2011

TEACHER EFFICACY, JOB SATISFACTION, AND ALTERNATIVE CERTIFICATION IN EARLY CAREER SPECIAL EDUCATION TEACHERS

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ABSTRACT OF DISSERTATION

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The Graduate School

University of Kentucky

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ABSTRACT OF DISSERTATION

A dissertation submitted in partial fulfillment of the
requirements for the degree of Doctorate of Education in Instruction and Administration,
with a program emphasis in Educational Leadership in the
College of Education
at the University of Kentucky

By
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Lexington, Kentucky

Co-Directors: Dr. Lars Björk, Professor and Chair in the Department of Educational Leadership
and Dr. Tricia Browne-Ferrigno, Associate Professor

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ABSTRACT OF DISSERTATION

TEACHER EFFICACY, JOB SATISFACTION, AND ALTERNATIVE CERTIFICATION IN EARLY CAREER SPECIAL EDUCATION TEACHERS

The number of special education students continues to rise, creating the need for additional special education teachers. Alternative certification programs have dealt with the special education teacher shortage, but not the question of teacher quality. Most teachers entering classrooms from alternative certification programs have little or no formal education in methodology or behavior management, but have commensurate responsibilities as their more experienced colleagues.

The intent of this quantitative study was to examine 222 special education teachers' sense of self-efficacy and job satisfaction in 21 central Kentucky school districts. The focus was the relation among special education teacher's degree of efficacy in the early years of their careers (zero to five), degree of job satisfaction, and their certification type in special education (alternative vs. traditional).

The secondary purpose was to examine the interrelation among teacher efficacy, number of years in the profession, degree of job satisfaction, gender, type of classroom, and area of certification in special education. The degree of teacher self-efficacy is linked to increased student outcomes and achievement, extent of planning, implementation of new ideas, enthusiasm, commitment, and increased patience with struggling students.

The Teacher Sense of Efficacy Scale was utilized to measure teacher efficacy. The Brayfield Rothe Job Satisfaction Index (1951) as modified by Warner (1973) was employed to measure the affective factors of job satisfaction. A demographic questionnaire developed by the researcher gathered information from the respondents.

The study hypothesis assumed that teacher efficacy, specifically teacher self-efficacy, was lower in early career special education teachers who were pursuing or had recently completed certification through alternative programs. Analysis of the data indicates there is no significant difference between special education teachers who have completed alternative certification programs and their traditionally certified counterparts in terms of their degree of self-efficacy. Responses from the Job Satisfaction Survey indicated both groups of special education teachers are satisfied with their jobs.

KEYWORDS: special education, teacher efficacy, job satisfaction, alternative certification, teacher shortage

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Student's Signature

Date

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This work is dedicated to my family—my husband Harvey, son Bryan, daughter Carol, and especially to grandchildren Katie, Austin, Damion, Jaydan, and Alex for their constant understanding and encouragement

ACKNOWLEDGEMENTS

I appreciate the support, patience and expertise of Dr. Lars Björk and Dr. Tricia Browne-Ferrigno, the co-chairs of my committee. This endeavor would not have been completed without their help and advice. Their continued encouragement has made it feasible for me to complete the journey.

I would like to acknowledge the support and encouragement of Dr. Beth Rous, the newest member of my committee. Thank you for your timely counsel and assistance.

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CHAPTER 1 : INTRODUCTION

The focus of the study was the relation among special education teacher's degree of efficacy in the early years of their careers (initial year through year five), their degree of job satisfaction, and their certification in the area of special education (alternative versus traditional). The secondary purpose of this study was examination of the interrelation among teacher efficacy, number of years in the profession, degree of job satisfaction, gender, age, special education teaching setting, and area of certification in special education.

A quantitative research approach was used in this study of teacher efficacy and alternative certification in early career special education teachers. The variables in the study included the degree of teacher self-efficacy, their level of job satisfaction, type of certification in special education (alternative or traditional), and demographic information including age, gender, education, teaching rank, years of teaching, area of certification in special education and teaching placement (resource, collaborative setting, or combination of both).

Results from the study increase understanding of the relation among the degree of early career alternatively certified special education teachers' self-efficacy and job satisfaction. Examination of these relationships might be able to uncover school practices or teacher beliefs that enhance or diminish beginning teachers' sense of efficacy or job satisfaction. Knowledge from the study might address issues within the alternative certification program or in the area of support once these teachers are in the classroom. Increased understanding of job satisfaction and teacher efficacy might aid in reducing special education teacher retention and attrition issues.

Statement of Problem

Qualified teachers are very difficult to locate and retain. Providing instruction and related services to students with disabilities is expensive. Like most other states, Kentucky currently is experiencing a severe shortage of special education teachers (Katsiyannis, Zhang, & Conroy, 2003; Sultana, 2002, as cited in Rickey, 2003).

Due to this shortage, many students with disabilities began the 2010–2011 school year in classrooms with teachers who have received little or no formal education instruction at the postsecondary level. The National Center for Education Information (NCEI, 2009) concluded alternative certificate programs designed to help ease the shortages in the number of special education teachers have made this possible. This is the case in Kentucky, where special education classrooms across the state are staffed by teachers recently accepted into alternative certification programs in special education. These starting teachers have the very same responsibilities in the classrooms as their fellow beginning teachers with postsecondary classes in the field of education (Kentucky Department of Education ([KDE], 2010). Alternative programs allow older adults with knowledge from other fields to enter teaching. These programs hopefully attract more minorities, more males and, most importantly, teachers who seek positions in schools where many graduates of traditional programs don't seek employment (Haberman, 2006).

Simply filling all the classrooms at the beginning of the school year with teachers is not adequate. Roth and Swail (2000) noted, "the research is clear—the single most important thing that a school can provide to ensure the success of students is a skilled and knowledgeable teacher. Good teachers—those who know what to teach and how to teach it—produce successful students. But teachers who are under-qualified or ill-equipped do

not produce successful students" (p. 19). Ensuring that special education teachers from alternative programs have the skills and mindset to provide instruction and support to their students is the overall goal.

Teacher efficacy is one variable which accounts for individual differences in a teacher's effectiveness (Gibson & Dembo, 1984). Teacher efficacy is related to a teacher's degree of persistence, enthusiasm, commitment, willingness to vary instruction techniques, and motivation to reach all students. Teacher efficacy has a significant impact on students. It is one variable associated with student achievement, student engagement, and student motivation.

This study also examines teacher job satisfaction. All teachers are faced with concerns as they begin each year in their classrooms; however, teacher concerns might be magnified for those who have relatively little experience. Fuller (1969) and Fuller and Brown (1975) examined the concerns of novice teachers. They concluded when teachers' concerns are not addressed or conditions do not change, teachers might begin to feel dissatisfied with their jobs. Additional research indicates job satisfaction is "significantly related to a person's decision to leave (or never enter) teaching" (Chapman, 1984, p. 654). Job satisfaction plays an important role in determining whether or not graduates remain in their chosen career.

Purpose and Significance of the Study

The purpose and primary focus of the study was the relations among teacher efficacy, job satisfaction, and alternative certification for special education teachers in their initial year through year five. The secondary purpose of this study is to examine the interrelations among teacher efficacy, number of years in the profession, degree of job

satisfaction, type of classroom (resource or collaborative), and area of certification in the area of special education (alternative or traditional).

At the same time the number of students who qualify for special education services is expanding, teachers, including those in the area of special education, are leaving the profession in record numbers (Walker, Garton, & Kitchel, 2004). The National Education Association (NEA) indicates the United States is facing "the worse teacher shortage ever" (Walker et al., 2004, p. 1). Traditional education programs have not been able to keep up with the demand. The shortage is most severe in the areas of Mathematics, Science, and Special Education.

Alternative certification is a relatively new concept, beginning in the early 1980s (National Center for Alternative Certification [NCAC], 2006). The shortage of teachers has prompted many states to find innovative ways to recruit new teachers into the field. This is especially true in some critical shortage areas such as special education (Fenstermacher, 1990). To fulfill their legal obligations under the Individuals with Disabilities Education Act (IDEA) (Levin, 2010) and the No Child Left Behind Act (NCLB, 2001), school districts must ensure a highly qualified special education teacher is available for every student who qualifies to receive special education services (Thornton, Peltier, & Medina, 2007). This is a real challenge for school districts across the nation. Thornton et al. reports that 98% of school districts nationwide have special education teacher shortages. NCLB also mandates all students, including students with disabilities, demonstrate increased achievement. Special education students must not only meet state-identified standards by the 2013–2014 school year but also demonstrate proficiency in all core content areas. Many states, including Kentucky, have chosen to fill a part of these

vacancies with special educators coming through alternative certification routes. Alternative certification is supported at the federal level as well. President George Bush encouraged this state strategy in his "America 2000" portfolio of education reforms (Darling-Hammond, 1990).

The importance of teacher quality cannot be underestimated. The Education Commission of the States (2009) concluded effective teachers are the most important educational determinant. Students who had strong teachers for three years in a row made reading gains over the period that were 54% higher than their fellow students who began at the same level but had weak teachers for three consecutive years (Sanders & Rivers, 1996). Teacher effectiveness is dependent on many factors. Effectiveness can vary depending on the content taught or the type of student within a specific classroom. Baber (2007) states that all effective teachers must have an understanding of the subject being taught, instructional skills, and an ability to manage a classroom.

Most teachers coming into the classrooms from alternative certification programs have no little or no formal education in methodology or behavior management before entering the classroom. They are expected to perform in the same manner as more experienced staff with the same responsibilities and job duties (Cornett, 1990).

To date, few studies have examined the relationships among one or more of the concepts of teacher efficacy, teacher job satisfaction, and/or alternative certification in the area of special education. This knowledge will provide a foundation for assessing school procedures and policies to facilitate support of novice special education teachers and address their concerns.

Research Question and Design

The hypothesis was based on the assumption personal teacher efficacy (PTE) or teacher self-efficacy is lower in early career special education teachers who have completed, or are currently enrolled in, alternative certification programs than those completing their special education degrees in a traditional program. The study focus is on the following research questions:

1. How satisfied are early career special education teachers and what is their sense of self-efficacy?
2. What are the relationships among teacher efficacy, job satisfaction, and alternative certification for early career special education teachers (initial year through year five) from 21 districts in central Kentucky?
3. What are the relationships among teacher efficacy, job satisfaction, alternative certification, and the number of years in teaching?
4. What are the relationships among teacher job satisfaction, teacher efficacy, and job placement among early career special education teacher (resource vs. collaborative teaching)?

Special education teachers, both traditional and alternative, certified between their initial year through year five within 21 districts in the central geographic area of Kentucky were the population sample. Teachers within the sample currently occupy positions in elementary, intermediate or middle schools, and high schools across these districts. The districts vary in size and have student populations ranging from a low of approximately 700 to a high of 6,600. The average size of the districts is approximately 2,900 students. These districts have a range of students whose socio-economic status

(SES) ranging from 13–34%. The average SES among the districts is slightly over 18.2%. The district with 34% SES is located the greatest distance from an urban area, limiting access to a greater variety of employment opportunities. This district is small and strictly rural, with agriculture being the primary means of support for most families. The districts' student achievement range varies from a high of 88% to a low of 74% on Kentucky state testing. The districts include both independent and county schools. Graduation rates for the district range from a high of 88% to a low of 74%. Both extremes in graduation rates originate from small county districts. The average graduation rate among the 21 districts is 81%. These 21 districts currently employ 222 full-time special education teachers from their initial year through year five experience. One hundred percent of these teachers were the potential subjects in this study.

A quantitative research approach was used in this study of Teacher Efficacy and Alternative Certification in Early Career Special Education Teachers. Quantitative research techniques are designed to best match the purpose of my study, exploring the relations among teacher efficacy, teacher job satisfaction and alternative certification in the area of special education in years zero to five. Creswell (2003) suggests quantitative analysis is the best research approach to test a theory, arrive at explanations, or understand predictors of outcomes.

Descriptive-correlational design was used for this study. Descriptive research "enable (s) researchers to organize, summarize, and describe observations" (Ary, Jacobs & Razavieh, 2002, p. 118). Ary et al. stated "correlational procedures show the extent to which change in one variable is associated with change in another variable" (p. 143). The hypothesis for the study was based on the assumption that teacher efficacy, especially

teacher self-efficacy (PTE), would be lower in early career special education teachers who are currently pursuing or have recently completed their certification in the area of special education through alternative certification programs offered by colleges and universities throughout Kentucky. The descriptive-correlational design was used to examine relations among teacher job satisfaction, teacher efficacy, and alternative certification in special education teachers in the very early years of their careers. Secondarily, the interrelations among these and other demographic variables were explored.

Purposive sampling was used by the selection of 100% of the special education teachers in their initial year through year five within the sample population as potential participants in the study. Randomization of the sample population was not necessary since one hundred percent of the targeted population were asked to participate. Participation was indicated by completion of the survey instruments (demographic survey, Teacher Sense of Efficacy Scale (TSES) (Tschannen-Moran & Woolfolk-Hoy, 2001), and Job Satisfaction Index (Brayfield Rothe, 1951 modified by Warner, 1973). Data analysis relied on participant responses to these three research instruments.

This study utilized an electronic researcher developed School Support Questionnaire (SSQ) and two surveys. They were distributed by email to the teachers' school via Survey Monkey. The usage of electronic correspondence was expected to increase the likelihood of participation. Surveys or questionnaires were used instead of personal interviews to allow a larger number of participants to be included in the study. Research indicates mailed, electronic or hard copy, questionnaires could collect similar information to personal interviews (Dillman, 2008). Questionnaire or surveys that are

mailed or emailed increase the number and expanse of the potential participants. Questionnaires and surveys that are sent have the advantage of guaranteeing confidentiality or anonymity. This type of response might be more honest and candid than might be obtained in a personal interview (Ary et al., 2002).

Assumptions of the Study

The results of this study are based on the following assumptions:

1. The special education teachers from the 21 districts in the central Kentucky area are representative of special education teachers across the Commonwealth of Kentucky.
2. Surveys utilized within the study are valid and reliable instruments. These surveys all have established reliability and validity measures.
3. Participants who responded to the surveys did so in an honest, accurate, and forthright manner.

Limitations and Delimitations of the Study

The focus of the study is on school districts within a geographical area in central Kentucky. The findings of this study might generalize to other areas of the state, but this type of generalization should be approached with caution. The findings of the study are limited to the population represented in the study. Alternative certification programs vary widely among colleges or universities. This difference in entrance requirements, the amount of time in the program, and the courses offered might place limitations on the generalizations of the findings of the study. In addition, teachers with alternative certification might have vastly different knowledge bases upon entrance into the alternative program, support from employing districts, and job experience in the area of education.

Organization of the Study

The findings of the study are divided into five chapters. Chapter One introduces the reader to teacher efficacy, job satisfaction, and alternative certification, and includes the purpose, significance, assumptions, and limitations of the study. Chapter Two provides a literature review in the areas of teacher efficacy, alternative certification, and job satisfaction. Chapter Three focuses on the methodology used in the study, including the sample population, data collection procedures, instrumentation, and data analysis techniques. Chapter Four presents an analysis of the study results. Chapter Five summarizes the findings of the study, and provides implications for policy and practices, conclusions, and suggestions for further research based on the results of the study.

CHAPTER 2 : REVIEW OF THE LITERATURE

This chapter begins with a short review of education reform and moves to a through historical review of efficacy. Literature from the area of education reform, job satisfaction, alternative certification, and teacher quality are included. Rationale for the importance of job satisfaction and personal teacher efficacy in the area of special education are explored. The chapter concludes with a summary.

Literature Review

Public Education is front and center of national, state, and local discussions. Teacher perceptions of the state of American schools is sometimes much different than public perception (Langdon, 1999). This is not difficult to understand since "teacher's viewpoints are shaped by first-hand experience in America's classrooms" while public opinions "are formed from the limited, often negative, information doled out in newspapers and repeated as television sound bites" (Langdon, 1999, p. 611). White (2000) concluded, "Teaching in today's schools can be rewarding, but it can also be filled with stress, frustration, and little time to take care of oneself" (p. 61).

