challenging. This is important because, without proper training and support on how to plan and implement said plans, AC teachers may struggle. The feedback obtained from the participants in this study indicated their AC teachers, past and present, had a gap in effectiveness with instructional planning and needed initial support in order to improve, with the exception of TFA teachers who excelled more in this area than regular AC teachers.

Secondary Research Question 4

How do school administrators perceive the effectiveness of AC teachers regarding human relations skills?

Human relation skills, according to the perceptions and experiences of the participants, was one of the strongest areas of effectiveness for AC teachers. Human relation skills were determined by multiple factors, first being the AC teachers' personality and innate ability. In fact, personality and innate ability was the most mentioned theme amongst the participants in this domain. Many of the participants discussed personality traits of AC teachers like being agreeable, cooperative, collaborative, sociable, extroverted, compassionate, with-it-ness, and being personal. Nearly all participants had positive experiences with AC teachers in this domain and agreed that overall, AC teachers are effective in this area, with some stating that AC teachers are better in this area than TC teachers. A couple of participants discussed specific AC teachers that struggled in this area, but they believed it was because of their personalities that negatively impacted this area. HS1 stated, "As an individual, you either have these skills or you do not, and credentials do not play a factor." MS2 reiterated, "As an AC teacher, one can learn a lot of the aspects of teaching once they are 'on the job,' but you cannot learn interpersonal skills, that either comes naturally to an individual, or it doesn't." The theme of mindset and coachability was mentioned by a couple of participants in relation to human relation skills. Participants mentioned that AC teachers who were "receptive to feedback" could improve in this area; however, being receptive to feedback is not a "taught skill;" it is a natural aspect of one's personality.

Previous experience of AC teachers was also a theme that was mentioned numerous times in connection to human relation skills. In fact, the AC teachers who had prior careers in areas like business and insurance, excelled in this area. Participants stated that they had to work on how to strengthen human relation skills with students, but these AC teachers excelled when working with colleagues, parents, and the community. Some participants discussed other career

paths of AC teachers prior to entering the classroom and how their experiences helped prepare them to be effective in this domain. HS2 said that his AC teachers, in the area of human relations, were above average. He attributed this to their prior authentic experiences in the real-world that helped build a strong foundation of interpersonal skills and how to interact with colleagues professionally. Other participants discussed that communication skills were strong amongst their AC teachers due to previous jobs they held. Additionally, the theme of teamwork was discussed in connection to an AC teacher's ability to collaborate and communicate; however, mentorship was not mentioned amongst the participants as a factor contributing to this domain.

Finally, participants discussed that human relation skills rarely had anything to do with one's certification type. Some participants felt as though their AC and TC teachers all had relatively effective human relation skills, while others felt some teachers needed improvement and support in this area. However, it was evident that certification pathways do not make an individual effective in this area, though there are previous experiences, mindsets, and personality traits that might allow an individual to be more effective with human relation skills. Most participants had a positive experience with their AC teachers and human relation skills. For example, ES2 thought that if you did not have certain personality characteristics, people-skills, or a desire to improve, you were going to struggle working in most schools, no matter what certification pathway you chose. Though it is important to note, most participants discussed human relation skills in connection to adults and colleagues; however, only a couple of participants discussed these skills and how it impacts students. These participants discussed that their AC teachers excelled with human relations with students and how this positively impacted student relationships, how they manage their classrooms, and handle discipline concerns. Others

said that those who initially struggled with human relation skills were due to their lack of experience with children, that with the right support, they quickly improved with human relation skills with their students.

Research supported some of the findings of this study. Human relations skills were one of the stronger areas of AC teacher effectiveness. The participants in this study had similar perceptions and experiences with AC teachers in regards to human relation skills with adults as prior studies. However, though student relationships were discussed, and were all positive, there was an overall missing component of human relation skills of AC teachers and the impact on students in this study. Additionally, human relation skills in connection with adults and colleagues were not discussed as much in the previous literature that was outlined in Chapter 2 of this study.

Research indicated that new and novice teachers might struggle at first with how to balance their role as a classroom teacher who is in charge of their classroom and how to be compassionate and build relationships with students (Aultman et al., 2009). However, Crosnoe et al. (2004), Gehlbach et al. (2012), and Roby (2012) found that those who work to develop and improve their human relation skills, both inside and outside their classroom, were able to improve their interpersonal relationships, especially with students. In fact, many researchers have argued that there needs to be more focus on interpersonal relationships with students so that they can develop a true love of learning and not just focus on academics (Ravitch, 2010). Therefore, based on the participants' responses in this study towards human relation skills mostly focusing on colleague relationships and not on student relationships, there may be an important component missing that needs to be improved.

A few participants discussed how AC teachers with strong human relation skills towards students, were able to strengthen relationships in their classrooms and this positively impacted their management and student behavior. Research also supported this. Studies have shown that students who have stronger relationships with their teachers have a decrease in disciplinary issues, a stronger sense of belonging in their classroom and school community, and an increase in positive social emotional behaviors, motivation, and academic achievement (Birch & Ladd, 1996, 1998; Crosnoe et al., 2004; Downey, 2008; Gehlbach et al., 2012; Nurmi, 2012; Roorda et al., 2014; Wentzel, 2002, 2010). Moreover, teachers who possess personality traits like compassion, supportive behaviors, and encouragement, are more likely to have students who want to improve and who feel safe in their classroom environment (Ryan et al., 1998).

Pianta et al. (2012) asserted that the largest barrier to school reform and improvement efforts, particularly in schools serving low-income, minority students, was a lack of focus on teacher to student relationships. Bridgeland et al. (2013) and Yeager et al. (2014) found that it is often reported that students in urban, low-socioeconomic schools have fewer quality relationships with their teachers. This is particularly important to note, because few participants discussed human relation skills in connection to students, yet all participants were leaders serving minority students in urban, low socioeconomic schools. This poses a concern because research has shown that the single most important factor to motivation in schools is directly connected to the relationships between a student and their teacher (Lazowski & Hulleman, 2016). The feedback obtained from the participants in this study indicated their AC teachers, past and present, were effective with human relation skills and of those who mentioned an AC teachers' human relations with students, only some needed initial support in order to improve.

However, the data focused mostly on human relations in connection to adults, not children, which is inconsistent with the aforementioned literature in this study.

Secondary Research Question 5

How do school administrators perceive the effectiveness of AC regarding professionalism?

Professionalism, according to the perceptions and experiences of the participants, was another strong area of effectiveness for AC teachers. Professionalism was determined by multiple factors. Though only a few participants discussed personality and one's innate ability like other domains in this study, it is still important to mention. Most participants who discussed personality felt as though an individual either has the personality to collaborate and work with their colleagues, or they do not. All participants who discussed personality in relation to one's professionalism thought that all of their AC teacher's personality traits helped them to be very effective in this area. ES3 said that nearly all of her AC teachers she has worked with were professional and collaborated well with their peers, while MS2 discussed that the individuals on her campus who were AC, were highly liked by their peers, and extremely responsive to student and staff needs. She attributed it to who they are as people.

According to many participants, previous experience positively contributed to an AC teacher's effectiveness with professionalism. AC teachers who have experienced work outside the realm of education and have obtained perspectives of what it is like to experience other types of career fields, increased their effectiveness with professionalism. Some specific areas where AC teachers were effective were collaborating with their peers and adhering to professional responsibilities like being on time, understanding and respecting policies, practices, and procedures, and adhering to hierarchy, when necessary. Many participants attributed their strength in this area to having previous jobs where they obtained these skills. Additionally, a few

participants felt as though having this experience actually made them more effective in professionalism than their TC counterparts. ES4 felt as though being AC did impact their professionalism in a positive way. Having experience in a different field has a major impact on how her AC teachers act in the workplace. HS2 agreed and thought since AC teachers have prior experience in other professional settings, they seem to come more prepared for what the workforce looks like or, should look like. Teamwork and mentorship were mentioned by one participant as a factor that helped AC teachers become more professional, but they were specifically talking about how they help AC teachers understand policies and procedures within a school. Mindset and coachability were not discussed in relation to professionalism.

Some participants felt as AC teachers were effective in regards to their professional behavior, and personality and previous experience were the main contributing factors. However, it is worth noting that some participants stated that although AC teachers were mostly professional, some needed support initially on how to understand school protocols and operations, but this was understandable. Regardless, nearly all of the participants mentioned that their AC teachers had high amounts of professionalism and this was a strength they brought to their schools. Moreover, some participants felt as though their AC teachers were more professional than their TC teachers. MS1 mentioned that she saw more professionalism in her AC teachers than her veteran TC staff. HS1 agreed with this sentiment, by stating that AC teachers tend to have more respect and desire to follow professional protocols. ES4 also thought her AC teachers respected policies and school expectations more often than her TC teachers. MS2 also felt as though her AC teachers understood the consequences to not adhering to school policies more so than her TC teachers.

Research partially supported the findings of this study. Professionalism was one of the stronger areas of AC teacher effectiveness. The participants in this study had similar perceptions and experiences with AC teachers in regards to professionalism as some prior studies, but not all, because professionalism is a subjective term. As discussed in the literature review section of this study, Ramadhan (2021) determined that the concept of professionalism has been widely debated, and one single definition has not been agreed upon. Some studies focused on how schools often operate through two varying structures: bureaucratic and professional (Tschannen-Moran, 2009), and schools that have a professional lens are more client-oriented, meaning the focus is on professionalism and the impact on students, while others focus on bureaucratic rules and procedures. Based on the data, when participants discussed their perceptions and experiences of AC teachers in regards to professionalism, it is evident a bureaucratic lens was used.

Cheng (1996) and Vanassche and Kelchtermans (2014) described a teacher's effectiveness in professionalism by their ability to adhere to standards and their overall conduct. Much of the other literature discussed in this study was grounded in teacher's belief systems and orientations that influences their actions, attitudes, behaviors, and performance. Weber and Johnsen (2012) found that characteristics of teachers who have exceptional professionalism are having integrity, understanding their role within the classroom and school, and being motivated. Moreover, Tanang and Abu (2014) and Ramadhan (2021) stated that teachers who have an exceptional attitude and good behavior inside and outside of the classroom are considered professional. This research is consistent with the findings of this study. However, the Learning Sciences Marzano Center (2013), the National Conference of State Legislatures (2011), and Weber and Johnsen (2012) discussed other components of professionalism that participants in this study did not mention in regards to AC teacher effectiveness. For example, these studies

mentioned that professionalism was measured by a teacher's knowledge of the subjects they taught and how they taught those subjects to students, exemplifying expertise in content and pedagogy, monitoring student learning, reflecting on their practice, commitment to student learning and achievement, and being an active member of their PLC. These components of teacher professionalism were not mentioned by participants in this study. However, the feedback obtained from the participants in this study indicated their AC teachers, past and present, had a strength in effectiveness in the domain of professionalism, as it aligns to the bureaucratic discussion of professionalism in research.

Summary of Findings

Results from this research study are supported by findings in previous research studies that suggest AC teachers are effective in some areas of teacher effectiveness but have gaps in other areas, suggesting administrative support is necessary in order to help AC teachers grow and develop. The participants' perceptions and experiences of AC teachers in the areas of classroom management and instructional planning directly align to previous research. Most teachers who enter the classroom from an alternative pathway do not have the background knowledge, experience, or adequate preparation to be successful in these areas, at least initially. However, it is important to note that the findings from this study and previous research also found that new and novice teachers, regardless of their certification pathway, struggled in these two areas. In regards to classroom management, research shows that it is a challenging aspect of teaching for all new teachers, no matter what certification they have (Emmer & Sabornie, 2015; Melnick & Meister, 2008). In fact, many researchers found that it is one of the most significant challenges to overcome for new teachers in the teaching profession (Blake, 2017; Borko & Putnum, 1996; Hogan et al., 2003; Marks, 2010; Melnick & Meister, 2008), including those from AC pathways.

Poznanski et al. (2018) and van den Bogert et al. (2014) found major gaps in classroom management in preservice teachers as well. Prior research also shows that those with minimal coursework in classroom management, which includes AC teachers, often have a difficult time in the classroom at first (Blazer, 2012; Darling-Hammond, 2010; Feistritzer, 2003; Ludlow, 2013). Other researchers found that those with little to no preparation actually struggled as veteran teachers as well with classroom management (Begeny & Martens, 2006; Simonsen et al., 2014), showing that adequate preparation, coursework, and practice with classroom management is key if an individual wants to be effective in this area when they step into the classroom and throughout their career. However, it is important to note that classroom management can be developed over time and this is consistent with this study's findings and previous literature (Ersozlu & Cayci, 2016).

In regards to instructional planning, previous research was also consistent with this study's findings. Many research studies discussed the complexities of instructional planning and how difficult it can be for teachers to understand (Ball et al., 2007; Danielson, 2007; Reiser & Dick, 1996). Other studies mentioned that in order to effectively plan, one must have strong content and pedagogical background (Setyono, 2016), something that many AC teachers lack due to minimal preparation and coursework. AC teachers themselves even expressed their own concern for minimal training or preparation in the area of instructional planning (Kim et al., 2020). Moreover, other studies have found that because AC teachers lack knowledge in pedagogy and child development, instructional planning is a challenge for them, even when they have content knowledge (Blazer, 2012; Darling-Hammond, 2010; Feistritzer, 2003; Ludlow, 2013). However, it is clear the findings in this study and in previous research show that this lack of effectiveness in instructional planning is not just isolated to AC teachers, but rather all

teachers are not adequately prepared and need support in this area (Jenkins & Ornelles, 2009; Segall & Campbell, 2012).

The study's findings are also supported by previous research studies on AC teacher's effectiveness in the area of content knowledge. Overall, the findings from this study found that most AC teachers had average or above average effectiveness with understanding content. Many studies found that AC teachers may have advantages in this area due to prior experience and degrees in specific subject areas (Brenner et al., 2015; Darling-Hammond, 2000a). Moreover, some researchers have studied specific ACPs, and found that they often recruit individuals with strong content area knowledge to their programs so they can excel in this area of teaching (Finn & Madigan, 2001). This study's findings are also consistent with the literature on AC teacher's ability to transfer this content knowledge to students. Prior research has found that AC teachers may be extremely strong in content knowledge, but struggle with helping students understand the content due to the lack of pedagogical knowledge (Darling-Hammond, 2000a; Eisenhart et al., 1993; Kahan et al., 2003). This disconnect was also mentioned in this study.

Finally, in the areas of human relation skills and professionalism, this study's findings were partially consistent with previous research. With the lack of discussion about AC teacher-student relationships and the impact of these domains on students, it is difficult to determine if these areas directly align with previous studies. This study found that AC teachers were effective with human relation skills, but it focused mainly on adult interactions. For those who discussed AC teacher effectiveness in human relation skills as it pertained to student relationships, behavior, and management, this finding was consistent with previous research studies. Studies have shown that teachers who have strong human relation skills, in the form of student relationships, have seen a positive impact on students and the school environment (Birch &

Ladd, 1996, 1998; Crosnoe et al., 2004; Downey, 2008; Gehlbach et al., 2012; Nurmi, 2012; Roorda et al., 2014; Wentzel, 2002, 2010). Moreover, the personality traits of AC teachers that were mentioned in this study in regards to effectiveness in human relation skills are also consistent with previous research (Ryan et al., 1998).

This study also found that AC teachers were effective with professionalism, but it focused on one specific area of professionalism in the research. Studies that examined professionalism of teachers that focused on their ability to meet basic job expectations, adhere to standards, and their overall behavior and conduct were consistent with the findings of this study (Cheng, 1996; Ramadhan, 2021; Tanang & Abu, 2014; Vanassche & Kelchtermans, 2014). Additionally, the personality traits and characteristics of AC teachers that were perceived as highly effective in the area of professionalism were also consistent with previous literature (Weber & Johnsen, 2012). However, other studies that addressed different components of a teacher's professionalism were not discussed in this study (Learning Sciences Marzano Center, 2013; National Conference of State Legislatures, 2011; Weber & Johnsen, 2012).

Additionally, it is worth noting that research that states that AC teachers are often hired in urban, low socioeconomic schools to fill vacancies is also supported by this study. All participants in this study had inherited and/or hired numerous AC teachers during their time as principals leading urban, low socioeconomic schools serving minority populations. Research shows that many AC teacher candidates are hired to fill vacancies in critical shortage areas like this (Burnette, 2017; Darling-Hammond, 2006; Goe, 2002; Hohnstein, 2017; NCES, 2020; Redding & Smith, 2016; U.S. Department of Education, 2015; Zeichner & Hutchinson, 2008). Furthermore, it is worth mentioning that many researchers have found that AC teachers may

possess qualities that are helpful in urban school settings (Ng, 2003), and this is also consistent with this study's findings.

Implication of the Theoretical Framework

This study was guided by two theories that made up the theoretical framework. First, Nusbaum's teacher effectiveness survey and theory were used to assess the components of teacher effectiveness (Nusbaum, 2002): content knowledge, classroom management, instructional planning, human relation skills, and professionalism. Second, the constructivist theory (Dewey, 1938) was used to guide interviews in order to learn through the lived experiences of urban school administrators and their perceptions and experiences of AC teachers. Constructivist pedagogy, an extension of constructivist learning theory, was also used as a focus for this study (Richardson, 2003). The findings from this study aligned with these theories. Nusbaum's (2002) teacher effectiveness survey outlined the five domains in which teachers need to be effective in order to dramatically impact student growth and achievement. Though not all participants felt as though their AC teachers were effective in all areas of teacher effectiveness, it was clear that AC teachers have strengths in the areas of content knowledge, human relation skills, and professionalism. Classroom management and instructional planning were the areas in which AC teachers had gaps and needed more support with.

Constructivism is considered an approach to learning that proposes that individuals actively construct their own knowledge and that everything is determined by the experiences of the learner. According to this concept, learning is believed to be a social activity (Dewey, 1938). In alignment with the constructivist theory, constructivist pedagogy was discovered and described as the classroom environment, activities, and methods that are grounded in the constructivist learning theory, and how teachers not only help individual students develop deeper

understandings of the content and subject matter, but also help them develop the skills they need in order to critically think and maximize opportunities to learn (Richardson, 2003). Though constructivist pedagogy does not explicitly state the five domains of teacher effectiveness as outlined by Nusbaum (2002), content knowledge, classroom management, instructional planning, human relation skills, and professionalism closely align with the fundamentals of constructivist pedagogy.

Additionally, this study outlined the role of an administrator in an AC teacher's development. As an administrator seeks to examine AC teacher effectiveness, they must also understand that each teacher, regardless of their certification type, enters the education profession with a unique set of experiences and knowledge. Some alternative route teachers enter into the profession with different degrees or careers that have helped shape them, which often translates into the classroom. Others have unique personality traits, innate abilities, or mindsets that contribute to their effectiveness in the classroom as well. Because the constructivist theory believes that individuals actively construct their own knowledge and that everything is determined by the experiences of the learner, this would mean that all teachers, AC and TC, come to the classroom with differences based on their own backgrounds. These differences that exist shows the critical importance of administrators understanding their teachers' strengths, gaps, and support needs. Furthermore, because many alternative route teachers come to the classroom with minimal preparation, they are often required to construct knowledge through their direct experience in the classroom (Richardson, 2003). Therefore, the concept of "learning by doing" becomes a regular thing in their lives. Regardless, it is the administrator's role and responsibility to identify areas in which all teachers, especially those who are AC, need support so they can ensure quality and success.

