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THE IMPACT OF CERTIFICATION PROGRAMS ON TEACHER RETENTION AND PREPARATION

by

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A Dissertation

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ABSTRACT

Hiring and retaining the highest quality teachers is a top priority for any school district. However, given the current challenges that districts face in today's educational climate and with the recently recovering economy and the looming retirement bubble about to burst, this priority becomes even more imperative. This study focused on gathering and analyzing data on the relationship between the type of credential that a candidate holds upon hire and their retention within the profession. Additionally, the research analyzed data around a relationship between the preparation that the teacher received from their certification program and their ability to address the challenges that they faced in their first five years in the classroom.

Ultimately, at the conclusion of this research, it was determined that there was no difference in the retention rate of teachers based on the type of credential held upon hire. In addition, the research identified that the only differences in the preparation of teachers was for those who participated in an intern program, who felt more prepared than those who were traditional teacher preparation participants. Also, the research identified that the Short Term Staff Permit and Provisional Intern Permit holders felt more challenged in their first five years in the classroom as compared to other new hires. Finally, the research identified that there were many similarities across all classifications as to what originally motivated candidates to teach, why they may have considered leaving at one point, and why they ultimately decided to stay.

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CHAPTER 1: INTRODUCTION

Across the country recent headlines have highlighted an increase in the demand for teachers that looks to dramatically rise over the next several years. According to a recent report by the Learning Policy Institute in the 2015-16 school year, there was an estimated teacher shortage of approximately 64,000 teachers (Darling-Hammond, Furger, Shields, & Sutcher, 2016, p. 1). According to the same report, by the year 2020 the estimate is 300,000 new teachers will be needed and by 2025 it will be 316,000 annually (Darling-Hammond et al., 2016, p. 1). Given this prognosis, hiring and retaining the highest quality of teachers is a top priority for all school districts. Given the current challenges that districts face in today's educational climate and with the increasingly diverse student population in our classrooms, however, this priority becomes even more crucial. To provide the highest quality of teachers to our diverse student population a partnership must occur between local districts, Institutions of Higher Education (IHE) and state licensing agencies. The National Commission on Teaching and America's Future indicated in their report No Dream Denied (Hunt & Carroll, 2003), that we must build a strong foundation between quality teacher preparation, accreditation, and licensure.

Institutions of higher education must be focused on what all teachers should know and effective techniques and strategies for teachers to implement in order to meet the needs of the increasingly diverse student populations that they are serving (Hunt & Carroll, 2003). According to Darling-Hammond, a key factor that influences teacher attrition is the "growing body of evidence that indicates teachers who lack adequate initial preparation are more likely to leave the profession" (Darling-Hammond, 2003, p. 3). The data she indicated shows that almost 30% of new teachers who had not had traditional student teaching experience left the profession within five years, compared to only 15% who followed a traditional teacher education program that

included student teaching. In the same, and subsequent studies, Darling-Hammond (2003, 2016) stated that almost 50% of those entering the profession uncertified (interns, short-term permits) left within five years compared with only 14% who were certified before they began teaching. It is imperative that to build and maintain a strong and effective teaching force university programs must prepare and produce quality candidates for district employment. These programs "need to provide pre-service teachers with ample opportunities to visit and interact with teachers and administrators in a variety of realistic school settings" (Inman & Marlow, 2004, p. 605).

The partnership cannot stop at the district or IHE level; it must continue to the state level with the need for regulation of teacher licensing. According to Zeichner (2003) there has been a drastic deregulation of alternative routes to certification without attention to the conditions that need to exist in these alternative programs for their educative potential to be realized. To ensure quality instruction for students, states must maintain a focus on preparing and licensing only teachers who are fully equipped to meet their diverse needs.

Research conducted by Darling-Hammond, Berry, and Thoreson (2000) found the credential status and pre-service support that teacher candidates received was a factor in teacher performance in the classroom, as displayed on student achievement results. Their data indicated that recent efforts to strengthen the state licensing requirements may have contributed to improvements in the overall preparation that teachers received prior to service.

Additionally, Darling-Hammond, Furger, Shields, and Sutcher (2016) indicate that the overlooked factor for teacher retention is the effect of their preparation. They indicate that attrition is usually the highest for teachers who lack effective preparation for their teaching. It is for these reasons that districts must be able to identify the best candidates to hire for the

classroom and the type of pre-service training programs that prepare the best candidates to address the challenges that teachers face upon entering the classroom.

Statement of the Problem

As a nation and a state, we face huge teacher shortages in all areas, now and in the near future (Brenneman, 2015). A key indicator of the looming shortage is the sharp increase in the number of temporary permits, waivers, and intern credentials that have been issued in California alone, meaning that more students are being taught by individuals that have yet to complete, or at times even begin, their initial preparation programs (Darling-Hammond et al., 2016). There are many factors that are contributing to the shortage overall. First, we are facing the retirement of the Baby Boomer era, nearly almost a third of our teaching force, over the next several years. Second, there were economic challenges in California over the past several years, and districts were forced to layoff teachers during those difficult financial times.

According to Darling-Hammond et al., after five years of budget cuts, by March of 2012 the teaching workforce in California had shrunk by nearly 9%, through a combination of layoffs and attrition (Darling-Hammond et al., 2016, p. 5). Additionally, enrollment for university teacher preparation programs have taken a significant decline. The number of students enrolled in California's teacher preparation programs has declined by 76% from 2001 to 2014 (Darling-Hammond et al., 2016). "Based on the evidence available, California will remain at elevated levels of teacher demand for the foreseeable future" (Darling-Hammond et al., 2016, p. 8).

Given these significant teacher shortages, the current trend is to hire candidates for teaching positions that have little to no experience in the classroom (Brenneman, 2015).

According to Darling-Hammond et al., "in the 2014-15 academic year the number of provisional and short-term permits, that are issued in order to fill immediate and acute staffing needs when a

fully credentialed teacher cannot be found, nearly tripled from the number issued two years earlier, increasing from 850 to more than 2,400, which is an increase of 182%" (Darling-Hammond et al., 2016, p. 2).

Purpose of the Study

The purpose of this study was to identify, in a single urban school district in Northern California, if there was a relationship between the type of certification that a candidate holds upon hire and their retention in the profession. Additionally, the study looked to identify a possible relationship between the type of certification program that a candidate completed and the challenges that the teacher faced in their classroom setting in the first five years of teaching.

Research Questions

- 1. To what extent was there a difference between the types of certification that a candidate held upon hire and their subsequent retention in the district?
 - Hypothesis: There is a significant difference in the retention rates for the types
 of certification that a candidate held upon hire.
- 2. To what extent was there a difference between the types of preparation that the teacher received from their certification programs and their ability to address the challenges that they faced in their first five years in the classroom?
 - Hypothesis: There was some difference in the preparation that teachers received from their certification programs and their ability to address the challenges that they faced in the first five years in the classroom.
- 3. To what extent was there a similarity in the reasons that teachers self-identified as to why they originally joined the profession as well as stayed in the profession after initial hire?

 Hypothesis: There was significant similarity in reasons that teachers selfidentified as to why they originally joined the profession, however not in why they stayed after initial hire.

Theoretical Framework

This study examined the relationship between the type of credential that a candidate held upon hire and their retention within the profession. It also examined the type of preparation that the teacher received from their certification programs and their ability to address the challenges that they faced in their classroom upon hire. Finally, this study sought to examine the similarities in self-identified factors contributing to the choice to both enter and remain in the teaching profession. This study was based on the theory of adult learning from the work of Malcolm Knowles. Also referred to frequently as andragogy, it is the art and science of how adults learn, in contrast to the teaching of children, which is referred to as pedagogy.

Historically the term andragogy has been around for many years and has been used in countries all over the world with a variety of connotations (Reischmann, 2004). In particular, within the United States, andragogy speaks to the work of Malcolm Knowles and "labels a specific theoretical and practical approach" of self-directed and autonomous learners and teachers as the facilitators of learning (Reischmann, 2004, p. 1). The term andragogy was first used by a German educator, Alexander Kapp in the 1800s and was first introduced to Knowles in the mid-1960s. According to Reischmann, Knowles published his first article in relation to his understanding of andragogy titled 'Andragogy, Not Pedagogy' in 1968 (Reischmann 2004, p. 3). Knowles' main concept of andragogy, which according to his own definition is "the art and science of helping adults learn" (Knowles, 1980, p. 43) and is built upon two specific

attributes. These two attributes are first a theory of the learner as self-directed and autonomous, and second the role of the teacher as the facilitator of learning rather than presenter of content (Pratt & Ass., 1988, p. 12).

In the latter part of his work, The Modern Practice of Adult Education (1980), Knowles outlined the five assumptions of the characteristics of adult learners. These assumptions closely align with the focus of this research. First is the assumption of self-concept, this relates to the idea that as a person matures they move from dependency to being more self-directed in their own learning (Knowles, 1980, p. 43). This characteristic is specifically connected to the alternative model of teacher certification where an individual is participating in a structured program of learning while they are the teacher of record in a classroom. This type of model requires a greater level of self-direction in one's own learning.

Second is the concept of the adult learner experience, meaning that as a person matures they accumulate a wealth of knowledge and experiences that become a resource for their own self-directed learning (Knowles, 1980). This characteristic is specifically connected to the traditional model of teacher certification, specifically the aspect of student teaching that comes at the end of a preparation program. This model of learning builds upon the acquired knowledge and skills necessary to be a teacher and implement that learning during their student teacher placement.

Third is the concept of one's readiness to learn. This indicates that as a person matures their readiness to learn becomes increasingly related to the developmental tasks of their social roles (Knowles, 1980). Fourth is the idea of orientation to learning, in which as a person matures their perspective shifts from that of eventual application of knowledge to the immediacy of that application, meaning that it is a shift from subject focus to problem focus

(Knowles, 1980). These two concepts of learning directly align with this research's focus on the preparation of new teachers and the connection to the actual challenges that teachers faced upon entering the classroom.

Lastly, the fifth assumption of the characteristics of adult learners is that of motivation to learn, indicating that as a person matures their motivation for learning becomes internal (Knowles, 1980). This final concept relates to the idea of teacher retention and the connection that the research study will attempt to identify between the original motivation to become a teacher and what kept them in the profession after initial hire.

Based on the original five assumptions of the characteristics of adult learners Knowles (1980) outlines the four principles of andragogy. These principles related to (a) the involvement of adults in the planning and evaluation of their own learning; (b) individual experience provide the basis for learning activities; (c) adults are most interested in learning concepts that immediately impact their job or personal life; and (d) the problem-centered focus of adult learning, versus the content-oriented that is largely associated with general teaching strategies.

Similar to Knowles theory of adult learning, Darling-Hammond (2006) in her work, Constructing 21st-Century Teacher Education, identified the importance of program design for teacher education and how it should function. Darling-Hammond (2006) indicates that although it is imperative that teachers have strong core knowledge, it is just as important for teachers' preparation to be organized in a way so that the teacher can integrate their learning and utilize new knowledge in practical ways in the classroom. This can be one of the most difficult concepts for teacher preparation to address, according to Darling-Hammond (2006),

not only the concept of what to teach but also how to be an expert at adapting the learning for their students as well as themselves as life-long learners.

The theoretical framework of this study merges the idea of andragogy, helping adults learn, with the analysis of how well types of certification programs are preparing and retaining new teachers in the profession.

Significance of the Study

Given the extensive teacher shortage that society is currently facing and the rapid rate of retirement that is coming up in the near future, the results may greatly impact the hiring practices for many districts. Teachers today face an increasingly diverse student population and therefore it is vital that districts hire and retain only the highest quality teachers that are well prepared to meet the needs of the students they will be serving. According to Haynes (2014) in a report from the Alliance for Excellent Education, teaching quality is the most powerful school-based factor in student learning. In order to accomplish this daunting task, a system of teacher preparation, recruitment, and retention must be the highest priority in order to ensure well-prepared teachers who can meet the needs of our diverse student population. However, according to Darling-Hammond, it is "equally important to focus on how to retain effective teachers" (Darling-Hammond, 2016, p. 17).

Additionally, at the district leadership level, quality professional learning and collegial collaboration must be provided to new teachers that is focused upon improved instructional strategies to support student learning. Districts must create a culture that fosters positive climates to allow teachers to feel safe with a performance-based assessment system that is monitoring and evaluating their effectiveness in providing solid instructional practices for their students. Finally, the partnership at the university and state level must be strengthened in order

to ensure all teacher candidates are well equipped to handle the needs of the diverse student populations that they are serving. According to Darling-Hammond (2010) making substantial, strategic investments in education are essential to our long-term prosperity and our success as a democracy. The "nation's hiring challenge would be best addressed by stopping the revolving door of teachers" (Darling-Hammond, 2016, p. 15). Darling-Hammond explains that in order to get to a better place in education instructors must teach their way out, as this will provide this diverse population of learners the equitable and highest quality education that they deserve. This study identified the type of pre-service program for teacher candidates that best prepared new teachers for the challenges that they faced in the classroom.

Definitions of Terms

Alternative Certification: For those wanting to enter the teaching profession but lacking an education degree or specific education coursework.

Credentialing: A process, implemented by the state Commission on Teaching Credentialing, to certify that teachers are well prepared to enter the classroom.

Efficacy: The power to produce a desired result or effect.

Emergency Permit: A one-year permit issued to people entering the teaching profession who have not completed some of the legal requirements for a credential. Generally, the intent is that the person will enroll in and complete an approved teacher preparation program.

Emergency permit holders must have a college degree, pass the California Basic Educational Skills Test (CBEST), and have some subject-matter knowledge. The permit allows the person to work only in the hiring district.

Highly Qualified Teacher (HQT): According to the No Child Left Behind Act (NCLB) of 2001, a teacher who has obtained full state teacher certification or has passed the state teacher

licensing examination and holds a license to teach in the state; holds a minimum of a bachelor's degree; and has demonstrated subject area competence in each of the academic subjects in which the teacher teaches.

Institutions of Higher Education (IHE): A college or university.

Intern: A student or recent graduate who works for a period of time at a job in order to get experience.

Pre-Service: Preparatory or prerequisite to.

Retention: The ability to keep something.

Student Teaching: Practice teaching.

Teacher Preparation: Most candidates must have earned a bachelor's degree in a noneducation major, passed the California Basic Educational Skills Test (CBEST), and demonstrated subject-matter competence by either passing approved college courses or the state's subject-matter exam. In addition, they must complete graduate coursework that includes classroom study and student teaching. At the end of this time, the candidate earns a Preliminary Credential, after which the teacher has five years to earn the Professional Clear Credential by completing additional professional coursework. There are alternative routes to earning a credential, such as internship programs.

Organization of the Study

Chapter One of this study was utilized in order to give a general overview of the focus research topic. It also included the statement of the problem, the purpose of the study as well as the research questions. Chapter Two includes the review of the current literature related to the research topic. Chapter Three identifies the methodology that was used in the research. The analysis of the type of instrumentations that were used as well as the description of the

data collection and analysis are also included in this chapter. Chapter Four presents the data compiled from the research. Finally, Chapter Five provides a summary, discussion, and conclusion of the research findings, including implications as well as recommendations for future study.

Summary

Overall, the need for highly qualified teachers in the classroom to address the increasingly diverse needs of our student population has been well documented. Currently, and over the next several years, districts face unprecedented teacher shortages and will have to identify ways to recruit and retain the best candidates to fill the large number of vacancies in the classroom. This research attempts to pinpoint the specific certification of new hires that are more likely to remain in the district, and therefore not perpetuating the cycle of need. From those that did remain in the district, the research attempts to identify the type of certification programs that best prepared teachers for the challenges they faced upon entering the profession.

CHAPTER 2: REVIEW OF LITERATURE

In 1983, President Ronald Reagan commissioned a panel to present a report on the quality of education in America. At the first commission meeting, the president noted that there "are few areas of American life as important to our society, to our people, and to our families as our schools and colleges" (National Commission on Excellence in Education, 1983, p. 8). In the report, the Commission called for a variety of much-needed reforms in order to correct the alarming direction that public education was viewed to be headed. As we look at where we are as a nation in the education system more than 30 years after that report, it is evident that many of the identified problems from 1983 remain largely unaddressed, and that student achievement has continued to be stagnant, and continues to be a challenge for teachers and administrators at all levels (Graham, 2013). In order to begin to move student achievement in the right direction we must ensure that all teachers across the nation have participated in a high-quality preparation program that prepares them to meet the needs of all students.

National Perspective on Teacher Certification

Historically speaking, the scope and purpose of teacher credentialing has revolved around four main questions over time (Angus, 2001). The first question focused on where the control of the licensing of teachers should rest. In many professions those responsible for the standards and oversight are made up in large part of members of the profession itself, in conjunction with state and/or federal government oversight. However, the actual process and standards for the profession itself rested with those inside it due to the fact that it is in the public's greatest interest to have those with the most knowledge in the profession protect it

from incompetence and lack of professional judgment (Angus, 2001). For most of the history of education, this has not been the case.

The second question where teacher credentialing is concerned focused around what the best method is for determining the competence of a teacher. Would a single score on an examination demonstrate this? Would the successful completion of an approved course of study demonstrate competence? The answer to these questions have been a pendulum swinging back and forth over the last century. At the turn of the century, an examination was the primary means of determining the competency of an aspiring educator. Fifty years later the certification examinations had all but disappeared.

As the century came to a close, the trend was back to placing a much higher emphasis on examinations yet again (Angus, 2001). As the pendulum continued to swing regarding examinations related to teacher certification, concurrently the education and training requirements for teaching rose relentlessly. As a nation, the United States has the highest level of formal education in its teaching force in the entire world. Unfortunately, the academic performance levels of our students do not take a similar climb that has been invested in our teacher education levels (Angus, 2001). In the 2011-12 academic year, 57% of teachers in U.S. public schools held a master's degree or higher in a variety of areas, not all in academic subjects (Horn & Jang, 2017).