Schools across the nation are faced with many challenges. English's study (2005) declared "teacher morale is at an all time low and attrition at an all-time high" (p. 430). Each year, colleges and universities graduate new classes of teachers; yet, this is not enough to meet demand in many content areas, including special education (Thornton et al., 2007). The United States has dealt with the demand for teachers exceeding the supply for several decades. Darling-Hammond (1988) indicated the supply of teachers graduating from colleges and universities would only meet 60% of the anticipated demand. Many of these graduates decide after graduation not to go into the teaching

profession (Heyns, 1988), and research indicates as many as 50% will leave teaching within the first five years (Rosenholtz, 1989; Wise, Darling-Hammond, & Berry, 1987). Teaching has a very high attrition rate when compared to other professions such as law, medicine, and engineering (Anderson, Stacy, Western, & Williams, 1983 as cited in Addi-Raccah, 2005).

Alternative routes to certification in education have become one of the main components in addressing the need for additional staff (Rosenberg & Sindelar, 2005). If we are going to curb attrition, raise job satisfaction, and supply our classrooms with the highly qualified staff the teaching profession must change to better address the needs and concerns of today's teachers (Thornton et al., 2007). Faber (1991) indicated teachers who are committed to staying in the teaching profession do so because they are satisfied and enjoy what they do. This commitment is even more important as teacher's responsibilities change based on the needs of students. We are now in a global economy which dictates the knowledge and skills students must have to compete successfully on the world stage. Due to the many changes, teachers are asked to do more with less, creating frustration and dissatisfaction (White, 2000). Research shows teachers' satisfaction and morale have dropped dramatically over the past two decades (National Public Agenda Foundation, 2000; Perie & Baker, National Center for Education Statistics, 1997; Scholastic Inc., 2000). Fullan (2003) states "A high-quality public school system is essential, not only for parents who send their children to these schools but also for the public good as a whole" (p. 4). It is essential schools are equipped with "highly competent teachers" to ensure quality public education. Public schools must serve the needs of all students, including a commitment to narrowing the achievement gap between high and low achieving students

(Fullan, 2003). To move forward, we must first look back to what brought us to where we are now.

History of Educational Reform

Prior to 1900, the federal government was not heavily involved in decisions concerning education or in any initiatives concerned with educational reform in the area of kindergarten through twelfth grade (Guthrie & Springer, 2004; Levitan & Gallo, 1993). Educational issues were viewed as the responsibility of the state or the local government. When the federal government did intervene it was in response to students who were not being adequately served in the existing education systems (Guthire & Springer, 2004; Levitan & Gallo, 1993). This intervention from the federal level did not occur until the 1970s, when the government passed legislation to give access to a free appropriate public education (FAPE) to all students throughout the nation (Katsiyannis et al., 2003; Kauffman, 1994).

In the 1950s and early 1960s, the world stage began to change. The United States was no longer standing alone as a world power and other countries were starting to compete in the area of manufacturing and innovation. The 1960s brought social change focusing on educational equality and access for all Americans. In the 1970s, the United States began to see changes including a decline in workplace productivity, a rise in unemployment, loss of market share to countries such as Japan and Germany, and rapid advances in technology. Policy makers and other stakeholders became increasingly concerned about America's ability to remain the leading industrial power in the world. As educators struggled to address these changes, a consensus of all stakeholders agreed the

current economic issues were connected to the state of public education in the United States (Cuban & Shipps, 2000; Murphy, 1992).

A presidential commission of corporate and public leaders, as well as educators, reported their assessment of public schools in the 1983 report *A Nation at Risk* (Cuban & Shipps, 2000). This report "deplored the mediocrity of education and stated unequivocally that schools as they exist have done a ruinous job on the economy and society" (Glickman, 1989, p. 5). Other reports followed with much the same theme. America's public school students' performance on national and international tests could be considered mediocre at best. Public school performance mirrored America's mediocre economic performance in the global marketplace (Björk, 1996; Cuban & Shipps, 2000; Hallinger, 2003). Media coverage led to public perception American schools was a failure. This was perceived as one of the reasons for the national economic decline (Kowalski & Björk, 2005: Winter, Millay, Björk & Keedy 2005). American educators and the public at large perceived the events as a crisis that must be addressed in order for the United States to maintain its status on the world stage and become more effective in competing in the global marketplace. Education reform efforts would be a primary goal of the educational community for many decades to follow. The progress of educational reform came in three waves whose themes were related but still distinctive (Cuban & Shipps, 2000; Winter et al., 2005).

The first wave of reform (1983–1986) was lead by *A Nation At Risk*, and focused on equal access to public education to a wide range of students, particularly those who had been underserved by the system (Kowalski & Björk, 2005). In addition to equity for all students, schools emphasized social and emotional growth (Hoy & Miskel, 2008).This

reform effort consisted of an array of initiatives or mandates designed to "fix" the existing system. These initiatives included increasing the length and number of school days per year; increased basic skills instruction; escalated the number of academic credits for graduation; and standardized testing of students, state and local standards, and teacher evaluation (Kowalski & Björk, 2005).

The second major wave of educational reform (1986–1989) focused on altering the very structures of the educational system. Reports such as *A Nation Prepared* (1986), *Investing in our Children* (1985), *Tomorrows Teachers* (1986), *Time for Results* (1986), and *Children in Need* (1987) concluded more accountability was needed in order to move public schools forward and ensure an increase in student achievement. The National Governors' Association and President George H. Bush met at the Charlottesville Educational Summit in 1989. The result of this meeting was the development of six national education goals. These goals were expanded to eight under the Goals 2000 program established by the Educate America Act of 1994 (Hoy & Miskel, 2008; Levink, 2010). To achieve their goals standards based assessment systems were put into place in order to hold schools accountable for improving student test scores. Additional emphasis was placed on higher-order thinking skills, problem solving, computer competency, and cooperative learning (Kowalski & Björk, 2005).

The third wave of educational reform (1989–2009) was in response to criticism of the very heart of the previous reform efforts. Authors during this period agreed previous efforts focused too heavily on organizational and professional issues and not nearly enough on the well-being of students or student learning. This third wave of reform was known as "systemic reform," which attempted to unite the previous reform movements

within the context of two dominating themes: “comprehensive change of many school elements simultaneously and policy integrations and coherence around a set of clear outcomes” (Hoy & Miskel, 2008, p. 296). This reform movement was different in that the real focus was on student achievement and learning (Kowalski & Björk, 2005).

One consequence of this third wave of reform has been an increase in perception effectiveness of a school is defined by their ability to produce students who have a high level of academic achievement on standardized tests (Hoy & Miskel, 2008). In many cases, including in Kentucky, these tests are based on state-developed standards. Mortimore and Mortimore (1998) “maintains that effective schools are ones in which students score higher on achievement tests than might be expected from their characteristics upon entry” (Hoy & Miskel, 2008, p. 298). For today’s schools to be considered effective, they must have high achievement test scores overall, must be narrowing the achievement gap between high- and low-achieving students, and must be demonstrating gains for all their students, including students with disabilities. No Child Left Behind (NCLB, 2001) demands all schools receiving federal funding “must show that their students are making adequate yearly progress or AYP, that is, making specified gains in academic achievement during a school year” (Hoy & Miskel, 2008, p. 298).

With the passage of the Civil Rights Act of 1964, Kentucky began to address equity in education. With the passage of the Elementary and Secondary Education Act (ESEA) in 1965, Kentucky was provided federal funds to help low-income students. This initiated programs such as Title I, Head Start, and bilingual education (English Language Learners). Kentucky educators were cognizant of the many changes required. They were also aware of their responsibility to create schools where all students’ performance and

achievement increased (Day, 2006). Funding was a major issue at the state level and in many districts. This was especially true in the areas of Kentucky, where many of the families lived at, or below, the national poverty level. School funding in Kentucky was neither equitable nor adequate for many of the students across the state. The result was the passage of the Kentucky Education Reform Act in 1990 (KERA). This was one of the most sweeping reforms in the nation (Montgomery, 1995). KERA calls for "a system wide change in education that focuses on areas of curriculum, governance, and finance" (Montgomery, 1995, p. 2).

Historical Review of Special Education

The birth of special education is a result of educational reform efforts and advocacy from parents to ensure students with disabilities have access to education. Between 1965 and 1975 state legislatures, the federal courts, and the U.S. Congress passed legislation to ensure strong educational rights for children with disabilities (Martin et al., 1996).Martin et al. (1996) stated "forty-five state legislatures passed laws mandating, encouraging, and/or funding special education programs. Federal courts, interpreting the equal protection and due process guarantees of the Fourteenth Amendment to the U.S. Constitution, ruled that schools could not discriminate on the basis of disability and that parents had due process rights related to their children's schooling" (p. 25).

Prior to the 1970s, millions of children with disabilities had limited access to public education. The few who were fortunate enough to be in school were under-served. Individuals, including children with physical or mental disabilities, had been discriminated against for years. They had been isolated and excluded from many aspects

of society. Until the mid-1970s, school districts had the option whether or not to grant access to their schools to students with disabilities. Districts were able to refuse to enroll a student if the student was considered to be "uneducable" (Martin et al., 1996, p. 4). Some of the students who were enrolled were simply placed in regular education classes with little or no assistance. Only after Public Law 94-142 was passed in 1975 and became effective in 1978 did "education for all" become a fact (Martin et al., 1996).

The history of special education truly originated in 1965, when Congress added Title VI to the Elementary and Secondary Education Act of 1965. This created a Bureau of Education for the Handicapped, currently called the Office of Special Education Programs (OSEP). This Act still did not mandate districts to educate students with disabilities; however, it was a signal that change was on the horizon. In 1972, two Supreme Court decisions, *PARC v. Pennsylvania* (1971) and *Mills v. D.C. Board of Education* (1972), strengthened the rights of children with disabilities by taking the position that children with disabilities have an equal right to access education as their non-disabled peers. In 1973, Section 504 of the Rehabilitation Act became federal law protecting qualified individuals from discrimination based on their disability. Most educators did not realize this law applied to public education (Peterson, 2007). In 1974, parents were given the rights to access all identifiable information collected, maintained, or used by the school district regarding their child. The Family Educational Rights and Privacy Act (FERPA) remains as a crucial component of parent rights (Martin et al., 1996).

The Education of All Handicapped Children Act (EAHCA) or P.L. 94-142 was enacted in 1975. This law mandated all school districts educate students with disabilities.

The law did not immediately take effect. It was not until the beginning of the 1977–1978 school year that the final regulations of EAHCA were released giving districts a set of rules by which to adhere when providing an education to students with disabilities. This new law remained the same until 1986, when the Handicapped Children's Protection Act was included. This new addition stipulated that parents and students have certain rights under EAHCA and Section 504 (Peterson, 2007; Martin et al., 1996).

In 1990, two very important changes occurred in the area of special education. The Americans with Disabilities Act (ADA) was enacted. This act adopts the Section 504 Regulations as part of the ADA. This was the beginning of individual 504 Plans in school districts across the nation. These plans can provide a student with modifications and accommodations based on their individual need. The greatest shift in special education came with the passage of the Individuals with Disabilities Education Act (IDEA). This law replaced EAHCA and contained major changes effecting schools. IDEA added transition services for students with disabilities. The major difference between IDEA and Section 504 is Section 504 is an unfunded mandate and parents and students have due process rights. School districts were now required to observe outcomes and assist students with disabilities in transitioning from high school to postsecondary life (Martin et al., 1996). IDEA was reauthorized in 1997 to require students with disabilities be included in all state and district-wide assessments. In addition, regular education teachers are now required to be part of the Individual Education Plan (IEP) team and assist in developing the student's Individual Education Plan. Students with disabilities were included in NCLB (2001), which requires all students be proficient in math and reading by the year 2014. The most recent reauthorization of IDEA occurred in 2004. This law

strengthened the requirement for states and local districts to be more accountable for data indicating the outcomes for students with disabilities. This is a shift from the original law, which only guaranteed access to education. This reauthorization is focused on student outcomes and intervention. The other major change was the requirement for districts to provide adequate instruction and intervention for students to help address their educational concerns and possibly prevent the need for referral and placement in special education (Peterson, 2007).

In Kentucky, the Department of Exceptional Children is responsible for assistance to districts in maintaining compliance with special education laws at the federal level. In addition, Kentucky has its own set of requirements for local districts (KDE, 2010). Kentucky is not unique in its struggle to address the needs of students with disabilities. Providing instruction and related services is expensive and many times qualified staff is very difficult to locate and retain. Like most other states, Kentucky is currently experiencing a severe shortage of special education teachers (Sultana, 2002; Katsiyannis et al., 2003).

Teacher Shortage and Alternative Certification

The National Coalition on Personnel Shortages in Special Education and Related Services (2010) concluded "there is and has been a significant shortage of special education teachers" (NCPSSERS, 2010, p. 1). Their conclusion indicates the 7.1 million students with disabilities might be in danger of not reaching their potential for academic success. The severity of the teacher shortage in all areas of special education is a result of two primary conditions: 1) shortages of special education teachers to meet the demand,

and 2) an increase in the number of qualified special education teachers to meet the ever growing number of students with disabilities.

In the 2001–2002 school year, the United States public schools employed approximately 49,000 special education teachers who were less than fully certified to teach students with disabilities ages 6–21. Students with disabilities between 3–6 years were served by 31, 000 special education teachers who were less than certified. Under-qualified special education teachers made up 12% of the total teacher workforce for ages 6–21 and 13.6% for students with disabilities ages 3–6 (U.S. Department of Education, n.d., as cited in Sindelar, Dauntic, & Rennels, 2004).

Upon the passage of PL 85-926 in 1958, only 40 colleges or universities were implementing programs designed to prepare teachers in the area of mental retardation. In 1953, only 5 universities were developing programs at the doctoral level to help prepare the special education teachers of the future. In 1961, President John Kennedy signed PL 88-164, which expanded the scope of teacher training to include deafness and hearing impairment, speech impairment, visual impairment, emotional disturbance, and physical and health impairments (Kleinhammer-Tramill et al., 2010). The number of programs designed to train special educators grew to 698 in 1983 (Geiger, 1983).

Students with disabilities are to be provided a free and appropriate education (FAPE) delivered by qualified personnel. This has been the law since the passage of the Education for All Handicapped Children's Act in 1975 (PL 94-142) and its reauthorization in 1990 to the Individuals with Disabilities Act (PL 101-476). The requirement for districts to provide FAPE to students with disabilities has not changed with additional reauthorizations. In 1997, IDEA (PL 105-17) was reauthorized, but the

commitment to providing student access was still in place. The last reauthorization occurred in 2004, resulting in name change to the Individuals with Disabilities Improvement Act (IDEIA). NCLB (2001) established an accountability requirement to be measured by academic progress for all students, including students with disabilities. NCLB also requires by the end of the 2005–2006 school year all special education teachers be "highly qualified." NCLB also requires all children, including students with disabilities, to perform at "proficient" levels as measured by state academic assessments by the 2013–2014 school year. These requirements have increased shortages in all areas of special education and put additional pressure on schools (Thornton et al., 2007). For the past twenty years, the growth rate of students with identified disabilities has grown faster than the general age population, occasionally more than three times faster (McLeskey, Tyler, & Flippin, 2004). The federal special education and related services personnel preparation program is declining. The loss of additional funding, combined with the new demands of NCLB, might lead to further shortages in an already critical need area (Kleinhammer-Tramill et al., 2010).

Special education is not the only crucial need area. General education continues to strive to locate qualified teachers to fill vacancies, especially in areas such as math and science. Teachers, regardless of content area, are faced with many challenges and new responsibilities in schools across the nation. These challenges and additional responsibilities have led many prospective and current teachers to reconsider their decision to make teaching their professional commitment (Leithwood & Riehl, 2003). Teacher shortages are a nationwide challenge. Currently, many of their positions are filled with uncertified or under-qualified applicants. Teachers in these districts are

younger, less experienced, and tend to have taken fewer college-level courses than teachers in non-urban districts (Darling-Hammond, 1990). The attrition rates are high and teachers tend to transfer from lower Socio-Economic Status (SES) schools and are then replaced with less experienced teachers (Beaudin, 1991; Greenberg & McCallk, 1974; Oakes, 1990). As a result, states have launched a variety of recruitment and retention initiatives, such as Troops-to-Teachers and Teach for America, to ease the staffing dilemma. Financial incentives have been utilized to entice new teachers to a specific area and to assist in retaining them once in place.