Implication for Practice

This study aimed to generate knowledge on alternative pathway teachers and their effectiveness in the classroom from an administrative point of view, specifically in urban, low socioeconomic, high-risk schools. A practical implication is that school administrators should continue to identify areas of effectiveness and ineffectiveness of AC teachers so they can develop a stronger understanding of potential teaching gaps and be able to provide the necessary support for AC teachers to improve in their overall practice. This research specifically provides administrators and district personnel areas in which AC teachers could be better supported in their growth and development in order to improve student academic outcomes and overall school improvement. By identifying these areas of effectiveness and gaps, principals may be able to keep AC teachers in the profession to attempt to reduce the teacher shortage and improve overall teacher quality.

Additionally, because of the variety of ACPs and routes to the classroom, this study also has the potential to inform local, state, and national ACPs of the pertinent skills individuals should acquire before entering the classroom. With this information, ACPs can be informed of the essential components their programs should have in order to better equip individuals for the teaching profession.

Limitations

Limitations were present in this study. First, this study was conducted in one large urban school district in the state of Oklahoma, potentially impacting the study's transferability. Transferability refers to whether or not the findings of a study can be applied outside the context to another situation (Coughlan et al., 2007). Additionally, urban schools were selected within one school district in one state in order to help support the research in the urban context, excluding

other school contexts, like rural and suburban schools and communities. However, because the school district is the largest school district in the state of Oklahoma, its size and unique attributes may not be able to transfer to all urban school districts. Although the perceptions of the Pre-K through 12th grade school principals in the sample may be similar to other findings or school districts, it is important to note that this study is isolated to one specific school district in one state.

Another limitation of this study is the sample size. Included in the sample, were seven elementary Pre-K through 4th grade principals, with one overseeing an early childhood campus, two middle school (fifth through eighth grade), and two high school principals, (ninth grade through twelfth grade). Having a larger representation of elementary participants than secondary could have impacted the results. Finally, this study excluded teachers who are currently in the classroom under an emergency or provisional certificate. It was assumed that all participants could decipher between these two pathways into the classroom, but a participant's inability to do this has the ability to impact the results of the study.

Recommendations

Based on the findings of this study, there are some recommendations for future studies. First, because the results of this study cannot be generalized to the larger population of administrators and AC teachers due to the study focusing on one large urban school district, it is recommended that future studies include gathering data from other urban districts for comparison. The second recommendation is, because this study was a qualitative single case study that sought to look at the similarities in the data, it would be beneficial to conduct a multiple case study that looked at the similarities and differences amongst principal perceptions of AC teachers. With this, investigation into the differences of AC teacher gaps and strengths

across the five domains of teacher effectiveness may offer more understanding of how to better support AC teachers based on specific and individualized needs.

A third recommendation would be to expand this study to include other types of schools, like those that are in rural or suburban communities to see if AC teachers have similar or different areas of effectiveness, gaps, and strengths. This study was isolated to one large, urban school district, so future researchers may want to implement a similar study but in a different type of setting.

A fourth recommendation would be to examine AC teachers who have been through specific ACPs, like TFA. Though TFA was discussed amongst some participants in this study, it would be beneficial to learn more about this program, or others like it, and its impact on AC teacher preparation and overall effectiveness.

Reflection

I have worked in public education as a classroom teacher, professional development trainer, and now school administrator. In each one of those roles, I have witnessed the critical importance of teacher quality and its direct connection to student growth and bridging the opportunity and achievement gap. As a school administrator, it is my role to not only recruit, but also support and retain highly qualified teachers. However, knowing where gaps exist and how to address those gaps can be challenging, as a “one size fits all” approach or a day of professional development is not enough to address the complexities of teacher effectiveness. Each teacher, regardless of their certification, have strengths, gaps, and areas of needed support, and it is my role to help identify those and capitalize on them so that all students have the opportunity to learn from a quality teacher.

As a traditionally trained teacher, I received 4 years of teacher preparation and taught in a suburban district prior to transitioning to the urban school district that I am in now. Even with a four-year teaching degree, credentials, student teaching, and some experience under my belt, I decided to participate in a two-year ACP where I was placed in an urban, low-socioeconomic school in one of the most impoverished neighborhoods in the entire state of Oklahoma, where 100% of students were below the poverty line. My experience as a teacher in the suburban, more affluent school versus the urban, lower socioeconomic school were vastly different, and I did not feel that my traditional preparation program prepared me to be successful for all of the challenges that a teacher faces in an urban setting. I attribute much of my success as a classroom teacher and now administrator to the knowledge I gained and the support that I received from the ACP I participated in. Additionally, as a current school administrator who has made a choice, on more than one occasion, to hire AC teachers over traditionally trained teachers, I wanted to learn more about the perceptions and experiences of administrators who have inherited or hired AC teachers on their campuses. Moreover, with a dramatic increase in teachers who are emergency or alternatively certified in the state of Oklahoma, it is critical that school leaders understand how to support these new teachers to help them be successful. Therefore, it was my desire to learn more about administrators' perceptions and experiences of AC teachers and their effectiveness in other schools that were similar to mine.

Conclusion

Throughout this study, my desire was to contribute to the literature on teacher effectiveness. The purpose of this qualitative case study was to generate knowledge of alternative pathway teachers' effectiveness in the classroom from an administrative point of view, specifically in urban, low socioeconomic, high-risk schools. Administrators are held responsible

for teacher effectiveness and student achievement, while also having to ensure they are aware of the areas in which their teachers need support in order to improve. Using the five domains of teacher effectiveness (Nusbaum, 2002) as my guide, my goal was to identify areas in which AC teachers are effective, have existing gaps, where they possess strengths, and areas in which they need additional support so administrators and ACPs alike can help AC teachers grow and develop.

My goal was to seek an understanding of the perceptions of AC teacher effectiveness through the lens of a school administrator. Participants shared their feelings, perceptions, and experiences of hiring, working with, and supporting current and past AC teachers. By doing this, I was able to capitalize on the perceptions and experiences of the participants and derive interpretations from their responses. They discussed how personality and innate ability, prior experience, mindset and coachability, and teamwork and mentorship contribute to an AC teacher's effectiveness in the areas of content knowledge, classroom management, instructional planning, human relation skills, and professionalism. They also shared their perceptions and experiences of AC teacher gaps and areas of needed support, specifically in the areas of classroom management and instructional planning. Additionally, participants shared that AC teachers were most effective in the areas of content knowledge, human relation skills, and professionalism.

Though some researchers and policymakers are harsh critics of AC teachers and programs, others have found the strengths of AC teachers and programs and believe they are a positive way to address the growing teacher shortage. There also continues to be mixed findings on AC teacher effectiveness. However, regardless of the positives and negatives AC teachers and programs may bring, many researchers have shifted the conversation to how we can train,

prepare, and properly support AC teachers to ensure their success, so that all students have access to a quality education.

References

- Adler-Greene, L. (2019). Every student succeeds act: Are schools making sure every student succeeds? *Touro Law Review*, 35(1), 11–23.
<http://heinonline.org.acu.idm.oclc.org/HOL/Page?handle=hein.journals/touro35&div=6>
- Akman, Y. (2020). The role of classroom management on confidence in teachers and stress. *International Journal of Contemporary Educational Research*, 7(1), 335–345.
<https://doi.org/10.33200/ijcer.687109>
- Allen, M. (2017). *The Sage encyclopedia of communication research methods* (Vols. 1–4). SAGE. <https://doi.org/10.4135/9781483381411/>
- Alliance for Excellent Education. (2014). *On the path to equity: Improving the effectiveness of beginning teachers*. <https://all4ed.org/wp-content/uploads/2014/07/PathToEquity.pdf>
- Aloe, A., Amo, L., & Shanahan, M. (2014). Classroom management self-efficacy and burnout: A multivariate meta-analysis. *Educational Psychology Review*, 26(1), 101–126.
<https://doi.org/10.1007/s10648-013-9244-0>
- Anderson, P. J., & Bullock, A. A. (2004). Meeting the no child left behind rules and regulations: Building essential skills for alternative route teachers. *Action in Teacher Education Association of Teacher Educators*, 26(2), 33–36.
<https://doi.org/10.1080/01626620.2004.10463321>
- Arbeau, K. A., Coplan, R. J., & Weeks, M. (2010). Shyness, teacher–child relationships, and socio-emotional adjustment in Grade 1. *International Journal of Behavioral Development*, 34, 259–269. <https://doi.org/10.1177/0165025409350959>

- Aud, S., Wilkinson-Flicker, S., Kristapovich, P., Rathbun, A., Wang, X., & Zhang, J. (2013, May 23). *The condition of education. 2013*. Institute of Education Sciences.
<http://ies.ed.gov/pubsearch/pubsinfo.asp?pubid=2013037>
- Audley, S. (2020). Searching for the golden rule: A case study of two White novice teachers' beliefs and experiences of respect in urban schools. *Education and Urban Society*, 52(6), 872–903. <https://doi.org/10.1177/0013124519894984>
- Aultman, L. P., Williams-Johnson, M. R., & Schutz, P. A. (2009). Boundary dilemmas in teacher–student relationships: Struggling with “the line.” *Teaching and Teacher Education*, 25(5), 636–646. <https://doi.org/10.1016/j.tate.2008.10.002>
- Ball, A. L., Knobloch, N. A., & Hoop, S. (2007). Instructional planning experiences of beginning teachers. *Journal of Agricultural Education*, 48(2), 56–65. https://www.jae-online.org/attachments/article/176/Ball_etal_48_2_56-65.pdf
- Bassett, S., Bowler, M., & Newton, A. (2013). Schemes of work, units of work and lesson planning. In S. Capel, M. Leask, & T. Turner (Eds.), *Learning to teach in the secondary school: A companion to school experience* (6th ed.; pp. 65–76). Routledge.
- Baumert, J., Kunter, M., Blum, W., Brunner, M., Voss, T., Jordan, A., Klusmann, U., Krauss, S., Neubrand, M., & Tsai, Y. (2010). Teachers' mathematical knowledge, cognitive activation in the classroom, and student progress. *American Educational Research Journal*, 47(1), 133–180. <http://doi.org/10.3102/0002831209345157>
- Baxter, P., & Jack, S. (2008). Qualitative case study methodology: Study design and implementation for novice researchers. *The Qualitative Report*, 13(4), 544–559.
<http://www.nova.edu/ssss/QR/QR13-4/index.html>

- Bayar, A. (2014). The components of effective professional development activities in terms of teachers' perspective. *International Online Journal of Educational Sciences*, 6(2), 319–327. <https://doi.org/10.15345/iojes.2014.02.006>
- Bean, S. (2007). *Classroom management to promote learning*. ETR Associates.
- Beck-Frazier, S. (2005). To stay or not to stay: That's the dilemma. *The Delta Kappa Gamma Bulletin*, 71(2), 28–33.
- Begeny, J. C., & Martens, B. K. (2006). Assessing pre-service teachers' training in empirically-validated behavioral instruction practices. *School Psychology Quarterly*, 21(3), 262–285. <http://doi.org/10.1521/scpq.2006.21.3.262>
- Berliner, D. (1986). In pursuit of the expert pedagogue. *Educational Researcher*, 15(7), 5–13. <https://doi.org/10.3102/0013189X015007007>
- Berliner, D. (1988a). Effective classroom management and instruction: A knowledge base for consultation. In D. Berliner (Ed.), *Alternative educational delivery systems: Enhancing instructional options for all students* (pp. 309–325). National Association School Psychologists.
- Berliner, D. (1988b). *The development of expertise in pedagogy*. AACTE.
- Birch, S. H., & Ladd, G. W. (1996). Interpersonal relationships in the school environment and children's early school adjustment: The role of teachers and peers. In J. Juvonen & K. R. Wentzel (Eds.), *Social motivation: Understanding children's school adjustment* (pp. 199–225). Cambridge University Press. <https://doi.org/10.1017/CBO9780511571190.011>
- Birch, S. H., & Ladd, G. W. (1998). Children's interpersonal behaviors and the teacher-child relationship. *Developmental Psychology*, 34, 934–946. <https://doi.org/10.1037/0012-1649.34.5.934>

- Birkeland, S., & Peske, H. (2004). *Literature review of research on alternative certification*. National Education Association.
- Blake, A. L. (2017). How do we manage? Classroom management strategies for novice teachers in high-poverty urban schools. *National Teacher Education Journal*, 10(2), 13–19.
- Blazer, C. (2012). What the research says about alternative teacher certification programs. *Information Capsule Research Services*, 1104(1), 1–13.
<https://files.eric.ed.gov/fulltext/ED536506.pdf>
- Blomeke, S., Olsen, R., & Suhl, U. (2016). Relation of student achievement to the quality of their teachers and instructional quality. In T. Nilson & J. Gustafsson (Eds.), *Teacher quality, instructional quality and student outcomes* (Vol. 2, pp. 21–50). IEA Research for Education. Springer. http://doi.org/10.1007/978-3-319-41252-8_2
- Bloomberg, L. D., & Volpe, M. (2019). *Completing your qualitative dissertation: A roadmap from beginning to end* (4th ed.). Sage.
- Booth, T., & Ainscow, M. (2011). *Index for inclusion* (3rd ed.). CSIE.
- Borko, H., & Putnum, R. T. (1996). Learning to teach. In D. Berliner & R. Calfee (Eds.), *Handbook of educational psychology* (pp. 673–707). Simon & Schuster Macmillan.
- Borman, G. D., & Dowling, N. M. (2008). Teacher attrition and retention: A meta-analytic and narrative review of the research. *Review of Educational Research*, 78(3), 367–409.
<https://doi.org/10.3102/0034654308321455>
- Bowling, A. M., & Ball, A. L. (2018). Alternative certification: A solution or an alternative problem? *Journal of Agricultural Education*, 59(2), 109–122.
<https://doi.org/10.5032/jae.2018.02109>

- Boyd, D., Grossman, P., Lankford, H., Loeb, S., & Wyckoff, J. (2006). How changes in entry requirements alter the teacher workforce and affect student achievement. *Education Finance and Policy*, 1(2), 176–216. <https://doi.org/10.1162/edfp.2006.1.2.176>
- Boyd, D., Lankford, H., Loeb, S., Ronfeldt, M., & Wyckoff, J. (2011). The effect of school neighborhoods on teachers' career decisions. In G. J. Duncan and R. J. Murnane (Eds.), *Whither opportunity? Rising inequality, schools, and children's life chances* (pp. 377–396). Russell Sage Foundation.
- Boyd, D., Lankford, H., Loeb, S., & Wyckoff, J. (2005). The draw of home: How teachers' preferences for proximity disadvantage urban schools. *Journal of Policy Analysis and Management*, 24(1), 113–132. <https://doi.org/10.1002/pam.20072>
- Brenner, D., Elder, A., Wimbish, S., & Walker, S. (2015). Principals' perceptions about alternate route programs in rural areas. *Rural Educator*, 36(2), 38–46.
<https://files.eric.ed.gov/fulltext/EJ1225582.pdf>
- Bridgeland, J., Bruce, M., & Hariharan, A. (2013). *The missing piece: A national survey on how social and emotional learning can empower children and transform schools*. Civic Enterprises. <https://files.eric.ed.gov/fulltext/ED558069.pdf>
- Brill, S., & McCartney, A. (2008). Stopping the revolving door: Increasing teacher retention. *Politics & Policy*, 36, 750–774. <https://doi.org/10.1111/j.1747-1346.2008.00133.x>
- Brinkmann, S., & Kvale, S. (2018). *Qualitative research kit: Doing interviews*. Sage.
<https://doi.org/10.4135/9781529716665/>
- Brouwers, A., & Tomic, W. (2000). A longitudinal study of teacher burnout and perceived self-efficacy in classroom management. *Teaching and Teacher Education*, 16, 239–253.
[https://doi.org/10.1016/S0742-051X\(99\)00057-8](https://doi.org/10.1016/S0742-051X(99)00057-8)

- Brown, A. L., Lee, J., & Collins, D. (2015). Does student teaching matter? Investigating pre-service teachers' sense of efficacy and preparedness, *Teaching Education*, 26(1), 77–93, <https://doi.org/10.1080/10476210.2014.957666/>
- Brown, C., & Militello, M. (2016). Principal's perceptions of effective professional development in schools. *Journal of Educational Administration*, 54(6), 703–726. <https://doi.org/10.1108/JEA-09-2014-0109>
- Brown, K. M., & Wynn, S. R. (2009). Finding, supporting, and keeping: The role of the principal in teacher retention issues. *Leadership & Policy in Schools*, 8(1), 37–63. <https://doi.org/10.1080/15700760701817371>
- Brownell, M. T., Sindelar, P. T., Kiely, M. T., & Danielson, L. C. (2010). Special education teacher quality and preparation: Exposing foundations, constructing a new model. *Exceptional Children*, 76(3), 357–377. <https://doi.org/10.1177/001440291007600307>
- Bruno, P., Rabovsky, S. J., & Strunk, K. O. (2020). Taking their first steps: The distribution of new teachers in school and classroom contexts and implications for teacher effectiveness. *American Educational Research Journal*, 57(4), 1688–1729. <https://doi.org/10.3102/0002831219882008>
- Brunsting, N., Sreckovic, M., & Lane, K. (2014). Special education teacher burnout: A synthesis of research from 1979 to 2013. *Education and Treatment of Children*, 37(4), 681–712. <https://doi.org/10.1353/etc.2014.0032>
- Bucat, R. (2005). Implications of chemistry education research for teaching practice: Pedagogical content knowledge as a way forward. *Chemistry Education International*, 6(1), 1–2. <https://doi.org/10.1039/B4RP90025A>

- Buddin, R., & Zamarro, G. (2009). *Teacher qualifications and student achievement in urban elementary schools*. Rand Corporation. <https://doi.org/10.1016/j.jue.2009.05.001>
- Burnette, D., II. (2017). States struggle to define “Ineffective teachers.” *Education Week*, 36(33), 1–17. <https://www.edweek.org/policy-politics/states-struggle-to-define-ineffective-teachers-under-essa/2017/05>
- Byra, M., & Coulon, S. C. (1994). The effect of planning on the instructional behaviors of preservice teachers. *Journal of Teaching in Physical Education*, 13(2), 123–139. <https://doi.org/10.1123/JTPE.13.2.123>
- Carter, H., Amrein-Beardsley, A., & Hansen, C. C. (2011). So not amazing! Teach for America corps members’ evaluation of the first semester of their teacher preparation program. *Teachers College Record*, 113(5), 861–894. <https://doi.org/10.1177/0161468111111300504>
- Castro, A., Quinn, D. J., Fuller, E., & Barnes, M. (2018). Addressing the importance and scale of the U.S. teacher shortage. UCEA policy brief 2018-1. <https://files.eric.ed.gov/fulltext/ED579971.pdf>
- Cazden, C. B. (2001). *Classroom discourse: The language of teaching and learning* (2nd ed.). Heinmann. <https://doi.org/10.14507/er.v0.230>
- Cheng, Y. C. (1996). Relation between teachers’ professionalism and job attitudes, educational outcomes, and organizational factors. *Journal of Educational Research*, 89(3), 163–171. <https://doi.org/10.1080/00220671.1996.9941322>
- Chiang, H. S., Clark, M. A., & McConnell, S. (2017). Supplying disadvantaged schools with effective teachers: Experimental evidence on secondary math teachers from Teach for

America. *Journal of Policy Analysis and Management*, 36(1), 97–125.