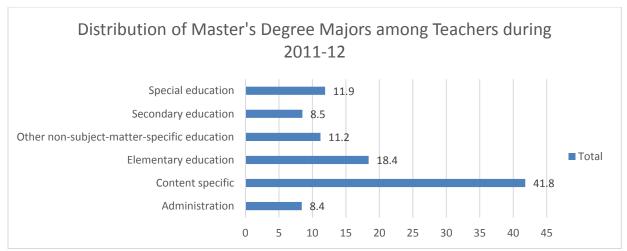


Figure 1. Distribution of Master's Degree Majors among Teachers during 2011-12 *Note.* N= 42,000. Adapted from Horn & Jang, 2017.

Given the fact that abandoning the education of teachers is unlikely, the third question around teacher certification surrounded what the elements of a course of study for teachers involve. Over time the focus has been on overall general academic knowledge, then specific specialization in a subject area (math, English, multiple subject, etc.), and finally on the professional course that is necessary for a student of teaching (classroom management, instructional strategies, etc.) that is a part of a student teaching or intern experience (Angus, 2001). The last question surrounding teacher licensing focused on how specific that license system should be. Should teachers be licensed to teach physics or science, Spanish or a foreign language, calculus or math? The question of what a teacher was licensed to teach also influenced many other facets of education regarding the daily schedule, as well as how rural versus urban schools were able to address their student needs. According to Angus (2001), as the 19th century ended, and these central questions were still being wrestled with, there was also a movement to centralize state authority of the certification of teachers. Throughout the 20th century, and into the start of the 21st, the federal government has continued to put

parameters around overall teacher education, most notably with the implementation of No Child Left Behind.

No Child Left Behind Act of 2001: Impact on teacher certification

In 2001 the federal government implemented the No Child Left Behind Act (NCLB) that required all teachers of core academic classes (English, reading or language arts, mathematics, science, foreign language, science, civics and government, economics, arts, history, and geography) to be "highly qualified" as defined by the law by June 2006 (McMurrer, 2007, p. 1). In general, this means that teachers held a bachelor's degree, were fully certified, and able to demonstrate their knowledge and skills in their content areas by having completed sufficient subject-matter coursework, having passed a state test, or met other state criteria (McMurrer, 2007, p. 1).

The Center on Education Policy (2007) conducted annual comprehensive studies of the implementation of NCLB. During year five of the law's implementation, the focus of their annual survey was specifically focused on the requirements to be considered "highly qualified" (McMurrer, 2007, p. 1). Key findings in this report indicated original intentions behind the creation of NCLB were facing challenges to come to fruition regarding the connections between teacher qualifications and student achievement. Specifically, the report indicated that 66% of districts reported that the teacher requirements of NCLB had minimally or not at all improved their students' achievement levels. In addition, 74% of districts reported that the same requirements had minimal or no impact on the effectiveness of their teacher workforce. The same district officials reported that they felt the definition of a "highly qualified" teacher, as determined by NCLB, was too focused on content knowledge, and should take into account the teacher's effectiveness in the classroom, their ability to relate to students, to effectively

teach students from different backgrounds, and how to differentiate instruction based on students' needs (McMurrer, 2007, p. 3). Across the country individual states have the purview to implement their own requirements for teacher certification, as long as they abide by the requirements of NCLB.

State by State Perspective and Impact on Teacher Certification

A professional license must be earned in order to practice teaching, just as it is to practice law or medicine. Every day the teacher leads a classroom, their actions may influence the life trajectory of a group of students – their brain development, their characters, their aspirations, and their self-beliefs. Given this incredible responsibility, states have put into place a process to make sure that anyone who assumes this role has the necessary skills and expertise it takes to be effective in their practice (www.teach.org, 2017).

The professional licensure requirements are set at the state level, so there are variations in policies across the country. However, there are several parameters at the national level that are fairly consistent. These similarities and differences were analyzed from the teach.org website and data reported as follows.

Teacher credentialing has several different structures in the United States. There are three main categories for teacher certification; (1) alternative types of certification, (2) Level I type of certification, and (3) Level II and beyond type of certification. In reference to alternative type of certification that results in the issuance of a teaching certificate without completion of a traditional preparation program, there are 17 states who specifically issue this type of certification.

For a Level I type of certification, there is an issuance of a teaching certificate upon completion of a teacher preparation program and any state assessments that are required, all 50

states issue this type of certification. For Level II and beyond types of certification, there is an issuance of a teaching certificate, above and beyond that of the Level I, upon completion of mandated or optional state requirements. Level II and beyond types of certification are a requirement, or an option in 45 states.

Additionally, data gathered indicates that in the United States 48 states require student teaching as part of a traditional teacher preparation program prior to issuance of the Level I type of certification. Lastly, some form of mentoring is required at some level of certification in 28 states. Table 1 gives the specific certification statistics for the United States. The history of the specific credentialing structure for California is addressed in the following section.

Table 1
National Teacher Certification Statistics

Certification	Number of States
Specific Alternative Certification	17
Level I Certification	50
Level II/III	45
Student Teaching Required	48
Mentoring Required During Some Level of	28
Certification	

California perspective and impact on teacher certification

As previously outlined, the states and their citizens began asserting responsibility of the qualifications of their public-school teachers. In California, Irving Hendrick indicated "how best to pursue that responsibility became the subject of continuing controversy, debate, and policy shifts," (Hendrick, 2011, p. 17). California's history of credentialing has been a practical matter of the state's attempt to pledge to the public that the teachers are at least minimally qualified to provide services that are in the state's best interest.

Concurrently, the state must supply a growing number of teachers, based on increases in school populations, at a minimal cost to taxpayers, which ensures that standards cannot be too high. "Most of the story over teacher credentialing to date is a story about dealing with issues of control and the substance of preparation" (Hendrick, 2011, p. 18). According to Hendrick (2011), in the early years of state oversight to teacher authority, California relied primarily on an examination, as did many other states. However, by 1905, California "became the first state to require a fifth year of college course work for secondary teaching credentials, and by 1906 the fifth year included a full year of graduate study" (Hendrick, 2011, p. 24). By 1930 the state Commission for the Study of Educational Problems determined that the long-standing system of certifying teachers on the basis of county examinations be abolished for all levels of teaching service, and that the state would solely rely on the University of California system for the higher education of all perspective teachers (Hendrick, 2011).

According to Inglis (2011), in 1961 due to a great deal of public uncertainty about teacher competency and the quality of instruction, California began to reform teacher education and credentialing with the implementation of the Fisher Act. There were five major changes that the Fisher Act brought to life in terms of credentialing for educators. First, it reduced the number of types of credentials from 57 to 5 (elementary, secondary, administrative, junior college and designated subjects). Next, it required both elementary and secondary teachers to complete a year of post-baccalaureate study (what has long been considered the "fifth year") for full certification. Additionally, it put specific parameters around the undergraduate work for teacher certification that both elementary and secondary candidates had to complete. Also, the Fisher Act aligned the courses that a secondary teacher could teach with their major and minor subject matter preparation. Lastly, it required that

candidates for an administrative credential have an undergraduate major in an academic field (Inglis, 2011).

During the latter part of the 1960's, the components of the Fisher Act faced a great deal of opposition, most specifically the requirements surrounding an education specific major as the course of study. In 1970's the original act unraveled, and the Ryan Act was initially developed, which entirely restructured the California credentialing system (Mastain, 2011). The components of the new Ryan Act introduced five new principles to teacher preparation (Mastain, 2011):

- Creation of an independent licensing agency, the Commission on Teacher
 Preparation and Licensing, that was comprised mostly of educators and was the first of its kind in the country;
- Continued the strong focus on subject matter preparation, but provided a new
 opportunity to demonstrate that subject matter competence through passage of a
 state examination or completion of subject matter preparation program that would
 waive the exam;
- 3. Created one credential for all teachers, K-12, with authorization based on the grade level of the content rather than the age of the student;
- 4. Retained the 5th year requirement however allowed seven years for completion;
- 5. Established the multiple subject and single subject distinction for teachers who may teach many subjects to a single group of students in a self-contained classroom versus one who teaches a single content to a rotating group of students throughout the day.

Again, in the early 1980's, more significant changes came about to the structure of California credentialing when a committee was established to assess the content of the fifth-year teacher preparation requirement. It was determined that it should not be based on a one-year period, but rather should extend over a 3 to 5 year period that included coursework in education, student teaching, as well as an extensive supervised internship.

This assessment developed into the two-tiered credential system that is the foundation for California's system of credentialing to this day (Mastain, 2011). The credentialing structure will be outlined in more detail in later sections, but in general the Level I certification relates to the issuance of a teaching certificate upon completion of a teacher preparation program and any state assessments required. The Level II indicates the issuance of a teaching certificate, above and beyond that of the Level I, upon completion of mandated or optional state requirements. In California the current educational climate has made it necessary for districts and state officials to make other concessions for the ways in which a teacher can be considered qualified to teach.

California's current educational climate. In a 2011 article for EdSource, then Superintendent of Public Instruction Tom Torlakson declared that California public schools were in a financial emergency. With more than three years of continuous cuts to public education funding, approximately 30% of the students were attending a school within a district that was in serious financial jeopardy (Dollars, 2011). Because of these severe budget cuts, districts had to resort to layoffs in order to remain fiscally solvent, which over time resulted in more than 26,000 teachers losing their jobs (Freedberg, 2013), or nearly 9% overall (Darling-Hammond, 2016).

This drastic increase in teacher layoffs had a severe impact, not only immediately within the districts and within schools, but created a current teacher shortage due to low enrollment in preparation programs at the university level as well. Based on a report that was created by the California Commission on Teacher Credentialing, enrollment in teacher preparation programs for the 2011-12 academic year was 26,446 students which was down 66% from a decade earlier when 77,700 students were enrolled (Freedberg, 2013). Those numbers have continued to decline with data from the 2012-13 and 2013-14 years being added; the decline as of 2014 was at a 12 year low indicating a 76% drop from 2001 to 2014 (Darling-Hammond, 2016, p. 6).

Affecting the number of available teachers even further will be the number of vacancies that those hires will need to fill in the near future. According to Freedberg (2013) the number of retirees in the coming decade is a bit unknown. The economic downturn had many older teachers concerned about their futures and delaying their own retirement, but with the economy picking up it is inevitable that the number of retirements will as well (Freedberg, 2013). Recent data indicate that in California, nearly one in 10 teachers are over the age of 60 and can be expected to retire in the next few years (Darling-Hammond, 2016), and it is likely is that it will take time for the teacher pipeline in California to recover. The concern is that the trend is to "revert to sending under-prepared teachers with emergency or interim credentials into the classroom. Doing so would have an impact on the students who need the most qualified teachers, not the least" (Freedberg, 2013, p. 2).

Historically, this is not a new concept. Since California legislation was passed in 1990 that made it possible for teachers to begin teaching in the K-12 setting without full credentials, studies have suggested that the students most in need of qualified, highly trained teachers are

the least likely to be the ones to receive them (Goe, 2002). As previously indicated there has been a sharp increase in the substandard credentials and permits being issued, approximately 4,700 in 2012-13 to nearly 7,700 in 2014-15, which is an increase of 63% (including special education permits). This assignment of teachers who have yet to complete preparation programs, and substitute teachers who come and go, has been found to be the most harmful to students (Darling-Hammond, 2016). Further, "the students generally considered most in need of highly qualified teachers are those attending schools where student standardized test scores are low and where there are large percentages of low-income students and/or minority students and English learners" (Goe, 2002, p. 3). This has an impact at both the state and local level.

Local perspective and impact on teacher certification. The data dashboard from the California Commission on Teacher Credentialing indicates specific data at the local level regarding the increase of permits being issued in one Central California County. In the 2011-12 school year 26 such permits were issued, and in 2015-16 there were 242 permits issued, an increase of 830%. Furthermore, at the local level, data gathered regarding teacher shortages throughout the state indicated a high need in this Central Valley County. Job postings from EdJoin analyzed in October of 2013 as well as October 2015 indicated an increase of 60%. This closely aligns with data from the state indicating an overall increase in need of 63% (Darling-Hammond, 2016). This will be illuminated in Table 5 in a subsequent section and will exemplify these numbers at the state and county level.

Summary

Teacher certification is regulated at both the federal and state levels. The requirements at the federal level indicate what states and districts must do in order for their teachers to be considered "highly qualified". Across the nation states have individually implemented a

variety of credential structures to meet these requirements. California has continued to struggle with meeting many of the "highly qualified" requirements, especially as enrollment in preparation programs has decreased and the issuance of emergency permits has increased. In the following sections the different options for preparation programs will be outlined and the requirements at the national, state and local level will be identified.

Types of Preparation Programs

According to a recent annual report on teacher quality, completed by the U.S. Department of Education, in spite of the type of preparation program in which a candidate participates, alternative or traditional, it is "expected that a teaching candidate will have gained the knowledge, skills, and abilities needed to effectively teach the nations' diverse student populations," (U.S. Department of Education, 2016, p. 1). In 2014, 69% of teacher preparation providers were based upon a traditional model and 31% were an alternative type of structure. As defined by the U.S. Department of Education, traditional teacher preparation programs "generally serve undergraduate students who have no prior teaching or work experience and generally lead to at least a bachelor's degree. Some traditional teacher preparation programs may lead to a teaching credential but not to a degree," (U.S. Department of Education, 2016, p. 5). On the converse side of the traditional preparation program is an alternative type of program. "Alternative route teacher preparation programs typically serve candidates whom states permit to be the teachers of record in a classroom while working toward obtaining an initial teaching credential" (U.S. Department of Education, 2016, p. 7). In the United States approximately 460,000 individuals were enrolled in either a traditional or alternative preparation program in the 2013-14 academic year (U.S. Department of Education, 2016). In the subsequent sections both traditional and alternative preparation programs are identified.

Traditional Preparation Programs

National. As previously described, there have been drastic changes to teacher credentialing requirements throughout the twentieth century. Beginning with the call to action that was initiated under the Nation at Risk report (1983) and commencing with the No Child Left Behind (2001) requirements for teachers to be considered highly qualified, the nation has continued to focus on what teacher education should look like and who should be responsible for qualifying teachers.

Based on the Tenth Annual Report on Teacher Quality, completed by the U.S. Department of Education in 2014, states reported 1,497 traditional teacher preparation providers that offered an average of 12 teacher preparation programs (U.S. Department of Education, 2016, p. 5). Based on data from 2014 there were a variety of requirements for both entrance into and exit from traditional teacher preparation programs at the national level. Most commonly reported from all states for undergraduate traditional program admission was a minimum GPA (2.5), transcripts, and minimum number of courses, credits, or semester hours completed (U.S. Department of Education, 2016, p. 5). Commonalities at the national level were indicated regarding exit requirements from teacher preparation programs, again most commonly were minimum GPA required (2.5), minimum number or courses, credits, or semester hours completed, as well as specific minimum GPA (3.0) required in professional education coursework.

In addition to entry and exit requirements, the U.S. Department of Education reported on commonalities for all states related to supervised clinical experiences in traditional teacher preparation programs. The term supervised clinical experience, when put into practice, in general refers to participation of the teacher candidate in classroom activities both before and

during student teaching. The two most common preservice types of supervised clinical experience that states reported were, (a) classroom participation and observation involving such areas as tutoring small group activities; practice teaching; interaction with a variety of student activities, but without any official responsibility for the classroom, and (b) completing student teaching which holds the entire responsibility for the classroom (U.S. Department of Education, 2016, p. 6). In the 2014 report, the mode average number of hours that teacher candidates were required to complete prior to student teaching in a traditional teacher preparation program was 100 (U.S. Department of Education, 2016, p. 6). The mode number of hours required for student teaching in a traditional teacher preparation program was 600 (U.S. Department of Education, 2016, p. 6). As previously described the U.S. Department of Education explicitly identifies the general requirements regarding what teacher certification must look like, however each individual state identifies the ways that their prospective teachers will meet those requirements.

California. The traditional route to teaching certification in California involves the completion of a teacher preparation program at a college or university, receiving a bachelor's degree in a specific academic area, followed up with some type of student teaching experience (Sass, 2011). According to Greenberg, Pomerance, and Walsh (2011)

the stakes in student teaching are high, teacher candidates have only one chance to experience the best possible placement. Student teaching will shape their expectations for their own performance as teachers and help determine the type of school in which they will choose to teach. (Greenberg, Pomerance, & Walsh, 2011, p. 1).

The practice of student teaching connects to Malcolm Knowles' second concept of his theory of adult learners that is related to the adult learner experience, meaning that as a person

matures they accumulate a wealth of knowledge and experiences that become a resource for their own self-directed learning (Knowles, 1980). This theory of adult learners builds on the idea that a prospective teacher acquires the knowledge and skills necessary to be a teacher and implements that learning during their student teacher placement.

Similar to the experience of a student in the K-12 public education system, the experience of a student teacher who has a mediocre, let alone a disastrous classroom setting and master teacher, can never be undone (Greenberg et al., 2011). Martin Haberman identifies the interesting dichotomy that "while it is clearly higher educations' role and not the lower schools to provide the schools with effective teachers this glaring failure is rarely if ever mentioned; it is the K-12 schools that are attacked for having poor teachers," (Martin Haberman 2012, p. 931). For this reason, the student teaching experience is part of a traditional teacher candidate experience, in order to fully prepare them for the challenges that they will face upon entering the classroom as the teacher of record. It gives them the opportunity in a protected environment to experiment with the pedagogical skills and knowledge that they have learned in their teacher preparation program (Greenberg et al., 2011).