In response to some aspects of educational reform movements, teachers are now being viewed as leaders in their own right. Accountability, teacher responsibility and expectations are at an all-time high. This shift to shared leadership has empowered teachers to facilitate making significant school decisions (Leithwood & Riehl, 2003). At the same time expectations for teachers are expanding, teachers are exiting the profession in record numbers. The National Education Association (NEA) indicates the United States is facing "the worse teacher shortage ever" (Walker et al., 2004, p. 1). Traditional education programs have not been able to sustain the demand. That has been especially true in the areas of Mathematics, Science, and Special Education. The forecast from the NEA is that nearly two million new teachers will be required over the next decade. Nearly one million teachers will be reaching retirement during this same period. In addition to retirement, many teachers are simply leaving the profession for a variety of reasons. Many are departing for professions with increased salaries and benefits, while others are exiting due to frustration and low job satisfaction. The National Center for Education Statistics (NCES, 1994) identified "inadequate support from administrators" as

the most frequently cited reason dissatisfied former teachers gave for leaving the profession (30.2%) and dissatisfied movers gave for changing districts in 1988–1989 (45.9%). In 1990–1991, the results were similar with 24.9% of the former teachers and 45.6% of the teachers moving from district to district gave the lack of administrative support as the main reason for their decision (Chester & Beaudin, 1996).

The Schools and Staffing Survey (SASS) and the National Center for Education Statistics (NCES) indicate that the demand for teachers increased since the mid-1980s; however, the rate of increase has declined since the late 1990s (Gerald, 1998; Snyder, Hoffman, & Geddes, 1997). Even with this development, 27% of the schools reporting job openings in special education reported they had difficulty filling these vacancies with qualified teachers (Ingersoll, 2001, p. 514).

Attrition is a major contributor for the shortage of special education teachers (Billingsley, 2004a). Katsiyannis et al. (2003) indicate special education teachers have higher attrition rates than their regular education counterparts. Boyer and Gillespie (2000) reported 9.3% of special education teachers leave the field at the end of their first year of teaching, and another 7.4% move from special education to general education positions. Districts have been faced with a "revolving cycle" of special education staff costing time, energy, resources, and perhaps limiting student achievement (Thornton et al., 2007).

One solution that individual states and postsecondary education institutions developed was alternative routes to certification in many of the high-need areas. This action was necessary to meet the demand for additional staff. In 2006, 200,000 alternative certified teachers were staffing classrooms across the country. Haberman (2006) concluded "these programs have opened teaching to more mature

adults, to people with substantial knowledge in a variety of fields, to individuals with experiences in the world of work, to adults who have raised families, to more minorities, more males and most of all, more people who seek positions in the very schools to which graduates of traditional programs don't even apply" (p. 7). Teachers from alternative certification programs are hired primarily in urban and rural school districts. These teachers are more racially diverse, older, and contain a higher percentage of males. They all bring with them life experiences from their other careers (Utsumi & Kizu, 2006).

As in any social policy issue, it is imperative we understand not only the problem, but the solution and its sometimes unintended effects. This is a real challenge in the area of alternative certification programs. Alternative routes to certification is supported and opposed by competing social agendas (Darling-Hammond, 1990). Darling-Hammond (1990) stated that alternative certification programs have "often been characterized, on both sides, by undefended assertions and counter-assertions grounded in mythology and half-truth" (p. 123). Fenstermacher (1990) concluded "this tension arises from the fact that professionalization initiatives typically call for sustained and rigorous study for entry into the profession, while alternative certification programs are often viewed as quick and rather elementary ways to enter teaching" (p. 155).

In the case of alternative certification programs, it is nearly impossible to develop a clear and precise definition. "Alternative routes" have varying requirements and standards (Darling-Hammond, 1990). Completion of an alternative certification program many differ widely both intrastate and interstate. Cornett (1990) stated "the amount of professional education beyond a liberal arts degree required of alternative route

candidates can vary from only 9 hours in Virginia to the 45 credit hours required for a full masters degree or its equivalent in Alabama or Maryland" (p. 57). Entry standards for both alternative and traditional teacher certifications vary widely (Cornett, 2003; Darling-Hammond, 1990). Darling-Hammond (1990) concluded " the differences are now so substantial that state licensure systems cannot be said to share a common viewpoint as to what teacher ought to know and to be able to do, or even as to what "good teaching" is" (p. 127). Alternative certification programs in some states simply "give teachers without proper credentials an interim status and allow them to be employed while they work to earn the college credits that are equivalent to standard requirements for teacher education programs" (Cornett, 1990, p. 57).

To fully understand alternative certification a distinction between certification and licensure must be made. Certification is associated with the beginning of one's teaching career, while "Licensure is a function of the state acting on its authority to protect and promote the general welfare, and certification, which is the function of the profession itself acting to acknowledge those who demonstrate advanced capabilities" (Carnegie Forum on Education and the Economy, 1986, p. 65). Alternative certification, in some states, increases local school district control over teacher preparation and reduces the teacher shortage. Some school districts favor alternative certification, since most of the training and control take place at the local school or district level (Fenstermacher, 1990).

Alternative certification has both advocates and opponents. President George W. Bush supported state development of alternative certification strategies in his "America 2000" education reforms (Darling-Hammond, 1990). The United States Department of Education (2005) stated that Virginia was the first state to develop and implement an

alternative certification program in education. The No Child Left Behind Act of 2001 (NCLB) encouraged "development of alternative programs by noting these approaches streamline the process of certification to move candidates into the classroom on a fast-track basis" (p. 15). Alternative certification is also supported by some corporations and foundations who want to benefit from or influence school reform efforts (Darling-Hammond, 1990). Politicians who support school choice see alternative certification and deregulation of education policy as a step in the right direction. Their agenda is to "break the monopoly" by postsecondary institutions on teacher education (Fenstermacher, 1990). The development and promotion of alternative certification routes is in direct opposition to ongoing efforts by many in the postsecondary community to raise standards and requirements to allow teaching to be viewed as a "profession." The development of alternative routes has not altered traditional requirements in most states; however, they have become a legitimate path to circumvent them (Darling-Hammond, 1990). In addition, Darling-Hammond concluded "states which have opted to use alternative routes as a way of boosting supply by getting teachers into classrooms quickly with relatively little training are able to maintain a salary structure below market wages and to fill classrooms with relatively low investments in teacher training" (p. 149).

Research supports development of alternative certification; Kearns (1990) reported "teaching is an art, and the best teachers report that the most valuable things they learned were not in the college classroom but in the classroom in which they taught" (p. 14). Supporters of this position see teaching as "an intuitive craft" that can be learned on the job (Hawley, 1990b). Gomez and Grobe (1990) concluded alternative candidates rated as well on average as traditional education candidates in several aspects of teaching;

however, they were lower in the areas including knowledge of instructional techniques and instructional models. Gomez and Grobe's study found a wider variance in the performance of alternative teachers than in traditionally trained participants. Alternative route teachers from short-term programs reported less job satisfaction than fully certified beginning teachers (Lutz & Hutton, 1989; Sciacca, 1987). Wright & Bonett (1987) concluded "inadequate preparation" was the reason given by 20% of Los Angeles alternative route candidates who quit before completion of their program. Hawley (1990) indicated attrition rates in the first two years of teaching are somewhat lower in alternative certification teachers than in traditional certification participants. Teddlie, Kirby and Stringfield (1989) found 75% of the alternative or non-traditionally certified teachers were still teaching after two years in comparison to only 60% of those certified through a conventional bachelor degree program. Lutz and Hutton (1989) study found alternative certified teachers lose more self-confidence in their first year of teaching than do their traditionally certified counterparts. In addition, traditional certified teachers have received more instruction in theory, research, and teaching strategies. This might explain why these teachers have been found to be more responsive to student needs, more capable, and more interested in helping struggling students who have not mastered materials presented (Hawley, 1990b). Rosenberg and Sindelar (2001) found only seven studies of special education preparation through alternative routes. All seven studies found alternative certification reported favorable outcomes (Sindelar et al., 2004). Zeichner and Schulte (2001) arrived at the same conclusion; alternative route certification programs can produce effective teachers, especially if certain elements are part of the

program. These elements include; meaningful methods courses, field experience, supervision, and mentorship (Sindelar et al., 2004).

Adelman, Michie, and Bogart (1986) found alternative certification programs attracted well-educated individuals who were serious about their intent to be teachers, provided participants with more field experience and more intense supervision in the field than traditional programs, and produce subject area proficient teachers. The lack of randomization of the programs and participants allow serious questions about the findings from the study (Feistritzer & Haar, 2005). From 1990–2006, C. Emily Feistritzer, founder of the National Center for Education Information (NCEI), analyzed data from all states in the area of alternative certification. Cornett (1990) indicates Virginia was the first state to develop and implement an alternative certification program in education. In 2005, the NCEI reports that 47 states currently have alternative certification programs in one or more content areas. In addition, two additional states were considering developing programs to help address teacher shortages. Only Alaska had then decided not to allow alternative certification programs of any kind (NCEI, 2005). Since 2006, all 50 states and the District of Columbia have had alternative certification programs (NCEI, 2007). Feistritzer reported "based on data submitted by the states, NCEI estimates that approximately 50,000 individuals were issued teaching certificates through alternative routes in 2004–2005, up from approximately 39,000 the year before" (Feistritzer, 2006, p. 8).

Jianping Shen's (1997) study of demographics of alternative and traditional certification teachers found little difference between traditional and alternative certified teachers in the area of gender. There were more minority teachers among the alternative

certified, but little difference was found in age. Shen's research results have been questioned based on ambiguity of the survey. Sindelar et al.'s (2004) findings agreed that alternative route graduates can produce competent beginning teachers. The study highlighted differences between the groups. Traditional program graduates outperformed teachers who completed the university or district add-on alternative certification program in (a) making goals and instructional procedures clear to students, (b) presentation of content, and (c) monitoring student learning and providing appropriate feedback. Alternative certified teachers from both programs outscored traditional teachers in building relationships and in principal assessment (Sindelar et al., 2004).

The United States Department of Education, Office of Educational Research and Improvement supported the research report by Suzanne M. Wilson, Robert E. Floden, and Joan Ferrini-Mundy focusing on improving teacher preparation. There were questions and concerns about their results as well. Lipsey and Wilson, (2001) concluded that "the biases of the researchers (pro or con alternative routes) are often reflected in their analyses" (p. 31). Title II of the Higher Education Act and NCLB required additional reporting on educational issues. The result was *The Secretary's Annual Report on Teacher Quality*, an annual report that focuses on state teacher certification requirements, including alternative programs, the performance of teachers on licensure tests, characteristics of teachers and the number of teachers hired and their certification route. In the 2005 report, approximately 20% of the new teacher graduates came from alternative certification programs (Feistritzer & Haar, 2005).

Candidates entering alternative certification programs are individuals who, for varied reasons, want to access teaching through routes that circumvent traditional

postsecondary training (Hawley, 1990a). They are not likely to have a substantial background in education (Cornett, 1990). In most cases, their undergraduate degree is in a field other than education. Candidates tend to come from jobs at the low salary range rather than professional or management fields (Kirby, 1999).

In 2005, the National Center for Education Information conducted a national survey of 2,647 teachers who entered the teaching field through a variety of alternative programs. The NCEI deemed the sample reflective of each of the respective populations. Fifty-four percent of all respondents indicated they would not have entered the teaching field without access to alternative programs (Feistritzer & Haar, 2005). This translates to 1,430 teachers who would not be in classrooms without alternative programs.

Alternative Certification in Special Education

Research in the area of alternative certification in the area of special education is minimal at best. Only six specific alternative certification programs have been the focus of studies: Epanchin and Wooley-Brown (1993), Edelen-Smith and Sileo (1996), Gaynor and Little (1997), Rosenberg and Rock (1994), Burstein and Sears (1998) and Evans (2002) (Rosenberg & Sindelar, 2005). In 1995, Buck, Polloway, and Mortorff-Robb declared the growth of alternative certification in the area of special education as proliferation. In 2004, the National Center for Education Information surveyed state departments of education and found 34 states were implementing alternative certification programs in a variety of areas of special education with more than 175 different options and requirements (Feistritzer, 2006). The NCEI (2007) indicated all fifty states had developed alternative programs in areas of special education. Billingsley (2002) reported 24% of applicants seeking certification in special education were from alternative

certification programs. All six of these research studies focused on the specific program, their completion rate, and participant demographics. Other variables were examined in specific studies, including job satisfaction (Burstein & Sears, 1998), performance on state certification tests (Gaynor & Little, 1997), and classroom performance (Rosenburg & Rock, 1998). Few of the studies report credible measures of teacher performance (Rosenberg & Sindelar, 2005).

Four studies compare alternative certification and traditional certified participants. Banks and Necco (1987) focused on years of teaching and advanced degrees, Ludlow and Weinke (1994) analyzed programming based on document review and stakeholder interviews, Sindelar et al. (2004) utilized classroom observations, scores on the Praxis III, graduate surveys, and principal surveys, and Nougaret, Scruggs, and Mastropieri (2005) examined classroom observations and self-rating scales of participants (Rosenberg & Sindelar, 2005). The results of the comparison studies produced few results that could be generalized to alternative certification programs. Their findings did substantiate two critical propositions; alternative programs can produce competent teachers, but not all alternative programs are alike (Rosenberg & Sindelar, 2005). An additional conclusion of the Nougaret et al. (2005) study is that "regardless of whether graduates of alternative routes have completed their programs, graduates of traditional programs are likely to outperform them on objective measures of teacher performance" (Rosenberg & Sindelar, 2005, p. 123).

Alternative Certification in Kentucky

In the area of special education, high turnover and increasing numbers of students with disabilities have led Kentucky to develop alternative programs for certification

(KDE, 2010). The NCEI reports that since 2006, all 50 states and the District of Columbia have alternative certification programs (Feistritzer & Chester, 2003). Kentucky's alternative program allows college graduates "with competence in a cognate field of academic study and without previous courses in education to be employed in a school district as a paid, fully responsible teacher of record" (Haberman, 2006). According to the Kentucky Education Professional Standards Board (2011) Certification Division, 15 Kentucky colleges and universities offer some type of alternative certification program in areas of special education. Kentucky programs require a joint university and school partnership (Cornett, 1990). These programs have been successful in increasing the supply of special education teachers. The three major factors contributing to the rapid growth of alternative certification programs in the area of special education are severe and persistent shortages of qualified teachers, the need for a more diverse teaching staff, and the support of NCLB for alternative programs (Cornett, 1990). Alternative programs have not lead to an increased supply of teachers in some locations and have not significantly increased the number of older or male teachers (Cornett, 1990).

To a large degree, much of Kentucky's alternative certified special education teachers' educational experience occurs on the job within their classrooms. Currently, many of the Kentucky colleges or universities who offer alternative certification programs in the areas of special education also offer programs in other areas of necessity such as mathematics and science. Alternative certificates have grown over the last ten years. Only 20 of the 1,743 Kentucky teachers were issued alternative certificates in the 1990–1991 school year. From 1991 to 1996, no alternative certificates were issued. In

1997–1998 only 14 of the 2,191 were alternative certificates issued; however, in 2003–2004, 1,386 of the 3,088 were alternative certificates. In 2004–2005, 961 of the 3047 certificates issued were from alternative programs (Kentucky Department of Education, 2009).