<https://doi.org/10.1002/pam.21958>

Chingos, M. M., & Peterson, P. E. (2011). It's easier to pick a good teacher than to train one:

Familiar and new results on the correlates of teacher effectiveness. *Economics of*

Education Review, 30(3), 449–465. <https://doi.org/10.1016/j.econedurev.2010.12.010>

Choy, D., Wong, A. F., Lim, K. M., & Chong, S. (2013). Beginning teachers' perceptions of their

pedagogical knowledge and skills in teaching: A three year study. *Australian Journal of*

Teacher Education, 38(5), 68–79. <https://files.eric.ed.gov/fulltext/EJ1014053.pdf>

Clark, C. M., & Yinger, R. J. (1979). *Three studies of teacher planning* (Research Series No. 55).

Michigan State University, Institute for Research on Teaching.

<https://files.eric.ed.gov/fulltext/ED175855.pdf>

Clark, C. M., & Yinger, R. J. (1987). Teacher planning. In J. Calderhead (Ed.), *Exploring*

teachers' thinking (pp. 84–103). Cassell.

Clotfelter, C. T., Ladd, H. F., & Vigdor, J. L. (2006). Teacher–student matching and the

assessment of teacher effectiveness. *Journal of Human Resources*, 41(4), 778–820.

<https://doi.org/10.3368/jhr.XLI.4.778>

Clotfelter, C. T., Ladd, H. F., & Vigdor, J. L. (2010). Teacher credentials and student

achievement in high school: a cross-subject analysis with student fixed effects. *Journal of*

Human Resources, 45(3), 655–681. <https://doi.org/10.3368/jhr.45.3.655>

Cochran-Smith, M., Baker, M., Burton, S., Chang, W. C., Cummings Carney, M., Fernández, M.

B., Stringer Keefe, E., Miller, A. F., & Sánchez, J. G. (2017). The accountability era in

US teacher education: Looking back, looking forward. *European Journal of Teacher*

Education, 40(5), 572–588. <https://doi.org/10.1080/02619768.2017.1385061>

Cochran-Smith, M., & Villegas, A. M. (2015). Studying teacher preparation: The questions that drive research. *European Educational Research Journal*, 14(5), 379–394.

<https://doi.org/10.1177/1474904115590211>

Connelly, F. M., Clandinin, D. J., & He, M. F. (1997). Teachers' personal practical knowledge on the professional knowledge landscape. *Teaching and Teacher Education*, 13, 665–674.

[https://doi.org/10.1016/S0742-051X\(97\)00014-0](https://doi.org/10.1016/S0742-051X(97)00014-0)

Coughlan, M., Cronin, P., & Ryan, F. (2007). Step-by-step guide to critiquing research. Part 1: Quantitative research. *British Journal of Nursing*, 16(11), 658–663.

<https://doi.org/10.12968/bjon.2007.16.11.23681>

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

Crosnoe, R., Johnson, M. K., & Elder, G. H. (2004). Intergenerational bonding in school: The behavioral and contextual correlates of student-teacher relationships. *Sociology of Education*, 77(1), 60–81.

<https://doi.org/10.1177/003804070407700103>

Curry, D. L., Reeves, E., McIntyre, C. J., & Capps, M. (2018). Do teacher credentials matter? An examination of teacher quality. *Curriculum and Teaching Dialogue*, 20(1-2), 176–180.

<https://files.eric.ed.gov/fulltext/EJ1247341.pdf>

Danielson, C. (2007). *Enhancing professional practice: A framework for teaching* (2nd ed.). Association for Supervision and Curriculum Development.

- Darjan, I. (2012, May). *Correlations between teachers' sense of self efficacy and classroom management* [Conference paper]. International Conference on Social Work Perspective of Quasi-Coercive Treatment of Offenders.
- https://www.researchgate.net/publication/273133150_Correlations_between_teachers'_sense_of_self-efficacy_and_classroom_management
- Darling-Hammond, L. (1990). Teacher professionalism: Why and how. In A. Lieberman (Ed.), *Schools as collaborative cultures: Creating the future now* (pp. 25–50). The Palmer Press.
- Darling-Hammond, L. (2000a). How teacher education matters. *Journal of Teacher Education*, 51, 166–173. <https://doi.org/10.1177/0022487100051003002>
- Darling-Hammond, L. (2000b). Teacher quality and student achievement: A review of state policy evidence. *Education Policy Analysis Archives*, 8(1), 1–44.
- <https://epaa.asu.edu/ojs/index.php/epaa/article/view/392/515>
- Darling-Hammond, L. (2006). Securing the right to learn: Policy and practice for powerful teaching and learning. *Educational Researcher*, 35(7), 13–24.
- <https://doi.org/10.3102/0013189X035007013>
- Darling-Hammond, L. (2010). Teacher education and the American future. *Journal of Teacher Education*, 61, 35–47. <https://doi.org/10.1177/0022487109348024>
- Darling-Hammond, L., & Bransford, J. (Eds.). (2007). *Preparing teachers for a changing world: What teachers should learn and be able to do*. John Wiley & Sons.
- Darling-Hammond, L., Hammerness, K., Grossman, P., Rust, F., & Shulman, L. (2005). The design of teacher education programs. *Preparing teachers for a changing world: What*

Teachers Should Learn and be able to do, 1, 390–441.

<http://ohe32.nysed.gov/pdf/lindadarlinghammond.pdf>

Dee, T. S., & Wyckoff, J. (2013). Incentives, selection, and teacher performance: Evidence from IMPACT. *Journal of Policy Analysis and Management*, 34(2), 267–297.

<https://doi.org/10.1002/pam.21818>

Denzin, N. K., & Lincoln, Y. S. (2011). *The SAGE handbook of qualitative research*. Sage.

Dewey, J. (1938). *Experience and education*. Collier Books.

Dewey, J., Sindelar, P. T., Bettini, E., Boe, E. E., Rosenberg, M. S., & Leko, C. (2017).

Explaining the decline in special education teacher employment from 2005 to 2012.

Exceptional Children, 83, 315–329. <https://doi.org/10.1177/0014402916684620>

Downey, J. A. (2008). Recommendations for fostering educational resilience in the classroom.

Preventing School Failure, 53, 56–63. <https://doi.org/10.3200/PSFL.53.1.56-64>

Eger, A. (2017, January 4). Oklahoma slips to 47th in nation on annual educational quality

ranking. *Tulsa World*. https://tulsaworld.com/news/local/education/oklahoma-slips-to-47th-in-nation-on-annual-educational-quality-ranking/article_0053bd86-0819-5cab-8eda-2edcfbff0594.html

Eger, A. (2018, December 25). More Oklahoma teachers are taking nontraditional paths to the classroom, and the trend is raising new state policy questions. *Tulsa World*.

https://tulsaworld.com/news/local/education/more-oklahoma-teachers-are-taking-nontraditional-paths-to-the-classroom-and-the-trend-is-raising/article_2702beb3-f096-5b61-8e4f-ad4d3681e50c.html

Eisenhart, M., Borko, H., Underhill, R., Brown, C., Jones, D., & Agard, P. (1993). Conceptual knowledge fall through the cracks: Complexities of learning to teach mathematics for

- understanding. *Journal for Research in Mathematics Education*, 24(1), 8–40.
<https://doi.org/10.2307/749384>
- Elliott, S. N., Kratochwill, T. R., Littlefield Cook, J., & Travers, J. (2000). *Educational psychology: Effective teaching, effective learning* (3rd ed.). McGraw-Hill.
- Emmer, E. T., & Sabornie, E. J. (2015). *Handbook of classroom management* (2nd ed.). Taylor & Francis.
- Ersozlu, A., & Cayci, D. (2016). The changes in experienced teachers' understanding toward classroom management. *Universal Journal of Educational Research*, 4, 144–150.
<https://doi.org/10.13189/ujer.2016.040118>
- Evens, M., Elen, J., & Depaepe, F. (2017). Effects of opportunities to learn in teacher education on the development of teachers' professional knowledge of French as a foreign language. *Journal of Advances in Education Research*, 2, 265–279.
<https://doi.org/10.22606/jaer.2017.24007>
- Farmer, T. W., Lines, M. A., & Hamm, J. V. (2011). Revealing the invisible hand: The role of teachers in children's peer experiences. *Journal of Applied Developmental Psychology*, 32, 247–256. <https://doi.org/10.1016/j.appdev.2011.04.006>
- Fauth, B., Decristan, J., Decker, A. T., Büttner, G., Hardy, I., Klieme, E., & Kunter, M. (2019). The effects of teacher competence on student outcomes in elementary science education: The mediating role of teaching quality. *Teaching and Teacher Education*, 86, 1–14.
<https://doi.org/10.1016/j.tate.2019.102882>
- Feistritzer, C. E. (1994). The evolution of alternative teacher certification. *The Educational Forum*, 58(2), 132–138. <https://files.eric.ed.gov/fulltext/EJ478777.pdf>

Feistritzer, C. E. (2003). The making of a teacher: A report on teacher preparation in the US.

National Center for Education Information. <https://cdn-files.nsba.org/s3fs-public/reports/Gross-v-FBL.pdf?N3GyLbug97E6hkWmJomFEdqJ8ravptqD>

Feistritzer, C. E. (2009a). Alternative teacher certification: A state-by-state analysis 2009.

National Center for Education Information. <https://files.eric.ed.gov/fulltext/EJ857483.pdf>

Feistritzer, C. E. (2009b). Teaching while learning: Alternate routes fill the gap. *Edge: The*

Latest Information for the Education Practitioner, 5(2), 1–15.

<http://www.sagepub.com.acu.idm.oclc.org/journalsIndex.nav#P>

Feistritzer, C. E., Griffin, S., & Linnajarvi, A. (2011). Profile of teachers in the U.S. 2011.

National Center for Education Information.

http://www.ncei.com/Profile_Teachers_US_2011.pdf

Feistritzer, C. E., & Haar, K. (2008). *Alternate routes to teaching*. Pearson Education.

Feng, L. (2009). Opportunity wages, classroom characteristics, and teacher mobility. *Southern*

Economic Journal, 75(4), 1165–1190. [https://doi.org/10.1002/j.2325-](https://doi.org/10.1002/j.2325-8012.2009.tb00952.x)

[8012.2009.tb00952.x](https://doi.org/10.1002/j.2325-8012.2009.tb00952.x)

Ferguson, R. F. (1998). Can schools narrow the Black-White test score gap? In C. Jencks & M.

Phillips (Eds.), *The Black-White test score gap* (pp. 318–374). Brookings.

Fernandez, C. (2014). Knowledge base for teaching and pedagogical content knowledge: Some

useful models and implications for teachers' trainings. *Problems of Education in the 21st*

Century, 60, 79–100. <https://doi.org/10.33225/pec/14.60.79>

Finn, C., & Madigan, K. (2001). Who is teaching our children: Removing the barriers for teacher

candidates. *Educational Leadership Journal*, 58(8), 29–36.

<https://files.eric.ed.gov/fulltext/EJ637138.pdf>

- Flower, A., McKenna, J. W., & Haring, C. D. (2017). Behavior and classroom management: Are teacher preparation programs really preparing our teachers? *Preventing School Failure*, 61(2), 163–169. <https://doi.org/10.1080/1045988X.2016.1231109>
- Flower, A., McKenna, J. W., Muething, C., Bryant, D., & Bryant, B. (2014). Effects of the good behavior game on classwide off-task behavior in a high school basic algebra resource classroom. *Behavior Modification*, 38(1), 45–68.
<https://doi.org/10.1177/0145445513507574>
- Ford, T. G., Urick, A., & Wilson, A. S. P. (2018). Exploring the effect of supportive teacher evaluation experiences on U.S. teacher's job satisfaction. *Education Policy Analysis Archives*, 26(59), 1–36. <https://doi.org/10.14507/epaa.26.3559>
- Fox, A. G., & Peters, M. L. (2013). First year teachers: Certification program and assigned subject on their self-efficacy. *Current Issues in Education*, 16(1), 1–15.
https://www.researchgate.net/publication/279924984_First_Year_Teachers_Certification_Program_and_Assigned_Subject_on_Their_Self-Efficacy
- Fox, J., & Certo, J. (1999). Recruiting and retaining teachers: A review of the literature. *Metropolitan Educational Research Consortium*, 86(1), 57–75.
<https://files.eric.ed.gov/fulltext/ED446076.pdf>
- Gagnon, D. J., & Mattingly, M. J. (2015). Rates of beginning teachers: Examining one indicator of school quality in an equity context. *Journal of Educational Research*, 108(3), 226.
<https://doi.org/10.1080/00220671.2013.878300>
- Gale, N. K., Health, G., Cameron, E., Rashid, S., & Redwood, S. (2013). Using the framework method for the analysis of qualitative data in multi-disciplinary health research. *BMC Medical Research Methodology*, 13, 1–8. <https://doi.org/10.1186/1471-2288-13-117>

- Gehlbach, H., Brinkworth, M., & Juraschek, A. (2012). Changes in teacher-student relationships. *The British Journal of Educational Psychology*, 82, 690–704.
<https://doi.org/10.1111/j.2044-8279.2011.02058.x>
- Gimbert, B., & Hanna, P. (2011). Falling flat: Certification as an insufficient indicator of teacher quality. *Journal of the National Association for Alternative Certification*, 6(2), 31–52.
<https://files.eric.ed.gov/fulltext/EJ1053342.pdf>
- Gitomer, D. H., & Latham, A. S. (2000). Generalizations in teacher education: Seductive and misleading. *Journal of Teacher Education*, 51(3), 215–220.
<https://doi.org/10.1177/0022487100051003009>
- Given, L. M. (2008). *The SAGE encyclopedia of qualitative research methods* (Vol. 1). Sage.
<https://doi.org/10.4135/9781412963909/>
- Gnambs, T., & Hanfstingl, B. (2016). The decline of academic motivation during adolescence: An accelerated longitudinal cohort analysis on the effect of psychological need satisfaction. *Educational Psychology*, 36(9), 1691–1705.
<https://doi.org/10.1080/01443410.2015.1113236>
- Goe, L. (2002). Legislating equity: The distribution of emergency permit teachers in California. *Education Policy Analysis Archives*, 10(42), 1–36.
<https://doi.org/10.14507/epaa.v10n42.2002>
- Goldhaber, D. D., & Brewer, D. J. (2000). Does teacher certification matter? High school teacher certification status and student achievement. *Educational Evaluation and Policy Analysis*, 22(2), 129–145. <https://doi.org/10.3102/01623737022002129>

- Goldhaber, D. D., & Hansen, M. (2013). Is it just a bad class? Assessing the long-term stability of estimated teacher performance. *Economica*, 80(319), 589–612.
<https://doi.org/10.1111/ecca.12002>
- Goldhaber, D. D., Krieg, J., Naito, N., & Theobald, R. (2019, October). *Student teaching and the geography of teacher shortages: Working paper no. 222-1019*. National Center for Analysis of Longitudinal Data in Education Research.
<https://files.eric.ed.gov/fulltext/ED600816.pdf>
- Goldhaber, D. D., Lavery, L., & Theobald, R. (2015). Uneven playing field? Assessing the teacher quality gap between advantaged and disadvantaged students. *Educational Researcher*, 44(5), 293–307. <https://doi.org/10.3102/0013189X15592622>
- Goldhaber, D. D., & Liddle, S. (2012, January). *The gateway to the profession: Assessing teacher preparation programs based on student achievement. Working paper 65*. National Center for Analysis of Longitudinal Data in Education Research.
<https://files.eric.ed.gov/fulltext/ED529165.pdf>
- Goldhaber, D. D., Quince, V., & Theobald, R. (2018). Has it always been this way? Tracing the evolution of teacher quality gaps in U.S. public schools. *American Educational Research Journal*, 55(1), 171–201. <https://doi.org/10.3102/0002831217733445>
- Goldstein, D. D. (2014). *The teacher wars: A history of America's most embattled profession* (1st ed.). Doubleday.
- Good, T. L., McCaslin, M., Tsang, H. Y., Zhang, J., Wiley, C. R. H., & Bozack, A. R. (2006). How well do 1st year teachers teach does type of preparation make a difference? *Journal of Teacher Education*, 57, 410–430. <https://doi.org/10.1177/0022487106291566>
- Greene, J. C. (2007). *Mixed methods in social inquiry*. Jossey-Bass.

- Greene, J. C., Caracelli, V. J., & Graham, W. F. (1989). Toward a conceptual framework for mixed-method evaluation designs. *Educational Evaluation and Policy Analysis*, 11(3), 255–274. <https://doi.org/10.3102/01623737011003255>
- Haberman, M. (1986). Alternative teacher certification programs. *Action in Teacher Education*, 8(2), 13–18. <https://doi.org/10.1080/01626620.1986.10519286>
- Hampden-Thompson, G., Herring, W. L., & Kienzl, G. (2008). Attrition of public school mathematics and science teachers. Issue Brief. NCES 2008-077. *National Center for Education Statistics*. <https://nces.ed.gov/pubs2008/2008077.pdf>
- Hanna, P., & Gimbert, B. (2011). Falling flat: Certification as an insufficient indicator of teacher quality. *Journal of the National Association for Alternative Certification*, 6(2), 31–52. <https://files.eric.ed.gov/fulltext/EJ1053342.pdf>
- Hanuscin, D. (2013). Critical incidents in the development of pedagogical content knowledge for teaching the nature of science: A prospective elementary teacher's journey. *Journal of Science Teacher Education*, 24(6), 933–956. <https://doi.org/10.1007/s10972-013-9341-4>
- Hanushek, E. A., Kain, J. F., & Rivkin, S. G. (2004). Why public schools lose teachers. *Journal of Human Resources*, 39(2), 326–354. <https://doi.org/10.2307/3559017>
- Harris, D. N., & Sass, T. R. (2011). Teacher training, teacher quality and student achievement. *Journal of Public Economics*, 95(7), 798–812. <https://doi.org/10.1016/j.jpubeco.2010.11.009>
- Hashweh, M. (2013). Pedagogical content knowledge: Twenty-five years later. In C. J. Craig, P. C. Meijer, & J. Broeckmans (Eds.), *From teacher thinking to teachers and teaching: The evolution of a research community* (pp. 115–140). Emerald Group Publishing Limited.

- Hatch, J. A. (2002). *Doing qualitative research in education settings*. State University of New York Press.
- Hattie, J. (2003, October). *Teachers make a difference: What is the research evidence?* Paper presented at the Australian Council for Educational Research Annual Conference on Building Teacher Quality.
https://research.acer.edu.au/cgi/viewcontent.cgi?article=1003&context=research_conference_2003
- Hawley, W. D. (1990). The theory and practice of alternative certification: Implications for the improvement of teaching. *Peabody Journal of Education*, 67(3), 3–34.
<https://doi.org/10.1080/01619569009538690>
- Heilig, J. V., & Jez, S. J. (2010). Teach for America: A review of the evidence. *In Education Policy Research Unit*. <http://nepc.colorado.edu/files/PB-TeachAmerica-Heilig.pdf>.
- Henry, G. T., Purtell, K. M., Bastian, K. C., Fortner, C. K., Thompson, C. L., Campbell, S. L., & Patterson, K. M. (2014). The effects of teacher entry portals on student achievement. *Journal of Teacher Education*, 65(1), 7–23. <http://doi.org/10.1177/0022487113503871>
- Hesse-Biber, S., & Leavy, P. (2011). *The practice of qualitative research* (2nd ed.). Sage.
- Hirsch, E. D., Jr. (2016). In defense of educators: The problem of idea quality, not teacher quality. *American Educator*, 4, 30–33. <https://www.aft.org/sites/default/files/ae-winter2016hirsch.pdf>
- Hogan, T., Rabinowitz, M., & Craven, J. (2003). Representation in teaching: Inferences from research of expert and novice teachers. *Educational Psychologist*, 38, 235–247.
https://doi.org/10.1207/S15326985EP3804_3

Hohnstein, S. (2017). The rise of urban alternative teacher certification. *Teacher Education and Practice, 1*, 194–206.

link.gale.com/apps/doc/A552850233/AONE?u=anon~6b559071&sid=googleScholar&xid=259a273f

Hoigaard, R., Giske, R., & Sundsli, K. (2012). ‘Newly qualified teachers’ work engagement and teacher efficacy influences on job satisfaction, burnout, and the intention to quit’.