Local. As previously indicated, the enrollment in California's teacher preparation programs drastically declined over the last decade, hitting a 12-year low. In 2002 there were over 75,000 candidates enrolled in a teacher preparation program in California and in 2014 that number was less than 25,000 (Darling-Hammond, 2016). This reduction, from 2002 to 2012, represents a 66% change in the number of candidates enrolled in a teacher preparation program in California. If this pace continues over the next several years, the demand for fully credentialed teachers will continue to outpace the available supply for the foreseeable future.

Summary

The purpose of the traditional teacher preparation experience is to provide the knowledge and skills necessary for a teacher to meet the needs of the students in their classroom. The acquisition of knowledge is followed up by a student teaching experience that allows the 'student teacher' to apply that new learning in a classroom that is facilitated by a master teacher to guide and support their learning along the way. The completion of this type of preparation program culminates in an initial teaching certificate that allows the teacher to be considered "highly qualified" and become the teacher of record in their own classroom. On the opposite side of the traditional preparation program is an alternative preparation program, also considered to be a viable option for states, especially during times of high need and/or teacher shortages.

Alternative Preparation Programs

National. The idea of alternative certification first appeared in the 1980's. The rationale was simple, make it less burdensome for skilled individuals without a teaching credential to enter the classroom (Walsh & Jacobs, 2007). There were a variety of reasons for the insurgence of alternative pathways to education: some focused on the high need and low supply of teachers and another on the burdensome requirements that the traditional pathway to teaching placed in front of talented people who lacked the education major background necessary at the time for traditional preparation programs (Walsh & Jacobs, 2011).

According to Tim Sass, over a 20-year period, 1985 to 2005, the number or teachers in the United States that acquired a teaching credential through a route other than that of a traditional teacher preparation program went from 300 to 59,000 (Sass, 2011). Regardless of the impetus for the dramatic rise in alternative certification programs, after years of implementation and fairly even data in terms of the number of teachers who participated in

each, according to Walsh and Jacobs, "these programs have merely re-ordered the traditional teacher-prep sequence without altering its substance, allowing candidates to take this burdensome course load while teaching [as opposed to] before" (Walsh and Jacobs, 2011, p. 9).

The alternative route teacher preparation program is a specific and structured program in which a teacher candidate receives preparation and training that is necessary to earn their teaching credential. Furthermore, these alternative routes are defined by each state and vary significantly from one to another (U.S. Department of Education, 2016).

Based on the Tenth Annual Report on Teacher Quality completed by the U.S.

Department of Education (2016) in 2014, states indicated 473 alternative teacher preparation providers that offered an average of 11 teacher preparation programs. Although the specific parameters of an alternative preparation program vary by state there are commonalities that they do share. In 2014, the three most commonly indicated requirements for undergraduate admission into an alternative teacher preparation program was a required transcript, minimum GPA (2.5), and a minimum number or courses, credits, or semester hours completed (U.S. Department of Education, 2016). The commonalities in exit requirements for the alternative teacher preparation program also fell under three categories, minimum number of courses, credits, or semester hours completed; minimum GPA (2.5); and minimum GPA (3.0) in content area coursework (U.S. Department of Education, 2016).

This method of teacher certification connects to Malcolm Knowles and his first assumption of adult learners. The assumption of self-concept that as an individual matures they move from dependency to self-directed in their learning. This self-directedness is

imperative in an individual who is learning the theories of being a teacher, while actually being the teacher of record in the classroom.

California. In California the most frequently used alternative route to teaching is to enroll in an intern program. These types of programs are designed to serve an individual who is the teacher of record in the classroom, and being paid a salary by their employing district, while receiving their formal teacher preparation program. According to data that were reported on the annual report card of California teacher preparation programs for the 2012-2013 academic year, Suckow (2014) indicated there was a fairly even distribution across gender and racial lines of those teacher candidates who complete their credential requirements via a traditional route or an alternative route. According to data from the U.S. Department of Education, California ranked fourth in the nation in the number of candidates that completed a traditional teacher preparation program, with 9,527, which was 6% of national completers, and second in the nation in the number of alternative teacher preparation program completers with 1,208, which was 9% of national completers (U.S. Department of Education, 2016, p. 25).

These numbers indicated that in California there was a fairly even distribution of the number of potential teachers who completed a traditional program and an alternative program.

Local. At the local level there has been a steady increase of the number of teacher candidates who were selecting this type of alternative certification as their pathway into education. Data from the Commission on Teacher Credentialing indicated that in California there was a 69% increase in the number of intern credentials issued from the 2011-12 school year to the 2015-16 school year. At the county level this number was drastically higher at a 282% increase during the same time span. One may surmise that this dramatic increase at the county level suggests a much greater need for teachers in some parts of the state than others.

Summary

The purpose of the alternative route to teacher preparation is to provide a structured and specific program to individuals while working as the teacher of record in a classroom. The specific structure and route that a candidate takes varies greatly from state to state but still all provide an approved framework or model to allow the teacher to rapidly apply their newly acquired knowledge as they are teaching in the classroom. In the following sections the variety of types of certification that are available for both traditional and alternative teacher candidates are discussed.

Types of Certification

At the national level there is a vast difference in the state by state options for teacher certification. Overall the options for state teacher certification fall into three categories: an alternative type of certification, an initial or Level I type of certification, and a Level II (or beyond) type of certification. In terms of an initial or Level I type of certification, all 50 states have a required teaching certification to begin working in the classroom. In terms of a next level, or beyond that in some cases, 45 states require or provide an opportunity for professional growth for their teachers subsequent to their initial certification. In some states, 17 specifically, there is an alternative certification option available to candidates prior to receiving their Level I certification (teach.org/state-certification-view). Table 2 identifies the credentialing structure by each individual state.

Credential Structure by State in the U.S.

Table 2

State	Credentialing Structure			Mentoring (on some level)	Student Teaching
AL	A	I	II	X	X
AK		I	II		X
AZ	A	I	II	X	X

AR		I	II	X	X
CA	A	I	II	X	X
CO	A	I	II/III	A	X
CT	A	I	II		X
DC	A	I	11		X
DE	71	I	II/III	X	X
FL	A	I	11/111	11	11
GA	A	I	II		X
HI	11	I	II/III		X
ID		I			X
IL		I	II/III	X	X X
IN	A	I	II/III	X	X
IA		I	II/III	X X	X
KS	A	I	II/III	X	X
KY	A	I	II	X	X
LA		I	II/III	X	X
ME		I	II	X	X
MD		I	II/III	X	X
MA	A	I	II	X	X
MI	A	I	II		X
MN		I			X
MS	A	I	II/III		X
MO		I	II/III	X	X
MT	A	I	II		X
NE		I	II		X
NV		I	II/III		X
NH		I	II	X	X
NJ		I	II		X
NM		I	II/III	X	X
NY	A	I	II		X
NC		I	II	X	X
ND		I	II	X	X
OH		I	II	X	X
OK		Ι	II	X	X
OR		I	II/III		X
PA		I	II		X
RI		I	T		X
SC	A	I	II		X
SD		<u>I</u>	II		X
TN		I	II	X	X
TX		I	II		X
UT		I	II/III	X	X
VT	A	I	II	X	X
VA		I	II	X	X
WA		I	II	X	X

WV	I	II/III	X	X
WI	I	II/III	X	X
WY	I			X

Note. A = Alternative Type of Certification (Issuance of a teaching certificate without completion of a traditional preparation program); I = Level I Type of Certification (Issuance of a teaching certificate upon completion of a teacher preparation program and any state assessments required); II/III = Level II/III Type of Certification (Issuance of a teaching certificate, above and beyond that of the Level I, upon completion of mandated or optional state requirements). Adapted from www.teach.org, 2016

The requirements for receipt of both traditional and alternative certification are discussed at the national, state and local level in the subsequent sections.

Traditional Certification

National. As previously discussed a traditional route to teaching requires the completion of a university or college-based preparation program with a major in education and completion of student teaching. Upon completion and any additional testing requirements, individually determined at the state level, the initial or Level I certification is received. Additional certification and requirements are based on each individual state credentialing structure.

California. In California specifically, upon completion of the coursework and assessment requirements, teacher candidates are issued the Preliminary (Level I) credential. The credential is valid for only five years. In order to renew the Preliminary credential, the teacher must complete a district approved Induction program that will lead to the issuance of the Clear credential (Level II). The Clear credential is renewable every five years with no additional requirements involved (Commission on Teacher Credentialing, 2017). In California there has been a steady decline in the number or Preliminary (Level I) and Clear (Level II) credentials issued. This decline in issuances of Preliminary (Level I) or Clear (Level II) credentials in the state closely aligns with the decrease in university teacher preparation enrollment, as well as the drastic increase in intern and permit issuances across the state.

Table 3

California Preliminary (Level I) and Clear (Level II) Issuance Statistics

California Initial Preliminary and Clear					
Year	N				
2011-12	16,759	7.00/			
2015-16	15,457	-7.8%			

Note: Adapted from www.ctc.ca.gov, 2017

Local. Closely aligned with California state data on issuances of Preliminary and Clear credentials the county numbers were similar for the 2011-12 and 2015-16 academic years.

Table 4

Central Valley County Preliminary (Level I) and Clear (Level II) Issuance Statistics

Central Valley CA County Initial Preliminary and Clear					
Year	N				
2011-12	837	1 < 40/			
2015-16	700	-16.4%			

Note: Adapted from www.ctc.ca.gov, 2017

Summary

The specific credentialing structure in California is based on a two-tiered system. The first tier, the Preliminary (Level I) is received upon completion of the required coursework and subsequent assessments. The second tier, the Clear (Level II) is received upon completion of a state approved induction program. The Professional Clear credential is renewable every five years with no additional requirements currently mandated. There is no option for a Level III credential in California. The requirements for receipt of an alternative certification are discussed in the subsequent section.

Alternative Certification

The alternative certification route allows an individual the ability to obtain their teaching certificate through a path other than that of the traditional route, often times while holding a position as a classroom teacher.

National. According to the U.S. Department of Education, states are frequently unable to fill all of their teaching positions with teachers that hold the required state credentials. With that in mind, often times in difficult to staff schools or content areas, states may issue emergency types of licenses in order to fill teaching positions. The specific requirements for these emergency types of licenses are varied from state to state.

In some states, an individual who holds a current teaching credential, but is teaching outside of the subject or grade level authorization, may be issued an emergency license. Other states may issue an emergency license to an individual who has specific expertise in a content area but does not hold a credential in the subject area. Additionally, according to the U.S. Department of Education, the length of time an emergency license is valid, as well as the number of times it may or may not be renewed, varies from state to state (U.S. Department of Education, 2016, p. 88).

California. In California, as previously identified, there has been a drastic decrease in the enrollment of prospective teachers at university programs. This has directly related to a dramatic increase in the issuance of short term teaching certificates across the state. The requirements to receive such types of certification are the completion of a bachelor's degree program, passage of the California Basic Educational Skills Test (CBEST) and possibly a California Subject Examinations for Teachers (CSET) for the appropriate content area. Table 5

identifies the specific number of intern and permit certificates that were issued in the state, county and local district for the 2011-12 and 2015-16 academic years.

Table 5

California Intern and Permit Issuance Statistics

	N	N	Increase
	2011-2012	2015-2016	
California			
Intern	2,240	3,806	70%
Permit	2,073	5,856	183%
County			
Intern	56	214	282%
Permit	26	242	831%
District			
Intern	17	51	200%
Permit	6	80	1,233%

Note: Adapted from www.ctc.ca.gov, 2017

Local. As indicated in the table above the local data for XYZ Unified School District showed a rapid increase in intern and permit issuances from the 2011-12 to 2015-16 academic years. These numbers closely align with the previously identified 76% decrease in university enrollment for teacher preparation programs.

Summary

Alternative certification is a viable option for prospective teachers to earn their teaching certification while working in the classroom. The requirements for issuance of an alternative certification are passage of state determined assessments as well as receipt of a bachelor's degree. The increase in demand, since 2012, for alternative certification candidates has rapidly increased in California as the supply of fully credentialed teachers has decreased due to previous years economic struggles. In subsequent sections the type of support that all prospective teachers, traditional or alternative, receive upon entering the classroom are identified.

Types of Support

National

According to Haynes (2014), in a report from the Alliance for Excellent Education, close to half a million teachers in the United States either move or leave the profession annually which costs up to \$2.2 billion nationwide. More recent research from Darling-Hammond (2016) disaggregates the numbers further to indicate replacement costs to be roughly \$18,000 per teacher, which adds up to a more significant national price tag of greater than \$7 billion a year. This cost is attributed to many things, most prevalently: having to provide additional recruitment, training and support for teachers that have to be replaced due to attrition. Therefore, the impact of teacher attrition goes far beyond just the dollar amount that is felt by districts when we cannot keep a stable teaching force, but students end up being the ones who pay the real price (Haynes, 2014). Based on these data, Darling-Hammond indicates that by reducing overall attrition the demand for new teachers would reduce as well, and money could be saved that would be "better spent on mentoring and other approaches to supporting teacher development and advancing student achievement" (Darling-Hammond, 2016, p. iii).

According to Darling-Hammond, "keeping good teachers should be one of the most important agenda items for any school leader. Evidence suggests that well-prepared, capable teachers have the largest impact on student learning," (Darling-Hammond, 2003, p. 6). The first few steps in retaining high quality teachers to support our diverse student population rest on the education system as a whole. Darling-Hammond, in her article "Keeping Good Teachers", states that "school systems can create a magnetic effect when they make it clear that they are committed to finding, keeping, and supporting good teachers," (Darling-Hammond, 2003, p. 12). It is imperative that we seek out and hire the best-prepared teachers because doing so will

ultimately have long-term benefits to lower attrition and higher levels of competence in the teaching work force.

The alternative is that we end up with large concentrations of underprepared teachers that become an ever-increasing drain on schools' human and financial resources which ultimately means that schools will continually pour money into more recruitment efforts and the cycle will continue (Darling-Hammond, 2003). In her book, *The Flat World and Education*, Darling-Hammond (2010) originally estimated that the cost of teacher turnover for districts was up to \$15,000 for every teacher who leaves, which included new teacher recruitment, hiring, and training. However, as previously indicated, Darling-Hammond's recent research (2016) indicates the cost is now closer to \$18,000 per teacher. When the cost of a decrease in learning for students is added in, the figures rise dramatically, hence the need to make appropriate decisions accordingly. This focus on teacher retention connects to Malcolm Knowles and his fifth assumption of adult learners that indicates an internalization of a teacher's motivation to learn and the desire to remain in the profession after the first few years.

Site leadership must prioritize teacher retention and support as a function of school improvement efforts. According to a 2006 article by Darling-Hammond and Berry, every school must be organized not only for student learning but also for teacher learning as well, and the working conditions must be in place to provide them a chance to be successful. The research has shown that several factors have a substantial effect on both improving teacher retention as well as increasing student achievement. Such factors are teacher empowerment, time for high-quality professional development, and school leadership (Darling-Hammond & Berry, 2006).

Additionally, the learning setting that teachers encounter when they enter the profession plays a major role in teacher retention. "Poor working conditions and lack of significant on-the-

job training and support are major reasons why many new teachers leave the profession within five years," (Johnson et al., 2001, p. 2). No matter the state that they are employed, new teachers must feel that they are a valued member of the professional learning community, that they have adequate time to work with colleagues, and that they have access to information, materials, and technology in order to be increasingly effective in their practice (Berry, 2013). Specific types of support that are implemented in California for new teachers are outlined in the following section.

California

In California, support for new teachers primarily rests with induction. Haynes (2014) states that comprehensive induction programs, such as Beginning Teacher Support and Assessment (BTSA) must be maintained for new teachers during their first two years that includes embedded coaching and feedback by well-trained mentors that leads to the next level of professional licensure. According to Darling-Hammond et al., "strong mentoring in the first years of teaching enhances the retention effects of strong initial preparation [and that] well-designed mentoring programs improve retention rates for new teachers, as well as their attitudes, feelings of efficacy, and instructional skills" (Darling-Hammond et al., 2016, p. 19).

The concept of induction directly connects to Knowles and his third and fourth assumptions of adult learners. These assumptions relate to the adult learner's readiness and orientation to learning and the shift that takes place for a new teacher. The purpose of induction is to utilize job embedded professional learning that focuses on the specific context and content of each new teacher.

The vision of California induction came about in conjunction with universities, state leaders, and local districts for ongoing professional development to be the hallmark of professionalism, and with California Senate Bill (SB) 2042 it became embedded in policy. The

vision took into consideration first from the university standpoint what teacher education should be like; then at the district level what the work that they do in their classrooms should be; and finally, at the state level how the work they do should be refined (Haynes, 2014). All of these components together formed the foundation for induction, which is rooted in job-embedded professional development, which originally required a dedicated funding source. According to a large-scale national study based on beginning teachers who participated in induction, that included mentoring, there was a 15% attrition rate as opposed to a 26% rate for those who had no induction supports (Darling-Hammond, 2016, p. 19).

Historically, California funding for induction programs was fully covered for all candidates as part of categorical aid with the Teacher Credentialing Block Grant. However, as Weston (2011) discusses in an article for the Public Policy Institute of California, this was drastically changed in February of 2009 when state lawmakers, who were assisting districts with deep budget cuts happening at the state level, gave districts flexibility for the use of many of their categorical monies for any education purpose.

In California an important first step was taken in supporting the continued access to induction programs for new teachers. An additional \$490 million was allocated to support "professional learning for educators, including mentoring and induction for beginning teachers" (Darling-Hammond, 2016, p. 26). Now that full implementation of the Local Control Funding Formula (LCFF) has been implemented across California, districts have had to take it upon themselves to determine if induction support for new teachers would be part of their Local Control Accountability Plan (LCAP) and the basic services that they would provide to ensure qualified teachers in the classrooms (Priority 1).