As more teachers arrive in Kentucky classrooms from alternative certification programs, it is imperative districts make their initial year in teaching a positive experience. This is vital for teacher retention, but also crucial for improvement in the area of student learning and achievement. Retaining new teachers beyond their induction year is critical because experience is the number one teacher characteristic associated with instructional effectiveness (Murnane & Phillips, 1981). When districts fail to retain teachers they must employ new teachers, usually with little, or no, experience to replace staff. This cycle of inexperience negatively affects the instructional effectiveness of their staff and lowers the probability for gains in student achievement. These new teachers always enter their classrooms with a learning curve that might negatively affect their students. Teachers who are confident in their ability to make a difference in their students' lives are more likely to persevere when faced with adverse situations.

This is especially important for special education teachers because they are responsible for many students who have additional challenges (related and unrelated) to their disability. Many of these students originate from families who are considered to be in lower SES. Research has shown students from lower SES families have lower achievement scores and drop out of school at higher rates than students from high SES families (Boyle, Georgiades, Racine, & Mustard, 2007; Gutman, Sameroff, & Cole, 2003). Alvidrez and Weinstein (1999) stated that teachers are more likely to consider

students from higher SES families as having higher cognitive abilities and being able to achieve at higher levels academically. Students from lower SES families have higher retention rates and are more likely to be placed in special education (Ackerman & Brown, 2006; Bronfenbrenner, McClelland Wethington, Moen & Ceci, 1996; Sherman, 1994).

Teacher Quality

"Teacher quality matters" (Rice, 2003). The reality is that teaching is a complex activity influenced by many elements. Several research studies indicate teaching experience has a profound impact on a teacher's effectiveness. This is especially true of beginning teachers who benefit from the "learning by doing" approach. High-quality teachers also have a broad understanding of subjects taught and pedagogy (Rice, 2003).

Parents, educators, and policymakers view "teacher quality" as a significant concern. This concern is based on the absence of high levels of student achievement among students in public schools, especially minority and students from disadvantaged families (Sawchuk, 2009). Several studies indicate their concern is well-founded. Wright, McKibbon, and Walton (1987); Rowan, Chaing, and Miller (1997); and Rivkin, Hanushek, and Kain (2005) indicate substantial differences in student achievement across teachers and across schools. This is a real challenge for researchers and educators alike, since no empirical evidence has identified the specific "teacher characteristics" of teachers that can be directly linked to higher student achievement (Sawchuk, 2009).

Research has shown student success and achievement is positively related and attributable to teachers. Teacher effectiveness far outweighs class size and heterogeneity as a determinant for differences in student learning (Darling-Hammond, 1999). Two studies indicate there is no relationship between a teacher's measured intelligence and

their students' achievement (Schalock, 1979; Soar, Medley, & Coker, 1983). Other studies indicate a teacher's verbal ability is related to student achievement and the relationship is stronger for teachers of different types of students (Bowles & Levin, 1968; Coleman et al., 1966; Hanushek, 1971; Summer & Wolfe, 1975).

The research of teacher quality has three district stages based on data availability and empirical approaches (Sawchuk, 2009). The research in the first stage of teacher quality research was based on cross-sectional data and most often aggregated at the school level or district level (Hanushek, 1986). Hanushek concluded teacher qualifications such as teacher experience and education had only minimal effect on student achievement, however, the performance across teachers differed significantly. Inadequate controls for prior achievement of students was a real concern for this group of studies (Sawchuk, 2009).

The second stage of teacher quality research utilized year to year improvements in student achievements. Concern was taken to control for student background and prior student achievement (Sawchuk, 2009). Research results prior to 1979 indicate teachers' higher test scores on pedagogical tests were positively related to higher student test performance (Sawchuk, 2009). Ferguson (1991) concluded teacher's test scores on the Texas licensing test were related to student achievement in reading and writing skills. Professional knowledge of the teacher could account for 20–25% of the variation across districts in student test scores (Sawchuk, 2009). Ferguson and Ladd (1996) found smaller effects on student achievement when using the ACT scores in Alabama. Ehrenberg and Brewer (1995) indicated teacher test scores on verbal aptitude test were associated with higher gains in student scores. Sawchuk (2009) found student scores varied widely by

school level and student's racial/ethnic backgrounds. Rowan et al. (1997) concluded a positive and significant relationship between a teacher's responses to a one-item measure of math knowledge to student achievement in mathematics. Strauss and Sawyer (1986) stated a positive relationship between teachers' performance on the NTE and the district average NTE scores.

The third, or most recent, research in the area of teacher quality relies on "estimates from longitudinal student-level data using either the contemporaneous value-added model with fixed effects or the value-added gains model with fixed effects" (Sawchuk, 2009, p. 6). These studies rely on administrative data from states and have little information about teacher qualifications and preparation (Sawchuk, 2009).

Rivkin et al. (2005) was one of the earliest and important studies. Rivkin et al. found teacher quality has a large effect on student achievement, but only a small share of teacher quality is concerned with experience or education. They found significant variability of teacher quality within schools, less across schools (Sawchuk, 2009).

Jacob and Lefgren's (2008) study examined how differences in teacher quality affected student achievement in a midsized district. They found significant differences in value-added teacher effectiveness, but only a small effect considering teacher education or experience. They concluded principal rankings are better predictors of teacher performance than observed teacher qualifications (Buddin & Zamarro, 2008).

Harris and Sass (2006) utilized a value-added model to determine educational background and experience have a very small effect on teacher performance. They also concluded a teacher's college major and test score on the ACT or SAT are unrelated to their classroom performance. However, Clotfelter, Ladd, and Vigdor (2006) found

teacher experience, education and licensure test scores have positive effects on student achievement. The effects were larger in the area of math than in reading (Buddin & Zamarro, 2008).

In 2007, Goldhaber utilized the value-added gain score model to conclude teacher licensure test scores have little effect on student achievement. Upon this conclusion, Goldhaber argues raising the passing cut score on the licensure test in North Carolina would have a negligible effect on the pool of eligible teachers without having a substantial effect on student achievement scores. Koedel and Betts (2007) use a value-added gains model and also determined teacher quality is an important predicator of student achievement, but teachers' qualities, including experience, quality of undergraduate work, education level, and college major have little effect on student achievement (Buddin & Zamarro, 2008).

Aaronson, Barrow, and Sander (2008) examined teacher quality using a value-added gain score approach and found teachers have a strong effect on student achievement, but traditional measures of teacher quality such as education, experience, and credential type have little effect on classroom results. The consensus of all these studies is that teacher quality has a large effect on student achievement; however, only the Clotfelter et al. (2006) study indicates education and experience have a positive effect on student achievement (Buddin & Zamarro, 2008).

Special Education Teacher Quality

The history of special education and special education teacher preparation is relatively short. The first special education teacher preparation programs were in residential facilities directed by clinicians such as Sequin, Gallaudet, and Itard (Brownell,

Sindelar, Kiely, & Danielson 2010). During this categorical era, special education teachers were prepared to serve students with specific disabilities. The areas of greatest focus were speech and hearing, deafness, and mental retardation. The concept of disability was based in medicine and psychology during this period. Special education teachers were prepared with knowledge of a specific disability, its assessments and interventions (Brownell, Sindelar, Kiely & Danielson, 2010).

Research in the area of behavior techniques and special education created a modification in special education teacher preparation and quality beliefs. Labels or specific disability categories no longer were the focus of teacher preparation. During this noncategorical era, special education teacher preparation shifted to colleges and universities and focused on specific teaching interventions (DISTAR & Curriculum Based Measurement), behavior objectives, and systematic data collection (Brownell et al., 2010). Brownell et al. (2010) concluded that "in the noncategorical era, effective teaching required mastery of generic instructional and classroom management skills" (p. 363).

The Office of Special Education and Rehabilitative Services, Assistant Secretary Madeleine Willis (1986) issued a directive for shared responsibilities between regular and special education teachers for students with disabilities resulted in the inception of the integrated preparation era. Students with disabilities were increasingly receiving part or all of their education in the regular education classroom (Brownell et al., 2007). Pugach (1990) identified special education and general education teachers were being prepared together. Special education teacher quality had shifted to fill the needs of inclusion. Special education teachers were prepared to work in both self-contained and resource

room settings (Brownell et al., 2007). Research during this time indicated special education teachers and general education teachers needed to have different preparation. General education teachers were knowledgeable about curriculum and methods, but knew little about differentiating instruction. Special education teachers brought the knowledge of differentiation, assessments, academic and behavior interventions to the general education classroom; however they have varying degrees of content knowledge. The lack of content knowledge might affect the success of the specific special education teacher (Baker & Zigmond, 1990; McIntosh, Vaughn, Schumm, Haager, & Lee, 1993; Zigmond et al., 1995).

With the passage of the No Child Left Behind Act (NCLB) in 2001, teacher quality became a must larger part of federal law. Part A of Title I of NCLB requires states to ensure 100% of all teachers in core academic subjects (English, language arts, mathematics, science, foreign language, civics and government, economics, arts, history, and geography) be "highly qualified." They must demonstrate subject-matter expertise, hold state certification, and have a bachelor's degree-by the end of the 2006–07 school year (NCLB, 2001). In Kentucky, this requirement is met by possessing a degree in a content area, having a specific number of college credits in core content areas, having passed the PRAXIS in the content area, or being in an alternative certification program (Kentucky Department of Education, 2010). The passage of NCLB has led to the debate about how to define and measure special education teacher quality (Brownell et al., 2010). Teachers in alternative certification programs might have access to high-quality professional development and intensive supervision with structured guidance and ongoing support, however, not all alternative programs are the same (Brownell et al.,

2010). Teachers are allowed three years to complete the alternative certification programs (Learning Point Associates, 2007). Before we can evaluate the effectiveness of traditional or alternative routes to certification, we need to adequately define beginning special education teacher quality (Brownell et al., 2009).

Nearly 13.4 % of public school students have disabilities and receive some form of special education service under the Individuals with Disabilities Improvement Act (IDEIA) (National Center for Education Statistics, 2009). Three-fourths of these students score below the overall mean achievement level as compared to half the students in the general population (Wagner, Newman, Cameto, & Levine, 2006). NCLB addresses the concern over academic performance of students with disabilities by mandating that schools and districts meet "adequate yearly progress" (AYP) standards along with other sub-groups of students (NCLB, 2001). In 2006, over 13% of schools did not meet AYP standards solely because students with disabilities did not attain the achievement standards (Soifer, 2006).

As a direct result of educational reform, teachers have new roles and responsibilities. Murphy and Lewis (1994) concludes the "recasting of power relationships enhances teacher involvement in schools, helps teachers take on new responsibilities and roles, and strengthens relationships among staff" (pp. 29–30). Jones and West (2009) state "teachers must be trained to consider all aspects of a student's life in determining what to teach, how to teach it and how you will know when it has been taught" (p. 71). Special education teachers must also have a profound understanding of disabilities and to be able to identify and implement teaching strategies to increase student learning (Jones & West, 2009). Both NCLB and IDEIA compel teachers to use

research to guide their instruction (Carpenter, 2007). This will necessitate teachers who have the knowledge and skills to access information, evaluate research evidence, and apply what they have learned when designing a plan to address the needs of students with disabilities (Jones & West, 2009). Carpenter (2007) noted concerns around special education training and quality. Jones and West (2009, p. 69) identified "The nature and needs of this group of students are becoming more complex and challenging."

Research in the area of special education and teacher quality is very limited. Hanushek, Kain, and Rivkin (2002) addressed the effects of participation in special education in Texas public schools. Their study indicated special education services had a positive effect on the achievement of students with disabilities and that these same students did not have a negative effect on their general education peers while in a general education setting. Reynolds and Wolfe (1999) found children with learning disabilities benefited less from special education than did children with other types of disabilities. Blackorby, Chorst, Garza, and Guzman (2005) used data from the Special Education Elementary Longitudinal Study (SEELS) and found that students who spent the majority of their day in general education classrooms performed better on standardized tests. This study also found students with disabilities who received accommodations performed worse than students with disabilities who did not receive accommodations. The differences in the Blackorby et al. (2005) study likely reflect the ability level of the students rather than the placement (Feng & Sass, 2009). Even though these studies focus on special education services and placement they do not provide any significant insight to special education teacher quality (Feng & Sass, 2009).

Other research focused on the training of special education teachers. Research on special education training and classroom practices by Algozzine, Morsink, and Algozzine (1988); Sindelar et al. (2004); and Nougaret, Scruggs, and Mastropieri (2005) revealed graduates of a traditional special education teacher program had superior classroom practices compared to their counterparts from alternative certification programs (university-district partnership and a district add-on program). Overall, traditionally certified special education teachers perform better than emergency certified special education teachers (Feng & Sass, 2009). The studies above all share the same shortcomings. The subject size was small (less than 50), the teachers observed were not chosen at random, and the study did not take into account general education teachers who might have been instructing the students with disabilities as well (Feng & Sass, 2009). Most importantly, none of the existing research studies "directly connect the education and the training of the teachers to student outcomes" (Feng & Sass, 2009, p. 8).

The role of special education teachers is complex and requires training in many areas. Research indicates special education teachers at the elementary level should know how to teach students to read, have some knowledge of mathematics, and provide writing instruction. They also require knowledge concerning disabilities, teaching basic skills to struggling students, motivating students, classroom management, and social skill development (Brownell et al., 2009). Many special education teachers rotate from classroom to classroom during the day. They also are responsible for students with disabilities of various age ranges and cognitive ability. Researchers have found it very difficult to assess teacher effectiveness since, in many cases, students with disabilities have more than one teacher and both are responsible for instruction (Feng & Sass, 2009).

IDEIA's requirement that students with disabilities be educated alongside their general education peers complicates research efforts as well (Brownell et al., 2009). Peers might have an impact on a student's achievement (Feng & Sass, 2009). To accurately assess the quality and effectiveness of the special education teacher, the influence students with disabilities obtain from their interaction with general education staff and their peers must be assessed (Feng & Sass, 2009).

Feng and Sass's (2009) research on special education teacher quality and student achievement found strong evidence that "teachers with substantial amounts of special education course work (measured by certification status) are more effective in promoting achievement gains for students with disabilities in regular education courses that teachers without such preparation" (p. 19). They also found experience had a much greater impact in special education classroom settings than in general education classrooms. In addition, Feng and Sass concluded that "reducing certification requirements for special education teachers via alternative certification programs may be counterproductive" (p. 19). Advanced degree attainment is positively associated with student learning gains; however, professional development, including special education professional development, appears to have little or no positive effect on the achievement of students with disabilities (Feng & Sass, 2009).

Special Education Teacher Concerns and Job Satisfaction

Most job satisfaction research is investigated as an organizational behavior (Spector, 1997). Research on job satisfaction varies; Peretomode (1993) and Whawo (1993), as cited in Oloube (2005), suggested job satisfaction increased with the prestige of the position.

Job satisfaction and motivation are crucial for long-term growth in any education system. They are important in the same way as professional knowledge, teaching skills, and access to educational resources (Oloube, 2005). Filak and Sheldon (2003) stated that job satisfaction and motivation occur when one feels effective taking on and completing challenging tasks directed at educational success and performance. In this context, job satisfaction can be the ability of the teaching job or position to meet an individual teacher's needs and improve their job/teaching performance (Filak & Sheldon, 2003). Job satisfaction is not the behavior, but the fulfillment acquired by various aspects of the job (Oloube, 2005). Hoy and Miskel (1987) stated employee motivation "is the complex forces, drives, needs, tension states, or other mechanisms that start and maintain voluntary activity directed towards the achievement of personal goals" (p. 176). Dessler (2001) defined motivation as a person's desire to engage in any activity. Motivation is primarily goal-directed behaviors (Filak & Sheldon, 2003). Research has found job satisfaction has the strongest direct effect on teacher's intent to stay (Billingsley & Singh, 1996).

Teaching has always been a profession characterized by conflict, ambiguity, and a heavy workload. Classrooms are locations where situational dynamics can change very quickly, sometimes with unexpected consequences and results, in the presence of both staff and students (Van de Berg, 2002). Each year across this nation, thousands of new teachers enter their classrooms for the first time. New teachers made up 14% of the total teachers in the 2007–2008 school year. This number translates into 516,500 teachers (National Center for Educational Statistics, 2010).