European Journal of Teacher Education, 35(3), 347–357.

<https://doi.org/10.1080/02619768.2011.633993>

Hopkins, D. (2013). Exploding the myths of school reform. *School Leadership and Management, 33*(4), 304–321. <https://doi.org/10.1080/13632434.2013.793493>

Howell, P. B., Faulkner, S. A., Cook, C. M., Miller, N. C., & Thompson, N. L. (2016).

Specialized preparation for middle level teachers: A national review of teacher preparation programs. *Research in Middle Level Education Online, 39*(1), 1–12.

<https://doi.org/10.1080/19404476.2015.1115322>

Hughes, G. (2012). Teacher retention: Teacher characteristics, school characteristics, organizational characteristics, and teacher efficacy. *Journal of Educational Research, 105*(4), 245–255. <https://doi.org/10.1080/00220671.2011.584922>

Hughes, S. (2005). Some canaries left behind? Evaluating a state-endorsed lesson plan database and its social construction of who and what counts. *International Journal of Inclusive Education, 9*(2), 105–138. <https://doi.org/10.1080/1360311042000315523>

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

<https://doi.org/10.1177/016146810811000103>

- Ingersoll, R. M. (2003). *Is there really a teacher shortage?* (1st ed.). University of Pennsylvania.
<http://www.gse.upenn.edu/pdf/rmi/ShortageRMI-09-2003.pdf>
- Ingersoll, R. M. (2007). Misdiagnosing the teacher quality problem. CPRE Policy Briefs. RB-49.
Consortium for Policy Research in Education.
<https://files.eric.ed.gov/fulltext/ED498327.pdf>
- Ingersoll, R. M., May, H., & Collins, G. (2019). Recruitment, employment, retention and the minority teacher shortage. *Education Policy Analysis Archives*, 27(37), 1–42.
<https://doi.org/10.14507/epaa.27.3714>
- Ingersoll, R. M., & Smith, T. M. (2003). The wrong solution to the teacher shortage. *Educational Leadership*, 60(8), 30. https://repository.upenn.edu/gse_pubs/126
- Jackson, N., & Miller, R. (2020). Teacher candidates' sense of self-efficacy toward classroom management. *Journal of Education*, 200(3), 153–163.
<https://doi.org/10.1177/0022057419881169>
- Jenkins, A., & Ornelles, C. (2009). Determining professional development needs of general educators in teaching students with disabilities in Hawaii. *Professional Development in Education*, 35(4), 635–654. <https://doi.org/10.1080/13674580802568930>
- Jensen, B., Roberts-Hull, K., Magee, J., & Ginnivan, L. (2016). Not so elementary: Primary school teacher quality in top-performing systems. *National Center on Education and the Economy*. <https://files.eric.ed.gov/fulltext/ED588643.pdf>
- Jensen, E., Skibsted, E. B., & Christensen, M. V. (2015). Educating teachers focusing on the development of reflective and relational competencies. *Education Research Policy Practice*, 14(3), 201–212. <https://doi.org/10.1007/s10671-015-9185-0>

Jones, D. L., & Sandidge, R. F. (1997). Recruiting and retaining teachers in urban schools: Implications for policy and the law. *Education and Urban Society*, 29(2), 192–203.

<https://doi.org/10.1177/0013124597029002006>

Juul, J., & Jensen, H. (2017). *Relational competence. Towards a new culture of education*.

Mathias Voelchert GmbH Verlag.

Kahan, J., Cooper, D., & Bethea, K. (2003). The role of mathematics teachers' content knowledge in their teaching: A framework for research applied to a study of student teachers. *Journal of Mathematics Teacher Education*, 6(3), 223–252.

<https://doi.org/10.1023/A:1025175812582>

Kalogrides, D., & Loeb, S. (2013). Different teachers, different peers: The magnitude of student sorting within schools. *Educational Researcher*, 42(6), 304–316.

<https://doi.org/10.3102/0013189X13495087>

Kalogrides, D., Loeb, S., & Be'teille, T. (2013). Systematic sorting: Teacher characteristics and class assignments. *Sociology of Education*, 86(2), 103–123.

<https://doi.org/10.1177/0038040712456555>

Khalid, M., Hashmi, A., Javed, Z., & Javed, I. (2021). Effect of teachers' advance knowledge and pedagogy skills on students' academic performance. *Ilkogretim Online*, 20(4), 2009–

2014. <https://doi.org/10.17051/ilkonline.2021.04.228>

Kim, S., Cambray-Engstrom, E., Wang, J., Kang, V. Y., Choi, Y. J., & Coba-Rodriguez, S. (2020). Teachers' experiences, attitudes, and perceptions towards early inclusion in urban settings. *Inclusion*, 8(3), 222–240. <https://doi.org/10.1352/2326-6988-8.3.222>

- Kimbrél, L. (2019). Teacher hiring: The disconnect between research based best practice and processes used by school principals. *Administrative Issues Journal: Education, Practice & Research*, 9(2), 12–27. <https://doi.org/10.5929/9.2.2>
- Kitsantas, A., & Baylor, A. (2001). The impact of the instructional planning self-reflective tool on preservice teacher performance, disposition, and self-efficacy beliefs regarding systematic instructional planning. *Educational Technology Research and Development*, 49(4), 97–106. <https://doi.org/10.1007/BF02504949>
- Klassen, R. M., & Chiu, M. M. (2010). Effects on teachers' self-efficacy and job satisfaction: Teacher gender, years of experience, and job stress. *Journal of Educational Psychology*, 102(3), 741–756. <https://doi.org/10.1037/a0019237>
- Kleickmann, T., Trobst, S., Heinze, A., Bernholt, A., Rink, R., & Kunter, M. (2017). Teacher knowledge experiment: Conditions of the development of pedagogical content knowledge. In D. Leutner, J. Fleischer, J. Grünkorn, & E. Klieme (Eds.), *Competence assessment in education. Methodology of educational measurement and assessment* (pp. 11–128). Springer International. <https://doi.org/10.1007/978-3-319-50030-0>
- Kosovich, J., Flake, J., & Hulleman, C. (2017). Short-term motivation trajectories: A parallel process model of expectancy- value. *Contemporary Educational Psychology*, 49, 130–139. <https://doi.org/10.1016/j.cedpsych.2017.01.004>
- Kraft, M. A., & Papay, J. P. (2014). Can professional environments in schools promote teacher development? Explaining heterogeneity in returns to teaching experience. *Educational Evaluation and Policy Analysis*, 36(4), 476–500. <https://doi.org/10.3102/0162373713519496>

- Krieg, J. M., Goldhaber, D., & Theobald, R. (2018, November). *Teacher candidate apprenticeships: Assessing the who and where of student teaching*. National Center for Analysis of Longitudinal Data in Education Research.
<https://files.eric.ed.gov/fulltext/ED591846.pdf>
- Krieg, J. M., Theobald, R., & Goldhaber, D. (2016). A foot in the door: Exploring the role of student teaching assignments in teachers' initial job placements. *Educational Evaluation and Policy Analysis*, 38(2), 364–388. <https://doi.org/10.3102/0162373716630739>
- Kvale, S. (1996). *InterViews: An introduction to qualitative research interviewing*. Sage.
- Kwiatkowski, M. (1999). Debating alternative teacher certification: A trial by achievement. In M. Kanstoroom & C. Finn (Eds.), *Better teachers, better schools*. Thomas B. Fordham Foundation.
- Laczko-Kerr, I., & Berliner, D. C. (2002). The effectiveness of Teach for America and other under-certified teachers on student academic achievement: A case of harmful public policy. *Education Policy Analysis Archives*, 10(37), 1–53.
<https://files.eric.ed.gov/fulltext/EJ667240.pdf>
- Lagemann, E. C. (2002). *An elusive science: The troubling history of education research*. University of Chicago Press.
- Lankford, H., Loeb, S., & Wyckoff, J. (2002). Teacher sorting and the plight of urban schools: A descriptive analysis. *Educational Evaluation and Policy Analysis*, 24(1), 37–62.
<https://doi.org/10.3102/01623737024001037>
- Lather, P. (1992). Critical frames in educational research: Feminist and post-structural perspectives. *Theory into Practice*, 31(2), 87–99.
<https://doi.org/10.1080/00405849209543529>

- Lazowski, R., & Hulleman, C. (2016). Motivation interventions in education: A meta-analytic review. *Review of Educational Research*, 86(2), 602–640.
<https://doi.org/10.3102/0034654315617832>
- Learning Sciences Marzano Center. (2013, April). *Developing a passion for professional teaching: The Marzano teacher evaluation model*. <https://www.learningsciences.com/wp-content/uploads/2020/06/The-Marzano-Teacher-Evaluation-Model.pdf>
- Leavy, P. (2017). *Research design: Quantitative, qualitative, mixed methods, arts-based, and community-based participatory research approaches*. The Guilford Press.
- Leko, M. M., & Brownell, M. T. (2011). Special education preservice teachers' appropriation of pedagogical tools for teaching reading. *Exceptional Children*, 77(2), 229–251.
<https://doi.org/10.1177/001440291107700205>
- Leko, M. M., Brownell, M. T., Sindelar, P. T., & Kiely, M. T. (2015). Envisioning the future of special education personnel preparation in a standards-based era. *Exceptional Children*, 82(1), 25–43. <https://doi.org/10.1177/0014402915598782>
- Lichtman, M. (2013). *Qualitative research in education: A user's guide* (3rd ed.). Sage.
- Linek, W. M., Sampson, M. B., Haas, L., Sadler, D., Moore, L., & Nylan, M. C. (2012). The impact of teacher preparation: A study of alternative certification and traditionally prepared teachers in their first year of teaching. *Issues in Teacher Education*, 21(2), 67–82. <https://files.eric.ed.gov/fulltext/EJ1001261.pdf>
- Liu, E., Rosenstein, J., Swan, A., & Khalil, D. (2008). When districts encounter teacher shortages: The challenges of recruiting and retaining mathematics teachers in urban districts. *Leadership & Policy in Schools*, 7(3), 296–323.
<https://doi.org/10.1080/15700760701822140>

- Liu, X. S., & Meyer, J. P. (2005). Teachers' perceptions of their jobs: A multilevel analysis of the teacher follow-up survey for 1994-95. *Teachers College Record*, 107(5), 985–1003. <https://doi.org/10.1111/j.1467-9620.2005.00501.x>
- Livingston, C., & Borko, H. (1989). Expert-novice differences in teaching: A cognitive analysis and implications for teacher education. *Journal of Teacher Education*, 40(4), 36–42. <https://doi.org/10.1177/002248718904000407>
- Lohrmann, S., Boggs, E. M., & Bambara, L. M. (2006). Elementary education teachers' beliefs about essential supports needed to successfully include students with developmental disabilities who engage in challenging behaviors. *Research and Practice for Persons with Severe Disabilities*, 31(2), 157–173. <https://doi.org/10.1177/154079690603100208>
- Luckner, A. E., & Pianta, R. C. (2011). Teacher–student interactions in fifth grade classrooms: Relations with peer behavior. *Journal of Applied Developmental Psychology*, 32(5), 257–266. <https://doi.org/10.1016/j.appdev.2011.02.010>
- Ludlow, C. (2013). Alternative certification pathways: Filling a gap? *Education and Urban Society*, 45(4), 440–458. <https://doi.org/10.1177/0013124511413916>
- Machi, L. A., & McEvoy, B. T. (2016). *The literature review: Six steps to success* (3rd ed.). Corwin Press.
- Malatras, J., Gais, T., Wagner, A., & Nelson, A. (2017). *A background on potential teacher shortages in the United States*. Nelson A. Rockefeller Institute of Government. <https://files.eric.ed.gov/fulltext/ED605640.pdf>
- Mansfield, R. K. (2015). Teacher quality and student inequality. *Journal of Labor Economics*, 33(3), 751–788. <https://doi.org/10.1086/679683>

- Marks, D. B. (2010). Preservice teachers' perceptions of classroom management instruction: Theory to practice. *National Teacher Education Journal*, 3(2), 179–201.
- Marshall, B. (2012). Teacher lesson planning: Superficial or deep? *Teaching Young Children*, 6(2), 24–26. <https://core.ac.uk/download/pdf/235420532.pdf>
- Marshall, C., & Rossman, G. B. (2016). *Designing qualitative research* (6th ed.). Sage.
- Martinussen, R., Tannock, R., & Chaban, P. (2011). Teachers' reported use of instructional and behavior management practices for students with behavior problems: Relationship to role and level of training in ADHD. *Child & Youth Care Forum*, 40(3), 193–210.
<https://doi.org/10.1007/s10566-010-9130-6>
- McKenna, J. W., & Ciullo, S. (2016). Typical reading instructional practices provided to students with emotional and behavioral disorders in a residential and day treatment setting: A mixed methods study. *Residential Treatment for Children & Youth*, 33(3–4), 225–246.
<https://doi.org/10.1080/0886571X.2016.1207217>
- McKenna, J. W., Muething, C., Flower, A., Bryant, D., & Bryant, B. (2015). Use and relationships among effective practices in co-taught inclusive high school classrooms. *International Journal of Inclusive Education*, 19(1), 53–70.
<https://doi.org/10.1080/13603116.2014.906665>
- McLeskey, J., Landers, E., Williamson, P., & Hoppey, D. (2012). Are we moving toward educating students with disabilities in less restrictive settings? *The Journal of Special Education*, 46(3), 131–140. <http://doi.org/10.1177/0022466910376670>
- Mee, M., & Haverback, H. R. (2017). Middle school principals' perceptions and preferences when hiring teachers. *American Secondary Education*, 45(3), 38–49.
<https://files.eric.ed.gov/fulltext/EJ1154027.pdf>

- Melnick, S. A., & Meister, D. G. (2008). A comparison of beginning and experienced teachers' concerns. *Educational Research Quarterly*, 31(3), 39–56.
<https://files.eric.ed.gov/fulltext/EJ788428.pdf>
- Merriam, S. B. (1998). *Qualitative research and case study applications in education*. Jossey-Bass.
- Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation* (3rd ed.). Jossey-Bass.
- Merry, J. J. (2013). Tracing the U.S. deficit in PISA reading skills to early childhood: Evidence from the United States and Canada. *Sociology of Education*, 86(3), 234–252.
<https://doi.org/10.1177/0038040712472913>
- Milanowski, A. (2004). The relationship between teacher performance evaluation scores and student achievement: Evidence from Cincinnati. *Peabody Journal of Education*, 79(4), 33–53. https://doi.org/10.1207/s15327930pje7904_3
- Mills, A. J., Durepos, G., & Wiebe, E. (2010). *Encyclopedia of case study research* (Vol. 1). Sage.
- Mincu, M. E. (2015). Teacher quality and school improvement: what is the role of research? *Oxford Review of Education*, 41(2), 253–269.
<https://doi.org/10.1080/03054985.2015.1023013>
- Moffett, E. T., & Davis, B. L. (2014). The road to teacher certification: Does it matter how you get there? *National Teacher Education Journal*, 7(4), 17–26.
- Nathaniel, P., Pendergast, L. L., Segool, N., Saeki, E., & Ryan, S. (2016). The influence of test-based accountability policies on school climate and teacher stress across four states.

Teaching and Teacher Education, 59, 492–502.

<https://doi.org/10.1016/j.tate.2016.07.013>

National Center for Education Statistics. (2012). *Schools and staffing survey (SASS): Number of teachers and percentage of teachers who reported that they entered teaching through an alternative certification program, by selected school and teacher characteristics: 2007–08 and 2011–12*. https://nces.ed.gov/surveys/sass/tables/sass1112_2014_01_t1n.asp

National Center for Education Statistics. (2015). *Teacher turnover: Stayers, movers, and leavers*. <https://nces.ed.gov/programs/coe/indicator/slc>

National Center for Education Statistics. (2018a, April). *Preparation and support for teachers in public schools: Reflections on the first year of teaching*. <https://nces.ed.gov/pubs2018/2018143.pdf>

National Center for Education Statistics. (2018b, May). *Characteristics of public school teachers who completed alternative route to certification programs*. <https://nces.ed.gov/programs/coe/indicator/tlc>

National Center for Education Statistics. (2020, May 9). *Characteristics of public school teachers who completed alternative route to certification programs*. https://nces.ed.gov/programs/coe/indicator_tlc.asp

National Commission on Excellence in Education. (1983). *A nation at risk: The imperative for educational reform*. https://edreform.com/wpcontent/uploads/2013/02/A_Nation_At_Risk_1983.pdf

National Conference of State Legislatures. (2011). *National Board for Professional Teaching Standards Certification: What legislatures need to know*. <https://www.ncsl.org/Portals/1/Documents/educ/NationalBoard.pdf>

National Research Council. (2010). *Preparing teachers: Building evidence for sound policy*. National Academies Press.

Neely, S. R. (2015). No child left behind and administrative costs: A resource dependence study of local school districts. *Education Policy Analysis Archives*, 23(26), 1–22.
<http://doi.org/10.14507/epaa.v23.1785>

Nelson, J. R., Maculan, A., Roberts, M. L., & Ohlund, B. J. (2001). Sources of occupational stress for teachers of students with emotional and behavioral disorders. *Journal of Emotional and Behavioral Disorders*, 9(2), 123–130.
<https://doi.org/10.1177/106342660100900207>

Ng, J. C. (2003). Teacher shortages in urban schools. *Education & Urban Society*, 35(4), 380–398. <https://doi.org/10.1177/0013124503255453>

Nurmi, J. E. (2012). Students' characteristics and teacher–child relationships in instruction: A meta-analysis. *Educational Research Review*, 7(3), 177–197.
<https://doi.org/10.1016/j.edurev.2012.03.001>

Nusbaum, C. M. (2002). *Principals' perceptions of the effectiveness of alternatively certified and traditionally certified teachers in Hampton Roads, Virginia*. University Libraries, Virginia Polytechnic Institute and State University.
<http://scholar.liv.vt.edu/theses/available/etd-12092002-183209/>

Ochanji, M. J., Chen, R. J., Daniels, E., Deringer, M. D., & McDaniel, J. (2016). A different kind of kid, a different kind of teacher education: Middle grades teachers reflect on their preparation to teach young adolescents. *Middle Grades Review*, 2(1), 1–17.
<https://files.eric.ed.gov/fulltext/ED511305.pdf>

- Office of Postsecondary Education (ED). (2016). Preparing and credentialing the nation's teachers: The secretary's 10th report on teacher quality. *Office of Postsecondary Education, US Department of Education*. <https://files.eric.ed.gov/fulltext/ED576185.pdf>
- Oklahoma State Department of Education. (n.d.). *Guidelines and eligibility for the alternative placement program*.
[https://sde.ok.gov/sites/ok.gov.sde/files/GUIDELINES%20AND%20ELIGIBILITY%20FOR%20THE%20ALTERNATIVE%20PLACEMENT%20PROGRAM%20\(1\).pdf](https://sde.ok.gov/sites/ok.gov.sde/files/GUIDELINES%20AND%20ELIGIBILITY%20FOR%20THE%20ALTERNATIVE%20PLACEMENT%20PROGRAM%20(1).pdf)
- Oklahoma State Department of Education. (2019). *Oklahoma alternative placement program for teacher certification*. <https://sde.ok.gov/oklahoma-alternative-placement-program-teacher-certification>
- Oklahoma State Department of Education. (2021). *Alternative paths to teacher certification*.
<https://sde.ok.gov/alternative-paths-teacher-certification>
- Oklahoma State Department of Education. (2021). *Emergency certification guidance*.
<https://sde.ok.gov/emergency-certification-guidance>
- Oliver, R. M., Wehby, J. H., & Reschly, D. J. (2011). Teacher classroom management practices: Effects on disruptive or aggressive student behavior. *Campbell Systematic Reviews*, 7(1), 1–55. <https://doi.org/10.4073/csr.2011.4>
- Patrick, H. (2004). Re-examining classroom mastery goal structure. In P. R. Pintrich & M. L. Maehr (Eds.), *Advances in motivation: Motivating students, improving schools: The legacy of Carol Midgley* (Vol. 13; pp. 233–263). Elsevier JAI Press.
- Patton, M. Q. (2015). *Qualitative research & evaluation methods* (5th ed.). Sage.