Local Control Funding Formula (LCFF). As has been previously stated, the original intentions behind the shift to flexibility in categorical funding by the state were clear in order to alleviate the massive budget cuts that were happening in all areas of education. This was originally intended to only be a short-term solution during drastic financial times for the state. California lawmakers and Governor Brown, however, continued to make drastic changes in funding for the education system across the state and signed this new funding formula into law on July 1, 2013. The Local Control Funding Formula (LCFF) "promises to simplify and rationalize the state's idiosyncratic and irrational funding system, with its complex rules governing dozens of categorical programs with funding designated for special purposes" (Fensterwald, 2013, pg. 1). For the state, including categorical aid in the LCFF funds that districts received alleviated much of the expenses of accountability that went along with those categorical dollars.

In essence, what LCFF does is establish base, supplemental, and concentration grants for school districts and charter schools, that replaces the previously long held finance system of K-12 school funding. The uniform base amount comes per pupil with varied amounts for the grade level spans, such as high school, middle grades, and K-3 (Fensterwald, 2013). Additionally, funds are received based on the number of low-income, English learner, homeless students and foster children (all considered "high-needs" students) who attend the district. This designation is considered the supplemental grant funding. Lastly, the concentration grant adds additional funds to districts when high-needs students make up at least 55% of the enrollment (Fensterwald, 2013). In order to ensure that high-needs students receive the appropriate funding a system was instituted to monitor resource allocations. Critical to the Local Control Funding Formula is the

way that the state monitors the funds that are distributed, specifically through the Local Control Accountability Plan (LCAP) (Weston, 2011).

Local Control Accountability Plan (LCAP). The Local Control Accountability Plan (LCAP) identifies the district's vision for students, annual goals, and specific actions through a focus on eight areas that the state has deemed as priorities. In conjunction with parent and community input, the district establishes goals and actions for the district as a whole and for each school in the areas of: highly qualified teachers, academic content standards, parent involvement, student achievement, student engagement, school climate, college and career readiness, and student outcomes (Weston, 2011). The plans cover three years but are updated annually by the district. Written into many districts' LCAP structure are the ways that specific funds will be spent for professional development.

Professional Development

In 1996 Darling-Hammond completed a report for the National Commission on Teaching & America's Future titled, What Matters Most: Teaching for America's Future. In this report recommendations were offered to address concerns in the teaching profession that would accomplish goals to change the profession for years to come.

One of those recommendations included reinventing teacher preparation and professional development. Darling-Hammond (1996) indicated that in order to accomplish this, teacher education and professional development must be organized around standards for both student as well as teacher learning. In addition, Darling-Hammond recommended that funding be provided for the mentoring of beginning teachers that includes the evaluation of their teaching skills as well as to create sustainable, high-quality sources of professional development that will provide the resources necessary for continuous improvement.

An integral step in retaining quality teachers to support students from diverse populations is to change the way that we look at the definition of quality instruction. According to Wechsler and Shields (2008) in their report on teaching quality in California, we must move from a pencil and paper definition of teacher quality to one that addresses the current climate of education. With increasing accountability being placed on teachers for the narrow measures of student performance, they are losing autonomy in their classroom (Wechsler & Shields, 2008).

Over the past several years, increased use of scripted curricula and professional development have been implemented regardless of the knowledge or experience that teachers bring. In particular, for both new and veteran teachers the use of scripted curricula "precludes teachers from using their subject matter knowledge, skills, and judgment within the context of the classroom" (Wechsler & Shields, 2008, p. 5). According to Wechsler and Shields, when we can honor the "rich toolkit of craft knowledge and skills," (Wechsler & Shields, 2008, p. 5) that teachers come to the classroom with and utilize effective instructional practices, over time that will lead to student learning.

In the area of professional development and collaboration Wechsler and Shields indicated that we must adhere to "the assumptions that all students can learn if provided the right conditions" (Wechsler & Shields, 2008, p. 8) to include quality teaching. Professional development for teachers must be based on the assumption that all teachers can "provide quality teaching if provided the appropriate supports and differentiated opportunities" (Wechsler & Shields, 2008, p. 8). To retain our new teachers they need sustainable, site-based professional development. Site-based professional development should involve experienced colleagues who watch them teach and provide targeted feedback to develop their instructional strategies as well

as modeling skilled practices and sharing insights about students' work (Johnson & Kardos, 2002).

This type of professional collaboration enables new teachers to improve in the ways that they meet the needs of the diverse student populations they face on a daily basis. In the 2009 report, Professional Learning in the Learning Profession by the National Staff Development Council, Darling-Hammond et al (2009), state that professional learning needs to be planned and organized to engage all teachers regularly to benefit students. It must be organized throughout the year, at every grade level and in every subject and include teacher collaboration that is closely tied to school improvement priorities. A key component of professional development for new teachers is mentoring by an experienced colleague.

Mentoring

Assuming a structure of professional development and collaboration has been established at the district and site level the focus can shift to improving instructional strategies. According to the National Commission on Teaching and America's Future, to create schools that respond to current demographic realities they must rely on the skills and knowledge of teachers of all generations (Carroll & Foster, 2010). Veteran teachers can benefit just as much as their inexperienced colleagues in the areas of standards-based instruction, the most recent approaches to literacy, or current thinking and ideas for integrating technology into the classroom that will improve instruction for diverse student populations (Johnson et al., 2001).

According to research completed by the New Teacher Center, nearly 30 states across the country specifically identify the educators that are eligible to serve as mentors (Moir & Fors, 2017, p. V). In addition, more than 30 states specifically provide or require initial training for new mentors, but only 18 require that professional development to be ongoing for their mentors

(Moir & Fors, 2017). The report identifies only four states (Alaska, Hawaii, Maryland and Washington) that provide or require full-time teacher mentors for their newest educators, and twenty-three states require or encourage release time to conduct classroom observations for their mentor teachers (Moir & Fors, 2017).

As a result of state legislation in California, the vision of job-embedded professional development came about, formally identified as Induction, and it was determined that districts, not universities as had been the historical practice, should be responsible for induction for new teachers. This was based on the idea that induction would be the demonstration of knowledge that was gained through university coursework and applied to the classroom practice of the credential candidate.

Furthermore, according to Bond (2011) the retention of teachers who participated in the Beginning Teacher Support and Assessment (BTSA) Induction model is largely attributed to the effectiveness of the model itself. California was considered the pioneer in this work, with the first statewide teacher induction efforts in the nation and "set the standard with its Beginning Teacher Support and Assessment (BTSA) program, which was shown to reduce attrition and improve teacher competence and became a model for other states" (Darling-Hammond, 2016, p. 25). Subsequently, California was one of only 16 states across the nation in the late 1990s that provided mentoring and it was becoming increasingly clear that this model of support for new teachers was having an impact on retention (Darling-Hammond, 2016).

Throughout the 1990's it was widely estimated that across the nation half of beginning teachers left the profession within the first three years (Bond, 2011). In a 2002 study by the California Employment Development Department, however, it was revealed that California "schools retain their teachers at a significantly higher rate than the national average," 84%

remained in the classroom as compared to the previously stated national statistic at 50% (Bond, 2011, p. 358).

Support for teacher induction was evident with the implementation of the No Child Left Behind (NCLB) act of 2001. The requirement of states to ensure that all students are taught by highly qualified teachers was a critical component of NCLB. According to Russell, in an article for the American Association of State Colleges and Universities "there is growing evidence of the positive impact of induction programs on teacher retention, costs, teacher quality, and student learning," (Russell, 2006, p. 2). In a comprehensive induction program there is an intensive, targeted, and structured multiyear process that is "designed to train, acculturate, support, and retain new teachers and seamlessly progress them into a lifelong professional development program" (Webb & Norton, 2013, pg. 114).

Summary

There are many levels of support that new teachers need upon entering the profession.

Some types of support and professional development are tied to funding such as mentoring and Induction, and some are school based, such as collaboration and targeted professional development. All are imperative in sustaining the high-quality teaching force that is necessary to ensure success for all students.

Summary

Overall, the need for highly qualified teachers in the classroom to address the increasingly diverse needs of our student population is imperative. This research attempted to pinpoint the specific candidates that are more likely to remain in the district, and from those candidates who do remain in the district to identify the type of certification programs that best prepared teachers for the challenges that they faced upon entering the profession.

CHAPTER 3: METHODOLOGY

This study was designed to address three specific research questions. First, to what extent was there a difference between the types of certification that a candidate held upon hire and their subsequent retention in the district? Second, to what extent was there a difference between the types of preparation that the teacher received from their certification programs and their ability to address the challenges that they faced in their first five years in the classroom? Third, to what extent was there a similarity in the reasons that teachers self-identified as why they originally joined the profession as well as stayed in the profession after initial hire?

This study used a causal-comparative research design. According to Best & Kahn, this particular type of research "scrutinizes the relationship among variables in studies in which the independent variable has already occurred, thus making the study descriptive rather than experimental in nature" (Best & Kahn, 2006, p. 134). In the case of this research the dependent variables, the retention of staff and the self-evaluated preparedness level of teachers, had already occurred and therefore the researcher had no control. Joyner, Rouse & Glatthorn described this type of research as "ex post facto research since the causes are usually studied after they have had an effect upon another variable" (Joyner, Rouse & Glatthorn, 2013, p. 76). In this particular case, the relationship of the certification program on the retention and preparation of the new teachers, in regard to the challenges that they faced in the classroom, was measured and implications of possible causation was used to draw conclusions about the results (Best & Kahn, 2006).

Setting and Participants

The study took place in a large, urban district in the central valley of California serving approximately 40,000 students in grades pre-kindergarten through adult education at 55 school

sites. Specifically, there were 39 elementary schools (pre-k through eighth grade), 4 comprehensive high schools, and 12 alternative schools (pre-k through twelfth grade).

At the time of the study, the average per pupil spending in the district was approximately \$9,400 with 61% allocated for instruction, 36% for support services, and the remainder for miscellaneous expenditures.

Of the student population that was served, approximately 93% were minority students, 86% qualified for free or reduced lunches, 9% had an Individualized Education Plan (IEP) and 27% spoke a language other than English. The district had a student diversity make up as follows: 62% Hispanic, 10% African-American, 8% Caucasian, 8% Asian, 12% other categories. Given the size and diversity of the student populations served, it is vital for this district to hire and retain the most well-prepared teachers to meet the variety of learning needs of all students.

Since the focus of this research was the preparation that teachers received in their preservice programs and was not specific to a particular grade level, site, or content area, a survey was distributed to all teachers in the district with less than 20 years of teaching experience. Over time, credentialing and teacher preparation programs have undergone significant changes. For this reason, as well as the difficulty that it could be for some to recall back a significant amount of time, the length of teaching experience was considered.

Specifically, anyone with more than 20 years teaching experience was excluded from the survey. The specific school district that was surveyed had approximately 1,800 K-12 general and special education teachers at the time the research was conducted. The survey was sent to 1,141 teachers with no more than 20 years teaching experience, with a response rate of 26.5%, this provided 303 participant responses.

Sampling Procedures

For this research, a convenience sampling was implemented. According to Lunenburg & Irby, "convenience sampling involves including in the sample whoever happens to be available at the time," (Lunenburg & Irby, 2008, p. 174). This type of sampling was chosen due to the fact that the research questions were not isolated to a specific content or grade level, or even credential type, so any and all credentialed teachers that were available within the district, with 20 years' or less experience, were surveyed. This provided a representative sample of the teaching population in districts similar to the one being surveyed.

Instrumentation and Measures

There were two instruments used in this study. The first was a survey that was given to all current K-12 general and special education teachers within the district with 20 or fewer years of teaching experience. The second was an archival data analysis of the district hiring practices over the past ten years.

The purpose of the survey was to determine the type of preparation program that teachers completed in order to receive their teaching credential and the impact that program's preparation had on their readiness to address the challenges that they faced in the classroom in their first five years. Best & Kahn indicate, "...the survey method gathers data from a relatively large number of cases at a particular time. It is not concerned with the characteristics of individuals as individuals. It is concerned with the statistics that result when data are abstracted from a number of individual cases." (Best & Kahn, 2006, p. 121)

The quantitative research instrument utilized a 42-question survey (See Appendix A) that asked teachers with less than 20 years teaching experience to share information across five categories: (1) general information, (2) credential preparation program, (3) classroom

challenges, (4) background in teaching, and (5) demographic data. The factors were determined by the researcher based on the research questions and the focus of the study.

There were five parts to the survey that were constructed by categories (See Appendix A). The first category of general information asked 14 questions related to the type of credential(s) teachers held and the pre-service training they completed. A sample question that participants completed was, "Did the credential program that you completed require student teaching?" Additionally, in this section, there was an open-ended free response question regarding what made participants originally want to become a teacher.

The second, third, and fourth categories combined for a total of 28 questions, utilized a Likert-type scale, which asked participants to specify their level of agreement or disagreement for a series of specific topics. The scale included four options ranging from strongly agree, agree, disagree, and strongly disagree.

In the credential preparation program and classroom challenges categories the specific topics were the same in order to gauge the level of preparation compared to the challenges that were faced. The examples ranged from classroom management, to collaborating with colleagues, to using technology as a learning tool.

The fourth category identified the participant's history of education, which was intended to gather data related to their background in education. The same Likert rating scale was used to gauge the strength of their thinking around each given item. An example of the question in this category was related to whether a participant always knew that they wanted to be a teacher. Additionally, in this section there was an open-ended free response question related to what has kept participants to stay in the teaching profession.

Similar to the first category regarding general information, the fifth category asked participants four questions related to demographic type of data such as age, gender, ethnicity, etc.

The second instrumentation (See Appendix B) used in this study was the archival data analysis of the district hiring practice for the past ten years, which included 2005 to 2016. Annually, lists were created based on the hiring that the Human Resources department identified for certificated employees. The researcher compiled the lists for the past ten years and combined them in order to identify the type of credential each new hire held upon their initial employment within the district. (See Appendix B).

The list was then categorized as follows: Clear (Level II) credential, Preliminary (Level II) credential, Intern credential, and Permit (alternative). The researcher then utilized the district Information Services Department to determine which of the employees were still currently working within the district (See Appendix C). The researcher was then able to determine a percentage of teachers, in each category, that had been retained within the teaching profession.

Validity

Given the nature of the types of questions on the survey, related to teachers' self-identification of challenges within their own classroom, there was potential for participants to have concerns regarding the confidentiality of their data. This area was addressed by ensuring that confidentiality, or rather participant privacy, was ensured by utilizing only data by potential categories such as grade level, content area, years of experience, etc. Oliver stated that regarding survey data specifically, "the researcher may have the intention of combining data, such that individual respondents are subsumed under the total aggregated data" (Oliver, 2010, p. 83) as

opposed to using fictional names, in an attempt to ensure anonymity of participants. Similar to the archival data analysis, survey data were able to provide criterion-related validity in a predictive way, indicating that the type of preparation that a teacher received impacted their ability to address the challenges that they faced upon entering the profession. The sample of the survey that was used can be found in Appendix A.

Reliability

The analysis of the archival data from the hiring practices provided predictive criterion-related validity. Meaning that the type of credential (or lack thereof) that a teacher held upon hire was predictive of whether or not they remained in the profession. Additionally, the archival data provided a level of internal consistency reliability because it was just two items that related to each other, the credential that was held upon hire and their current employment status.

Anticipated Ethical Issues

One potential ethical dilemma that was encounter was confidentiality. Given the nature of the types of questions on the survey, related to teachers' self-identification of challenges within their own classroom, there was the potential for participants to have concerns regarding the confidentiality of their data. This area of confidentiality, or rather participant privacy, was addressed by utilizing data according to potential categories such as grade level, content area, years of experience, etc. and not related to specific participant names.

An additional potential ethical dilemma that was encounter was informed consent. This was not foreseen as a substantial concern, however by informing the participants of the connections that were being attempted regarding challenges they faced in the classroom as a new teacher they may have been hesitant to participate. Careful consideration was made for what

was strategically shared with participants so that they had just enough information without it being so much that it made them hesitant to respond honestly.

The final consideration that was anticipated was for survey participants that were familiar with the researcher distributing the survey and may have given the answers that they think were desired. An independent researcher could have provided an opportunity to gather unbiased data, however this was not an option that was utilized in this study due to the anonymous nature of the survey data.

Data Collection

There were two different methods of acquiring data for this research. First, archival data of the hiring practices for the past ten years within the district was collected. According to Lunenburg & Irby (2008), this type of research involves the analysis of documents or records. Archival data were accessed through the district Curriculum Department that currently houses the annual hiring practices of new teachers. Lists are annually compiled, and those lists were combined for the past ten years to complete a comprehensive list of all certificated hires for the past ten years. Analysis was completed through access to district data servers, through the Information Services and Human Resources Departments that determined which teachers on the list were still currently teaching within the district.

Surveys were distributed via district email accounts. Since the survey was completed as a Google form the data collection was housed on a web-based server for ease of access and warehousing. Reminders were sent to participants on a bi-weekly basis for one month, in order to ensure completion from as many respondents as possible.

With the stated data collection procedures, there was potential that this research study could be replicated in all aspects as long as accessibility to the archival data of hiring practices

for a particular district, county, or state could have been achieved. The survey for this study was easily replicable and expanded on or narrowed to focus on less years of experience, or a particular grade or content area. The timeline for the research study was distribution of the survey in the Spring of the 2016-2017 school year. Approximately one month was given for participants to complete the survey, therefore it was sent in the end of April and closed at the end of May. Concurrent to the survey distribution was the analysis of the archival data so that all required data was gathered and ready for analysis by June 2017. Data were maintained on the researcher's computer device for a minimum of three years upon completion of the research.