In 1993, the United States Department of Education conducted a large-scale study and found 40% of American teachers were strongly dissatisfied with their workload, the resources available to them, the support received at the school and district level, and the procedures used to measure their effectiveness. Nearly 50% were dissatisfied with their ability to influence school policy, and 75% were unhappy with the how the public perceived and evaluated their work (Van de Berg, 2002). As a response to federal regulations, a rise in the number of students with disabilities and the accountability factor of NCLB on the achievement of students with disabilities, special education teachers are increasingly frustrated and dissatisfied (Feng & Sass, 2009). Independence, understanding, compassion, empathy, and patience are important traits for special education teachers (Eichinger, 2000). Dissatisfaction has been associated with teacher absenteeism, turnover, illness, and stress (Culver, Wolfle, & Cross, 1990; Sutton & Huberty, 1984).

Today's educational landscape finds schools across the nation dealing with limited funding, increased responsibilities, and public scrutiny. Special education teachers are faced with ever-increasing responsibilities, additional paperwork, and more challenging students (Stempien & Loeb, 2002). Research is clear; the major challenge for the twenty-first century is attracting, retaining, and satisfying teachers of students with disabilities (Rosenberg, Griffin, Kilgore, & Carpenter, 1997; Simpson, Whelan, & Zabel, 1993; Smith-Davis & Billingsley, 1993). The link between job satisfaction and a teacher's decisions to depart is well-established (Billingsley & Singh, 1996; Gersten, Keating, Yovanoll, & Harniss, 2001; Shreeve, Norby, Goetter, Stueckle, Midgley, & Goetter, 1988). Fimian and Blanton (1986) found stress and low job satisfaction were a

primary motivating factor for teachers who abandoned their careers. Eichlinger (2000) found the connection of job satisfaction and stress associated with the special education teachers' decision to leave. Shreeve et al., (1988) and Singer (1993) found less-experienced special education teachers were more apt to leave their positions due to low job satisfaction brought about by the stressors of the field of special education. Kilgore and Griffin (1998) reported special education teachers described themselves as insufficiently prepared, frustrated, and exhausted. Rosenberg, O'Shea, and O'Shea (1998) also found stress and pressure greater in less-experienced special education teachers. Ascertaining the reasons for decreased job satisfaction and high levels of stress are critical if a sufficient amount of special education teachers are to be retained in the workforce (Stempien & Loeb, 2002).

Nichols and Sonsnowsky (2002) found special education teachers are more vulnerable to stress or professional burnout than human service providers. Zabel and Zabel (2002) indicate special education teachers are deeply involved with people, in this case students, in the same way as nurses, physicians, and police officers. A special education teacher's sense of accomplishment is diminished by emotional exhaustion and depersonalization (Nichols & Sonsnowsky, 2002). Embich (2001) found that four main problems beyond personal control of the special education teacher are the major contributors to burnout and job dissatisfaction. These factors are: conflicting roles between general and special education teachers, role ambiguity, additional paperwork, other special education specific responsibilities, and lack of administrative support (Piotrowski & Plash, 2006). Gersten et al. (2001) stated that special education teachers believe they are hired to teach children with disabilities, but end up spending a majority

of their day completing paperwork and attending meetings. In addition, special education teachers felt "their influence and power in the class had been weakened over the years by changes in the demographic characteristics of the student body" (Cothran & Ennis, 1997).

Job satisfaction contains both intrinsic and extrinsic factors. The greatest impacts on job satisfaction are the intrinsic factors such as a sense of accomplishment, self-worth, and personal growth (Davis & Wilson, 2000). Job satisfaction might also originate from the success in working with students, interactions with colleagues, and the success of daily activities in the classroom (Perie & Baker, 1997). Job satisfaction for teachers occurs when they are satisfied with the success they have in the areas of their individual responsibility, challenging work, and opportunities for achievement and advancement (Johnson & Johnson, 1999).

Extrinsic factors affecting job satisfaction include salary, fringe benefits, school safety, level of building-level support, and job security. Research indicates extrinsic factors do not significantly affect the level of job satisfaction of teachers (Baughman, 1996; Johnson & Johnson, 1999; Perie & Baker, 1997). Perie & Baker (1997) found few individuals enter the teaching profession because of the amount of potential salary, benefits, or prestige. That does not mean these extrinsic factors are inconsequential to job satisfaction. If salary or fringe benefits are considered sub-standard or unfair, job dissatisfaction might occur. Extrinsic factors might affect teacher morale, teacher productivity, or job satisfaction (Johnson & Johnson, 1999).

Research has found three major factors of teacher job satisfaction are community factors, school environment, and teacher background. Teachers are more satisfied in communities with greater economic growth, in schools with a great degree of resources

and support, and when their backgrounds are comparable to the student's backgrounds in the schools where they teachers (Sargent & Hannum, 2003). Conditions in schools have an impact on teachers' job satisfaction (Perie & Baker, 1997). A strong school culture directly correlates with teacher attitudes concerning their work. Stronger school cultures have more motivated teachers with higher job satisfaction (Stolp & Smith, 1994). Research indicates teachers who are empowered and have a greater sense of autonomy have higher levels of job satisfaction (Wilson, 2000). This empowerment might come when teachers have increased control over their classrooms as well as other school-level decisions (Perie & Baker, 1997). Not all researchers agree with this assessment. Davis and Wilson (2000) contend teacher empowerment can lead to increased job stress and decreased motivation.

Job satisfaction is critical for schools to meet the needs of their students and reach their potential. It is also vital for strong teacher commitment and school effectiveness. Shann (1998) indicated district support and actions by school administrators were predictive of the level of job satisfaction of the teaching staff. Teacher satisfaction is important to educational reform. Shann (1998) found teacher satisfaction influences job performance, attrition, teacher interactions with students, and student performance.

Addressing teacher concerns is of great consequence for all educational organizations. Dissatisfied or unhappy employees become discouraged, resulting in burnout. Burnout happens to some of the most able and committed people in the teaching profession. Maslach and Leiter (1999) indicate teacher burnout is a serious problem in today's workplace. Burnout was first described as emotional exhaustion, depersonalization, decreased personal skills, and diminished competence (Maslach &

Leiter, 1999). Burnout has been particularly associated with professions and situations where there is a special relationship between the provider of a service and the recipients. This relationship is based on emotional experiences (Van den Berg, 2002).

Eichinger (2000) describes burnout is as "a syndrome of emotional exhaustion and cynicism that often occurs among individuals who work with people" (p. 400). As pressures and responsibilities increase in the workplace, the result is physical and emotional exhaustion, negative attitudes toward the job, and a feeling of being totally overwhelmed (Weisberg & Sagie, 1999). Burned out employees perform their jobs at a bare minimum level (Maslach & Leiter, 1999). Research indicates the symptoms of burnout lead to erosion of idealism, increased depression, frustration, depersonalization or negative feelings toward students and staff, and cynicism and detachment from co-workers (Bryne, 1998; Eichinger, 2000; Friedman, 1993; Lumsden, 1998). Teachers who are frustrated or burned out might have a negative impact on the school environment. They are less tolerant to their students, have poor attitudes toward their students and colleagues, provide diminished quality of instruction, and are preoccupied with the prospects of leaving the profession. These teachers do not provide the support necessary for students to reach their potential (Briggs & Richardson, 1992). When teachers are motivated and have a high degree of job satisfaction, students do better in school, become motivated, and, as a result, teachers become motivated by their students' success and the positive cycle continues (Czubaj, 1996). It is clear that when teachers are provided with what they need to remain inspired and enthusiastic, with a sense of optimism for teaching, both students and teachers are the beneficiaries (Lumsden, 1998).

There is an abundance of research in the areas of job stress and job satisfaction among teachers. The majority of this research has been completed in other areas outside special education. Veenman's (1984) research found one constant: "the more problems beginning teachers encountered, the more likely they were to leave teaching" (p. 156). Turner and Lawrence's research (1965) indicated in order the top five teacher problems were: working with students with discipline problems, having the inability to motivate students, dealing with the individual differences among students, assessing student's work and progress, and working with parents. Veenman (1984) and Bouchard and Hull (1970) stated 75% of their participants noted their satisfaction depended on their ability to motivate their students to learn. This research was completed prior to students with disabilities being in most classrooms (Veenman, 1984). In today's schools special education teachers not only face these top five teacher concerns every day, but they are the cornerstone of the area of special education.

A large body of literature spanning several decades addresses the needs and experiences of beginning general educators (Fuller, 1969; Gold, 1996; Weinstein, 1988). Research on teacher concerns began in the late 1950s and continued into the 1960s and beyond. Most of these studies focused on the nature of teacher concerns and were not specific to special education teachers (Fuller, 1969). Most of the more recent studies have used surveys to "describe the nature and development of teaching concerns" (Ghaith & Shaaban, 1997, p. 489). These studies concluded that teacher concerns consist of a wide range of issues such as classroom management, meeting the expectations of administrators and parents, and providing ways to improve and bring about change to the educational system (Barkhuizen, 1997; Evans & Tribble, 1986; Guillaum & Rudney,

1993; Pigge & Marso, 1997; Marso & Pigge, 1987; Reeves & Kazelskis, 1985; Veenman, 1984). Fuller (1969) and Fuller and Brown (1975) examined the concerns of novice teachers. They concluded beginning teachers were more concerned about their individual abilities including classroom management, their skill and knowledge base, finding a way to "fit" into the existing power structure in the school, and their ability to work with parents. Fuller and Brown concluded teachers' concerns change as they gain more experience.

Fuller (1969) and Fuller and Brown (1975) constructed the Theory of Teacher Development. Using previous and current research, they posed three stages of teacher concerns during their early years in the profession. The first phase is the survival stage, where the concerns are linked to a teachers' ability to control the classroom, be liked by students, and be successful in their teaching evaluations. The second phase concerns their teaching situation, including their usage of materials and methods and mastery of their own skill within the teaching situation. The final stage concerns their relationship and interactions with the students. This includes motivation; meeting the academic, emotional, and social needs of their students; and relating to each student as an individual. Fuller's (1969) theory is supported by additional research completed by Adams, Hutchinson, and Martray (1980) and Adams and Martray (1981). Lanier and Little (1986) found Fuller's Theory of Teacher Development applied to teachers in alternative programs as well. These teachers experienced similar concerns but not necessarily in any particular sequence.

However, research results are not consistent in the area of teacher concerns. Studies indicated teacher's "self-survival" concerns decreased with the increase in the

years in the classroom (Pigge & Marso, 1987; Richards & Gipe, 1987). Many of the studies support Fuller and Brown's (1975) findings that teachers' concerns change over time. The sequence of these changes did not prove to be consistent (Calderhead, 1989; Pigge & Marso, 1987; Reeves & Kazelskis, 1985). Studies by Guillaume and Rudney (1993) concluded "many personal, program, and context variables may interact with classroom experiences to arouse teacher concerns" (p. 66). Examples of the personal variables that have been found to influence the perception of teacher concerns include gender (Pigge & Marso, 1987), reflections based on cognitive structures (Winitzky & Arends, 1991), and teacher belief systems and perceptions based on previous school experiences (Bullough, 1990; Calderhead & Roboson, 1991; Ghaith & Shaaban, 1997; Zahorik, 1989). Research supports the concept that the type of postsecondary educational program influences the perceptions of teaching concerns by student teachers (Ghaith & Yaghi, 1997a). Research concluded that student teachers enrolled in a three-year undergraduate program had higher concerns than did those student teachers who were enrolled in a one-year post B.A. diploma program across areas of self-survival, tasks, and impact categories of teacher concerns (Ghaith &Yaghi, 1997b).

Teaching is an interactive process built on a social relationship between teacher and student (Burbules, 1986).Many new teacher concerns are associated with the reality that teaching is not what they expected (Cothran & Ennis, 1997). New teachers quickly find that students have power of their own: "Reciprocal power exists in a group when each member achieves a degree of control over the other and is simultaneously subject to control by them" (Pauley, 1991, p. 57).

Quickly, new teachers learn negotiation is a large part of their job. Students are also conscious of their power within the classroom. They quickly assess the teacher's understanding of the situation and they decide how they are going to use their power to affect the classrooms (Cothran & Ennis, 1997). Students decide to withhold or reward their teachers with their compliance to interact with the curriculum or to behave appropriately. If compliance is given, this allows a teacher to instruct the class and the other students to learn in a productive environment (Pauley, 1991). For special education teachers, the power dichotomy is even more apparent. They are responsible for students who, although small in number, are more aggressive in their strategies to cause disruption to a classroom (Billingsley & Singh, 1996). The students are more aware of their power in the classroom and are much more willing to exercise it in order to pursue their own goals. These "slow down" tactics have intentionally disrupted instruction and created stress and frustration on the part of the teacher (Cothran & Ennis, 1997). Sedlak, Wheeler, Pullin, and Cusick (1986) stated that "even a few disruptive students can undermine the authority of even those teachers who are strongly committed to academic learning" (p. 101).

Many times, the teaching tasks are more difficult and demanding than teachers in their early career had imagined. If left unaddressed, these teacher concerns might lead to a decline in job satisfaction. Research indicates job satisfaction is "significantly related to a person's decision to leave (or never enter) teaching" (Chapman, 1984, p. 654). The National Education Association (2006) stated that attrition of a new or novice teacher is a result of these teachers becoming overwhelmed by the scope and expectations of the job. In many cases, teachers underestimate the time it takes to prepare to teach, overestimate

their abilities (Weinstein, 1988), and hold unrealistic expectations (Gold, 1996). Teachers also report they feel isolated, lack support from administration and, in some cases, are unclear about expectations. Billingsley (1993) reported the strongest influence on job satisfaction was principal support followed by role-related concerns. Teachers who have supportive principals find their work more rewarding (Rosenholtz, 1989), experience greater job satisfaction (Chapman & Hutcheson, 1982), and experience less job stress and burnout (Zabel & Zabel, 1982).

Even though researchers consider working conditions and support systems important, very few studies have been conducted in the area of special education (Billingsley & Tomchin, 1992; Griffin, Winn, Otis-Wilborn, & Kilgore, 2003). However, nine studies concerning special education teachers were reviewed by Billingsley (1993) to determine the factors leading to attrition among this group of teachers. Five of the nine studies indicated job stress, decreased job satisfaction, and burnout are the most significant factors and "Therefore to help alleviate this shortage, it is important to examine job stress and satisfaction among special educators to determine ways to reduce stress and increase satisfaction" (Eichinger, 2000, p. 397). Billingsley, Carlson, and Klein (2004) stated "Careful attention to the working conditions and the induction of early career special educators is needed if we are to build a committed and qualified teaching force" (p. 333). Many teachers do not receive the intrinsic rewards they anticipated upon entering the teaching profession (Gold, 1996). Teachers become frustrated, which leads to reduced job satisfaction, which then "leads to disillusionment, burnout, and finally, attrition" (Billingsley et al., 2004, p. 334). Frustration from an overload of teacher responsibilities have been reported in many special education studies (Bensky et al.,

1980; Billingsley, 1993; Dangel, Bunch, & Coopman, 1987; Olson & Matuskey, 1982; Platt & Olsen, 1990). Teachers are being asked to perform many duties that are not directly related to teaching the curriculum leading to teachers' frustration and resentment at having to "do it all."

Many of the additional special education teacher responsibilities were once dealt with by parents. Parents are increasingly busy and unable or unwilling to play a major role in helping students at home. Many students come from single-parent households or family units where both parents work. These occupational demands decrease the amount of time parents have to support their students in the classroom. Teachers and students now bear increased responsibilities for homework completion as well as other school related activities (Conklin &Weil, 1997).

Role-related problems, such as additional monitoring and other required paperwork, can result in role overload. Role overload has been linked with decreased commitment in previous research (Morris & Koch, 1979; Morris & Sherman, 1981). Specific role problems, such as excessive paperwork, high caseloads of students, and frequent meetings, have been linked to burnout among special educators (Crane & Iwanicki, 1986; Fimian & Blanton, 1986). Billingsley's (1993) research indicates role-related problems are twice as high among special education teachers as they are among their regular education colleagues. Since the results of this research, the magnitude of required special education paperwork has risen and, with it, additional frustration on the part of special education teachers. Each of their students with disabilities has "a written plan that provides for reasonable accommodations or modifications in assessment and instruction as a means to create a fair and level playing field for students who qualified as

disabled" (Hardman, Drew, & Egan, 2006, p. 48). In addition to Individual Education Plans (IEP), special education teachers have additional (at least weekly) progress meetings for each student and annual conferences with parents.