- Pianta, R. C., Hamre, B. K., & Allen, J. P. (2012). Teacher-student relationships and engagement: Conceptualizing, measuring, and improving the capacity of classroom interactions. In S. L. Christenson, A. L. Reschly & C. Wylie (Eds.), *Handbook of research on student engagement* (pp. 365–386). Springer. https://doi.org/10.1007/978-1-4614-2018-7_17
- Podolsky, A., Kini, T., Bishop, J., & Darling-Hammond, L. (2016). *Solving the teacher shortage: How to attract and retain excellent educators*. Learning Policy Institute. <https://files.eric.ed.gov/fulltext/ED606767.pdf>
- Poland, B. (2001). Transcription quality. In Gubrium, J. F., & Holstein, J. A. (Eds.), *Handbook of interview research* (pp. 628–649). Sage. <https://doi.org/10.4135/9781412973588>
- Policy and Program Studies Service, Office of Planning, Evaluation, and Policy Development, U.S. Department of Education [PPSS]. (2015). *Highly qualified teachers enrolled in programs providing alternative routes to teacher certification or licensure*. <https://www2.ed.gov/rschstat/eval/teaching/hqt-teacher-certification/report.pdf>
- Powell, S. R. (2015). Connecting evidence-based practice with implementation opportunities in special education mathematics preparation. *Intervention in School and Clinic*, 51(2), 90–96. <https://doi.org/10.1177/1053451215579269>
- Poznanski, B., Hart, K. C., & Cramer, E. (2018). Are teachers ready? Preservice teacher knowledge of classroom management and ADHD. *School Mental Health*, 10(3), 301–313. <https://doi.org/10.1007/s12310-018-9259-2>
- Qu, Y., & Becker, B. (2003). Does traditional teacher certification imply quality? A meta-analysis. *American Educational Research Association*, 2–48. <https://files.eric.ed.gov/fulltext/ED477460.pdf>

- Ramadhan, R. A. (2021). A review of literature on professionalism and motivation to become a professional teacher. *Ilkogretim Online*, 20(1), 1335–1339.
<https://doi.org/10.17051/ilkonline.2021.01.128>
- Ramos, G., & Hughes, T. (2020). Could more holistic policy addressing classroom discipline help mitigate teacher attrition? *eJournal of Education Policy*, 21(1), 41–58.
<https://doi.org/10.37803/ejepS2002>
- Ravitch, D. (2010). *The death and life of the great American school system: How testing and choice are undermining education*. Basic Books.
- Redding, C., & Smith, T. M. (2016). Easy in, easy out: Are alternatively certified teachers turning over at increased rates? *American Educational Research Journal*, 53(4), 1086–1125. <https://doi.org/10.3102/0002831216653206>
- Reininger, M. (2012). Hometown disadvantage? It depends on where you're from. Teachers' location preferences and the implications for staffing schools. *Educational Evaluation and Policy Analysis*, 34(2), 127–145. <https://doi.org/10.3102/0162373711420864>
- Reiser, R. A., & Dick, W. (1996). *Instructional planning: A guide for teachers*. Allyn and Bacon.
- Richardson, V. (2003). Constructivist pedagogy. *Teachers College Record*, 105(9), 1623–1640.
https://weldone-project.eu/assets/howtoget_weldone/ppts/O3_WELDONE_Ex_5_1.pdf
- Rizwan, S., & Khan, R. M. (2015). Raising the quality of teaching in public schools of Pakistan: A three dimensional analysis for capacity development of in-service teachers in instructional planning and strategies. *Journal of Education and Practice*, 6(19), 190–202.
<https://files.eric.ed.gov/fulltext/EJ1079532.pdf>
- Robottom, I., & Hart, P. (1993). *Research in environmental education: Engaging the debate*. Deakin University Press.

- Roby, D. E. (2012). Teacher leader human relations skills: A comparative study. *Education*, 132(4), 898–906. <https://files.eric.ed.gov/fulltext/EJ994250.pdf>
- Rockoff, J. E. (2004). The impact of individual teachers on student achievement: Evidence from panel data. *American Economic Review*, 94(2), 247–252.
<https://doi.org/10.1257/0002828041302244>
- Rockoff, J. E., Jacob, B. A., Kane, T. J., & Staiger, D. O. (2011). Can you recognize an effective teacher when you recruit one? *Education Finance and Policy*, 6(1), 43–74.
https://doi.org/10.1162/EDFP_a_00022
- Roorda, D. L., Verschueren, K., Vancraeyveldt, C., Van Craeyevelt, S., & Colpin, H. (2014). Teacher–child relationships and behavioral adjustment: Transactional links for preschool boys at risk. *Journal of School Psychology*, 52(5), 495–510.
<https://doi.org/10.1016/j.jsp.2014.06.004>
- Rosiek, J. (2003). Emotional scaffolding: An exploration of the teacher knowledge at the intersection of student emotion and the subject matter. *Journal of Teacher Education*, 54(5), 399–412. <https://doi.org/10.1177/0022487103257089>
- Rubin, H. J., & Rubin, I. S. (1995). *Qualitative Interviewing: The art of hearing data*. Sage.
- Rutt, A. A., & Mumba, F. M. (2020). Developing secondary pre-service science teachers’ instructional planning abilities for language- and literacy-integrated science instruction in linguistically diverse classrooms. *Journal of Science Teacher Education*, 31(8), 841–868.
<https://doi.org/10.1080/1046560X.2020.1760431>
- Ryan, A. M., Gheen, M. H., & Midgley, C. (1998). Why do some students avoid asking for help? An examination of the interplay among students’ academic efficacy, teachers’ social–

- emotional role, and the classroom goal structure. *Journal of Educational Psychology*, 90(3), 528–535. <https://doi.org/10.1037/0022-0663.90.3.528>
- Ryan, F., Coughlan, M., & Cronin, P. (2007). Step-by-step guide to critiquing research. Part 2: Qualitative research. *British Journal of Nursing*, 16(12), 738–744. <https://doi.org/10.12968/bjon.2007.16.12.23726>
- Ryan, S. V., von der Embse, N. P., Pendergast, L. L., Saeki, E., Segool, N., & Schwing, S. (2017). Leaving the teaching profession: The role of teacher stress and educational accountability policies on turnover intent. *Teaching and Teacher Education*, 66, 1–11. <https://doi.org/10.1016/j.tate.2017.03.016>
- Sahin-Taskin, C. (2017). Exploring pre-service teachers' perceptions of lesson planning in primary education. *Journal of Education and Practice*, 8(12), 57–63. <https://files.eric.ed.gov/fulltext/EJ1140566.pdf>
- Sanders, W. L., & Rivers, J. C. (1996). *Cumulative and residual effects of teachers on future student academic achievement. Research Progress Report*. University of Tennessee Value-Added Research and Assessment Center. <https://www.beteronderwijsnederland.nl/files/cumulative%20and%20residual%20effects%20of%20teachers.pdf>
- Savage, T. V., & Savage, M. K. (2010). *Successful classroom management and discipline: Teaching self control and responsibility* (3rd ed.). Sage.
- Sayeski, K., & Brown, M. (2014). Developing a classroom management plan using a tiered approach. *Teaching Exceptional Children*, 47(2), 119–127. <https://doi.org/10.1177/0040059914553208>

Scales, P. C., Van Boekel, M., Pekel, K., Syvertsen, A. K., & Roehlkepartain, E. C. (2020).

Effects of developmental relationships with teachers on middle-school students' motivation and performance. *Psychology in the Schools*, 57(4), 646–677.

<https://doi.org/10.1002/pits.22350>

Scherzinger, M., & Wettstein, A. (2019). Classroom disruptions, the teacher-student relationship and classroom management from the perspective of teachers, students and external observers: a multimethod approach. *Learning Environments Research*, 22(1), 101–116.

<https://doi.org/10.1007/s10984-018-9269-x>

Segall, M. J., & Campbell, J. M. (2012). Factors relating to education professionals' classroom practices for the inclusion of students with autism spectrum disorders. *Research in Autism Spectrum Disorders*, 6(3), 1156–1167. <http://doi.org/10.1016/j.rasd.2012.02.007>

<http://doi.org/10.1016/j.rasd.2012.02.007>

Setyono, B. (2016). Providing variations of learning modalities to scaffold pre-service EFL teachers in designing lesson plan. *Proceeding of The International Conference on Teacher Training and Education*, 1(1), 336–343.

<https://jurnal.fkip.uns.ac.id/index.php/ictte/article/view/7622/5463>

Shenton, A. (2004). Strategies for ensuring trustworthiness in qualitative research projects.

Education for Information, 22(1), 63–75. <https://doi.org/10.3233/EFI-2004-22201>

Shepherd, D., & Devers, C. (2017). Principal perceptions of new teacher effectiveness. *Journal of Education*, 197(2), 37–47. <https://doi.org/10.1177/002205741719700205>

<https://doi.org/10.1177/002205741719700205>

Sherman, H. J., & Ding, C. (2008). Linking teacher education preparation to assessment of student achievement. *Teaching & Learning*, 23(1), 48–53.

<https://doi.org/10.1177/0022487118800708>

- Shulman, L. S. (1986). Those who understand: Knowledge growth in teaching. *Educational Researcher*, 15(2), 4–14. <https://doi.org/10.30827/profesorado.v23i3.11230>
- Shulman, L. S. (1987). Knowledge and teaching: Foundation of the new reform. *Harvard Educational Review*, 57(1), 1–22. <https://doi.org/10.17763/haer.57.1.j463w79r56455411>
- Shuls, J. V., & Trivitt, J. R. (2015). Teacher qualifications and productivity in secondary schools. *Journal of School Choice*, 9(1), 49–70. <https://doi.org/10.1080/15582159.2015.998964>
- Simonsen, B., MacSuga-Gage, A. S., Briere, D. E., Freeman, J., Myers, D., Scott, T. M., & Sugai, G. (2014). Multitiered support framework for teachers' classroom-management practices: Overview and case study of building the triangle for teachers. *Journal of Positive Behavior Interventions*, 16(3), 179–190. <https://doi.org/10.1177/1098300713484062>
- Smith, K., & Davies, J. (2015). Qualitative data analysis. *Practical research and evaluation: A start-to-finish guide for practitioners*, 145–158. <https://doi.org/10.4135/9781446268346/>
- Stake, R. E. (2006). *Multiple case study analysis*. Guilford.
- Stoddart, T. (1993). Who is prepared to teach in urban schools? *Education & Urban Society*, 26(1), 29–48. <https://doi.org/10.1177/0013124593026001004>
- Strauss, V. (2018, April 26). 'A Nation at Risk' demanded education reform 35 years ago. Here's how it's been bungled ever since. *The Washington Post*. <https://www.washingtonpost.com/news/answer-sheet/wp/2018/04/26/the-landmark-a-nation-at-risk-called-for-education-reform-35-years-ago-heres-how-it-was-bungled/#:~:text=Here's%20how%20it's%20been%20bungled%20ever%20since.,-By%20Valerie%20Strauss&text=Our%20nation%20is%20at%20risk,by%20competitors%20throughout%20the%20world%E2%80%A6>

- Struyven, K., & Vanthournout, G. (2014). Teachers' exit decisions: An investigation into the reasons why newly qualified teachers fail to enter the teaching profession or why those who do enter do not continue teaching. *Teaching and Teacher Education*, 43, 37–45.
<https://doi.org/10.1016/j.tate.2014.06.002>
- Sutcher, L., Darling-Hammond, L., & Carver-Thomas, D. (2016). *A coming crisis in teaching? Teacher supply, demand, and shortages in the U.S.* Learning Policy Institute.
<https://learningpolicyinstitute.org/product/coming-crisis-teaching>
- Sutcher, L., Darling-Hammond, L., & Carver-Thomas, D. (2019). Understanding teacher shortages: An analysis of teacher supply and demand in the United States. *Education Policy Analysis Archives*, 27(35), 1–40. <https://doi.org/10.14507/epaa.27.3696/>
- Tanang, H., & Abu, B. (2014). Teacher professionalism and professional development practices in south Sulawesi, Indonesia. *Journal of Curriculum and Teaching*, 3(2), 25–42.
<https://doi.org/10.5430/jct.v3n2p25>
- Teacher Certification Degrees. (n.d.). *Alternative teacher certification guide*.
<https://www.teachercertificationdegrees.com/alternative/>
- Thibodeaux, A., Labbat, M., Lee, D., & Labbat, C. (2015). The effects of leadership and high-stakes testing on teacher retention. *Academy of Educational Leadership*, 19(1), 1–201.
- Thomas, M. A. M. (2018). Policy embodiment: Alternative certification and teach for America teachers in traditional public schools. *Teaching and Teacher Education*, 70, 186–195.
<https://doi.org/10.1016/j.tate.2017.11.011>
- Torff, B., & Sessions, D. N. (2005). Principals' perceptions of the causes of teacher ineffectiveness. *Journal of Educational Psychology*, 97(4), 530–537.
<http://doi.org/10.1037/0022-0663.97.4.530>

- Torres, A. C., & Chu, E. (2016). Preparation programs for alternate-route teachers: Teacher satisfaction with instruction aligned to clinical practice. *Teacher Education & Practice*, 29(1), 213–240.
<https://link.gale.com/apps/doc/A552763158/AONE?u=anon~7efe42af&sid=googleScholar&xid=5f459e5a>
- Tschannen-Moran, M. (2009). Fostering teacher professionalism in schools: The role of leadership orientation and trust. *Educational Administration Quarterly*, 45(2), 217–247.
<https://doi.org/10.1177/0013161X08330501>
- Tschannen-Moran, M., & Hoy, A. W. (2001). Teacher efficacy: Capturing an elusive construct. *Teaching & Teacher Education*, 17(7), 783–805. [https://doi.org/10.1016/S0742-051X\(01\)00036-1](https://doi.org/10.1016/S0742-051X(01)00036-1)
- Uriegas, B., Kupczynski, L., & Mundy, M. A. (2014). A comparison of traditional and alternative certification routes on classroom management. *Sage Open*, 4(4), 1–6.
<https://doi.org/10.1177/2158244014553599>
- U.S. Department of Education. (n.d.). *New No Child Left Behind flexibility: Highly qualified teachers*. <https://www2.ed.gov/nclb/methods/teachers/hqtflexibility.html>
- U.S. Department of Education. (2015). *Highly qualified teachers enrolled in programs providing alternative routes to teacher certification or licensure*.
<https://www2.ed.gov/rschstat/eval/teaching/hqt-teacher-certification/report.pdf>
- U.S. Department of Education. (2017). *Teacher shortage areas nationwide listing*. 1990–1991 through 2017–2018.
<https://www2.ed.gov/about/offices/list/oep/pol/bteachershortageareasreport201718.pdf>

- U.S. Department of Education and Office of Innovation and Improvement. (2004). *Innovations in education: Alternative routes to teacher certification*. Education Publications Center.
<https://www2.ed.gov/admins/tchrqual/recruit/alttroutes/report.pdf>
- U.S. Department of Education Office of Special Education Programs. (2006). *Highly qualified teachers (HQT)*. [PowerPoint slides]. OSEP Leadership Conference.
https://sites.ed.gov/idea/files/HQT_10-5-06.pdf
- U.S. Department of Education. Office of the Under Secretary. (2002, September). *No Child Left Behind: A desktop reference*.
<https://www2.ed.gov/admins/lead/account/nclbreference/reference.pdf>
- Vanassche, E., & Kelchtermans, G. (2014). Teacher educators' professionalism in practice: Positioning theory and personal interpretative framework. *Teaching and Teacher Education, 44*, 117–127. <https://doi.org/10.1016/j.tate.2014.08.006>
- Van den Bogert, N., Van Bruggen, J., Kostons, D., & Jochems, W. (2014). First steps into understanding teachers' visual perception of classroom events. *Teaching and Teacher Education, 37*, 208–216. <https://doi.org/10.1016/j.tate.2013.09.001>
- van Driel, J. H., Berry, A., & Meirink, J. (2014). Research on science teacher knowledge. In N.H. Lederman & S. K. Abell (Eds.), *Handbook of research on science education* (Vol. 2, pp. 848–870). Routledge.
- Van Overschelde, J. P., & Wiggins, A. Y. (2020). Teacher preparation pathways: Differences in program selection and teacher retention. *Action in Teacher Education, 42*(4), 311–327.
<https://doi.org/10.1080/01626620.2019.1656116>

- van Tartwijk, J., Veldman, I., & Verloop, N. (2011). Classroom management in a Dutch teacher education program: A realistic approach. *Teaching Education*, 22(2), 169–184.
<https://doi.org/10.1080/10476210.2011.567847>
- Walsh, K., & Jacobs, S. (2007). *Alternative certification isn't alternative*. Thomas B. Fordham Institute. <https://files.eric.ed.gov/fulltext/ED498382.pdf>
- Wang, H., Hall, N. C., & Rahimi, S. (2015). Self-efficacy and causal attributions in teachers: Effects on burnout, job satisfaction, illness, and quitting intentions. *Teaching and Teacher Education*, 47, 120–130. <https://doi.org/10.1016/j.tate.2014.12.005>
- Ward, P., Li, W., Kim, I., & Lee, Y. S. (2012). Content knowledge courses in physical education programs in South Korea and Ohio. *International Journal of Human Movement Science*, 6, 107–120.
https://www.researchgate.net/publication/255703666_Content_Knowledge_Courses_in_Physical_Education_Programs_in_South_Korea_and_Ohio
- Warren, C. (2001). Qualitative interviewing. In Gubrium, F. J., & Holstein, A. J. (Eds.), *Handbook of interview research* (pp. 83–102). Sage.
<https://doi.org/10.4135/9781412973588/>
- Wayman, J. C., Foster, A. M., & Mantale-Bromley, C. (2003). A comparison of the professional concerns of traditionally prepared and alternatively licensed new teachers. *The High School Journal*, 86(3), 35–40. <https://doi.org/10.1353/hsj.2003.0005>
- Weber, C. L., & Johnsen, S. K. (2012). Teacher professionalism. *Gifted Child Today*, 35(1), 5–5.
<https://doi.org/10.1177/1076217511429676>