Data Analysis

Data were analyzed to identify the number of hires, the type of credential that they each had upon hire (i.e. Clear [Level II], Preliminary [Level I], Intern, and Permit) and the determination of whether each of those teachers was still currently teaching within the district. The first research question was answered by analyzing the archival data of hiring practices for the past ten years within the district. A Chi-squared analysis was done in order to identify the number of hires, the type of credential that they each had upon hire (i.e. Clear [Level II], Preliminary [Level I], Intern, and Permit) and then whether each of those teachers were still currently teaching within the district. The researcher selected this type of analysis in order to identify if there was any relationship between a specific type of credential and the subsequent retention within the district.

The second research question was answered by analyzing the data of a survey that was distributed to all current K-12 general and special education teachers within the district with no more than 20 years teaching experience. The data were reviewed in order to determine the type of preparation program that teachers completed to receive their teaching credential and the

impact that program's preparation had on preparing them for the needs that they would face in the classroom, as well as their retention in the profession.

The specific analysis was completed in two ways. Descriptive statistics were used to compare the mean responses from alternate and traditional participants based on their perceived beliefs about the types of preparation they received from their certification programs and their mean responses regarding their ability to address challenges in their classroom. In addition to the descriptive statistics that were analyzed, independent-sample t-Tests were conducted to compare the preparation scores for three different groups: alternative and traditional certification participants, intern and no intern experience, and Short-Term Staff Permit (STSP) or Provisional Intern Permit (PIP) and no STSP/PIP experience. Furthermore, independent-sample t-Tests were conducted to compare the challenge scores for the same three groups. This specific type of analysis was selected in order to determine whether there was statistical evidence that the population means were significantly different.

The qualitative research question was addressed by analyzing the two free response questions that were included in the survey. Participant responses were categorized and coded by topic and analyzed to determine trends and patterns in their perspectives. This was completed in order to determine if there were similar reasons that originally brought someone into the teaching profession as well as what kept them in the profession.

Because the researcher attempted to identify if there was a relationship between the type of preparation program that a teacher chose to participate in and whether that program prepared them for the challenges that they faced in the classroom, the research was causal-comparative. Identifying a possible relationship between teacher preparation programs and readiness to address challenges in the classroom, the design of the research was for the possibility of

predicting the likelihood of retaining more teachers by hiring those with specific types of credentials.

Not only was the identification of the type of preparation program achieved but also based on the survey data there were multiple variables that teachers identified regarding preparation they received and variables regarding the challenges they encountered in their first years. An independent-samples t-test is conducted in research in order to compare the means of two independent groups. Based upon the perceived readiness scores that were measured by each credential group independent samples t-tests were completed by the researcher, in order to determine whether there was statistical evidence that the means of each group were significantly different based upon the program that they completed. This allowed the researcher to identify which group perceived themselves as having the highest level of readiness when they entered the profession.

Summary

Overall, the need for highly qualified teachers in the classroom to address the increasingly diverse needs of our student population is imperative. Over the next several years, districts face unprecedented teacher shortages and will have to identify ways to recruit and retain the best to fill the large number of vacancies in the classroom. This research attempted to pinpoint the specific certification of new hires that are more likely to remain in the district, and therefore not perpetuating the cycle of need. From those that did remain in the district, the research attempted to identify the type of certification programs that best prepared teachers for the challenges that they faced upon entering the profession.

CHAPTER 4: RESULTS

This study was designed to address three specific research questions. First, to what extent was there a difference between the types of certification that a candidate held upon hire and their subsequent retention in the district? Second, to what extent was there a difference between the types of preparation that the teacher received from their certification programs and their self-perceived preparation and ability to address the challenges that they faced in their first five years in the classroom? Third, to what extent was there a similarity in the reasons that teachers self-identified as why they originally joined the profession as well as stayed in the profession after initial hire?

There were two instruments used in this study. The first was a survey that was given to all current K-12 general and special education teachers within the district with 20 or fewer years of teaching experience. The second was an archival data analysis of the district hiring practices over the past ten years. This chapter provides the analysis of both the quantitative and qualitative data of the study through survey responses, both closed and open-ended as well as data analysis of district hiring practices.

Participant Characteristics

The survey results included responses from 303 participants. The survey was sent to 1,141 teachers with no more than 20 years teaching experience with a response rate of 26.5%. Within the 303 survey respondents, teachers were comprised of 80 males and 221 females, 2 respondents did not identify their gender. They also ranged in ages from 20-29 through 60+ years old, with the largest portion of the sample (36%) being between the ages of 40-49.

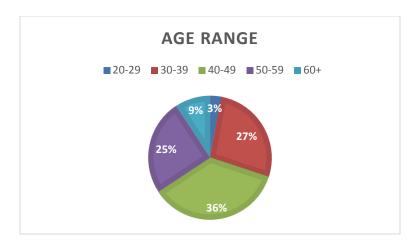


Figure 2. Age Range. Rockstad 2017

Respondents also held a variety of teaching credentials including, Multiple Subject, Single Subject, Education Specialist, Career and Technical Education (CTE), and Administrative Services credentials. Many respondents held multiple credentials.

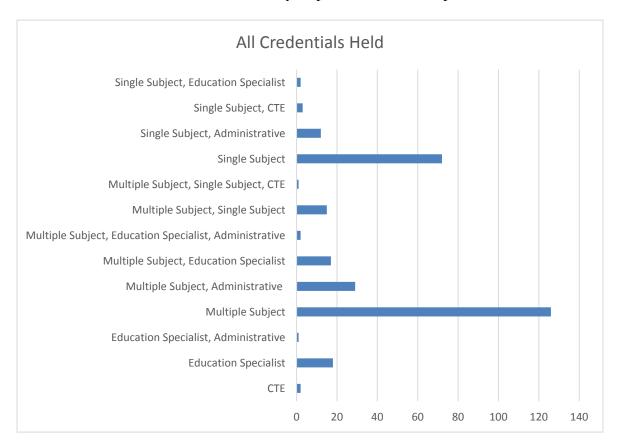


Figure 3. All Credentials Held. Rockstad 2017

Quantitative Data Analysis

Data were analyzed to identify the number of hires, the type of credential that they each had upon hire (i.e. Clear [Level II], Preliminary [Level I], Intern, and Permit) and the determination of whether each of those teachers was still currently teaching within the district. The first research question was answered by analyzing the archival data of hiring practices for the past ten years within the district. A Chi-squared Goodness of Fit analysis was done in order to identify the number of hires, the type of credential that they each had upon hire (i.e. Clear [Level II], Preliminary [Level I], Intern, and Permit) and then whether each of those teachers were still currently teaching within the district. The researcher selected this type of analysis in order to identify if there was a difference between the retention rates associated with each type of preparation, and rates that one would expect to see if all types retained teachers equally.

The second research question was answered by analyzing the data of a survey that was distributed to all current K-12 general and special education teachers within the district with no more than 20 years teaching experience. The data were reviewed in order to determine the type of preparation program that teachers completed to receive their teaching credential and the impact that program's preparation had on preparing them for the needs that they would face in the classroom.

Findings of Quantitative Research

Research Question #1

The first research question focused on the extent to which there was a difference between the types of certification that a candidate held upon hire and their subsequent retention in the district.

Table 6

Hiring Data 2006-2016

Credential Held Upon Hire	N	% of Total	Remain	% Remain	Left	% Left
Clear	246	21.5	121	49.1	125	50.8
Intern	376	32.9	184	48.9	192	51
Preliminary	385	33.7	195	50.6	190	49.3
Short Term Staff Permit/	135	11.8	78	57.7	57	42.2
Provisional Intern Permit						
Total	1142	100	578	50.6	564	49.3

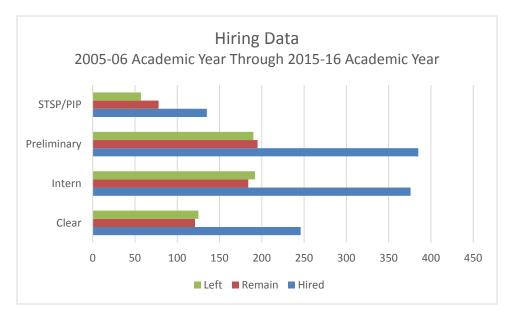


Figure 4. Hiring Data. Rockstad 2017

A Chi-square Goodness of Fit test indicated there was no significant difference in the rates of retention based on the type of credential a teacher held upon hire, $\chi^2(1, n = 578) = 1.67$, p = .64. This means that teachers of each credential type left the district at a similar rate. The percent that left ranged from 50.8% (Clear) at the highest to 42.2% (STSP/PIP) at the lowest. The hiring data table above shows a clear similarity in the percentages of each credential types that left the district and the Chi-squared data supports the findings that there was no significant difference based on the p value of .64.

Table 7

Chi-squared Goodness of Fit
Group

	Observed N	Expected N	Residual
Clear Credential	121	124.5	-3.5
Internship	184	190.3	-6.3
Preliminary	195	194.9	.1
STSP/PIP	78	68.3	9.7
Total	578		

Table 8
Test Statistics

	Group
Chi-Square	1.676 ^a
df	3
Asymp. Sig.	.642

Research Question #2

The second research question focused on the extent to which there was a difference between the types of preparation that the teacher received from their certification programs and their ability to address the challenges that they faced in their first five years in the classroom.

In order to answer this question, a survey was given to all current K-12 general and special education teachers within the district with 20 or fewer years of teaching experience. The purpose of the survey was to determine the type of preparation program that teachers completed in order to receive their teaching credential and the impact that program's preparation had on their readiness to address the challenges that they faced in the classroom in their first five years.

The survey included 42 questions that asked participants to share information across five categories: (1) general information, (2) credential preparation program, (3) classroom challenges, (4) background in teaching, and (5) demographic data. The second research question was focused around the second and third sections of the survey, credential preparation

program and classroom challenges. These sections utilized a Likert-type scale, which asked participants to specify their level of agreement or disagreement for a series of specific topics. The scale included four options ranging from strongly agree, agree, disagree, and strongly disagree. In the credential preparation program and classroom challenges categories the specific topics were the same in order to gauge the level of preparation compared to the challenges that were faced. The examples ranged from classroom management, to collaborating with colleagues, to using technology as a learning tool.

Research Question 2 Descriptive Statistics

Table 9

•	N	Mean	Mean
		Preparation	Challenge
Alternate	147		
Managing classroom behaviors		2.49 (.95)	2.64 (1.10)
Fostering a safe environment that promotes student well-being		2.90 (.94)	1.98 (.90)
Assessing the needs of students in order to differentiate instruction		2.79 (.89)	2.65 (.92)
Ensuring access to the curriculum for students with special needs		2.46 (.92)	2.70 (.93)
Addressing the instructional needs of English Learners		2.86 (.93)	2.49 (.98)
Using technology as a teaching tool		2.51 (1.12)	2.53 (1.06)
Using technology as a resource to support student learning		2.44 (1.08)	2.53 (1.06)
Collaborating productively with teachers and other resource personnel at my site or district		2.66 (1.03)	2.21 (.99)
Fostering student learning		3.07 (.78)	2.11 (.92)
Overall		2.69 (.75)	2.43 (.66)
Traditional	154	, ,	, , ,
Managing classroom behaviors		2.53 (.99)	2.64 (1.02)
Fostering a safe environment that promotes student well-being		2.94 (.90)	2.21 (1.00)
Assessing the needs of students in order to differentiate instruction		2.90 (.93)	2.67 (.97)
Ensuring access to the curriculum for students with special needs		2.64 (.96)	2.64 (.97)

Addressing the instructional needs of	2.97 (.94)	2.47 (.95)
English Learners		
Using technology as a teaching tool	2.48 (.97)	2.39 (1.01)
Using technology as a resource to support	2.43 (1.00)	2.45 (1.03)
student learning		
Collaborating productively with teachers	2.80 (.97)	2.18 (1.02)
and other resource personnel at my site or		
district		
Fostering student learning	3.11 (.87)	2.22 (.92)
Overall	2.76 (.73)	2.43 (.67)

As indicated in Table 9 above there were minimal differences between both alternate and traditional participants perceived beliefs about the types of preparation that they received from their certification programs and their ability to address challenges in their classroom.

For the alternate preparation program participants there were only two areas that indicated a slight difference in their mean preparation and mean challenge results. The first was 'fostering a safe environment that promotes student well-being' and the second was 'fostering student learning'. The mean preparation results for 'fostering a safe environment that promotes student well-being' was 2.90 with a standard deviation of .94 and the mean challenge result was 1.98 with a standard deviation of .90. For the category of 'fostering student learning' the mean preparation result was 3.07 with a standard deviation of .78 and the mean challenge result was 2.11 with a standard deviation of .92. Both categories indicate that alternate preparation participants felt prepared in those areas but that there was not a challenge that occurred in their classrooms within the first five years.

For the traditional preparation program participants there was only one area that indicated a slight difference in their mean preparation and mean challenge results. This area was 'fostering student learning'. The mean preparation results for 'fostering student learning' was 3.11 with a standard deviation of .87 and the mean challenge result was 2.22 with a standard deviation of .92. This difference indicates that traditional preparation participants felt

prepared in that area but that there was not a challenge that occurred in their classrooms within the first five years.

The Bonferroni Adjustment is used in quantitative research when a single data set is used in multiple analyses in order to offset an increased chance of making a Type 1 error. As the scale was used in three different sets of calculations the original alpha value of 0.05 was divided by three, resulting in an adjusted alpha value of 0.0167. This was the value that was used for evaluating significance for the following three sets of calculations.

Table 10

Mean Survey Responses

	N	Mean	SD	SEM
Alternative Certification				_
Preparation	143	2.70	.774	.065
Challenge	142	2.43	.665	.056
Traditional Certification				
Preparation	157	2.75	.760	.061
Challenge	156	2.43	.671	.054
Intern Experience				
Preparation	140	2.93	1.187	.100
Challenge	138	2.46	.663	.056
No Intern Experience				
Preparation	160	2.63	.759	.060
Challenge	160	2.40	.671	.053
STSP/PIP				
Preparation	125	2.78	1.265	.113
Challenge	124	2.55	.661	.059
No STSP/PIP				
Preparation	174	2.75	.724	.055
Challenge	174	2.34	.660	.050

Alternative versus Traditional

An independent-samples t-test was conducted to compare the preparation scores for alternative and traditional certification participants. After confirming the assumption of homogeneity of variance (F= .038, p= .85), there was no significant difference in scores for

alternative (M = 2.70, SD = .77) and traditional (M = 2.75, SD = .76; t (298) = .48, p = .63, two-tailed) participants. The magnitude of the differences in the means (mean difference = .04, 95% CI: -.132 to .217) was very small (eta squared = .003).

An independent-samples t-test was conducted to compare the challenge scores for alternative and traditional certification participants. Assuming equal variances (F= .22, p= .64), there was no significant difference in scores for alternative (M = 2.43, SD = .66) and traditional (M = 2.43, SD = .67; t (296) = -.05, p = .96, two-tailed) participants. The magnitude of the differences in the means (mean difference = -.003, 95% CI: -.156 to .149) was very small (eta squared = .003).

These two analyses indicated that the alternative group and the traditional group of survey participant group had no significant difference in the preparation that they received from their preparation programs, or in the challenges that they faced upon entering the classroom.

Table 11

t-Test: Traditional Versus Alternative

		N	Mean	SD	SEM	
Preparation	Traditional	157	2.75	.760	.061	
	Alternative	143	2.70	.774	.065	
Challenge	Traditional	156	2.43	.671	.054	
	Alternative	142	2.43	.665	.056	

Intern Experience

An independent-samples t-test was conducted to compare the preparation scores for intern experience and no intern experience participants. After confirming the assumption of homogeneity of variance (F= .041, p= .84), there was a significant difference in scores for those teachers who had participated in an internship (M = 2.93, SD = 1.19) and those who had no internship experience (M = 2.63, SD = .76; t (230.397) = -2.55, p = .01, two-tailed). The

magnitude of the differences in the means (mean difference = -.30, 95% *CI:* -.529 to .217) was very small (eta squared = .004).

An independent-samples t-test was conducted to compare the challenge scores for intern experience and no intern experience participants. Assuming equal variances (F= .20, p= .65), there was no significant difference in scores for those teachers who had participated in an internship (M = 2.46, SD = .66) and those who had no internship experience (M = 2.40, SD = .67; t (296) = -.750, p = .454, two-tailed). The magnitude of the differences in the means (mean difference = -.058, 95% CI: -.211 to .094) was very small (eta squared = .003).

These results indicated that those teachers who had participated in an internship felt more prepared by their credential program than those who had no internship experience. However, there was no difference in the challenges that either group felt that they faced upon entering the classroom.

Table 12

t-Test: Intern versus No Intern

		N	Mean	SD	SEM	
Preparation	Not an Intern	160	2.63	.759	.060	
	Intern	140	2.93	1.187	.100	
Challenge	Not an Intern	160	2.40	.671	.053	
	Intern	138	2.46	.663	.056	

Short Term Staff Permit (STSP)/Provisional Intern Permit (PIP) Experience

An independent-samples t-test was conducted to compare the preparation scores for teachers with STSP/PIP experience and with no STSP/PIP experience. After confirming the assumption of homogeneity of variance (F= 2.06, p= .15), there was no significant difference in mean scores for those teachers with a STSP/PIP experience (M = 2.78, SD = 1.27) and with no STSP/PIP experience (M = 2.75, SD = .72; t (297) = -.240, p = .810, two-tailed). The magnitude

of the differences in the means (mean difference = -.028, 95% *CI:* -.255 to .200) was very small (eta squared = .003).