In addition to the "paperwork overload" special education teachers work with many students with disabilities who come from different backgrounds or cultures than their own. Nieto (2005) stated that almost 40% of the student base represents minority populations. Working with students of different backgrounds can lead to misunderstandings and cultural clashes within the classroom. This can be especially disconcerting for early career teachers. Prior or shared experiences with people of diverse backgrounds tend to increase confidence (Bakari, 2003; Causey, Thomas, & Armento, 2000; Taylor & Sobel, 2001).

Goodlad (1984) indicated teachers who had entered teaching because of inherent professional values were more satisfied and committed as compared to those whose entry into the occupation to simply have a job. Billingsley (1993) found that special education teachers who had been in the profession longer had a stronger intent to stay. This is consistent with other research in the area of special education (McKab, 1983; Mezke, 1988; Seery, 1990; Singer, 1993). Not all teachers who are appreciably dissatisfied leave the profession; many choose or are forced by circumstance to remain. Research has shown they are far more likely to put forth less effort. These remaining teachers might have a negative effect on the remainder of the current teaching staff (Billingsley, 1993). The most frequent explanations in Goodlad's (1984) research for teachers leaving the profession were a low sense of efficacy stemming from their own job performance or their students' low achievement in the classroom. Ingersoll (2001) cited the five most

common reasons for teacher attrition as teacher retirement, school staffing actions, personal reasons, another job opportunity, and job dissatisfaction. Nearly 41% of attrition can be attributed to teachers leaving to pursue opportunities in another field and dissatisfaction in the current workplace (Ingersoll, 2001). Research reports dissatisfaction is a result of "low salaries, lack of support from school administration, lack of student motivation and student discipline problems" (Ingersoll, 2001, p. 522).

With the exception of salary considerations, special education teachers are perhaps more directly affected by the areas reported as leading to job dissatisfaction. Special education teachers work with students who have the most severe academic concerns, often lack motivation, exhibit the most challenging behaviors, and require specific strategies which address their unique needs. Academic progress is slow and, in some cases, inconsistent. Additional documentation related to compliance issues at the state and federal level is a daily requirement for special education teachers (Billingsley, 1993). These beginning teachers are often given the most challenging assignments, the least desirable courses, and the most ill-equipped classrooms (Feiman-Nemser, 2003). Many times these conditions lead to job dissatisfaction and further attrition in early career teachers (Darling-Hammond, 2003; Gold, 1996; Gissmer & Kirby, 1987; Odell & Ferraro, 1992).

Walker et al.'s (2004) research classified their teacher respondents as stayers, movers, and leavers. They found teachers who left did so because they were dissatisfied with their job duties or their interaction with administrations. For special education teachers, the danger is not only the numbers of teachers leaving but also the number of special education teachers who would be considered "movers." These teachers simply

transfer out of the area of special education as soon as possible due to the working conditions and increased clerical requirements in the field (Billingsley et al., 2004). Knowledge of the needs and experiences of concerns of general educators encompass literature spanning decades, while the experiences and support of special educators have received attention only recently (Billingsley, 2004b). Most of the research in the area of special education is case studies (Boyer, 2001) or qualitative studies utilizing only a few teachers (Billingsley & Tomchin, 1992; Cheney, Krazewski, & Combs, 1992; Kilgore & Griffin, 1998). The research results are consistent. Concerns in the area of special education include the area of curriculum and instructional issues, work conditions, ambiguous roles, locating materials, addressing students' problem behaviors, time and organizational issues, collaboration, stress and instructional management concerns (Griffin, Kilgore, Winn, & Otis-Wilborn, 1999). Whitaker (2000) indicates mentors for beginning and novice special education teachers can lead to more job satisfaction. He also indicates it is important the mentor be another special education teacher or someone who is very familiar with the various job responsibilities of a special education teacher.

Special education teachers must experience a significant degree of job satisfaction in order to develop and mature into master teachers. Research indicates that "job satisfaction plays an important role in determining whether or not graduates remain in their chosen career" (Garton & Robinson, 2006, p. 553). In addition to job satisfaction, special education teachers must have a sense of their own worth and ability to make a difference for their students and to create a successful learning environment. If not, we will continue to see special education teachers leaving the profession in far greater numbers than their regular education counterparts. The retention rate after one year of

teaching was significantly lower for special education teachers (89%) than it was for general education teachers (94%) according to Stempien & Loeb (2002). A survey of 402 teachers of students with behavioral disorders found that nearly half of them considered taking a job in general education during the previous few years (McManus & Kauffman, 1991).

The relationship between job satisfaction and teachers leaving the profession is well-documented (Gersten et al., 2001; Shreeve et al., 1988; Billingsley & Singh, 1996). Several studies have documented stress and the resulting job dissatisfaction which motivated people to abandon their positions (Fimian & Blanton, 1987). This relationship between job satisfaction and job stress is well-documented in the area of special education (Eichinger, 2000). The common stressors documented in special education literature are heavy workload, dealing with students with disabilities, especially those with behavior concerns, completion of tasks and paperwork in a timely manner, and the perceived lack of student success (Stempien & Loeb, 2002). The result is lowered confidence by teachers and increased frustration (Kyriacou & Sutcliffe, 1978).

The beginning or novice special education teachers have the lowest level of job satisfaction (Shreeve et al., 1988), and are more likely to leave their positions (Singer, 1993). These studies might indicate the frustration level of early career special education teachers might be the result of adjustment issues rather than chronic conditions (Stempien & Loeb, 2002). Research indicates beginning special educators report different concerns and problems than their regular education counterparts (Kilgore & Griffin, 1998). Beginning special education teachers describe themselves as "insufficiently prepared, frustrated, and exhausted" (Stempien & Loeb, 2002, p. 259). The research of Rosenberg

et al. (1998) documents the difference in concerns and pressures unique to inexperienced special educators.

Other studies do not support any significant difference in the job satisfaction or teacher concern levels of special educators versus general educators. Darcy, Kusznikow, and Lester (1995) found no difference in job satisfaction between 31 special education teachers and 31 regular education teachers. Billingsley et al., (2004) found no overall difference in job satisfaction between the two groups of teachers. One of the reasons for the conflicting results might be the range in the job responsibilities of special education teachers and the diversity among the students with disabilities they serve. Research indicates teachers of gifted and talented students have a higher degree of job satisfaction than teachers of students with learning disabilities. Teachers of students with behavioral issues reported the least job satisfaction with their working conditions (Stempien & Loeb, 2002).

Teachers who are humanistic foster interpersonal relationships. Hoy (2001) states this type of teacher encourages students to become self-disciplined and self-regulated. Teachers who demand students' conformance instead of trying to understand the causes of misbehavior are much more apt to become frustrated and feel discouraged when they cannot simply "make" students conform.

Professional commitment refers to teachers' willingness to "go the extra mile" to ensure that students succeed (Lewis, 1998). Teacher self-efficacy is also an important indicator of the degree of teacher's commitment and job satisfaction (DiPaola & Hoy, 2005). Lewis (1998) concluded teacher's personal and professional investments are indicated "by specific behaviors that indicate extra effort as well as by attitudes" (p. 3).

Teachers' sense of efficacy is an indication of the degree teachers are conscientious about their teaching, altruistic in their behavior, courteous to others ,and committed to the civic virtue of helping others (DiPaola & Hoy, 2005). Teachers with a high sense of efficacy and job satisfaction "tend to foster a classroom climate that is warm and supportive of student needs" (Fritz, 1995, p. 201). A nurturing learning environment is likely to enhance students' perceptions of themselves and their abilities (Bandura, 1986).

MetLife's 2010 Teacher Survey indicates job satisfaction for teachers is at an all-time high: "Teachers are more satisfied with their jobs now than they have been in the last 25 years" (p. 1). This study indicates job satisfaction among the 1,000 teachers surveyed increased from 40% in 1984 to 62% in 2008. Considering the importance of teachers and the potential shortages, the fact that 75% of the teachers in the survey would recommend teaching as a profession might be a strong indicator to individuals considering education as their chosen profession.

Job Satisfaction Measures

Job Satisfaction scales focus on cognitive and affect influences of the job. The cognitive aspects of the job are considered extrinsic and include salary, fringe benefits, working conditions, and opportunities for advancement (Moorman, 1993). These areas are outside of the direct control of the individual worker and require appraisals of the job (Moorman, 1993).

Cognitive appraisals of the job are certainly important, but are not the focus of the study. The interest of the study is participants' feelings and emotions sensed as a result of their current teaching position. There were three affective job satisfaction measures considered for use in the study. They include the Facet Free Job Satisfaction Scale

(Quinn & Staines, 1979), the Job Diagnostic Survey (Hackman & Oldham, 1975), and the Brayfield Rothe Job Satisfaction Index (1951) as modified by Warner (1973). Williams (1988) compared these three scales by examining their affective and cognitive components and found that 27% of the variance in the Facet Free scale and 18% of the variance in the Job Diagnostic Survey could be explained by affect. Conversely, 22% of the variance in the Brayfield Rothe Job Satisfaction Index could be explained by affect and only 16% could be explained by cognitions. Williams concluded the Brayfield Rothe Job Satisfaction Index was more affective in its orientation. Moorman (1993) indicated the Brayfield Rothe Job Satisfaction Index includes questions that center on the respondents' emotional reactions to their work. These include respondents' feelings of being bored, interested, happy, enthusiastic, and disappointed by their work.

The Brayfield Rothe Job Satisfaction Index is a unidimensional job satisfaction scale (Moorman, 1993). This job satisfaction instrument was used in research studies by Bowen and Radhakrishna (1991); Bruening and Hoover (1991); and Walker, Garton, and Kitchel (2004). The psychometric properties of the Brayfield Rothe Job Satisfaction Index as modified by Warner (1973) have been supported by the following research: Brief and Roberson (1987), Williams (1988), and Price and Mueller (1986). Even though it is one of the older job satisfaction scales, the Brayfield Rothe continues to be an effective scale to measure intrinsic job satisfaction. Moorman (1993) reports after comparison of the three job satisfaction scales, Brayfield Rothe represents "a more affective job satisfaction scale" (p. 771).

The items on the Brayfield Rothe Job Satisfaction Index ask for an evaluation of the participants' feelings rather than on a comparison of outcomes received. The

Brayfield Rothe Job Satisfaction Index was modified by Warner in a study in 1973, and has been employed in many other studies. The Brayfield Rothe Job Satisfaction Index (1951) as modified by Warner (1973) consists of fourteen questionnaire items with five possible responses per item. The potential responses to the items range from "strongly agree" to "strongly disagree." The questionnaire included items such as the following:

1. My job is like a hobby to me.
2. I feel fairly well satisfied with my present job.
3. I feel that my job is not more interesting than others I could get.

The Brayfield Rothe Job Satisfaction Index (1951) as modified by Warner (1973) is considered to be valid and reliable. Cano and Miller (1992) reported a reliability of .94 (Cronbach's Alpha) The Spearman-Brown split-half internal-consistency reliability coefficient for this index was .87.

General Teacher Efficacy

Teachers are key change agents in the classroom, yet inadequate attention has been paid to traits that optimize teachers' success (Fritz, Miller-Heyl, Kreutzer, & MacPhee, 2001). The study of efficacy can be traced to the early psychological research of Heider (1958), White (1959) and Guskey and Passaro, 1993. Guskey and Passaro (1994) stated "The earliest reference to efficacy in the Educational Resources Information Center (ERIC) is a study by Barfield and Burlingame (1974) in which efficacy is defined as a personality trait that enables one to deal effectively with the world" (p. 628). General teacher efficacy is teachers' belief about whether teaching can affect student learning despite external constraints. This construct was first labeled teaching efficacy and later changed to General Teacher Efficacy (Henson, 2001).

Empowerment is defined "as a process whereby school participants develop competence to take charge of their own growth and resolve their own problems" (Rinehart, Short & Eckley, 1998, p. 635). An important aspect of teacher empowerment is self-efficacy. Tschannen-Moran and Woolfolk-Hoy (2001) stated "A teacher's efficacy belief is a judgment of his or her capabilities to bring about desired outcomes of student engagement and learning" (p. 783). Ross, Cousins, and Gadalla (1996) agreed about the importance of teachers' efficacy by stating "efficacy is one of the few individual teacher characteristics that reliably predicts teacher practice and student outcomes" (p. 385).

Ashton (1985) stated "teachers' sense of efficacy, their belief in their ability to have a positive effect on student learning" (p. 142), has been related to specific variables as student achievement (Armor et al.,1976), student motivation (Midgley et al., 1989; Woolfolk et al.,1990), teachers' adoption of innovations (Berman et al., 1977; Guskey, 1988; Smylie, 1988), superintendents' ratings of teachers' competence (Trentham, Silvern, & Brogdon, 1985), and classroom management strategies (Ashton & Webb, 1986). The degree of teacher efficacy can also make a difference as to whether students who are struggling are referred to special education (Hoy, 2000). Efficacy generally is assumed to be the independent variable; therefore, most of these studies do not indicate causal links between efficacy and outcomes (Hoy & Woolfolk, 1993).

Research has paid very little interest to the traits or characteristics that motivate teachers to become great. One motivational aspect important to classroom effectiveness is the teacher's sense of efficacy (Ashton & Webb, 1986; Gibson & Dembo, 1984; Greenwood et al., 1990). Teacher self-efficacy has been determined to be an important factor in predicting student achievement. Teacher's sense of efficacy also is a predictor of

their sense of confidence in the classroom (Anderson et al., 1988). Ghaith and Shaaban, (1999) concluded "more efficacious teachers are more likely to take charge of their own growth and to resolve their problems" (p. 488). Much of the teacher efficacy research focuses on definition or measurement of the construct as it relates to career commitment (Guskey & Passaro, 1994; Knobloch & Whittington, 2002, 2003; Tschannen-Moran et al., 1998; Tschannen-Moran & Woolfolk-Hoy, 2001;). Teacher efficacy is strongly related to both classroom and school decision-making (Moore & Esselman, 1992).

Rand's Studies of Teacher Efficacy: Social Learning Theory

The conceptual framework for teacher efficacy for the two Rand studies was Rotter's (1966) locus of control construct (Gibson & Dembo, 1985). Locus of control was defined "as the extent to which teachers believe that they could control the reinforcement of their actions, that is, whether the control reinforcement lay within themselves or in the environment" (Tschannen-Moran et al., 1998, p. 202). Rotter proposed a person's locus of control is the perception of where one's belief stems. Locus of Control contains two distinct areas: internal and external control. External control is the belief that the reward or reinforcement is due to outside causes such as luck, fate, chance, or a higher power. Internal control is the belief the reward or reinforcement, as well as behaviors and actions, are the result of personal characteristics (Rotter, 1966; Tschannen-Moran et al., 1998). Rotter conceptualized teacher efficacy as "teachers' beliefs that factors under their control ultimately have greater impact on the results of teaching than do factors in the environment of the student—factors beyond the influence of the teachers" (Tschannen-Moran et al., 1998, p. 206).

The Rand studies were grounded in Rotter's Social Learning Theory. The main concept behind Social Learning Theory is personality represents the interaction of the individual with his or her environment (Tschannen-Moran et al., 1998). Social Learning Theory has four main components that predict individual behavior. These include behavior potential, the likelihood of engaging in a particular behavior; expectancy, the probability of a behavior leading to a specific outcome; reinforcement values, the desirable outcomes of our behavior; and the psychological situation, the concept that different people react differently to the same situation (Tschannen-Moran et al., 1998).

The instrument used in the Rand studies consisted of the following items. Teachers were asked to rate each statement using a five-point Likert scale ranging from *strongly agree* to *strongly disagree*. Teachers' sense of efficacy was measured by the total score obtained from the responses to these two items (Gibson & Dembo, 1985):

> Rand Item 1. "When it comes right down to it, a teacher really can't do much because most of a student's motivation and performance depends on his or her home environment."
>
> Rand Item 2. "If I really try hard, I can get through to even the most difficult or unmotivated students."