- Wentzel, K. R. (2002). Are effective teachers like good parents? Teaching styles and student adjustment in early adolescence. *Child Development*, 73(1), 287–301.
<https://doi.org/10.1111/1467-8624.00406>
- Wentzel, K. R. (2010). Students' relationships with teachers. In J. L. Meece & J. S. Eccles (Eds.), *Handbook of research on schools, schooling, and human development* (pp. 75–91). Routledge.
- Whitford, D. K., Zhang, D., & Katsiyannis, A. (2018). Traditional vs. alternative teacher preparation programs: A meta-analysis. *Journal of Child and Family Studies*, 27(3), 671–685. <https://doi.org/10.1007/s10826-017-0932-0>
- Wolff, C. E., Jarodzka, H., van den Bogert, N., & Boshuizen, H. (2016). Teacher vision: Expert and novice teachers' perception of problematic classroom management scenes. *Instructional Science*, 44(3), 243–265. <https://doi.org/10.1007/s11251-016-9367-z>
- Wolff, C. E., van den Bogert, N., Jarodzka, H., & Boshuizen, H. P. A. (2015). Keeping an eye on learning: Differences between expert and novice teachers' representations of classroom management events. *Journal of Teacher Education*, 66(1), 68–85.
<https://doi.org/10.1177/0022487114549810>
- Woods, J. R. (2016, May). *Mitigating teacher shortages: Alternative teacher certification*. Education Commission of the States. <https://www.ecs.org/wp-content/uploads/Mitigating-Teacher-Shortages-Alternative-Certification.pdf>
- Worth, J., & de Lazzari, J. (2017). Teacher retention and turnover research. Research Update 1. Teacher retention by subject. *National Foundation for Education Research*.
<https://www.nfer.ac.uk/publications/nufs01/nufs01.pdf>

- Worth, J., Lynch, S., Hillary, J., Rennie, C., & Andrade, J. (2018). Teacher workforce dynamics in England: Nurturing, supporting, and valuing teachers. *National Foundation for Educational Research*, 1–127. <https://files.eric.ed.gov/fulltext/ED594462.pdf>
- Wright, K. (2020). Comparison of pedagogical knowledge of traditional and alternate routes to teacher certification. *Journal of Graduate Education Research*, 1(5), 9–15. <https://scholarworks.harding.edu/jger/vol1/iss1/5>
- Yeager, D. S., Henderson, M. D., D'Mello, S., Paunesku, D., Walton, G. M., Spitzer, B. J., & Duckworth, A. L. (2014). Boring but important: A self-transcendent purpose for learning fosters academic self-regulation. *Journal of Personality and Social Psychology*, 107(4), 559–580. <https://doi.org/10.1037/a0037637>
- Yin, R. K. (2009). How to do better case studies: (with illustrations from 20 exemplary case studies). In Bickman, L., & Rog, D. J. *The SAGE handbook of applied social research methods* (pp. 254–282). Sage. <https://doi.org/10.4135/9781483348858/>
- Yin, R. K. (2018). *Case study research design and methods* (6th ed.). Sage.
- Young, A., Reiser, R., & Dick, W. (1998). Do superior teachers employ systematic instructional planning procedures? A descriptive study. *Educational Technology Research and Development*, 46(2), 65–78. <https://doi.org/10.1007/BF02299789>
- Zahorik, J., Halbach, A., Ehrle, K., & Molnar, A. (2003). Teaching practices for smaller classes. *Educational Leadership*, 61(1), 75–77. https://www.researchgate.net/publication/296271098_Teaching_Practices_for_Smaller_Classes

Zeichner, K., & Hutchinson, E. (2008). The development of alternative certification policies and programs in the United States. In P. Grossman & S. Loeb. *Taking stock: An examination of alternative certification* (pp. 15–29).

<https://www.researchgate.net/publication/303381581> The Development of Alternative Certification Policies and Programs in the US

Zembylas, M. (2007). Emotional ecology: The intersection of emotional knowledge and pedagogical content knowledge in teaching. *Teaching and Teacher Education*, 23(4), 355–367. <https://doi.org/10.1016/j.tate.2006.12.002>

Zinskie, C. D., & Rea, D. W. (2016). The Every Student Succeeds Act (ESSA): What it means for educators of students at risk. *National Youth Advocacy and Resilience Journal*, 2(1), 1–9. <https://doi.org/10.20429/nyarj.2016.020101>

Appendix A: IRB Approval

ABILENE CHRISTIAN UNIVERSITY
Educating Students for Christian Service and Leadership Throughout the World
Office of Research and Sponsored Programs
320 Hardin Administration Building, ACU Box 29103, Abilene, Texas 79699-9103
325-674-2885



November 10, 2021

Julianne H. Denton
Department of Educational Leadership
Abilene Christian University

Dear Julianne,

On behalf of the Institutional Review Board, I am pleased to inform you that your project titled "Is There More Than One Way? Examining Alternative Pathway Teacher Effectiveness Through the Experiences and Perceptions of Principals in Urban, Low Socioeconomic Schools in Oklahoma",

(IRB# 21-156)is exempt from review under Federal Policy for the Protection of Human Subjects.

If at any time the details of this project change, please resubmit to the IRB so the committee can determine whether or not the exempt status is still applicable.

I wish you well with your work.

Sincerely,

Megan Roth

Megan Roth, Ph.D.
Director of Research and Sponsored Programs

Appendix B: Participation Solicitation Email

21-156

Date of Approval: 11/10/2021

Hello,

I am doing a research study entitled "Is There More Than One Way? Examining Alternative Pathway Teacher Effectiveness Through the Experiences and Perceptions of Principals in Urban, Low Socioeconomic Schools in Oklahoma"

The purpose of the study is to generate knowledge of alternative pathway teacher's effectiveness in the classroom from an administrative point of view, specifically in urban, low socioeconomic schools.

To qualify to participate, you must have (a) been a principal for a minimum of two years and (b) have worked with or currently work with alternatively certified teachers.

Participation would require about 65 minutes of your time, to fill out a pre-questionnaire survey about your role and your campus, and participate in a virtual interview between you and me, the Primary Investigator. Interviews will be recorded, and securely stored.

If you are interested in participating and meet the basic criteria for this study, please reply to this email to notify me of your interest. I will reply with a Consent Form and more information.

Sincerely,

Julianne Hennessy Denton
Primary Investigator

Appendix C: Prequestionnaire


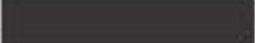

21-156

Date of Approval: 11/10/2021

Link to Pre-questionnaire: <https://forms.gle/he3xn1rYX3bbctN78>

Pre-Questionnaire

The goal of this study is to generate knowledge on alternative certification teacher effectiveness from a principal's point of view. This qualitative study will include this initial pre-questionnaire and one hour virtual confidential interview using the Google Meet platform. The planned design outcomes of this study are to inform administrators of specific areas where AC teachers can receive additional professional development and support. Please note: Alternative certification does not include teachers who currently are under an emergency certification, but can be under a provisional certification if they are currently enrolled in an alternative certification program.

  (not shared) [Switch account](#) 

* Required

Name:

Your answer

Email:

Your answer

21-156

Date of Approval: 11/10/2021

Phone Number:

Your answer

How many years have you been a building principal?

Your answer

How many years have you been a building principal in an urban, low-socioeconomic school? *

Your answer

What is the total number of teachers in your building currently? *

Your answer

21-156

Date of Approval: 11/10/2021

What is the total number of alternatively certified teachers in your building currently? Please note: this excludes those under emergency certification, but can be under a provisional certification if they are currently enrolled in an alternative certification program. *

Your answer

What grade levels and/or content areas do the alternatively certified teachers currently teach in? *

Your answer

Submit

Clear form

Appendix D: Interview Protocol

21-156

Date of Approval: 11/10/2021

Interview Guide

1. What grade levels and/or content areas are AC teachers currently placed in at your school? If you have previously worked with AC teachers, what grade and/or content areas did they teach in?
2. How do you feel about the effectiveness of AC teachers in the area of content knowledge? Tell me your experiences.
3. How do you feel about the effectiveness of AC teachers in the area of classroom management? Tell me your experiences.
4. How do you feel about the effectiveness of AC teachers in the area of instructional planning? Tell me your experiences.
5. How do you feel about the effectiveness of AC teachers in the area of human relation skills? Tell me your experiences.
6. How do you feel about the effectiveness of AC teachers in the area of professionalism? Tell me your experiences.
7. What gaps, if any, in effectiveness do you see in teachers from alternative routes?
8. What strengths, if any, in effectiveness do you see in teachers from alternative routes?
9. What area(s) do you believe AC teachers need support in?
10. Optional: How likely are you to hire AC teachers?

Appendix E: Coding Matrices for Research Questions

Secondary Research Question #1: How do school administrators perceive the effectiveness of AC teachers regarding content knowledge?

Interview Question: How do you feel about the effectiveness of AC teachers in the area of content knowledge? Tell me your experiences.

Category	Theme	Evidence
Content Knowledge	Personality and Innate Ability	<p>ES1: It really depends on the personality of the teacher if they are successful in content knowledge.</p> <p>ES5: It depends on the person to be honest, it is really based off that individual, their self-interest, and personality.</p> <p>ES3: Most of what makes you effective is your personality.</p> <p>ES4: It almost depends on the person themselves.</p> <p>ES5: It's really based off that person and just that individual and their self-interest and personality.</p> <p>ES5: It depends on the person to be honest.</p> <p>ES7: My alternative teachers in early childhood, they just had that with-it-ness. You know, they just had it. They just had it and they didn't have to think about how or ponder, or Google how they would be able to get that concept over to the child.</p> <p>ES7: They just had it and they didn't have to think about how or ponder what to do in the moment.</p> <p>ES7: For those that didn't do well with content, I think a lot of it had to do with their own personal insecurities or lack of security. What's the word I'm looking for? Self-esteem. Efficacy. In my opinion, if you're comfortable teaching a subject and confident in the classroom, you're going to get it across to the children a lot easier. And that goes for alternative certification, too.</p>

		<p>MS2: It has been a case by case basis at my campus and it just depends on the person.</p>
	Mindset and Coachability	<p>ES1: It really depended heavily on their mindset, their growth mindset.</p> <p>ES1: I would say coming in, they would have almost no content knowledge, but with the right mindset, I saw some of them improve over time. You have to be willing to persevere in our schools.</p> <p>ES1: People who work in our schools have to commit to like continuous learning and professional growth if they want our kids to be successful.</p> <p>ES5: I've noticed working previously with other teachers that have become alternatively certified and gone through the whole path of becoming a teacher after changing careers, or whatever that they've become so invested in becoming a teacher and their own growth that they do their own research. And so they have self-taught themselves.</p>
	Previous Experience	<p>ES1: One AC was a journalist before she became a teacher. So, for her to teach writing and grammar with our kids was a huge benefit for our kids.</p> <p>ES1: My gold star was my fourth grade AC teacher. She was a journalist before she became a teacher.</p> <p>ES1: Kids really, really thrived in there because she approached her content in a unique way, and I think it's because she had that prior career.</p> <p>ES1: My Second grade teacher was not..she was another AC teacher and it was a terrible experience because she didn't have kids of her own, she was older, and she didn't know how to talk to kids. She didn't have any experience prior. And so, she really struggled. She came in with no content knowledge and really didn't improve in her time here.</p> <p>ES2: You don't learn everything that you need in college. Some alternative teachers have other</p>

		<p>previous experience that helps them with the content and that is great.</p> <p>ES2: One of my AC teachers had lots of experience in the classroom under the guidance of a really good teacher as a paraprofessional first.</p> <p>ES2: So, it was almost like 4 or 5 years of student teaching before she had her own classroom.</p> <p>ES3: But it kind of depends on like their experience too. Right now I have a Kindergarten teacher who was a sociology major and was a Pre-K assistant and parent here before. Then she decided to go to start teaching. And she's doing just fine. She's a good teacher.</p> <p>ES3: My art teacher, she is a trained artist. She worked for an arts council. Her experience directly connects with what she does with students each day.</p> <p>ES3: My other teacher, was a sociology major. But she had a hard time at first. She got better over time though.</p> <p>ES4: They are actually very knowledgeable about their content area, and those with prior experiences...they really studied, know, and understand it."</p> <p>ES5: It almost depends on the person themselves because I have one that's alternatively certified even though the majority of their studies was in education and then my other teacher her background is not an education, but she seems to have a better understanding of content than the other one.</p> <p>ES6: Content knowledge, they're not ready, it's inadequate. You cannot just learn content knowledge. I couldn't learn to do a surgery while I was doing the surgery...AC teachers need adequate preparation or student teaching before coming to the classroom.</p>
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		<p>ES6: You cannot just learn content knowledge. I couldn't learn to do surgery while I was doing the surgery...AC teachers need adequate preparation and student teaching. They need more experience before.</p> <p>ES6: There's a lot of teacher preparation that people have had. So, I just think it's that much more stressful on AC teachers.</p> <p>ES7: I feel like children suffer in this area with an alternatively certified teacher because they don't have the knowledge, training, and experience to do the job.</p> <p>ES7: They may know the concept that they're teaching but they didn't know how to get it across and actually teach it because they don't have that training they need before.</p> <p>MS2: Content knowledge varies. It has been a case by case basis at my campus. The teacher I mentioned earlier, the science teacher, that was a no-brainer because she was a practicing scientist, so I had a high level of confidence in her content knowledge.</p> <p>MS2: Content knowledge is an area of concern for me because the way our state sets it up is you have to have related experience to your content area to be able to even be qualified for AC. But it appears they have loosely applied what that 2 years of experience really means.</p> <p>HS1: Most of the AC teachers I have hired when it comes to content knowledge, they have it. One of my AC science teachers has great background knowledge of science and he could stand with the best of them I believe.</p> <p>HS2: Alternatively certified teachers I have worked with have an expert level, or at least proficient level knowledge of their content, and with this, they are able to make connections between the curriculum and real-life experiences from what</p>
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		<p>they knew in another career and bring that to their classroom.</p> <p>HS2: Their expertise and their ability to discuss content with their students is a little above average.</p>
	All Teachers Have Similar Needs	<p>ES2: I feel like, just like anyone else. I think they need support.</p> <p>ES2: I don't see them as being different I think they're kind of in the same categories as everyone else with content knowledge. I think they have a lot of potential but they need some support.</p> <p>ES3: I don't feel like you really learn to be a teacher until when the principal says 'here's your room, here's your keys' and close the door and says here's your little team of people have fun. And you just have to figure things out, of course with support, but you are never really prepared no matter what your preparation looked like.</p> <p>ES3: Sometimes I think people are just a natural at teaching and I've had traditional and alternative people like that.</p> <p>ES3: I don't you feel like you really learn to be a teacher until when the principal says here's your room. Here's your keys and close the door and says, here's your little team of people have fun.</p> <p>ES4: I think however they were alternatively certified they really studied their content and they know and understand it. you know, traditional teachers, they're spread really thin even in college, not just learning content but they're learning how to teach and philosophy of teaching and they're not, they don't take as many of those specific content courses.</p> <p>ES6: We often just say, 'here's your key,' and teachers step into their rooms and learn as they go.</p> <p>MS1: I don't think it's any different than my regularly certified teachers. I haven't had really any teachers come like really strong in content.</p>

		<p>MS1: So, a lot of our school PD is centered around content knowledge and standards for all of our teachers, not just like the regular certification route or alternative certification route because they all need it. The need for content knowledge help is greater than what I saw in elementary school as a principal, especially in our schools where our students have such high needs. You might be able to get by at a surrounding affluent school, but not with our babies.</p> <p>MS1: In middle school where we're focused in on one content, I still see a lot of struggle there, doesn't matter what path they took.</p> <p>HS1: In area of content knowledge. I can't tell the difference between alternatively certified teacher that I've had experience with as opposed to a regularly certified teacher.</p>
	Teamwork and Mentorship	<p>ES2: We have a really good mentor program here where we pair them up with someone a lot of times, it's a team member but we pair them up with someone else who can kind of guide them and answer questions for them, especially with content. That helps them improve.</p> <p>ES2: I think that it is critical to have a mentor for walking them through the day-to-day operations, helping them understand their content and how to use the curriculum, and helping them develop best practices. They've already been down this road. They have seen what works better and what doesn't work so well, so they can share those experiences. Pair them up with someone else who can kind of guide them and answer questions for them, especially with content. That helps them improve.</p> <p>ES3: We have a really good mentor program here where we pair them up with someone a lot of times, it's one of their team members, but we pair them up with someone else who can kind of guide them and answer questions for them, especially with content. That helps them improve.</p> <p>ES3: I think that's critical to have a mentor just for walking them through the day-to-day operations helping them understand how to use the</p>

		<p>curriculum. Helping them just helping them with best practices.</p> <p>ES5: We just walk in the door and say here's your kids. I think if we could create a path to where if they could student teach for a semester with a mentor teacher then they can make that decision, whether they want to keep going or not they would be more successful.</p> <p>ES6: They don't even student teach. They just walk in the door and we say here's your kids. I think if we could create a path to where if AC's could student teach for a semester with a mentor teacher then they can make that decision, whether they want to keep going or not they would be more successful, especially with content.</p> <p>ES6: Teach for America does a six week boot camp where they work on content. But they also have ongoing trainings and support on site, and their trainer would come and work with them and some of them stay in education because of it.</p> <p>MS1: Teachers who teach similar content need to work together for support. Sometimes I'll pair them up, or with an instructional coach.</p>
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Secondary Research Question #2: How do school administrators perceive the effectiveness of AC teachers regarding classroom management?

Interview Question: How do you feel about the effectiveness of AC teachers in the area of classroom management? Tell me your experiences.