An independent-samples t-test was conducted to compare the challenge scores for those teachers with a STSP/PIP experience and with no STSP/PIP experience. Assuming equal variances (F= .084, p= .77), there was a significant difference in scores for those teachers with a STSP/PIP experience (M = 2.55, SD = .66) and with no STSP/PIP experience (M = 2.34, SD = .66; t (296) = -2.67, p = .008-, two-tailed). The magnitude of the differences in the means (mean difference = -.207, 95% CI: -.360 to -.054) was very small (eta squared = .003).

These results indicated that although those teachers with STSP/PIP experience and those without indicated no difference in the preparation they received, they did however indicate a difference in the challenges that they faced upon entering the classroom.

Table 13

t-Test: STSP/PIP Versus No STSP/PIP

		N	Mean	SD	SEM	
Preparation	No STSP/PIP	174	2.75	.724	.055	
	STSP/PIP	125	2.78	1.265	.113	
Challenge	No STSP/PIP	174	2.34	.660	.050	
	STSP/PIP	124	2.55	.661	.059	

Based on the quantitative analysis completed of the survey results for preparation scores and challenge scores for both alternate and traditional preparation participants it would indicate that there is no difference in the types of preparation that the teacher received from their certification programs and their ability to address the challenges that they faced in their first five years in the classroom.

Findings of Qualitative Research

Research Question #3

The third research question focused on the extent to which there was a similarity in the reasons that teachers self-identified as to why they originally joined the profession as well as stayed in the profession after initial hire. This question was addressed by analyzing the two free response questions that were included in the survey. The first question focused on the participants original motivation to become a teacher ("What originally made you want to be a teacher?") and the second focused on what has kept them in the teaching profession ("What is the main reason you have stayed in teaching?"). Participant responses were categorized and coded by topic and analyzed to determine trends and patterns in their perspectives. This was completed in order to determine if there were similar reasons that originally brought someone into the teaching profession as well as what kept them in the profession.

Table 14

Motivation to Teach – General Responses (participants could provide more than one answer)

	Alternate		Traditional	
Response	N	% of Total	N	% of Total
Participants	144		153	
Working with Kids	35	24	36	24
Tried It and Liked It	26	18	15	10
Family in Education	15	10	16	10
Always Just Knew	10	7	19	12
Content Knowledge	10	7	9	6
High Demand	10	7	2	1
Enjoy Learning	8	6	13	8
Schedule	5	3	7	5
Wanted to Give Back	5	3	3	2
Money	4	3	2	1
Good Experience with a Teacher	3	2	25	16

For both categories of respondents, the most common motivation for becoming a teacher was related to working with students. There was a desire from both the alternate and traditional groups to join the teaching profession based on their passion to work with children. For each participant group, 24% of them indicated on some level that students were at the heart of their original motivation to become a teacher. Responses from both alternate and traditional participants include:

I love children and love to teach. (Alt80)

I always taught kids, even when I was little. I just love school and helping children learn.

(Alt81)

I love kids and wanted to help change kids' lives by educating them about loving to learn.

(Trad181)

Love being around kids and teaching. (Trad184)

The joy of working with children. (Trad201)

I loved working with kids and saw a need for exceptional teachers in the public school system. (Trad279)

These responses indicate a clear passion for students as the motivating factor for becoming a teacher from both alternate and traditional participants. The category of working with children encompasses a wide variety of the feelings expressed by participants. They ranged from the idea of wanting to build a strong educational foundation for students, to helping them discover learning, to just enjoying being around kids.

Another motivating factor for becoming a teacher was that many just tried it and liked it.

This experience may or may not have come from prior experience as a substitute teacher. In a separate survey question, participants were asked if they had any previous experience as a

substitute prior to becoming a teacher. Of the 297 responses, 114 (38%) indicated no prior experience and 183 (62%) indicated they did have prior experience as a substitute teacher. For the question related to their original motivation to be a teacher, there were indications from both the alternate and traditional groups to join the teaching profession based on some experience that they had previously had in the classroom. For the alternate respondents 18%, and for the traditional respondents 10% indicated that they had decided to become a teacher because they tried it and liked it.

I began subbing for income and decided I liked it. (Alt37)

I didn't want to be a teacher. I decided I would apply to sub as I go to law school.

When I picked up an application to sub, they asked if I was interested in completing an application to teach because they were in desperate need of teachers. I agreed. I ended up getting a teaching position and fell in love with the job. (Alt54)

I was looking for a way to earn money and a career that I liked. I decided to substitute to see if I liked it before going back to school. (Alt95)

Volunteering in my sister's classroom. (Trad283)

I was an instructional aid and realized I could do what [the teacher] was doing. (Trad288)

These responses indicate for both alternate and traditional participants that their original motivation for becoming a teacher was based on trying it out and enjoying it. This category encompasses aspects ranging from experience as a substitute teacher (58% for alternate participants, and 64% for traditional), to a paraprofessional in the classroom. Some participants indicated that they volunteered in a family member's classroom or had experience in their own children's classroom that made them want to be a teacher themselves.

In a separate survey question, participants were asked if they had one or more members of their family in education. Of the 301 total responses, 181 (60%) indicated they did have members of their family in the education field, and 120 (40%) did not. Whether or not this motivated them to be a teacher or not, there were indications from both the alternate and traditional groups that this did play a role. For both the alternate and traditional respondents 10%, indicated that a motivating factor for them to become a teacher was due to the fact that they had members of their family that were also teachers.

Many of my family members are teacher. (Alt136)

I come from a family of teachers. (Alt180)

I have many family members that are in education and found a passion for it. (Alt189) My entire family is comprised of educators. From a very early age, I can recall how much they enjoyed their jobs and thought teaching may be a good path for myself. (Trad89)

Both my parents were teachers and I just always knew that I wanted to become a teacher. (Trad208)

These responses indicate only a 10% motivation to become a teacher from both alternate and traditional participants based on family history, even though 60% of all participants indicate that one or more members of their family are in the education field.

A further motivating factor for becoming a teacher was that many indicated that they always just knew they would be teachers. In a separate survey question, participants were asked if they always knew they would become a teacher. Of the 302 total responses, 161 (46%) indicated that they did not always know, and 141 (47%) indicated that they did always know they would be a teacher. When they were then asked what their original motivation to be a

teacher was, there were indications from both the alternate and traditional groups to join the teaching profession based on this idea of always wanting to be teachers. For the alternate respondents 7%, and for the traditional respondents 12% indicated that they had decided to become a teacher because they always knew they would be.

From a very young age I wanted to be a teacher. (Alt141)

I decided this when I was ten. I don't remember. (Alt243)

Always wanted to be one, loved school. (Trad40)

It's my dream to become a teacher since I was in high school. (Trad46)

Known I wanted to be a teacher since first grade. (Trad116)

These responses indicate a motivating factor for becoming a teacher from both alternate and traditional participants was that they always just knew it was what they would do. The responses from both groups of participants indicated it was sometimes a subconscious understanding of what they would do, to just a feeling that they had always carried with them from childhood. For some it was just a skill that they felt came naturally to them and it created a great sense of satisfaction in their lives.

Content knowledge was a factor that was expressed by both alternate and traditional participants as a motivation for becoming a teacher. There were indications from both the alternate and traditional groups to join the teaching profession based on a high level of content knowledge in a variety of areas that they wanted to share. For the alternate respondents 7%, and for the traditional respondents 6% indicated that they had decided to become a teacher because they had a desire to share their content knowledge.

I wanted to teach science to kids that don't really learn very much of it on their own.

(Alt120)

I wanted to help students to like math a little more. (Alt165)

Empowering youth through the social studies. (Alt196)

Passion for math and teaching. (Trad137)

Wanting to give our students a strong civics/history education. (Trad211)

These responses indicate a clear desire to share their content knowledge as the motivating factor for becoming a teacher from both alternate and traditional participants. The category of content knowledge was based on participants not only wanting to share an area that they had a specific passion for, such as math or science, but also a desire to expand the knowledge of their students in specific areas, reading or social science.

As has been previously discussed in Chapter 1 and 2 there is currently a high demand for teachers. For some respondents, this high demand was a motivating factor for becoming a teacher at the time they entered the profession. There were indications from both the alternate and traditional groups to join the teaching profession based on a high need. For the alternate respondents 7%, and for the traditional respondents only 1% indicated that they had decided to become a teacher because they saw a high demand for teachers.

Demand for teachers. (Alt11)

I was offered a job because I had the right degree, the district needed a biology teacher.

(Alt77)

There was a need, article in the newspaper. (Trad154)

These responses indicate high demand as the motivating factor for becoming a teacher from both alternate and traditional participants. The discrepancy in responses from the alternate and traditional participants speaks highly to the purpose of the two types of programs. As discussed in Chapter 1 and 2 many times teachers go into alternative types of credentialing

programs due to a high need and an ability to be in the classroom while completing their teacher preparation requirements. Participants who complete a traditional type of program may be less likely to have chosen the route they did based on a high need since it takes longer for them to actually become the teacher of record.

Some participants indicated that they had a passion for learning themselves and that played a role in their initial motivation to teach. There were indications from both the alternate and traditional groups to join the teaching profession based on their own desire to learn. For the alternate respondents 6%, and for the traditional respondents 8% indicated that they had decided to become a teacher because they enjoyed learning.

Love of learning. (Alt144)

Love of education. (Alt183)

A career of lifelong learning. (Trad134)

I enjoy education. (Trad166)

These responses indicate a love of learning for themselves as the motivating factor for becoming a teacher from both alternate and traditional participants. This category spans from just basic enjoyment of learning on their own, to wanting to continue to expand on their learning while they share that lifelong learning passion with others.

Having time off in the summer, as well as working a specific schedule during the day was a factor for some participants to originally become a teacher. There were indications from both the alternate and traditional groups to join the teaching profession based on a schedule that worked for them. For the alternate respondents 3%, and for the traditional respondents 5% indicated that they had decided to become a teacher based on the schedule.

Wanted a schedule similar to my young children. (Alt8)

Same schedule as kids. (Trad25)

Teaching offers more leeway in terms of family time. (Trad203)

These responses indicate that the schedule was the motivating factor for becoming a teacher from both alternate and traditional participants. The schedule for some was a daily schedule that allowed them to have time with their families after work, or to be on the same daily schedule as their children. It was also a schedule for the year that appealed to some with having summers available for family vacations.

Being a part of a meaningful profession that allows you to give back was a motivating factor for some participants when they were deciding to become a teacher. There were indications from both the alternate and traditional groups to join the teaching profession based on a passion to give back. For the alternate respondents 3%, and for the traditional respondents 2% indicated that they had decided to become a teacher because they wanted to be in a meaningful profession and give back in some way.

I wanted to give back and serve in a high-needs school. (Alt10)

A sense of giving back and helping youth. (Alt267)

I always wanted to be in a helping profession and to give back to the community I live in. (Trad85)

These responses indicate a desire for a meaningful profession where they are able to give back as their original motivation for becoming a teacher from both alternate and traditional participants. Some indicated a passion for their own community to specifically work in. In a separate question, participants were asked if they grew up in the same community where they were currently teaching. Of the 303 total respondents, 188 (62%) grew up elsewhere, and 115 (38%) grew up in their current community. This category ranged from wanting to make a

difference in other lives, to being able to change the world and give back in a way that they themselves received when they were a student.

Finances played a role in some participants' original decision to become a teacher. There were indications from both the alternate and traditional groups to join the teaching profession based on some type of financial factor. For the alternate respondents 3%, and for the traditional respondents only 1% indicated that they had decided to become a teacher because of the money.

The money! (Alt186)

Incentives for college tuition reimbursement. (Trad258)

These responses indicate financial reasons as the motivating factor for becoming a teacher from both alternate and traditional participants. The category of finances ranges from a basic need for income to student loan reimbursements and saving money for something else.

The final motivating factor for becoming a teacher was that many indicated a positive previous experience with a teacher of their own. There were indications from both the alternate and traditional groups to join the teaching profession based on their own positive experience with a teacher. For the alternate respondents 2%, and for the traditional respondents 16% indicated that they had decided to become a teacher because they had a positive experience in their past with a teacher.

I loved my 4th grade teacher. (Alt261)

I had a teacher in elementary who really made a great impression on my learning.

(Trad62)

I had several teachers who made a huge impact on my life as I was growing up. They pushed me to do more than I thought I ever could and believed in me along the way. I wanted to be that teacher for someone else. (Trad84)

My experience in high school English. (Trad106)

I had a teacher in 7th grade that was so inspiring that I wanted to be a teacher just like him. (Trad185)

I had amazing teachers since second grade, they are why I wanted to be a teacher. (Trad219)

These responses indicate a positive previous experience as the motivating factor for becoming a teacher from both alternate and traditional participants. The difference in responses from the alternate (2%) and the traditional (16%) participants is clearly significant. This also aligns with the discrepancy in responses for those who always knew they would be a teacher (alternate 7% and traditional 12%) and those who came in based on a high demand (alternate 7% and traditional 1%). Often times our traditional candidates have always known they wanted to be a teacher, because of a previous experience with a teacher and our alternate candidates join based on need and not a long-held passion.

In addition to being asked about their original motivation to become a teacher, participants were asked if they had ever considered leaving the profession once they began teaching. Overwhelmingly more than half (55%) indicated that they had. For the alternative group it was 60% and for the traditional group it was 49%.

Table 15

Considered Leaving

	N	% of Total
Total	295	100
Yes	161	55
No	134	45
Alternative	143	48
Yes	86	60
No	57	40
Traditional	152	52
Yes	75	49
No	77	51

Participants who indicated yes, were asked (but not required) to respond to why they had considered leaving. Responses were only from participants who had indicated a yes answer for whether they had considered leaving the profession and trends were identified based on those responses.

Table 16

Why Considered Leaving (Participants Could Provide More Than One Answer)

	Alternate		Traditional	
Yes Response	N	% of Total	N	% of Total
Participants	86		75	
Administrative Support	32	37	20	27
Regulations (District & State)	17	20	15	20
Student Behaviors	17	20	18	24
Money	12	14	6	<1
Other Duties	9	10	11	15

For both groups of respondents, the most common motivation for considering leaving was related to a lack of administrative support. There was a feeling from both the alternate and traditional groups that they were not getting the support that they needed from their administrators. For the alternate group, 37% and for the traditional group 27% indicated that

their administration was not supporting them in the ways that they needed them to. Responses from both alternate and traditional participants include:

I did not have administrative support in an environment that was NOT conducive to learning and teaching. (Alt26)

Non-support from admin. (Alt234)

I contemplated leaving about seven years after my teaching career began because I did not receive the support I needed from my administrator. (Alt289)

Disrespectful/unsupportive administrators (Trad160)

Frustration with lack of leadership on site and district level. (Trad201)

Support from administration with discipline issues in students. (Trad211)

These responses indicate a clear lack of support being felt by both the alternate and traditional participants which caused them to consider leaving the profession. The category of administrative support encompasses a wide variety of areas that were indicated by participants. They ranged from no support with students' behavior, to a lack of belief in the abilities of the students by administration, to a feeling of frustration due to lack of overall discipline at the site. Some participants indicated an unrealistic set of expectations being placed on them by their administrators and no support in how to achieve the expectations.

An additional factor that some respondents indicated as causing them to consider leaving the profession were the regulations that were placed on them by either the district or the state. For both alternate and traditional groups, 20% indicated that regulations that are placed on teachers from both the district and state level had caused them to consider leaving the profession. Responses from both alternate and traditional participants include:

Restrictions from school and state. (Alt1)

The mandates of the district are not always conducive to learning and/or schools are not set up to value academics. (Alt28)

Demands of the district taking away creativity of teaching. (Alt292)

Far too much emphasis on district policies at the expense of learning. (Trad59)

The bureaucracy of education. At times, the fun of teaching/education is stifled by the decisions made from laws and districts. (Trad181)

The regulations that were indicated were brought on by both the district and the state.

Regulations included mandates brought down by NCLB, as well as district implementation of

Units of Study to support Common Core standards implementation. These factors impacted

participants' feelings of their ability to teach their students and caused some to consider leaving
the profession at one time.

Student behavior was considered by some participants to be an issue that was severe enough to cause them to consider leaving the profession. For the alternate group, 20% and for the traditional group 24% indicated that challenging student behavior was a factor that caused them to consider leaving the profession. Responses from both alternate and traditional participants include:

Difficulty with students and challenging behaviors that cause stress. (Alt18)

Too much time spent dealing with the major behavioral challenges of a few students.

(Alt75)

Behavior issues in the classroom, students had no respect for me as a teacher, it felt like babysitting some days. (Trad62)

Not enough support with disciplining out of control kids. Even the best discipline skills aren't effective with so many kids. (Trad230)

Both alternate and traditional participants indicated a struggle with student behavior that was severe enough at one time it caused them to consider leaving the profession. The challenges that were indicated ranged from a feeling that students did not show respect for the teacher, to a lack of overall discipline at the site, as well as lack of support for how to implement management strategies in their classroom.

Additionally, some respondents considered leaving the profession at one point due to pay. For the alternate group, 14% and for the traditional group less than 1% indicated that money was a factor that at one time caused them to consider leaving the profession. Responses from both alternate and traditional participants include:

If I were to leave, it would be only because I have to earn more money, not because I want to leave. (Alt92)

I thought about leaving because of a higher salary schedule. (Alt267)

The pay. (Trad166)

Better pay in other fields. (Trad277)

In this instance, the responses from both alternate and traditional participants all focused around the salary that they receive. There was an indication that the pay was not high enough or they had considered leaving because they could earn more money in a different profession. The discrepancy in responses based on participant groups aligns with several of the previously discussed factors that caused some respondents to originally join the teaching profession in the first place. Many in the traditional group felt that they always knew they would become a teacher, so the pay that they received would have been something that they were aware of and not an influencing factor in their consideration of leaving. However, many in the alternate group

originally joined the profession due to a high demand for teachers, so if the pay was not significant enough for them they might be more likely to consider leaving based on that factor.