The hypothesis of the Rand researchers was that student success and performance motivated and reinforced teacher behavior. Teachers with a high degree of teacher efficacy believed they could control or, at the very least, influence student motivation and achievement. Teachers' strong agreement with Item 1 indicates they believe environmental factors far outweigh the influence of teachers in the classroom and their affect on student learning (Gibson & Dembo, 1985). In contrast, teachers who strongly agree with Item 2 indicated they are confident in their ability to reach all students and their effectiveness in the classroom will overcome outside factors. The Rand study did

not divide teacher efficacy into the two distinct areas of GTE and PTE. They used the sum of the scores to determine the overarching construct of teacher efficacy.

Bandura's Study of Teacher Efficacy: Social Cognitive Theory

Another group of researchers interested in teacher efficacy based their studies on Bandura's (1977) Social Cognitive Theory and his construct of self-efficacy. Social Cognitive Theory is the theoretical framework for both teacher and collective efficacy (Goddard & Goddard, 2001). This construct defined self-efficacy as "beliefs in one's capabilities to organize and execute the courses of action required to produce given attainments" (Bandura, 1977, p. 3). Bandura's Self-Efficacy Theory defines teacher efficacy as "a teacher's belief in his or her own capability to organize and execute courses of action required to successfully accomplish a specific teaching task in a particular context" (Tschannen-Moran et al., 1998, p. 233). Bandura indicated self-efficacy can be based on past successes and the level of competence people expect they will have in a given situation or circumstance. Self-efficacy beliefs influence people's willingness to expend effort in pursuit of their goals, persist in the face of adversity, continue to move forward in spite of setbacks, and exercise control over events that affect their lives (Bandura, 1986, 1993, 1996, 1997).

Bandura's Social Cognitive Theory (1993) indicated perceived self-efficacy is comprised of two concepts that determine individuals' beliefs about their ability to control the outcome of their behavior and the events that affect their lives. These concepts are outcome expectancy and efficacy expectation (Bandura, 1993). Efficacy expectation is "the conviction that one can successfully execute the behavior required to produce the outcomes" (Bandura, 1977, p. 193). Gist and Mitchell (1992) declared "self-

efficacy is a judgment about task capability that is not inherently evaluative" (p. 185). Self-efficacy is a self-perception of but not the actual level of competence. This is important since we often tend to over or underestimate our abilities.

Social Cognitive Theory also includes a second concept; outcome expectancy. This is independent from efficacy expectations. Tschannen-Moran et al. (1998) stated "an efficacy expectation is the individual's conviction that he or she can orchestrate the necessary actions to perform a given task, while outcome expectancy is the individual's estimate of the consequences of performing the task at the expected level of competence" (p. 210). In summary, the efficacy question under Social Cognitive Theory is: do I have the ability to do the task? The outcome question is: what are the likely consequences if I successfully perform the task (Tschannen-Moran et al., 1998)? In a cognitive sense, the answer to the efficacy question helps to define or form the outcome expectancy. Bandura inferred "outcome expectancies add very little to the predictive power of efficacy measures since the outcomes are based on a projected level of confidence" (Tschannen-Moran et al., 1998, p. 210).

Social Cognitive Theory suggests efficacy beliefs are affected by two components: human agency and triadic reciprocal causation (Henson, 2001). "Goodard & Goodard (2001) concluded "When humans and organizations (through collective actions of group members) make choices, they exhibit agency" (p. 809). Henson (2001) states "people are capable of choice and intentional pursuit of courses of action and actively shape their lives" (p.822). Efficacy beliefs also influence individual's thought patterns and emotional reactions (Pajares, 1996). Pajares (1996) concluded personal agency is "socially rooted and orates within a sociocultural influences, individuals are both

products and producers of their own environments and social systems" (p.544). Triadic reciprocal causation is the mechanism through which human agency works. Triadic reciprocal causation is multi-directional model in which behavior, internal personal factors (cognition, affect, and attitudes), and environment exert causal influence on each other (Bandura, 1997; Henson, 2001). The interaction of and interplay between these influences results in actual behavior and thoughts of the individual (Henson, 2001).

Bandura's Self-efficacy Theory is not the same as Rotter's Theory of Efficacy based on his Locus of Control Theory. Bandura (1977) stated," beliefs about whether one can produce certain outcomes (perceived self-efficacy) cannot ….be considered the same as beliefs about whether actions affect outcomes (locus of control)" (p. 20). Zimmerman (2000) concluded locus of control and self-efficacy are separate constructs. "Even though locus of control and teacher self-efficacy are not the same they are to some degree interrelated" (p. 85). Tschannen-Moran et al., (1998) stated "the existence of these two separate but intertwined conceptual strands has contributed to the lack of clarity about the nature of teacher self-efficacy" (p. 203). General teacher efficacy is the overriding belief by a teacher that they make a difference and is able to perform activities that will lead to student learning regardless of outside factors (Ghaith & Shaaban, 1999).

Bandura states once these beliefs are formed and accepted by an individual, they contribute to the success and level of one's functioning. He also suggests that an individual's sense of efficacy is a cognitive mediator of behavior in which psychological experiences create expectations of personal efficacy (Bandura, 1977). Ashton, Webb, and Doda (1983) agree these expectations contribute to an individual's belief that behaviors can be successfully performed or that they will be unsuccessful in their attempt. Ashton

et al. (1983) concluded "self-efficacy is a cognitive mechanism for processing information—a dynamic, multi-dimensional process resulting in situation-specific efficacy expectations" (p. 1).

Bandura's continued study of efficacy led to his postulation that there are "four sources of efficacy expectations: mastery experiences, physiological and emotional states, vicarious experiences, and social persuasion" (Hoy, 2003, p. 3). Master experiences are the perception that one's performance has been successful. This perception of success raises efficacy beliefs and allows expectations to remain high for successful performances in the future. Physiological and emotional states are contextual to the immediate circumstances in a person's life. Hoy (2003) concluded "the level of arousal, either of anxiety or excitement, adds to the feeling of mastery or incompetence" (p. 3). An individual's skills and attributes are factors as well. If the success of any performance is attributed to these internal skills or attributes efficacy is enhanced. If external forces such as luck or intervention from others are in play, efficacy might not be strengthened (Bandura, 1993; Pintrich & Schunk, 1996). Vicarious experiences occur when a desired skill is modeled by another. The greater the identification between the observer and the model, the more profound the negative or positive effect is on efficacy. Poor performance by the model might have a negative effect on the observer (Hoy, 2000). Social persuasion might entail a "pep talk or specific performance feedback from a supervisor or colleague" (Hoy, 2000, p. 3). The effects of social persuasion are usually temporary, but might lead a person to initiate a task, attempt new strategies, or simply try harder at a given task (Bandura, 1982). Social persuasion might be enough to simply "get

you over the hump." The degree of persuasion depends on the credibility, trustworthiness, and expertise of the persuader (Bandura, 1986).

Ashton's Theory of Efficacy

Ashton et al. (1983) developed a "conceptual framework for understanding the nature, antecedents, and consequences of efficacy attitudes in teachers" (p. ii). This framework consists of three dimensions: teaching efficacy, personal efficacy, and personal teaching efficacy. Teaching efficacy entails teacher's beliefs between the general relationship of teaching and learning. This sense of efficacy is the belief of the degree the power of teaching has to counteract the negative influences in the students' environment or background. Teachers who have a low sense of teaching efficacy perceive student learning is dependent upon a student's ability and far less affected by the teaching and learning process.

Personal efficacy is Ashton's second dimension. Personal efficacy is teachers' perception of their overall effectiveness in their role as teachers and in their perception of their ability to have a positive impact on students' achievement (Ashton et al., 1983). Teachers with a high degree of personal efficacy believe they have the skills, abilities, and knowledge to lead to student success. Personal efficacy is a more general sense of effectiveness, not specific to a particular situation and is willing to try new instructional techniques and adapt instruction (Gibson & Dembo, 1984).

The third dimension of Ashton's model is personal teaching efficacy. This is an integration of a teacher's sense of teacher efficacy and personal efficacy (Ashton et al., 1983). Personal teaching efficacy is the best predictor of teacher behavior (Gibson & Dembo, 1985). Personal teacher efficacy affects the instruction, the types of learning

environments teachers create, and the level of academic progress their students achieve (Bandura, 1983). Teachers with a high degree of personal teaching efficacy believe teachers in general make a difference and are more influential than outside factors such as a student's environment or background. They believe their personal abilities, skills, and knowledge base will lead to student achievement and success (Gibson & Dembo, 1985). Ashton et al. emphasized the importance of each of the three concepts being viewed independently. Ashton et al. also remind that the strategies teachers choose to affect change in schools depend on the origin of the sense of inefficacy. An example of this might be an alternative certified special education teacher who is unsure of his or her skills, abilities, and knowledge base, but is convinced all students can learn might choose different interventions than a special education teacher who is secure in their skills, abilities and knowledge base but doubtful of the truth behind the belief that all students can learn.

Ashton's Teacher Efficacy Study analyzed teachers' efficacy in two phases. The first phase focused on middle school teachers and the second focused on high school basic skills teachers. The study results indicated the following:

1. Teaching efficacy has a significant relationship to students' achievement in high school basic skills classes.
2. Teaching efficacy is related to maintenance of a warm, accepting classroom climate.
3. Teaching efficacy is negatively related to teachers' use of harsh control tactics.
4. Teaching efficacy is related to school organizational structures. Teachers in middle school that had team organization, teacher participation in school decision-making, and multi-age grouping of students had a higher sense of efficacy than teachers in a

junior high with a departmental organization, traditional age grouping, and less teacher participation in decision-making.

5. Teachers with high-efficacy attitudes were more likely to maintain high academic standards, concentrate on academic instruction, monitor students' on-task behavior and work to build friendly, non-threatening relationships with their low-achieving students than were teachers with low-efficacy attitudes.
6. Teachers with low-efficacy attitudes tended to sort and stratify their classes according to ability and give preferential treatment (more instruction, more appropriate praise and feedback, more interaction, more assignments) to high-ability students. High-efficacy teachers have clear expectations, concentrate on academic instruction, maintained on-task behavior and demonstrated a "with-it-ness."
7. Conditions in the schools-isolation, uncertainty, powerlessness, and the lack of economic rewards and social recognition make it difficult for teachers to maintain high-efficacy attitudes (Ashton et al., 1983).

Teacher efficacy is important when creating successful learning environments for students. Teachers who have internal control believe they can have an impact on or have control over the situation, while teachers with external control believe that they cannot control the events that happen to them (Tschannen-Moran & Woolfolk-Hoy, 2001). To a degree, a teacher's belief in their abilities directs their behavior to the events of their lives. These teachers have a sense of being able to control their own destiny. They apply the "mind over matter" philosophy (Czubaj, 1996). General teaching efficacy appears to increase during college work, but decrease during student teaching (Hoy & Woolfolk, 1990; Spector, 1997). Hoy (2000) suggests the reason for the change might be that the

"optimism of young teachers might be somewhat tarnished when confronted with the realities and complexities of the teaching task" (p. 5).

Research indicates teachers' efficacy can be developed and changes at different times (Ghaith & Yaghi, 1997). Studies have shown (Brousseau, Book, & Byers, 1988; Housego, 1990; Hoy & Woolfolk, 1990) teacher efficacy increases during the period of preservice teaching, but declines with more years of experience (Ghaith & Yaghi, 1997). Teacher efficacy might be enhanced by in-service training (Ross, 1994; Stein & Wang, 1988). Housego's study (1992) assesses teacher efficacy and teachers' preparedness to teach and found that a teacher's preparedness to teach increased in each semester except the fourth. The fourth semester consists of curriculum less focused on teaching itself than on reflecting on the teaching profession, potential problems, and other indicators of their classroom success (Harootunian & Yarger, 1981). Teacher efficacy, "the belief that teaching is a potentially powerful factor in students' learning," declined in the first two years of this study (Woolfolk et al., 1989, p. 7). Important to the area of alternative certification is the research results, which indicate personal teacher efficacy, the individual's belief in their ability to make a difference in student's learning, only increased during the third term or student teaching. This illustrates the importance of field experiences within the teacher preparedness program (Lanier & Little, 1986).

Teacher efficacy has some effect on students as well. Research has indicated teacher efficacy is related to increased student motivation (Midgley et al., 1989), better student self-direction (Rose & Medway, 1981), and more positive attitudes toward school (Miskel, McDonald, & Bloom, 1983).

Personal Teacher Efficacy

Personal teacher efficacy or self-efficacy is a part of the larger concept of efficacy. Self-efficacy is "a context-specific assessment of competence to perform a specific task" (Pajares, 1997, p. 15). Personal teacher efficacy is the teachers' belief they will be able to perform whatever actions necessary to lead to student learning (Ghaith & Shaaban, 1999). Self-efficacy beliefs are about the future, not about what has been accomplished in the past. Self-efficacy does not require comparisons between one's ability and the ability of others in the same situation, nor is self-efficacy a judgment of one's self-worth. (Hoy, 2004). Self-efficacy is a "central determinant of a person's ability to exert power, action, and influence" (Chester & Beaudin, 1996, p. 235).

Personal teacher efficacy is important to learning and the learning environment because self-efficacy is a strong predictor of behavior. Self-efficacy has the power to motivate, influence choices, influence personal goals, and increase perseverance through difficult challenges (Hoy, 2004). Berliner (1986) stated "Self-efficacy begins by making people feel that they have the power to change their own world. The kind of leadership needed in the teaching profession today is leadership that hands over power to teachers to solve their own problems" (p. xii). A teacher's sense of self-efficacy is related to their sense of persistence, enthusiasm, commitment, quality of instruction, and student outcomes, such as achievement, motivation, and self-efficacy beliefs (Tschannen-Moran & Woolfolk-Hoy, 2001). Personal teacher efficacy can influence teacher effectiveness and predict classroom management behavior (Housego, 1992).

Optimism is another facet of efficacy. Optimistic teachers focus on the positive qualities of students, classrooms, parents, their schools and communities (Pajares, 1997).

Seligman (2006) states optimism is a way to increase personal control, maintain hope, and have a general positive outlook about life. This outlook will have a positive effect on how teachers view themselves and their ability to make a true difference for their students. Tschannen-Moran et al. (1998) defines teacher efficacy as "judgment of his or her capability to bring about desired outcomes of student engagement and learning, even among those students who may be difficult or unmotivated" (p. 202). Optimism might result in teachers who set high standards for themselves and students, provide additional support for students who are struggling, and persist in the face of difficulty or failure on the part of the student or themselves (Pajares, 1997). Student learning is positively affected when teachers are focused on student engagement and academic tasks (Woolfolk, 2007).

Hoover-Dempsey, Bassler, and Bressie (2001) found "teacher efficacy was significantly related to teacher reports of parents' involvement in conferences, volunteering, and home tutoring, as well as teacher perceptions of parent support" (p. 287). Teachers with a higher sense of personal teacher efficacy might be more confident in their teaching skills and are more prone and willing to invite and accept parent involvement.

Efficacy is also a cognitive concept. It is one of a few teacher characteristics research has concluded is directly related to student achievement (Kurz, Woolfolk-Hoy, & Hoy, 2007). Bandura's (1997, 2006) Social Cognitive Theory states the regulation of behaviors are complex, multi-faceted, and casual structures. The degree of teacher efficacy, especially personal teacher efficacy, might have a profound effect of the degree

of success for students in any given classroom. These teachers are willing to try new techniques and adapt instruction in order to achieve success with all students.

Teachers' attitudes and beliefs have also been found to contribute to their effectiveness as educators (Gerges, 2001). Teachers' beliefs about their personal effectiveness or efficacy appear to discriminate between more or less effective teachers (Brophy & Evertson, 1976; Gerges, 2001; Volkman, Scheffier & Dana, 1992).