Category	Theme	Evidence
Classroom Management	Personality and Innate Ability	<p>ES4: I don't want to call them just naturals, but it seems that way with my AC teachers.</p> <p>ES6: Some people are just natural with it and have those instinctive unique skills and personality that it takes</p> <p>ES6: I think that's in your makeup as to whether you've got the heart or the with-it-ness, maybe that's a better word to say that with-it-ness, to work with kids. Because I've seen people come out of teacher Ed that I thought, I don't know how you are here. And then I have AC teachers who are phenomenal with management and working with kids.</p> <p>ES6: I think it's in their own makeup.</p> <p>ES6: I think it's just in your own makeup as to whether you can have the patience to work with kids and manage a classroom or not.</p> <p>MS2: To be honest, I think it is more temperament and personality and temperament and not necessarily preparation. That's the only conclusion I can really come to.</p>
	Mindset and Coachability	<p>ES7: My AC Pre-K teacher, she wants to get better. She wants to grow. She definitely does. There's a difference in early childhood. Teachers will reach out, but when you get above that, they will not reach out for help.</p>
	Previous Experience	<p>ES1: She didn't run a classic, typical classroom. It was more like a press room so students responded well.</p>

		<p>ES2: She is a Pre-K teacher. Her mother owned a daycare. So, she grew up working at her mom's daycare. And so, even though she is an alternative cert, she grew up in an environment where she's very familiar with how to set up the procedures for a classroom and how to make that work. It was a smooth transition for her.</p> <p>ES2: So that worked for her, the other one who didn't have a lot of struggles with classroom management, so she had taught previously in Costa Rica.</p> <p>ES2: She had experience managing kids. So, she was able to kind of transfer that so she didn't struggle quite as much setting up her classroom procedures.</p> <p>ES3: I think they just catch on like the rest of us. You know, it takes you a couple of years no matter what your certification is. You just have to keep working at it and growing yourself.</p> <p>ES4: I have had a mixed experience with that. But I will say of those that I have hired, they are doing amazing with management.</p> <p>ES4: I will say one of those is a former TFA teacher and the training that she received in addition to anything the district provided was very useful. She does an excellent job. She is one of my team leads. She is kind of a step ahead of all the other alternatively certified teachers I have.</p> <p>ES5: They all do come with their issues at first, but I've also noticed like because I'm just I'm very impressed with my alt cert that I have this year in kinder, because she worked in mentoring programs previously.</p> <p>ES5: Another worked with small groups of kids. So, she has, she is really good when it comes to classroom management and the other one that has a background of education so she has done well too.</p>
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		<p>ES5: It all depends really on their previous experience before coming into the schools because the majority of them do well with classroom management with some level of experience prior.</p> <p>ES5: Another had part-time jobs at like the movie theaters and things like that. So, she had the customer service aspect, but not working with students, so she needed a lot of help.</p> <p>ES6: By not doing student teaching, by not letting them go and observe and then go and student teach, you just show up at work in a school and we're just like boom, here's your room, good luck. If they had that they would definitely do better with management.</p> <p>ES7: They initially had no classroom management, not at all. They didn't even know how to go about even acquiring classroom management because they didn't have that skill set. That they had their degrees in business and you don't run a business the way you teach in the classroom.</p> <p>MS2: The science teacher, who had experience as an adjunct teacher and practicing geologist, her engagement is so high that classroom management virtually isn't an issue.</p> <p>HS1: I honestly think it's the life experience that AC teachers bring in with them. Most of my alternatively certified teachers are coming in from a second career standpoint or they're coming in with other experiences. This helps so much with relationships.</p> <p>HS1: AC teachers chose this profession and they know what's out there as opposed to coming, straight out of say, college going straight into teaching and really not having any type of work environment outside of education. I mean I have teachers that are ready to retire that have never been in the workforce. They've, they went to school all through K12, then went to college and then got jobs in schools and have never been out of a school</p>
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		<p>environment. So, the only work experience they have is school. I think there's some advantages to that just as much as there's advantages to the second or third career people, but for some reason my AC teachers do better in this area in my setting.</p> <p>HS1: I've worked with TFA teachers that much better in classroom management.</p> <p>HS2: I would say probably below average in classroom management. Their expertise and their ability to discuss content with their students is a little above average. But then when you talk about how that manifests itself in the design of classroom management of classroom protocols, systems, and practices, I see that there is definitely a little bit more need to do that work helping those teachers raise the bar so to speak to meet my expectations. They just don't have that experience yet.</p> <p>HS2: Generally, I need to provide additional guidance to an alt certified person just because they've never had experience working with adolescents in many cases.</p> <p>HS2: However, there are some carved out instances where you'll see an AC person that has this life experience that positively impacts their classroom management and even the pedagogical aspect of teaching.</p> <p>HS2: For example, my visual art AC teacher has such a respect level that when they engage with students, they're able to make connections because of the authenticity of their work and what they're asking students to be able to do that, sometimes, I see a carryover in the overall management, which everything is based in as, you know, respect between the teacher and the student.</p>
	All Teachers Have Similar Needs	<p>ES3: I think they just catch on like the rest of us. You know, it takes you a couple of years no matter what your certification is. You just have to keep working at it and growing yourself.</p>

		<p>ES6: I've got seasoned teachers with Masters in Education that are not always kind and patient with children nor do they have good structure and then I've got my TFA teachers did immensely better in classroom management.</p> <p>ES6: Because I've seen people come out of teacher ed that I thought, I don't know how you are here. And then I have AC teachers who are phenomenal with management and working with kids.</p> <p>MS1: Across the board, there's been some things there that need to be worked on.</p> <p>MS1: I'm going to say all first year teachers need help with that. It takes a couple of years to kind of build that confidence as a teacher to go into the classroom and do it well.</p> <p>MS1: But I see it across the board with just first year teachers. Teachers in general regardless what certification route they went that's a struggle for a lot of new teachers.</p> <p>HS1: I can't say that I've seen any difference in classroom management from an alternatively certified teacher any different than a regularly certified teacher, in fact, I tend to see more problems with our traditionally certified teachers in my setting. But it's probably more the setting than the teacher.</p> <p>HS1: I've not had a problem in fact, my two alternatively certified teachers never complain about a student. I've never received a complaint from an AC teacher. I've not received a complaint from a student on those teachers. They do a great job managing and building relationships. I can't always say the same about the traditional track.</p> <p>HS1: As I go in and I interview teachers, I'm looking for the ones that can build relationships with students. The ones I've inherited. Meaning they were there before, I became principal there on the traditional track and either they've been in it too long or they didn't have an understanding of</p>
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		<p>alternative education in the at-risk youth that we serve.</p> <p>HS1: Often times, AC teachers are more successful in my setting with the at-risk students we serve.</p>
	Teamwork and Mentorship	<p>ES2: Two of them have struggled in that area. So, we've had to pair them up with a mentor that can really help them. They have improved so much.</p> <p>ES2: I mean you have teammates to support you and give you ideas. But, you know, you Like I said, I feel like it's one of those things where you learn as you go and if you have a good strong team around you, that can talk you through some of the challenges and give you some best practices, you will be successful. That's really what I think is the key.</p> <p>ES2: We've had to have them, do some kind of classroom observations though to see what other classroom strategy management strategies and their teammates are using. So, it's an ongoing process, but we have seen quite a bit of growth with AC teachers because of this, so it has been encouraging.</p> <p>ES3: We've had to have them do some kind of observations and other classrooms to see what other classroom strategy management strategies and their teammates are using. We have seen quite a bit of growth with AC teachers because of this though so that has been encouraging.</p> <p>ES7: My Pre-K AC teacher struggled with classroom management, but the difference with her is she will reach out for help to her other co-workers that are very seasoned who don't lack that knowledge and she gets support from them.</p>

Secondary Research Question #3: How do school administrators perceive the effectiveness of AC teachers regarding instructional planning?

Interview Question: How do you feel about the effectiveness of AC teachers in the area of instructional planning? Tell me your experiences.

Category	Theme	Evidence
Instructional Planning	Personality and Innate Ability	<p>ES3: I wonder if it pretty much has everything to do with the teacher's personality opposed to what they bring in.</p> <p>ES5: They do need quite a bit of support in that area. But again, it just depends on the person and they do need support in that area because they're just not sure what.</p>
	Mindset and Coachability	<p>ES1: If you've got someone that just has a natural growth mindset, that wants to learn and grow and be really, really good at what they're doing, they usually persist and can grasp areas like management and instructional planning quicker than other</p> <p>ES1: It is all about mindset.</p> <p>ES1: Those alternatively certified teachers who have a growth mindset, they tend to put in more effort and keep going. And to planning that out.</p> <p>ES1: Those alternatively certified teachers who wanted to improve, improved. They put in the effort, and I've kept that fourth grade teacher and I've kept that first grade teacher because of it.</p> <p>ES1: Now, I wouldn't know anything different 5 years later. They are both excellent teachers, but they had the mindset and desire to improve. So, they did.</p> <p>ES1: The other AC teacher, I didn't keep her around long enough to even know. She had a fixed mindset, she didn't want to improve and it showed.</p>

		<p>ES2: It's about wanting to learn and grow.</p> <p>ES7: They don't know how to plan. Whether it's at both schools that I've had alternative certified teachers. They want to get a teacher's guide and just teach from that and they think that every child should fit that mold.</p> <p>But I see that mindset regardless of certification.</p>
	Previous Experience	<p>ES3: My art teacher, she does some fantastic lessons. She is a great little artist. She was trained in it.</p> <p>ES4: My TFA person, she's phenomenal. My TFA teacher, she is phenomenal with instructional planning. In fact, we video her and send her to other teachers because she has an amazing understanding of what we're doing and how to create and implement a lesson cycle and look at data.</p> <p>ES4: So I am attributing a lot of that to the extra training she had and her drive.</p> <p>ES4: I'm just looking back at other buildings where I have worked with either TFA teachers, or alternatively certified. All the teachers that had that extra training through TFA we're strong. Really strong.</p> <p>ES4: I do have a few that struggle with that, but I think it is because of lack of experience, lack of quite an understanding of how a lesson plan is written, you know, traditionally written not that they can't do it, but they understand it a little better.</p> <p>ES6: My TFA teachers have done really well with instructional planning.</p> <p>ES7: Because they've not had that educational or training background that tries to prepare them for how hard the job is, whether it's classroom management, classroom effectiveness, lesson planning or anything else, they really aren't prepared to do any of it.</p>

		<p>MS2: On occasion, you get someone in here, and I honestly think this is what was successful about the science teacher I had, who had had some college level teaching experience and training and planning for instruction, so that it was still difficult for her going, but It wasn't as far as a jump.</p>
	All Teachers Have Similar Needs	<p>ES2: I think that's an area that we're all working to grow. Whether there are traditional cert, alternative, or emergency cert, but I think they do need an extra support in that for sure.</p> <p>ES3: I mean, I approach all brand-new teachers the same. It takes a few years to get where you need to be. I support them all.</p> <p>ES3: No one really knows what they're doing right away.</p> <p>ES2: We've had to rethink the way we approach planning. So, it definitely has been a learning process for all of us, not just those who are alternative.</p> <p>ES5: AC teachers need support in that area because they're just not sure what pieces to really plan for. The traditionally trained teachers do have a better grasp.</p> <p>ES5: But we have had so many changes in education with lesson planning and how we navigate classroom management is important to adjust as well. As students change, we may have to adjust too.</p> <p>ES7: They don't know how to plan. Whether it's at both schools that I've had alternative certified teachers. They want to get a teacher's guide and just teach from that and they think that every child should fit that mold.</p> <p>But I see that mindset regardless of certification.</p> <p>MS1: I have a lot of teachers, AC and not, who know the basics of lesson planning but as far as the delivery of the lesson, that seems to be where the disconnect is.</p>

		<p>MS2: That's not a fair question. Um, because we all are struggling with that right now whether you're traditionally or alternatively certified I feel.</p> <p>MS2: Most alternatively certified candidates probably did not set out to be teachers and so they might not have planned for the level of complexity that instructional planning requires.</p> <p>MS2: I think AC teachers come in and they probably have one expectation and most of them I've seen are completely overwhelmed with the level of planning and complexity that is required just because they haven't been exposed to it yet.</p> <p>HS1: That is probably where they're the weakest. I don't find that their planning, is it any worse than my traditional teachers, but teachers who are traditionally trained, get that kind of training in their pedagogy courses or their content courses. Where an alternatively certified teacher may not have gotten that extensive, so they're kind of more left to learning on the job.</p>
	Teamwork and Mentorship	<p>ES3: It's gonna be rough kind of at first. They don't know anything about that because they haven't written lesson plans. They work together as a team and they improve. We have good teams at our school.</p> <p>ES3: You know, my AC teachers, they have had multiple years of opportunities to work with a good team.</p> <p>ES3: Yeah, they know what they need to, but they work together as a team and they improve. We have good teams at our school. Some of them, write the reading, some write the math, some write, the social studies, or the science.</p> <p>ES3: A team has definitely helped with improving instructional planning because they all split content areas. You know, my AC teachers, they have had multiple years of opportunities to work on a good team which has helped them grow.</p>

		<p>ES3: Our first grade, they collaborate, they get along. This will be easy breezy for you. They will share everything, they plan. But she didn't get along with them, she didn't want to collaborate. But I think that was more her personality. So I moved her to another grade thinking it was the team. She didn't work well with them either. So she hasn't been really successful with others.</p> <p>ES6: Instructional planning is probably the easiest area for AC teachers. Because we give them the template. We go over it. They meet as a team, with the vertical alignment and horizontal alignment, they meet with mentors for help.</p> <p>ES6: This is definitely a better, easier area because you can learn from your peers as an AC teacher.</p> <p>MS2: Our teachers meet in PLCs every week with vertical and horizontal teams. This helps us all improve our planning and pedagogical knowledge.</p> <p>HS1: Their planning growth, it just depends on who their teammates are, or who's in their plc, or who they're working with.</p> <p>HS1: Fortunately, we have our instructional coach who can work with all of our teachers on lesson planning, and, and the importance of it. How to, how to not, just go through the motions and, and in turn, teachers who are traditionally trained, get that kind of training in it's not any more of a challenge than their pedagogy courses or their educational course work.</p> <p>HS1: Their planning growth, it just depends on who their teammates are, or who's in their plc, or who they're working with.</p>
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Secondary Research Question #4: How do school administrators perceive the effectiveness of AC teachers regarding human relation skills?

Interview Question: How do you feel about the effectiveness of AC teachers in the area of human relation skills? Tell me your experiences.

Category	Theme	Evidence
Human Relation Skills	Personality and Innate Ability	<p>ES1: Two of my three AC teachers did this better than some of my TC teachers, because they had the personality and drive to improve</p> <p>ES2: I think it has a lot to do with your personality. If you have a personality that's agreeable, and you can cooperate with others and collaborate and work together, you're gonna be, you're gonna be fine.</p> <p>ES2: If you don't have those things, no matter what pathway you take, you're going to struggle.</p> <p>ES3: How can you say that as a generalized statement, that's all about personality.</p> <p>ES3: You know all my AC teachers have good human relation skills and professionalism. They all get along, great. Collaborate with each other. So, it's hard to say, is it because they are alternative? Or is it simply just their personalities?</p> <p>ES4: I've noticed that several of them and I don't know if this is a trend just because they are alternatively certified or just their personality. I had never looked at it that way, but they are effective.</p> <p>ES4: Maybe that's just them, their personality, because every one of my teachers has great relationships with kids, great relationships with parents, and good relationships with each other.</p> <p>ES5: It really is just based on their personality more than anything, you know, if they are type A, type B, or something else.</p> <p>ES5: So, I think it's just more of a personality thing.</p>

		<p>ES6: I think that goes back to whether you have with-it-ness and personality.</p> <p>ES6: I think it's whether they have that with-it-ness and the personality and willingness and the patience and the wherewithal to keep going year after year, after year, because I think we lose AC people after 3 years or so.</p> <p>ES7: I have never had any issues with any AC teachers and human relation skills.</p> <p>ES7: It may come down to just who they are as people, but I think I that most of the ones I've been fortunate to have so far have been very social, extroverted, and dependable. They're not withdrawn. They are people-people. They have good social skills.</p> <p>MS2: In my experience so far, most of them have really good human relation skills. We can teach you a lot of things but I can't always teach you personal and interpersonal personality skills. My two teachers, there personalities and their temperaments are definitely an asset that compensates for the instructional deficits at times.</p> <p>MS2: Sometimes people just have it, and others just don't, whether you are TC or AC.</p> <p>HS1: I think people have people skills regardless of what credentials they hold. You either know how to get along with people or you don't. I don't think their certification makes them people-people, but their personality does.</p> <p>HS1: I know we don't get that type of training (human relations) in teacher prep courses, you get some classroom management training in teacher prep courses. But I think that these are skills that you either have or you don't and if you don't have them, you're not going to work out in my building and you won't stay there long.</p>
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	Mindset and Coachability	<p>ES1: And even though the fourth grade team was departmentalized, She still wanted feedback. She would always tell me like, Hey, can you come in? And can we, can we meet today, instead of waiting till tomorrow, to talk about what you saw? She was very eager to what maybe she wasn't seeing. She wanted to grow professionally as a teacher.</p>
	Previous Experience	<p>ES1: I think the adult person of human relation skills comes easier. I don't feel like it was that way though with the kids. I think there were a lot of things that were missed just because they hadn't ever worked with or experienced working with students before.</p> <p>ES1: The first grade AC teacher she was in insurance. She worked with adults. She had good human relation skills with adults. She was a natural salesman. That's why I think she got along well with the adults.</p> <p>ES1: The fourth grade AC teacher worked for the Daily Oklahoman, so she was used to working with and interacting with adults.</p> <p>ES1: They were all like in a business job before. So, it seemed very easy. Their communication...with adults at least.</p> <p>ES1: But all three AC teachers really weren't sure how to initially approach kids. We had to work on that.</p> <p>ES4: Sometimes they seem more corporate. And I keep looking at them sometimes when they say things I have to remind them that we are teaching elementary school. But, it's not a bad thing that the kids hear that kind of vocabulary, it's just you just don't normally see that in an elementary, you know?</p> <p>HS2: I would absolutely say above average in my experiences. I see that in a lot of cases their prior career, their prior authentic experiences in a real work, real world context created a strong ability to make quality relationships and interactions with people.</p>

		<p>HS2: A lot of times I'll see an alternatively certified person in my experience that comes more well prepared in that area than maybe some of the other pedagogical things.</p>
	All Teachers Have Similar Needs	<p>ES2: I don't know if they are any different from people who are traditionally certified. Having human relation skills is the ability to work with others. The ability to listen, the ability to be compassionate to be supportive of one another I don't know that. Alternative certs don't do any better or worse than anyone else in that.</p> <p>ES2: If you don't have those things, no matter what pathway you take, you're going to struggle.</p> <p>ES5: I think that with all my AC certs I've rarely had one that doesn't want to build relationships, and a lot of them come into our schools wanting to build those relationships with kids because they want to make a difference in their lives. It depends with traditional certs because they are those that just want to teach. They don't really want to build that relationship.</p> <p>ES5: It is the same as traditionally certified, it really is just based on their personality more than anything, you know, if they are type A, type B, or something else.</p> <p>MS1: Human relations can be a struggle sometimes, building student relationships. With first year teachers as well, doesn't matter the certification. I'm not gonna keep saying first years, just a lot of my staff.</p> <p>MS1: Certified teachers, first year teachers, AC teachers, they all pretty much have the same struggle and needs.</p> <p>HS1: So, as far as the alternatively certified teacher, I don't think that their certification makes them people.</p>

Secondary Research Question #5: How do school administrators perceive the effectiveness of AC teachers regarding professionalism?

Interview Question: How do you feel about the effectiveness of AC teachers in the area of professionalism? Tell me your experiences.

Category	Theme	Evidence
Professionalism	Personality and Innate Ability	<p>ES1: I think it, I think it also goes back to personality. I'd say two of those three were very easy to come into a team and work and talk.</p> <p>ES3: I think they're all fairly professional. Once again is that their, you know, personality or their certification?</p> <p>ES3: You know all my AC teachers have good human relation skills and professionalism. They all get along, great. Collaborate with each other. So, it's hard to say, is it because they are alternative? Or is it simply just their personalities?</p> <p>ES3: It makes me wonder if so much is your personality.</p> <p>MS2: It is probably who they are as people. So, like both of the individuals are highly likable by their peers, their highly responsive to students and staff their deficits.</p>
	Previous Experience	<p>ES1: I don't think she realized that we give frequent feedback in education as professionals. And we're expected to take that feedback and improve. Maybe they didn't have that when she was in her previous career.</p> <p>ES4: All of the AC teachers I have worked with either here or in previous buildings have been amazingly professional. I have not had any issues. I think especially for those who have experienced outside, they've worked outside of education.</p> <p>ES4: I think becoming alternatively certified, I think it did affect that. Their professionalism. In a positive</p>

		<p>way. Does that make sense? Like I think experience in a different field does have an effect on how they act in the job place.</p> <p>ES7: I've always thought emergency certified and alternative certified take the jobs because they can't find anything at the time within their degree and it's just a placeholder for them. So, they're just going through the motions until something else comes available to be perfectly honest with you. And that effects their effectiveness as a teacher, punctuality, timeliness, how they take constructive criticism. I think they just don't take it seriously.</p> <p>HS2: Since they have their prior experiences in a professional setting, they seem to come more well prepared for what this workforce looks like, there's still an entire set of policies practices procedures that we ask of them in education that they have possibly mirrored in you know, another career.</p>
	All Teachers Have Similar Needs	<p>ES2: My experience is that they're on par with everyone else. I haven't had any issues with in regards to their professional behavior. Doesn't really matter if they are alternative or not.</p> <p>ES7: They lack a lot of professionalism. I see a big difference between alternative certified and regular certified teachers when it comes to punctuality, when it comes to dedication. My traditionally certified teachers have that dedication. And the ones that are not as fully dedicated are the ones that have been alternative certified.</p> <p>MS1: Often have no idea what they are doing and so they're more like sponges and don't want to make a mistake and want to adhere to their professional responsibilities versus veteran teachers. A lot of my veteran teachers are really comfortable where they are which can come out negatively at times in their professionalism.</p> <p>MS1: So, I see a lot of a lot more professionalism in my alternatively, certified teachers.</p>

		<p>MS2: Based on my experience with these two. I would say. I would see no difference between them and their traditionally certified peers.</p> <p>MS2: I can say that with confidence, unless they've told somebody in the building their colleagues don't know that they're alternatively certified.</p> <p>MS2: Their colleagues might know this is their first year of teaching or their second year teaching but it's not something we broadcast that, oh, by the way, somebody's alternatively certified. Sometimes I think that's a good thing because sometimes, I think if you broadcast that necessarily it becomes a bias against people at times.</p> <p>MS2: However, the alternative certified teachers that we did hire in the last couple of years as they are up against their peers in a PLC or just their daily behaviors. You wouldn't have known the difference.</p> <p>HS1: They tend to have a little bit more respect, the alternatively certified teachers, especially early on like when they first come into the building, they're respecting all the professional protocols.</p> <p>HS1: Some of your long-term teachers just kind of seemed to treat things, not like unprofessional, just with a less degree of professionalism, than AC teachers.</p> <p>HS1: I think it's one of those areas where over time, maybe they lose it, but in the beginning, I see more respect for the profession and more professionalism coming in from Ac teachers.</p>
	Teamwork and Mentorship	<p>ES6: Oh, I think they're professional. But when I put them on a team, I put them with my strongest teachers and the ones that are going to lead them in the direction they need to go.</p>

Interview Question: What gaps, if any, in effectiveness do you see in teachers from alternative routes?