The final factor that was considered by both groups to leave the profession was related to the other duties that teachers face outside of the classroom. For the alternate group, 10% and for the traditional group 15% indicated that the amount of other duties teachers have to complete had at one time caused them to consider leaving the profession. Responses from both alternate and traditional participants include:

Too many additional responsibilities. (Alt3)

All of the non-teaching stuff. (Alt243)

There is so much paperwork put on top of teaching. (Trad126)

Other jobs stop when you leave the workplace, but with teaching you work at the school, at home, and on the weekends. (Trad138)

The other duties that were indicated include an abundance of paperwork (grading, lesson plans, report cards, etc.) as well as things like meetings, yard duty, parent conferences and other aspects that impact a teacher's time outside of the classroom instruction.

Even though many respondents had considered leaving the profession at some point they ultimately decided to stay. All participants were asked the question of what is the main reason they have stayed in the profession. Similar to the participant responses for their original motivation to become a teacher, respondents also had common trends for why they decided to stay in teaching.

Table 17
Stayed (Participants Could Provide More Than One Answer)

	Alternate		Traditional		
Response	N	% of Total	N	% of Total	
Participants	144		153		
Students	66	46	67	44	
Love Teaching	25	17	22	14	
Making a Difference	25	17	15	10	
Money	11	8	17	11	
Schedule	8	6	7	5	
Challenge	5	3	4	3	
Good at It	5	3	1	<1	

The most common response from both the alternate and traditional participants to remain in the teaching profession was based on a love of working with students. For the alternate group 46%, and the traditional group 44% indicated that students were the main factor that has kept them in the profession.

I find joy working with kids and seeing them get it. I think I am able to connect with kids, even the most challenging ones. The kids really do want to learn, and I am glad that I am able to be a part of their journey. (Alt54)

I have stayed in teaching for the students of the community. I truly believe in our work as educators and that it has an impact on student academic and personal success. (Alt196)

The main reason I have stayed in teaching is the positive reactions and responses from students. (Alt222)

Love the students. (Trad21)

Good students who really want to learn. (Trad62)

Even with the pressures of this job, I enjoy the students. I love watching them learn and grow as learners and individuals. (Trad89)

We have the absolute best kids around! (Trad155)

I love my students and my school, they are part of my extended family. (Trad156)

These responses, from both alternate and traditional participants, indicate a clear passion for students as the main factor that has kept them in teaching. The responses from both groups indicate not only a genuine love of children, but also a strong desire to work with them and positively influence their schooling and lives.

Another common response for remaining in the profession was a love of teaching. There were indications from both the alternate and traditional groups to remain in the profession based on a love of what they do. For the alternate respondents 17%, and for the traditional respondents 14% indicated that they had decided to stay in the profession because they love to teach.

I love teaching and working with kids. (Alt32)

I love it. Each year I get to help shape the future of my students. Give them chances to discover what they can do and how to overcome what they cannot. (Alt42)

The main reason I have stayed in teaching is that I find great satisfaction in it. I am lucky enough to be able to teach a subject that I am passionate about, and I have had enough "successes" to keep me going when I struggle. (Alt229)

Love the job. (Trad20)

I love my job, it's rewarding for the most part. (Trad52)

I love what I'm doing and will always be doing it. (Trad128)

These responses, from both alternate and traditional participants, indicate a love of teaching as the main factor that has kept them in the profession. This category included some who just indicated that they love to teach, and some who said that they love it because it gives them a sense of fulfillment when they see light bulbs turn on in their students.

A desire to make a difference in the community as well as the lives of others was another common them that was identified from respondents. There were indications from both the alternate and traditional groups to remain in the profession based on a passion for making a difference in the lives of others as well as the community. For the alternate respondents 17%, and for the traditional respondents 10% indicated that they had decided to stay in the profession for altruistic reasons.

I have seen the impact I have had on students. I make a difference in their lives by being here. (Alt6)

I love investing in the lives of the youth of our community. (Trad84)

I want to give back to my community just like I was given help when I was in school.

(Alt97)

I want to make a difference. (Trad128)

The desire to give back to the community. (Trad143)

These responses, from both alternate and traditional participants, indicate a desire to make a difference for others as the main factor that has kept them in teaching. Both groups indicated this idea of making a difference gives them a rewarding feeling by not only helping their students learn something new, but by building a strong foundation for the greater good of society. Having a strong impact on both the individual and the community as a whole was expressed by both alternate and traditional groups.

There were financial reasons that participants identified as being an influential factor that kept them in the profession. There were indications from both the alternate and traditional groups to remain in the profession based on financial reason. For the alternate respondents 8%,

and for the traditional respondents 11% indicated that they had decided to stay in the profession based on money.

Loan forgiveness programs. (Alt 67)

The pay and the pension. (Alt114)

To have a steady income, benefits, good retirement. (Alt282)

Job stability and insurance. (Trad25)

Family insurance. (Trad225)

Benefits (Trad251)

These responses, from both alternate and traditional participants, indicate financial reasons to be a main factor that has kept them in teaching. Financial reasons encompass a wide variety of areas. Some included a steady paycheck, or insurance benefits for themselves as well as their family, as well as the retirement benefits for teachers. These categories were all included in the area of financial for the purpose of the participant responses.

Another common response for remaining in the profession was based on the schedule. There were indications from both the alternate and traditional groups to remain in the profession based on the calendar that teachers are able to keep. For the alternate respondents 6%, and for the traditional respondents 5% indicated that they had decided to stay in the profession because they like the teacher schedule.

Great hours to spend time with my son and coach softball which is a passion of mine.

(Alt38)

I was on the year-round track system and I loved the time/months I was off. (Alt81)

Having summers off. (Alt98)

It's hard to go to working 9-5, working year-round. (Trad57)

These responses, from both alternate and traditional participants, indicate scheduling as the main factor that has kept them in teaching. The category of teacher schedule encompasses both the annual calendar as well as the daily one. Participants indicated that they both enjoy having summer off, but also having a work day that allows them to be off at the same time of day as their families.

Many people like a challenge, and the participants here were no exception. The enjoyment of a challenge was another factor that was utilized by some as why they ultimately decided to stay in the profession. There were indications from both the alternate and traditional groups to remain in the profession based on a love of being challenged in their lives. For both the alternate and traditional respondents 3% indicated that they had decided to stay in the profession because they love a challenge.

I love the challenges and look forward to continued professional development. (Alt123)

I actually love it, find it challenging, and would be bored doing anything else. (Alt257)

It is a challenge and it requires creativity. (Alt280)

It is so much more difficult than I even expected, but I absolutely love it. (Trad100)

It is challenging and fulfilling and I can think of no better way to spend my time, effort and energy. (Trad160)

These responses, from both alternate and traditional participants, indicate a desire to be challenged as the main factor that has kept them in teaching. Being challenged on a day to day basis to be creative as well as finding it challenging to address the needs of all students were included in this category. Participants from both groups expressed an enjoyment that no day was ever the same, and things did not get boring in the teaching profession, and that was one of the factors that had influenced them to remain.

The final common response for remaining in the profession was a feeling of being good at what they were doing. There were indications from both the alternate and traditional groups to remain in the profession based on being good at their job. For the alternate respondents 3%, and for the traditional respondents a little less than 1% indicated that they had decided to stay in the profession because they are good at it.

I enjoy it and feel that I am good at it. (Alt11)

I think I am good at it. (Trad207)

These responses, from both alternate and traditional participants, indicate a sense of being good at what they do as the main factor that has kept them in teaching. The responses from both groups of teachers indicate not only a feeling of being good teachers, but also indicated that it gave them a feeling of self-efficacy in what they were doing for their students, and this was an influencing factor that had kept them in the profession.

Based on the qualitative analysis completed of the two free response questions that were included in the survey there were many similarities in the reasons that teachers self-identified as to why they originally joined the profession as well as stayed in the profession after initial hire. These similarities focused primarily around the desire to work with students, as well as a continued passion to meet their diverse needs. The key difference in response to original motivation related to previous experience with an educator. The responses indicate a positive previous experience as the motivating factor for becoming a teacher from both alternate and traditional participants. The difference in responses from the alternate (2%) and the traditional (16%) participants is clearly significant. This also aligns with the discrepancy in responses for those who always knew they would be a teacher (alternate 7% and traditional 12%) and those who came in based on a high demand (alternate 7% and traditional 1%). Often times our

traditional candidates have always known they wanted to be a teacher, because of a previous experience with a teacher and our alternate candidates join based on need and not a long-held passion.

The main difference in why they stayed in the profession from both alternate and traditional participants revolved around salary. There was an indication that the pay was not high enough or they had considered leaving because they could earn more money in a different profession. The discrepancy in responses based on participant groups aligns with several of the previously discussed factors that caused some respondents to originally join the teaching profession in the first place. Many in the traditional group felt that they always knew they would become a teacher, so the pay that they received would have been something that they were aware of and not an influencing factor in their consideration of leaving. However, many in the alternate group originally joined the profession due to a high demand for teachers, so if the pay was not significant enough for them they might be more likely to consider leaving based on that.

Summary

This chapter provided analysis of the research survey that was designed to address three specific research questions. First, to what extent was there a difference between the types of certification that a candidate held upon hire and their subsequent retention in the district? Second, to what extent was there a difference between the types of preparation that the teacher received from their certification programs and their self-perceived preparation and ability to address the challenges that they faced in their first five years in the classroom? Third, to what extent was there a similarity in the reasons that teachers self-identified as why they originally joined the profession as well as stayed in the profession after initial hire?

The first research question focused on the extent to which there was a difference between the types of certification that a candidate held upon hire and their subsequent retention in the district. A Chi-square Goodness of Fit test indicated there was no significant difference in the rates of retention based on the type of credential a teacher held upon hire. This means that teachers of each credential type left the district at a similar rate. The percent that left ranged from 50.8% (Clear) at the highest to 42.2% (STSP/PIP) at the lowest.

The second research question focused around the extent to which there was a difference between the types of preparation that the teacher received from their certification programs and their ability to address the challenges that they faced in their first five years in the classroom. Based on the quantitative analysis completed of the survey results for preparation scores and challenge scores for both alternate and traditional preparation participants it would indicate that there is no difference in the types of preparation that the teacher received from their certification programs and their ability to address the challenges that they faced in their first five years in the classroom.

The third research question focused on the extent to which there was a similarity in the reasons that teachers self-identified as why they originally joined the profession as well as stayed in the profession after initial hire. This question was addressed by analyzing the free response questions that were included in the survey. For both the original motivation and the decision to stay, survey participants indicated that the common reason for both was about the students, an initial desire to work with them and then a passion for continuing to work with them that had kept them in the profession.

CHAPTER 5: DISCUSSION

This study was designed to address three specific research questions. First, to what extent was there a difference between the types of certification that a candidate held upon hire and their subsequent retention in the district? Second, to what extent was there a difference between the types of preparation that the teacher received from their certification programs and their self-perceived preparation and ability to address the challenges that they faced in their first five years in the classroom? Third, to what extent was there a similarity in the reasons that teachers self-identified as why they originally joined the profession as well as stayed in the profession after initial hire? This chapter provides the discussion and implications for the results of this research.

Summary of the Study

There were two instruments used in this study. The first was a survey that was given to all current K-12 general and special education teachers within the district with 20 or fewer years of teaching experience. The second was an archival data analysis of the district hiring practices over the past ten years. The survey results included responses from 303 participants. The survey was sent to 1,141 teachers with no more than 20 years teaching experience with a response rate of 26.5%.

The first research question was answered by analyzing the archival data of hiring practices for the past ten years within the district. Data analysis indicated that there was no significant difference in the rates of retention based on the type of credential a teacher held upon hire. This indicated that teachers of each credential type left the district at a similar rate. The percent that left ranged from 50.8% (Clear) at the highest to 42.2% (STSP/PIP) at the lowest. In Chapter 1, it was indicated that almost 50% of those entering the profession uncertified (interns,

short-term permits) left within five years compared with only 14% who were certified before they began teaching (Darling-Hammond, 2003, 2016). In addition, similar data was shared in Chapter 1 indicating that almost 30% of teachers who had not had a traditional student teaching experience left the profession within five years, compared to only 15% who did. Both of the previously cited data are in direct contradiction to the results of this study. The results received from this study indicate that of those entering the district, regardless of preparation and experience with student teaching, left the profession at a similar rate over a ten-year period. Contributing factors could have been personal reasons or it could have been related to some of the reasons that were given for why participants considered leaving at one time, mainly administrative support, district and state regulations, student behaviors, money or other duties.

The second research question was answered by analyzing the data of a survey distributed to all current K-12 general and special education teachers within the district with no more than 20 years teaching experience. The data were reviewed in order to determine the type of preparation program that teachers completed to receive their teaching credential and the impact that program's preparation had on preparing them for the needs that they would face in the classroom.

Data indicated that there were minimal differences between both alternate and traditional participants perceived beliefs about the types of preparation that they received from their certification programs and their ability to address challenges in their classroom.

For the alternate preparation program, participants had only two areas based on survey responses that indicated a slight difference in mean preparation and mean challenge results.

The first was 'fostering a safe environment that promotes student well-being' and the second was 'fostering student learning'. Both categories indicate that alternate preparation

participants felt prepared in those areas, however there wasn't a challenge that occurred in their classrooms within the first five years.

For the traditional preparation program participants there was only one area that indicated a slight difference in their mean preparation and mean challenge results. This area was 'fostering student learning'. This difference indicates that traditional preparation participants felt prepared in that area but that there was not a challenge that occurred in their classrooms within the first five years.

In addition, survey results were analyzed in order to compare both the preparation and challenge scores for alternative and traditional certification participants. These two analyses indicated that the alternative group and the traditional group of survey participant groups had no significant difference in the preparation that they received from their preparation programs, or in the challenges that they faced upon entering the classroom. These results are supported by the research that was discussed in Chapter 2 that indicated that in spite of the type of preparation program in which a candidate participates, alternative or traditional, it is "expected that a teaching candidate will have gained the knowledge, skills, and abilities needed to effectively teach the nations' diverse student populations" (U.S. Department of Education, 2016, p. 1).

Further analysis was conducted for those participants who had completed an intern program versus those who had not. These results indicated that those teachers who had participated in an internship felt more prepared by their credential program than those who had no internship experience. However, there was no difference in the challenges that either group felt that they faced upon entering the classroom.

The same analysis was completed for those who had held a Short Term Staff Permit (STSP) or Provisional Intern Permit (PIP), versus those who had not. These results indicated

that although those teachers with STSP/PIP experience and those without indicated no difference in the preparation they received, they did indicate a difference in the challenges that they faced upon entering the classroom. As discussed in Chapter 2, the trend of hiring under-prepared teachers with emergency credentials has been found to be the most harmful to students (Darling-Hammond, 2016; Freedberg, 2013). These results indicate a correlation to the research since this particular group of respondents feel the most challenged in the classroom.

Based on the quantitative analysis completed of the survey results for preparation scores and challenge scores for both alternate and traditional preparation participants it would indicate that there is no difference in the types of preparation that the teacher received from their certification programs and their ability to address the challenges that they faced in their first five years in the classroom.

The third research question focused on the extent to which there was a similarity in the reasons that teachers self-identified as to why they originally joined the profession as well as stayed in the profession after initial hire. This question was addressed by analyzing the two free response questions that were included in the survey. Participant responses were categorized and coded by topic and analyzed to determine trends and patterns in their perspectives. This was completed in order to determine if there were similar reasons that originally brought someone into the teaching profession as well as what kept them in the profession.

For the first free response question regarding original motivation to teach, the trends for both alternate and traditional respondents included the following categories: (a) working with students, (b) tried it and liked it, (c) family in education, (d) always just knew, (e) content knowledge, (f) high demand, (g) enjoy learning, (h) schedule, (i) wanted to give back, (j) money, and (k) positive previous experience with a teacher.

By and large most categories indicated a similar rate of response for both alternate and traditional participants. The categories with a noticeable difference were high demand and having a positive previous experience with a teacher of their own.

In the category of high demand, for the alternate respondents 7%, and for the traditional respondents only 1% indicated that they had decided to become a teacher because they saw a high demand for teachers. The discrepancy in responses from the alternate and traditional participants speaks highly to the purpose of the two types of programs. As previously discussed many times teachers go into alternative types of credentialing programs due to a high need and an ability to be in the classroom while completing their teacher preparation requirements. Participants who complete a traditional type of program may be less likely to have chosen the route they did based on a high need since it takes longer for them to actually become the teacher of record.

In the category of having a positive previous experience with a teacher of their own, for alternate respondents only 2%, yet for the traditional respondents it was 16% indicated that they had decided to become a teacher because of a positive previous experience of their own with a teacher. This also aligns with the minor discrepancy in responses for those who always knew they would be a teacher (alternate 7% and traditional 12%) and more significantly those who came in based on high demand (alternate 7% and traditional 1%). Often times our traditional candidates have always known they wanted to be a teacher because of a previous experience with a teacher and our alternate candidates join based on need and not a long-held passion.

In addition to being asked about their original motivation to become a teacher, survey participants were asked if they had ever considered leaving the profession once they began teaching. Overwhelmingly more than half (55%) indicated that they had. For the alternative

group it was 60% and for the traditional group it was 49%. Participants who answered yes, to whether they had considered leaving were additionally asked to indicate their reason for this consideration. The analysis that was completed indicated trends in responses from both alternate and traditional participants. The responses included: (a) administrative support, (b) regulations (district & state), (c) student behaviors, (d) money, and (e) other duties. For most of the categories, the responses for alternate and traditional were at a similar rate. The only category with a significantly different rate of response was for money.