Category	Theme	Evidence
Gaps	Classroom Management and Instructional Planning	<p>ES1: The alternatively certified teachers really needed more help with classroom management.</p> <p>ES1: Maybe going back to the classroom management side of things, and everybody wants to be their friend, like they don't have to like you to respect you or whatever that saying is?</p> <p>ES1: Probably in my population is dealing with second language learners and having that basic understanding of how students learn. That pedagogy isn't there so it is difficult to plan for their instructional needs.</p> <p>ES2: I guess it would be probably just setting up a classroom, classroom management, the basics. I think that's where they need the extra support, especially in the beginning.</p> <p>ES2: TC teachers have this gap too, but it's not as much as a lot of them because in theory they should have completed a student teaching. So in doing that, they should have some experience although it's limited and they still need some support but their gaps are not going to be quite as great as all the alternative certs.</p> <p>ES3: At the beginning, how to set up a classroom because they're really clueless on that, they don't have the experience to be prepared for this quite yet.</p> <p>ES3: It might have helped some of them if they had some childhood psychology classes to better understand how to plan for student needs. Knowing the development of kids is hard.</p> <p>ES4: I would say, classroom management has been, maybe the biggest hurdle. The biggest gap.</p>

		<p>ES4: I think a lot has thrown at a teacher. And they may not have the organizational skills to take care of it at first. That could be a personal thing. But everything moves quickly in our schools, there is a lot to juggle.</p> <p>ES4: AC teachers have a gap in their ability to manage a classroom and basic organizational skills, but I would say that would be equal to new teachers in general. I think it comes from just lack of experience managing people.</p> <p>ES4: Just keep sharpening their skills and they just get better and better.</p> <p>ES4: I do think I would say that it's equal to new TC teachers, too. And I think it comes from just lack of experience managing 25 or so people.</p> <p>ES4: Once they figure out the classroom management, they can be really successful in other areas, because the ones I have who have been here a while? They're amazing now.</p> <p>ES5: Just knowing or having strategies and how to present standards to students. They just don't have any teaching strategies yet because they don't have the experience.</p> <p>ES5: And classroom management. Even the TC teachers who have student teaching don't always do it in our type of schools. I think everyone should do teacher observations in an urban school like ours.</p> <p>ES5: TC teachers are often placed or choose to be placed in more affluent schools for their student teaching experience. I think everyone should do teacher observations in an urban school like ours.</p> <p>ES6: A big need is classroom management and organizational skills.</p> <p>ES7: Classroom management. They need work on that.</p>
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		<p>ES7: Just the day-to-day operations of being an effective teacher, you know, being able to turn on a dime.</p> <p>ES7: That's a big one planning and knowing how to plan. You can plan, but you need to be able to turn on a dime. When you see that a class is not getting a lesson that you have planned, you need to be able to correct that in the moment as a teacher.</p> <p>MS1: Classroom management and relationship building, but that's all new teachers in general.</p> <p>MS1: Vocabulary. With AC teachers in general, a lot of times our PD is like back to the basics. But they need that background knowledge in order to plan and run a classroom.</p> <p>MS2: There's a gap sometimes in classroom management because they don't understand basic adolescent development.</p> <p>MS2: AC teachers have a level of underpreparedness for the complexity that goes into teaching. But when even have regular certified teachers in year five, six, and seven and they're still struggling with standards-based instruction and best instructional strategies, it's all the more of a struggle for teachers who are not TC. However, this is exactly what I would expect to have a gap in.</p> <p>MS2: AC teachers need support on what does an assessment do and how you use it to plan for meeting different students' needs.</p> <p>MS2: Because, you know, that the first whole year is like, what does that mean? Like I need to tell you what this definition means, so you know how we're moving forward. So, I didn't tell you what a plc means. I didn't tell you what data analysis means, anytime you have all of this stuff that goes into planning...the education jargon can be complex, but with time, she understands it more and can try to apply it better.</p>
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		<p>MS2: So just the data analysis itself and they like the in-depth, the planning for standard space instruction. There's a gap in just planning for instruction and assessing instruction because they may not have had that experience in assessing progress and monitoring progress.</p> <p>MS2: So, I find sometimes that people have an image in their head of what teaching is like and that image is based on what they experienced as a student. And we all know that what we experience as a student was probably less than 20% of the actual work that went in from you teachers standpoint, right? And so, I would say the gap really is about you know, the art and science of teaching, like, there's so much more to it than just standing in front of a group of students and teaching from a textbook and getting along with people and making relationships.</p> <p>HS1: There are gaps in planning and not knowing how to find other methods of teaching in my setting. One of the things that makes an alternative school a good setting is we, we've actually got some freedom and I think the alternatively certified teacher is looking for the structure if that makes sense.</p> <p>HS1: So, if there was a gap, it's not having the toolbox that other teachers have to find the way to reach those students if it's not given to them. They typically develop their instructional toolbox overtime.</p> <p>HS1: Teachers who are traditionally trained, get that kind of training in their pedagogy courses or their content courses, when they're going through the educational course work. The instructional planning is where the bigger gap seems to be. Where an alternatively certified teacher may not have gotten that extensive, so they're kind of more left to learning on the job.</p> <p>HS2: Instructional planning and that continuum that we know of, how to identify learning targets and standards, unpack those standards, assess students,</p>
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		<p>and then developing instructional cycles that in and of itself seems to be that weak point.</p> <p>HS2: That's the part where, when I develop a mentor relationship between a veteran teacher and a new teacher or AC teacher, our focus area is really discussing what lesson planning looks like. Usually AC teachers I hire know their content, but if you fail to do that, then they do what they think is correct and most of the time, as you can imagine, leads to issues of effectiveness.</p> <p>HS2: A mentor is also good for new teachers when they have questions or need help.</p> <p>HS2: But it's really in my estimation or my years, it's a very intimate understanding of how students learn and what instructional events you have to create to cause that learning to be maximized that can be difficult for new and AC teachers. You know, how do you assess and provide intervention supports all of that continuum. Definitely you know I'll see an AC person pick that up pretty quickly when they see they feel and understand it. But I don't know that that's innate when is a thing. And it becomes most prevalent during my interview questions.</p>
	Previous Experience	<p>ES3: It would really help if AC teachers had some childhood psychology classes. With that, I feel like many other areas of teaching would improve because that background knowledge is important. But, I believe people can learn this.</p> <p>MS1: So out of just the educational background, the educational vocabulary that we know. With alternatively certified teachers in general, a lot of times with our PD we have to go okay, let's go back to the basics. They don't have that background knowledge.</p> <p>HS2: It just goes back to pedagogy. It's a very intimate understanding of how students learn...and this can be difficult for new and AC teachers without any experience.</p>

Interview Question: What strengths, if any, in effectiveness do you see in teachers from alternative routes?

Category	Theme	Evidence
Strengths	Mindset and Coachability	<p>ES1: It was kind of a new outlook on life, they do sometimes bring that a little bit more fresh perspective, sense of joy.</p> <p>ES1: It wasn't necessarily just about data, like she brought some other things to the team that really made a very tight first grade. Like they are friends. She kind of became that glue.</p> <p>ES1: She struggled managing her class, my AC teacher, but she came in with the mindset that she could and she wanted to as well you know.</p> <p>ES1: My fourth grade AC teacher would ask questions like, Hey, what are you guys working on? What are you guys doing in math? Or you know what? What If we did research on the person that came up with this, mathematical theory, or whatever, and wrote about it? She tried to tie some of that stuff into what they were already doing, and that was fantastic. But she really wanted to improve and become better. That's what set her apart.</p> <p>ES4: Extremely willing to learn, they take feedback exceptionally well they don't necessarily always implement it, but they are more receptive than other teachers. They listen. And they're leaders. I mean several of them are very strong leaders in my building.</p> <p>ES5: The willingness to be coached, the desire to learn. The. That again, taking it upon themselves to research.</p> <p>ES5: They do their own research, they ask questions.</p> <p>ES5: And their willingness to self teach and the relationship building with students</p>

		<p>ES6: They also have the desire to be super successful.</p> <p>ES6: They show up, they're ready, and they are here every day. They are never absent.</p> <p>MS1: A willingness to work towards our school vision.</p> <p>MS1: With traditionally certified or veteran teachers I have to help them to unlearn a lot of ineffective strategies versus alternatively certified teachers don't have that. They just kind of jump in with an open mind and it's easier for them. It's hard to get my traditionally certified teachers on board with things.</p> <p>HS1: One of the biggest strengths is a work ethic, and desire to improve. They come in with a sense of excitement and new ideas.</p>
	Previous experience	<p>ES2: Some of them might be a little bit older and more experienced in life and so sometimes that can be a strength to, their level of maturity.</p> <p>ES2: Having people from different backgrounds brings the diversity of thought that your school really needs.</p> <p>ES3: Their strong content or subject matter knowledge and their previous experience. They can bring many strengths that make them successful.</p> <p>ES4: None of them have an issue with school hierarchy...they don't try to overstep. Several of them are strong leaders in my building but they don't overstep their boundaries.</p> <p>MS2: It has really nothing to do with instruction but more back to that human relations skills. Most of the time they've had jobs where they've come from and they would kind of look and they're like well that would never fly in a real job.</p> <p>MS2: They can bring you skillsets based on their experiences in different places that you wouldn't have otherwise.</p>

		<p>Their strong content or subject matter knowledge and their previous experience. They can bring many strengths that make them successful.</p> <p>MS2: Most of the time AC teacher have had jobs previously, and they would look at what other teachers do and they would say that it would never fly in a real job. You can't come to work 17 times late and still keep your job in the other world. So they bring a sense of realness to the position of what happens when you're not surrounded by certain protections that teachers have</p> <p>HS2: Perspective of the real world.</p>
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Interview Question: What area(s) do you believe Ac teachers need support in?

Category	Theme	Evidence
	Classroom Management and Instructional Planning	<p>ES2: They need more support with instructional planning, specifically for reading. We focus a lot on reading instruction, specifically phonics. They probably have never had any coursework or training on how to teach these.</p> <p>ES2: I think classroom management would also be one, but I think a lot of people need help with that. So that's not exclusive to just alt certs.</p> <p>ES3: At the beginning, how to set up a classroom because they're really clueless on that. Alternative people with brand new baby teachers that are traditionally certified they have the same needs.</p> <p>ES4: Classroom management at first is probably the best thing we can do for them. Helping them get those systems in place that are going to make their classrooms run really well. Providing PD as they're ready for it without it being overwhelming for them. I think that is really important.</p> <p>ES5: Strategies and how to teach, or how to how to plan for small group instruction and intervention. All that goes into planning and it can be very complex. They just don't have any teaching strategies yet.</p>

		<p>ES5: All new teachers need help with classroom management. Not all AC teachers have experience working with kids.</p> <p>ES6: The biggest need is the need for classroom management and organizational skills.</p> <p>MS2: They need more support in working with students with differences and whether that students with gifted and talented or students with disabilities. How to plan for and support them. Learning how to provide differentiation.</p> <p>MS2: And with instructional planning, know how to create and use appropriate assessment and by appropriate assessment like the big piece, what does assessment do and how do you use it?</p>
Areas of Support	Teamwork and Mentorship	<p>ES1: It's important for them to have a mentor teacher, offering professional development opportunities.</p> <p>ES1: Yes, having the right teacher mentor and then just offering professional development opportunities.</p> <p>ES1: I always am very careful when placing mentors together. I look at personalities, strengths, and weaknesses, so they can help them improve in their areas of weaknesses.</p> <p>ES6: They just need support and training. Like a mentor teacher. A mentor teacher is your partner that helps you with something as small as bulletin boards and covering for you when you are late, all the way to observing you teach and helping you become more confident in your craft.</p> <p>ES7: And so, what I do, if I hire an alternative or emergency certified teacher, what I do in the back of my mind, already know she's AC and I put her with my most experienced teacher as a mentor and then I bring back teacher that's going to mentor and I set the groundwork of what my expectations are. AC teachers have to have some sort of support, because,</p>

		<p>in our schools, it is getting to the point that that's all we have available to hire</p> <p>ES7: The district needs to create a stronger mentorship program and training if we want to keep these people, let alone make them effective.</p> <p>MS2: It's important to have collaboration with your PLC to plan and improve instruction vertically.</p>
	Classroom Management and Instructional Planning	<p>ES1: When I develop a mentor relationship between a veteran teacher and a new or an AC teacher, our first focus area is setting up their classroom and then discussing what lesson planning looks like.</p> <p>ES3: Classroom management and probably planning. But I mean, I approach all brand-new teachers the same. It takes a few years to get where you need to be. I support them all.</p> <p>ES3: No one really knows what they're doing right away, they all need support.</p> <p>ES3: All of my new teachers, they kind of learn the most when they're in the trenches learning it themselves. Isn't that how it was for you?</p> <p>ES3: Working in some of our schools is hard. The inner-city ones. It is a learning curve for sure, don't you think?</p>
	All Teachers Have Similar Needs	<p>ES3: You know, I almost put those alternative people with brand new baby teachers that are traditionally certified. They have the same needs.</p> <p>ES3: I mean, I approach all brand-new teachers the same. It takes a few years to get where you need to be. I support them all.</p> <p>ES3: No one really knows what they're doing right away.</p> <p>ES3: All of my new teachers, they kind of learn the most when they're in the trenches learning it themselves. Isn't that how it was for you?</p>

		<p>ES3: Working in some of our schools is hard. The inner-city ones. It is a learning curve for sure, don't you think?</p> <p>MS2: We're learning that all teachers in that same boat.</p>
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Interview Question: How likely are you to hire AC teachers?

Category	Theme	Evidence
Hiring	Personality and Innate Ability	<p>ES1: If their personalities stick out, I will. It depends I think on what their degree is in and if a content area can be transitioned easily.</p> <p>ES3: I'm not opposed to considering a teacher that is alternatively certified I think you just, yeah, go with who you think will be best in your school. And sometimes that is AC and sometimes in not. But I always look at personality.</p> <p>ES4: Highly likely. If they are exhibiting those traits that I'm looking for such as you know the passion and the energy, enthusiasm that the willingness to learn, they do not need to be traditionally certified for me to hire them.</p> <p>HS1: I am highly likely to hire an AC teacher. I look at personality, mindset, and their willingness to work hard, not certification.</p>
	Mindset and Coachability	<p>ES2: I think if they have the right mindset and a growth mindset and they've had experience working with kids and willing to persevere through tough days, I would absolutely hire them.</p> <p>ES5: I focus on coaching, are you coachable? Do you have the mindset to receive feedback and new ideas?</p> <p>ES5: If their backgrounds in counseling, or if they've done mentoring, I like to look at their experiences and if they have none then I focus on coaching, are you coachable? Are you going to be nice to the kids?</p>

		<p>And are you coachable? But I am extremely likely. I'll absolutely hire an AC teacher.</p> <p>ES6: If they agree to work with a mentor and they agree that not every day is going to be a good day. That kids are hard. And our schools can be really difficult because of our unique challenges, then we're all in.</p> <p>MS1: I am more probably likely to hire an AC teacher than a TC teacher. I've seen different motivation, different energy, and overall mindset from AC teachers in their risk-taking and willingness to jump in and try new things.</p>
	Previous Experience	<p>ES5: If their backgrounds in counseling, or if they've done mentoring, I like to look at their experiences and if they have none then I focus on coaching, are you coachable? Are you going to be nice to the kids? And are you coachable? But I am extremely likely. I'll absolutely hire an AC teacher.</p> <p>MS2: I would absolutely hire an AC teacher. I often look first at traditionally certified teachers, but there are those AC teachers that have the expertise and experience that I look for as well.</p> <p>HS2: Highly likely. It doesn't always work out, but at our school we have such unique programming that the advantages of an AC teacher really play in our favor. For example, in our theater program, you want the curriculum to drive the day, but when you hire people, and they have had real-world, authentic experiences in a theater production and in theater as a career field, and then they come in here and are able to articulate some of those experiences you couple that with the kids, in our building, their high motivation to learn and engage in those advanced studies, that, that is a synergy that makes an excellent learning experience.</p>
	All Teachers Have Similar Needs	<p>ES2: In fact, I've hired several that have done better regardless of their certification or anything like that.</p> <p>ES2: I look at certification as well. And if I can find that then by all means, if I think they're going to be a good fit, but the reality is, that's becoming more and</p>

		more difficult to find. And so we have to hire who's in the pool, you know?
	Teamwork and Mentorship	ES5: If they agree to work with a mentor, and they agree that not every day is going to be a good day and kids are hard then I'm all in on hiring them

Appendix F: Secondary Research Questions and Corresponding Themes

Table F1

Secondary Research Questions and Corresponding Themes

Secondary Research Question	# of Themes Present	Themes
How do school administrators perceive the effectiveness of AC teachers regarding content knowledge?	5/6	Personality and Innate Ability Mindset and Coachability Previous Experience All Teachers Have Similar Needs Teamwork and Mentorship
How do school administrators perceive the effectiveness of AC teachers regarding classroom management?	6/6	Personality and Innate Ability Mindset and Coachability Previous Experience All Teachers Have Similar Needs Teamwork and Mentorship Classroom Management and Instructional Planning
How do school administrators perceive the effectiveness of AC teachers regarding instructional planning?	6/6	Personality and Innate Ability Mindset and Coachability Previous Experience All Teachers Have Similar Needs Teamwork and Mentorship Classroom Management and Instructional Planning
How do school administrators perceive the effectiveness of AC teachers regarding human relation skills?	4/6	Personality and Innate Ability Mindset and Coachability Previous Experience All Teachers Have Similar Needs
How do school administrators perceive the effectiveness of AC teachers regarding professionalism?	4/6	Personality and Innate Ability Previous Experience All Teaches Have Similar Needs