The discrepancy in responses for alternate (14%) and for traditional (less than 1%) participants who indicated money was the main factor that caused them to consider leaving at one point, aligns with several of the previously discussed factors that caused some respondents to originally join the teaching profession in the first place. Many in the traditional group felt that they always knew they would become a teacher, so the pay that they received would have been something that they were aware of and not an influencing factor in their consideration of leaving. However, many in the alternate group originally joined the profession due to a high demand for teachers, so if the pay was not significant enough for them they might be more likely to consider leaving based on that.

Additional qualitative analysis was conducted for the free response question in order to address research question three, related to why participants have ultimately made the decision to stay in the profession. The respondents had common themes for why they decided to stay in teaching. Identified categories include: (a) students, (b) love of teaching, (c) making a difference, (d) money, (e) schedule, (f) challenge, and (g) being good at what they do. There were no significant differences in the responses for any category from alternate versus traditional candidates, response rates for both groups were similar for all categories.

As discussed in Chapter 2, Darling-Hammond and Berry indicate several factors that have a substantial effect on improving teacher retention, these factors are teacher empowerment, time for high-quality professional development, and school leadership (Darling-Hammond & Berry, 2006, p. 5). These factors are in direct contradiction to the data received from both respondent groups as to what kept them in the profession after considering leaving. The overall factor that had the greatest impact on why respondents ultimately decided to stay in the profession was related to the students, and their passion to work with them. This is in contradiction to the research that indicates a variety of other factors that contribute to teacher retention. A possible reason for the discrepancy in responses for participants based on the research could be due to the highly diverse student population within the district and the passion that teachers overall felt to support their needs.

Based on the qualitative analysis completed of the two free response questions that were included in the survey there were many similarities in the reasons that teachers self-identified as to why they originally joined the profession as well as stayed in the profession after initial hire. These similarities focused primarily around the desire to work with students, as well as a continued passion to meet their diverse needs. The key difference in response to original motivation related to previous experience with an educator. The main difference in why they stayed in the profession from both alternate and traditional participants revolved around salary.

Implications for Practice

No one can argue that there is a need for highly qualified teachers in the classroom to address the increasingly diverse needs of our student population. Currently and over the next several years, districts face unprecedented teacher shortages and will have to identify ways to recruit and retain the best to fill the large number of vacancies in the classroom.

This research attempted to pinpoint the specific certification of new hires that are more likely to remain in the district, and therefore not perpetuating the cycle of need. As the data indicated, there was no significant difference in the rates of retention based on the type of credential a teacher held upon hire. This means that teachers of each credential type left the district at a similar rate. Based on this data it is recommended that the district focus on the reasons that survey participants gave as considerations for leaving the profession, none of which related to their original certification program.

The areas that were indicated as factors causing participants to consider leaving the profession speak directly to the theory of adult learning that provided the theoretical framework for this research. The idea that adults have a problem-centered focus for their learning speaks to the need for support around the areas that caused them to consider leaving at one time, as they identified in their survey responses.

Lack of administrative support in some capacity was indicated by both alternate and traditional participants as a reason why they had at one time considered leaving the profession. For alternate participants 37% and traditional it was 27%. They indicated a feeling of not being supported in their classrooms, or in the overall leadership of the site. These results indicated a high need for professional development for district site administrators in supporting their teachers in all areas, from addressing student behaviors to their own abilities to create a supportive and effective work environment for their staff.

State and district regulations were a factor that caused 20% of both alternate and traditional candidates to consider leaving the profession at one point. These results indicated a sense of frustration on the part of participants to be told what to do and when to do it. This is a difficult issue to address in this researcher's opinion. From the state level, as has been

previously outlined there is a need to regulate what districts are doing to address the needs of their students, and given the large numbers of districts, teachers and students in California it is difficult to identify how this could be done without regulations on teaching and student outcomes. At the district level, however, there was a sense of frustration expressed by participants at the emphasis on district policies that were implemented at the expense of student learning. It is the opinion of the researcher that this issue will need a long-term solution. Given the historical animosity between district administration and the teachers union, there is a genuine lack of trust on both sides. It is important for the district to put parameters on what teachers should know and be able to do in their classrooms, and administrators do not always trust teachers are implementing those efforts. It is also important for teachers to have a sense of ownership for their students' learning and teacher do not always own up to that as well. If both sides could move forward with understanding their roles, then ultimately there could be a better sense of freedom from the regulations that participants have expressed that they feel at the district level.

The challenges that teachers face in the classroom related to student behavior were expressed from both alternate (20%) and traditional (24%) participants. This is a common challenge that many teachers face throughout their career, not just when they are a new teacher. It is important that at the district and site level there is professional development, both initial and ongoing, for new as well as veteran teachers. The district could benefit from full time behavior support specialists that provide initial training upon hire as well as ongoing training throughout the year. Given the size of most sites within the district, there should be a designated behavior support specialist that can provide both collaboration for teachers around

student behavior challenges as well as in-class support for modeling appropriate practices to address student behaviors.

An additional factor that was given as a reason that caused some to consider leaving the profession was due to remuneration. There was quite a discrepancy in the response from participants, with 14% of alternate and less than 1% of traditional giving this reason. As previously discussed, this discrepancy in responses in the researcher's opinion speaks to the reasons that the two groups join the profession in the first place and therefore require little recommendations moving forward.

There were many from both participant groups who indicated the number of other duties related to the teaching profession which had at one point caused them to consider leaving. Ten percent of the alternate respondents and 15% of the traditional respondents cited this as a factor. Teaching is a challenging profession and there are many aspects of teaching that go beyond the classroom. It is important to instill a climate within the district where teachers work hard, both inside and outside the classroom, to meet the needs of all students.

In addition to identifying the specific credential types that were more likely to remain in the district, the research attempted to identify the type of certification programs that best prepared teachers for the challenges that they faced upon entering the profession. Overall, the data analysis showed no significant difference in relation to a specific type of certification program that was better preparing teachers for the ultimate challenges that they faced upon entering the classroom. Therefore, it is not recommended that the district consider hiring one type of participant over the other, alternate versus traditional. However, given that there was a higher preparation response rate for those participants that were interns versus those that were not, it is recommended that the district partner with local intern programs in order to strengthen

the relationship for those participants who are selecting an intern preparation route in order to ensure that intern candidates continue to feel well prepared to meet the diverse needs of their students.

In addition, given the higher response rate for those participants who held a STSP/PIP type of certification and the challenges they faced in the classroom upon hire, it is recommended that districts attempt to decrease the number of new hires that hold these specific certifications. This may be difficult to do during high demand times, however any effort that can be made to reduce this number will have an impact on the ways that student needs are addressed in the classroom. For example, if more teachers who hold an intern, preliminary or clear credential are the ones being hired in the district, the challenges that they face in their first five years in the classroom will be decreased. Furthermore, in the short term while districts are finding it necessary to fill high vacancies with the least prepared teachers, strategic support should be in place to address the needs of these teachers. Districts would benefit from utilizing available resources such as instructional coaches to support any STSP and PIP teachers. Instructional coaches could be dedicated to providing additional support to those teachers who have not yet begun their initial preparation programs in order to remediate the knowledge and skills that they have yet to receive.

This research aimed to identify similarities in self-identified reasons that teachers indicated related to their original motivation to become a teacher. The singular aspect of data analysis that lends itself to current implications for practice is the response from traditional participants related to a positive previous experience with a teacher of their own. It is recommended that the district focus on how to build capacity within their current teaching pool, which will allow them to have a stronger impact on their students, thereby creating a new pool of

student candidates who themselves will want to become teachers. Perhaps some of this initially could be built into induction programs since all new teachers must participate. In a comprehensive induction program there is an intensive, targeted, and structured multiyear process that is "designed to train, acculturate, support, and retain new teachers and seamlessly progress them into a lifelong professional development program" (Webb & Norton, 2013, p. 114). Increasing the focus of the work between new teachers and mentors during induction, on fostering positive relationships with their students, and creating an environment that is engaging and exciting for the students to participate in, may increase the number of students themselves that ultimately want to become a teacher in the future.

Research from Haynes (2014) stated that comprehensive induction programs, such as Beginning Teacher Support and Assessment (BTSA) must be maintained for new teachers during their first two years that includes embedded coaching and feedback by well-trained mentors that leads to the next level of professional licensure. Therefore, induction is an appropriate time to highlight this focus around how to foster a positive environment for students since there is a process of constant reflection on current practice that is built into the mentoring process.

Limitations and Delimitations

There were two identified limitations for this research. The limitations included the researcher's position within the district, the confidential nature of the data, and the source of the data gathered. First, as a district level specialist the researcher's position could have potentially influenced some of the participants in the survey. Next, participants may have been hesitant to discuss the concerns and struggles that they faced when they were first teaching in the classroom. These concerns were mitigated with the anonymity of the survey that was given, as participant names or identifiers were not requested or gathered.

There were also two delimitations for this research. First, the participants in the survey were specifically teachers with less than 20 years teaching experience. This delimitation was selected because the researcher presumed anyone with more than 20 years of service would have struggled to remember the training they received in pre-service and therefore, if reported inaccurately, would have provided data that was invalid. Second, the fact that no teachers who had left the profession were interviewed limited the specific data that were able to be gathered. This data would have been specifically related to teacher attrition.

Recommendations for Further Research

This research was limited to anonymous surveys and data that were gathered from archival hiring records. More extensive research, related to teachers who ultimately choose to leave the profession may contribute to a deeper understanding of teacher attrition. In this researcher's opinion a long term qualitative study of teachers who resign, including interviews about their initial preparation, the challenges they face when they first started and their reason for ultimately deciding to resign would be invaluable to the district in order to find was to curb the cycle of teacher attrition.

Survey data were limited to specific questions related to the preparation that teachers received during initial certification and the challenges that they faced in the first five years in the classroom. More extensive research of the specific support that was received upon hire may contribute to a deeper understanding of teacher retention and other contributing factors besides initial certification that could have played a role in their decision to stay in the teaching profession.

In the United States, we have the highest levels of formal education for our teaching force in the entire world, with over 40% of our public K-12 teachers holding at least a

master's degree, though not in academic subjects. Although the academic performance levels of our students do not take a similar climb as we have invested in our teacher education levels (Angus, 2001). In this researcher's opinion, a quantitative analysis of student performance as related to teacher education levels may identify if there is a correlation between teacher education and student ability level. Furthermore, analysis of student academic ability levels related to current teacher certification could identify if students are benefitting from having fully qualified teachers in the classroom.

Conclusions

This study was designed to address three specific research questions. First, to what extent was there a difference between the types of certification that a candidate held upon hire and their subsequent retention in the district? Second, to what extent was there a difference between the types of preparation that the teacher received from their certification programs and their self-perceived preparation and ability to address the challenges that they faced in their first five years in the classroom? Third, to what extent was there a similarity in the reasons that teachers self-identified as why they originally joined the profession as well as stayed in the profession after initial hire? This chapter provides the discussion and implications for the results of this research.

In relation to the first research question, there was no significant difference in the retention rates for the types of certification that a candidate held upon hire. Teachers are leaving the district at an alarming rate for all credential types. Factors need to be considered for how to retain all teachers at a higher rate in order to reduce the cycle of need that is paramount within the district.

In relation to the second research question, there was no difference in the preparation that teachers received from their certification programs and their ability to address the challenges that they faced in the first five years in the classroom. There was a difference in the preparation that those who were interns felt they received versus those who were not interns. Therefore, the district should strengthen partnerships with local intern programs in order to continue the strong sense of preparation that those candidates feel they receive from their certification programs.

Finally, in relation to the third research question, there was a large similarity in the reasons that teachers self-identified as to why they originally joined the profession as well as why they stayed in the profession after initial hire. Students were indicated as the strongest motivator for both alternate and traditional participants to both join as well as stay in the profession for the long haul.

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APPENDIX A

Survey of Teacher Retention and Preparation

Thank you for your participation. Please answer the following questions based on your experience in teacher preparation as well as your initial five years in the classroom.

General Information

1. What type of teaching credential program did you participate in?	O Traditional Preparation Program (blended credential program with BA/BS degree and student teaching)			
	O Alternative Certification Program (completed a BA/BS in another field and then decided to go into teaching) *drop down options:			
	O Intern Program (completed teacher preparation program while I was teaching)			
	O Taught on a Short Term Permit or Emergency Credential prior to enrolling in an Intern Program			
	O Other *drop down to open ended response			
2. Where did you complete your credential program?	 California Outside of California *drop down menu to indicate which state 			
3. What type of university was your				
program part of?	O PublicO Private			
	O County Office			

4. you co	Did the credential program that mpleted require student teaching?	0	Yes No	
5. your ci	What was the length of time of redential program?	years *drop down for number of years		
	What year did you originally e your Clear credential?	*drop	down for year	
7. Type of credential held (check all that apply)		0	Multiple subject	
an mai	, арргу)	0	Single subject	
		0	Education Specialist	
		0	CTE	
		0	Administrative	
		0	Other	
	Did you have experience as a ute teacher prior to completing redential work?	O If Yes,	Yes how many years	
9. prograteachir	Did you participate in a BTSA m in your first two years of ng?	0	Yes No	
10. Did you earn your Clear credential through a BTSA program?		0	Yes	
		0	No	
11.	What made you want to be a r?	0	Open Ended Response	
12. Do you plan to spend the remainder of your career teaching in the classroom?		0	Yes	
		0	No	
13.	Did you ever consider leaving ng?	0	Yes	
teachir		0	No	
14. and wh	If so, why did you want to go, nat made you stay?			

Credential Preparation Program

Please rate the extent that you feel your teaching credential (SS/MS/Ed.Sp.) program prepared you to address the following aspects in your classroom

15.	Managing classroom behaviors	0	Strongly disagree
		0	Disagree
		0	Agree
		0	Strongly agree
16. promot	Fostering a safe environment that tes student well-being	0	Strongly disagree
		0	Disagree
		0	Agree
		0	Strongly agree
17.	Assessing the needs of students	0	Strongly disagree
in orde	er to differentiate instruction	0	Disagree
		0	Agree
		0	Strongly agree
18.	Ensuring access to the	0	Strongly disagree
curricu needs	llum for students with special	0	Disagree
needs		0	Agree
		0	Strongly agree
19.	Addressing the instructional of English Learners	0	Strongly disagree
needs		0	Disagree
		0	Agree
		0	Strongly agree
20.	Using technology as a teaching	0	Strongly disagree
tool		0	Disagree
		0	Agree
		0	Strongly agree
21.	Using technology as a resource	0	Strongly disagree
to supp	oort student learning	0	Disagree
			=

	0	Agree			
	0	Strongly agree			
22. Collaborating productively with	0	Strongly disagree			
teachers and other resource personnel at my site or district	0	Disagree Disagree			
my site of district	0	Agree			
	0	Strongly agree			
23. Fostering student learning	0	Strongly disagree			
	0	Disagree Disagree			
	0	Agree			
	0	Strongly agree			
Classroom Challenges in the Fi	rst Fiv	ve Years			
Please rate whether you felt the following areas were a struggle for you in the first five years of teaching experience					
24. Managing classroom behaviors	0	Strongly disagree			
	0	Disagree			
	0	Agree			
	0	Strongly agree			
25. Fostering a safe environment that	0	Strongly disagree			
promotes student well-being	0	Disagree			
	0	Agree			
	0	Strongly agree			
26. Assessing the needs of students	0	Strongly disagree			
in order to differentiate instruction	0	Disagree			
	0	Agree			
	0	Strongly agree			
27. Ensuring access to the	0	Strongly disagree			
curriculum for students with special needs	0	Disagree Disagree			
needs	0	Agree			

		0	Strongly agree
28.	28. Addressing the instructional needs of English Learners	0	Strongly disagree
neeas		0	Disagree
		0	Agree
		0	Strongly agree
29.	Using technology as a teaching	0	Strongly disagree
tool		0	Disagree
		0	Agree
		0	Strongly agree
30. Using technology as a resource		0	Strongly disagree
to sup	port student learning	0	Disagree
		0	Agree
		0	Strongly agree
31.	Collaborating productively with	0	Strongly disagree
teachers and other resource personnel at		0	Disagree Disagree
my site or district	0	Agree	
		0	Strongly agree
32.	Fostering student learning	0	Strongly disagree
		0	Disagree
		0	Agree
		0	Strongly agree

Your Background in Teaching

Please rate the experience(s) that you have that relate to your background in education

	I always knew that I wanted to acher.	0	Strongly disagree
be a te		0	Disagree
		0	Agree
		0	Strongly agree
34. teacher mind.	I did not originally intend to be a	0	Strongly disagree
	r but eventually changed my	0	Disagree
		0	Agree
		0	Strongly agree
35.	One or more members of my are in the education field.	0	Strongly disagree
family		0	Disagree
		0	Agree
		0	Strongly agree
36.	I grew up in the same	0	Strongly disagree
comm	unity where I currently teach.	0	Disagree
		0	Agree
		0	Strongly agree
37.	It was important to me to teach	0	Strongly disagree
	area where the students have the st need.	0	Disagree
greate	st need.	0	Agree
		0	Strongly agree
38. have s	What is the main reason that you stayed in teaching?	0	Open Ended Response
Dem	ographic Information		
39.	Gender	0	Male
		0	Female
40.	Age (range)	0	20-29
		0	30-39
		0	40-49
		0	50-59

		0	60+
41.	Ethnicity	0	White/Caucasian
		0	African American
		0	Native American
		0	Hispanic/Latino
		0	Asian/Pacific Islander
		0	Other
		0	Prefer not to disclose
42. (indica	Years of teaching experience ate #)		years