Collective Teacher Efficacy

Collective efficacy is the most recent efficacy construct developed. Collective efficacy is an organizational dimension to efficacy (Goddard, Hoy, & Woolfolk-Hoy, 2004). Collective efficacy refers to "the individual's belief in the groups' capabilities" (Ware & Kitsantas, 2007, p.303). Chong et al.(2010) state that "although conceptually distinctive, collective and individual measure of teacher efficacy should be seen as interdependent since such beliefs are socially situated, where embedded group dynamics can inevitably influence individual appraisal of efficacy" (p. 184). In Brookover and Lezotte's (1979) study, school personnel interviews indicated more effective schools had a stronger sense of efficacy and tended to feel more responsible for the learning of their students than did those in less effective schools (Guskey & Passaro, 1994). Other studies conducted in diverse contexts have produced similar results (Armor et al., 1976; Ashton, 1984; Brophy & Evertson, 1977; Guskey, 1988; Lee & Gallagher, 1986; Trentham et al., 1985; Guskey & Passaro, 1994). In more recent studies, researchers refer to this group perception as "perceived collective efficacy" (Bandura, 1997; Goddard et al., 2000; Hoy, Sweetland, & Smith, 2002; & Goddard, Hoy & Woolfolk-Ho., 2004). Perceived collective efficacy represents the beliefs of group members concerning "the performance

capability of a social system as a whole" (Bandura, 1997, p. 469). Goddard et al. (2004) indicates "perceived collective efficacy refers to the judgment of teachers in a school that the faculty as a whole can organize and execute the courses of action required to have a positive effect on students" (p. 4). One important aspect of collective teacher efficacy is "the manner in which an educational task is analyzed by the teachers as a group" (Van de Berg, 2002, p.588). Collective teacher efficacy also influences the perception of the staff on the amount of expertise available within the school. Collective efficacy is shaped by the attitudes of other teachers within the school concerning the amount of resources, organizational support, expectations, and goals (Chong et al., 2010).

Research on collective teacher efficacy is in its infancy. A review of literature finds very few studies of collective efficacy. The research does support the assumption Social Cognitive Theory can be used to examine organizational behavior and Bandura's (1993) study by "providing additional evidence that teacher beliefs about the capabilities of their faculty are systematically related to student achievement" that "encompasses a collection of beliefs, attitudes, and emotions that basically guide the work of the individuals within the school" (Goddard et al., 2000, pp. 503, 588). The degree of collective efficacy pertains to both student achievement and the extent of cooperation with colleagues (Van de Berg, 2002). Research has found a high degree of collective efficacy increased job satisfaction and leads to increased behavior management (Klassen, 2010b).

Historical Review of Efficacy Measurement

Measurement of efficacy has been debated for decades. In 1984, Gibson and Dembo developed the 30-item Teacher Efficacy Scale (TES) based on Bandura's (1986)

Social Cognitive Theory. The TES was developed as a result of a pilot study given to 208 elementary teachers selected from 13 elementary schools from two districts in the same location. Gibson and Dembo's study determined the two dimensions "clearly conform to Bandura's conceptualization of self-efficacy" (Ashton et al., 1983, p. 574). The first dimension represents Personal Teacher Efficacy (PTE). PTE reflects a teacher's sense that they possess the skills and abilities to influence student learning (Ashton, 1983). The items in this area reflect the teacher's sense of personal responsibility for student learning and behavior. PTE corresponds to Bandura's (1986) self-efficacy dimension, which addresses one's belief they have the skills to bring about the desired outcome increasing student learning and achievement (Gibson & Dembo, 1984).

The second dimension represents a teacher's sense of teaching efficacy. This is the belief that teachers in general are important to the general relationship between teaching and learning. When comparing Bandura's (1986) Social Cognitive Theory to the construct teacher efficacy reflects the degree teachers believe that environment could be controlled by good instruction (Gibson & Dembo, 1984).

Gibson and Dembo's (1984) research study using the Teacher Efficacy Scale (TES) confirmed the existence of two distinct constructs: personal teacher efficacy (alpha=.75) and general teacher efficacy (alpha=.79). As this scale became more widely utilized, concerns became apparent. Some items loaded on both PTE and GTE, while other items did not have strong loading on either factor. This led to the TES to be shortened to 16 items, but concerns still surfaced. Hoy & Woolfolk (1993) utilized a further-abbreviated 10-item version. Five items related to PTE and five to GTE. The

reliabilities for this version were not significantly different from the original version (PTE=alpha .77 and GTE=alpha .72).

Gibson and Dembo (1984) predicted that teachers who score high on both general teacher efficacy and personal teacher efficacy would be active and assured in their responses to students, be persistent, provide academic focus, and have high expectations of their students. In addition, Gibson and Dembo found evidence that teachers with a high degree of efficacy are less likely to criticize a student for an incorrect answer and are more likely to work with a struggling or failing student. These same teachers are more likely to find ways to use small group instruction, mastery teaching, or cooperative learning (Tschannen-Moran et al., 1998). Conversely, teachers who scored low on both general and personal efficacy are expected to give up readily if they did not get the results. Research generally has supported these predictions (Tschannen-Moran et al., 1998).

Concerns remain in the area of efficacy measurement. Researchers agree efficacy is, to some degree, content-specific (Gibson & Dembo, 1984). The real question is how much specificity needs to be present in any instrument used as a measurement of both general and personal efficacy. In an attempt to address this issue, the Gibson and Dembo TES has been modified to be more content specific. Riggs and Enoch (1990) modified the TES to apply to the area of Science, while Emmer's (1990) modification addressed the area of classroom management. Meijer and Foster (1988) and Coladarci and Breton (1997) focused on the area of special education, specifically the area of special education referrals.

The Gibson and Dembo (1984) TES scale is one of the most utilized scales in the measurement of efficacy. The TES is a valid measure of teacher efficacy. Many researchers have utilized this scale to study the multi-faceted construct of teacher efficacy as it relates to student achievement, school structure, and school climate. Results from these studies confirm the importance of this construct and measurement (Tschannen-Moran et al., 1998).

In 1990, Woolfolk and Hoy conducted a study focused on the structure and meaning of efficacy. The population was 182 prospective teachers, 104 of whom were in an elementary program and 78 of whom were working toward secondary certification. Their study revised the TES (Gibson & Dembo, 1984) and related efficacy to beliefs concerning control and motivation. Woolfolk and Hoy used only 20 of the TES items. In addition, they included the two original Rand items, using a total of 22 items.

Woolfolk and Hoy (1990) discovered the two independent dimensions of teaching efficacy, teaching efficacy and personal teaching efficacy, support Bandura's (1986) theory of notion of outcome and efficacy expectations. One concern is the question of whether teachers can override the effects of adverse background influences. This might be the case since the fact of the determination is based on the teacher's potential to perform (Woolfolk & Hoy, 1990). The revised TES by Woolfolk and Hoy (1990) uses a 6-point Likert scale ranging from *strongly agree* to *strongly disagree*.

As researchers continued to examine the construct of teacher efficacy, they found that current scales created an atmosphere of concern over interpretation of the data, conceptualization, and poor-correlations across settings and participants (Woolfolk & Hoy, 1990). One of the most challenging facets is discovering the optimal level of

specificity for measurement (Tschannen-Moran & Woolfolk-Hoy, 2001). Pajares's (1996) research warns "specificity and precision are often purchased at the expense of external validity and practical relevance" (p. 561). If a specificity of the scale is too restrictive, there is a real danger of losing its predictive power beyond the specific skills and context being measured. In order to be useful, teacher efficacy must be assessed across multiple settings and activities (Tschannen-Moran & Woolfolk-Hoy, 2001). The Tschannen-Moran et al. (1998) model of teacher efficacy suggests "that a valid measure of teacher efficacy must assess both personal competence and an analysis of the task in terms of the resources and constraints in particular teaching contexts" (p. 295).

Concerns about the construct of measurement of teacher efficacy persisted. Participants in a seminar on self-efficacy in teaching and learning in the College of Education at Ohio State University started work on a new measure of efficacy (Tschannen & Hoy, 2001). The participants in the seminar included two researchers and eight graduate students. Their goal was to use the Bandura's (1986) scale as a starting point and generate items all participants agreed should be measured to gain a full picture of teacher efficacy. The resulting measure, the Ohio State Teacher Efficacy Scale (OSTES) was validated through three different studies. Modifications to the initial items were made along the way (Tschannen-Moran & Woolfolk-Hoy, 2001).

Tschannen and Hoy (2001) indicated the first study included 224 participants, including 146 pre-service teachers and 78 in-service teachers. The participants were asked to respond to the 52-question scale on a nine-point Likert rating ranging from *1—nothing, 3—very little, 5—some influence, 7—quite a bit, and 9—a great deal*. The participants were also asked to rate each of the items in terms of importance based on a

four-point scale consisting of not at all, somewhat, important, or critical. The result of the first study narrowed the items on the instrument from 52 to 32.

The second study conducted by Tschannen and Hoy included participants from a different group of pre-service and in-service teachers. This group included 70 pre-service and 147 in-service teachers, for a total of 217. Participants in this study were asked to complete not only the OSTES, but other efficacy measures as well. These other measures included the two Rand items, the Hoy and Woolfolk (1993) ten-item adaptation of the Dembo and Gibson (1984) TES, the pupil control ideology form (Willower, Eidell, & Hoy, 1967), and the work alienation scale (Forsyth & Hoy, 1978). As a result of the second study, Tschannen-Moran and Woolfolk-Hoy (2001) concluded the OSTES could be shortened to 18 items from the 32 in study one, and that the OSTES items were related to the other efficacy scales. In addition, three subscales were identified: engagement, management, and instruction. Tschannen-Moran and Woolfolk-Hoy stated "the findings of Study 2 were encouraging. The 18-item instrument had good validity and the factors were conceptually sound representations of the various tasks of teaching" (p. 798).

However, concerns still remained. Weakness in the area of management lead to a third study. The purpose of the third study was the further refine the OSTES (Tschannen-Moran & Woolfolk-Hoy, 2001). Roberts and Henson (2001) also expressed concerns over the 18-item OSTES. They found the area of management weak and recommended the elimination of this area. Instead of elimination, additional items were added to the management area. Some of these items were a result of the consultation of the Emmer's (1990) teacher efficacy for classroom management scale. The participants in this study consisted of 103 pre-service and 255 in-service teachers. The OSTES scale was further

refined, and the result was a long form of 24 items and a short form of 12 items (Tschannen-Moran & Woolfolk-Hoy, 2001). These new instruments maintained high reliabilities in all three subscale areas (0.86 for instruction, 0.86 for management, and 0.81 for engagement). Tschannen-Moran and Woolfolk-Hoy concluded "the intercorrelations between the long and short forms for the total scale and the three subscales were high, ranging from 0.95 to 0.98" (p. 799).

Further analysis was completed and results of the analysis indicated the OSTES could be considered reasonably valid and reliable. With either 24 or 12 items, it is of reasonable length and should prove to be a useful tool for researchers interested in exploring the construct of teacher efficacy (Tschannen-Moran & Woolfolk-Hoy, 2001). Positive correlations with other measures of personal teaching efficacy provide evidence of construct validity. Tschannen-Moran and Woolfolk-Hoy (2001) stated "the OSTES moves beyond previous measures to capture a wider range of teaching tasks" (p. 801).

The OSTES measures the areas considered vital to good instruction while giving the researcher information in the three areas representative of teacher's effort. Tschannen-Moran & Woolfolk-Hoy (2001) stated the OSTES "is superior to previous measures of teacher efficacy in that it has a unified and stable factor structure and assesses a broad range of capabilities that teachers consider important to good teaching, without being so specific as to render it useless for comparisons of teachers across contexts, levels and subjects" (p. 802). Validity correlations for the OSTES are; 0.84 in instructional strategies, 0.79 in classroom management, and 0.85 in student engagement. Tschannen-Moran and Woolfolk-Hoy refer to the Ohio State Teacher Efficacy Scale

(OSTES) as the Teacher Sense of Efficacy Scale (TSES). This name change will be used when referring to the efficacy scale in this study.

Efficacy and Special Education

Due to the passage of the Education for All Handicapped Children Act (P.L. 94-142) in 1975, school districts nationwide were mandated to provide students with disabilities access to schools, services, and certified teachers capable of meeting their unique needs. As knowledge and recognition of disabilities have increased, so have the number of students who qualify to receive special education services. The number of certified special education teachers required has risen based on the increase in the number of students with disabilities. Recruitment has been inadequate to fill the need. Alternative special education certification programs are the primary method of providing classrooms with required teachers. Research has revealed a high degree of teacher efficacy is related to increased student achievement, perseverance from teachers and students, willingness to implement new interventions, and a more positive and caring classroom environment. This study focused on the relationships among alternative certification in special education, job satisfaction, and the degree of personal teacher efficacy in early career special education teachers (years zero through five).

Klassen (2010b) concludes "teaching is a stressful occupation. High levels of occupational stress effect teachers' performance, career decisions, physical and mental health, and overall job satisfaction" (p. 342). Teacher stress lowers teacher self-efficacy and raises "poor teacher-pupil" rapport (Klassen, 2010a). Stress lowers teacher effectiveness (Kokkinos, 2007). Elementary school teachers have a higher degree of self-efficacy than do teachers of older students. Wolter and Daugherty (2007) and Jepson and

Forrest (2006) found male teachers experience greater emotional exhaustion than do their female counterparts.

The focus of efficacy research has been within general education. The resulting information certainly pertains to special education; however, additional research must be completed in the area of special education (Coladarci & Breton, 1997). Research indicates resource teachers who have a high degree of personal teaching efficacy tend to exhibit greater organization, spend more time and effort in planning, are fairer, have greater enthusiasm, and provide clarity in their instruction (Allinder, 1994). These special education teachers demonstrated a "willingness to try a variety of materials and approaches to teaching, desire to find better ways of teaching and implementation of progressive and innovative techniques" (Allinder, 1994, p. 89). Research found teachers with a low self-efficacy are more likely to refer difficult-to-teach students for special education than teachers with a high degree of personal efficacy (Soodak & Podell, 1996). High-efficacy teachers concentrate more closely to the needs of lower-ability students. They demonstrate positive attitudes toward low-achieving students, establish rapport, and build relationships in addition to setting high academic standards (Ross & Bruce, 2007). Regular education teachers are still responsible for the achievement of students with disabilities. Many, if not most, students with disabilities spend at least part of their day in the regular classroom setting (Friend & Cook, 2009). Many classrooms have two certified teachers—one special education teacher and one regular education teacher. The roles and responsibilities of each of these teachers vary according to the teaching model being utilized; leading and assisting, station teaching, parallel teaching, alternative teaching, and team teaching (Hang & Rabren, 2009). Many times, teachers are not sure of the

precise role they are to play in instruction and behavior management. This might lead to the special education teacher simply monitoring or aiding the general education teacher (Hang & Rabren, 2009). This domination by content teachers might lead to special education teachers questioning their abilities, and the result might be a lower sense of efficacy (Hang & Rabren, 2009). Collaboration among special education and regular education teachers can be positive for both. Regular educators and special educators teaching jointly have a higher degree of personal teacher efficacy than do regular educators who have students with disabilities in their classroom without assistance (Leyser, 2002). Older novice special education teachers (those without previous experience) have a higher degree of self-efficacy than do their younger novices (Leyser, 2002).

Teachers across the United States employ a wider repertoire of pedagogical strategies, including project work, simulations, current events, and lecture-based discussions (Alviar-Martin, Randall, Usher & Engelhard, 2008). Special education teachers are trained in pedagogical principles of individualized instruction, assessment, and classroom behavior management of students with disabilities (Leyser, 2002). Most students with disabilities have had very little, if any, success in the educational arena. Many times, multiple strategies and interventions must be used to make even the slightest progress in their achievement (Shechtman et al., 2005). Both regular and special education teachers agree instructional strategies are effective and important, but only special education teachers use them with any regularity (Leyser, 2002). Leyser (2002) found many teachers, both special education and general education, did not implement these strategies because they were too time-consuming, they diminished teacher

authority, or the teachers concluded the procedure did not work as well as they anticipated. Research has found teachers with a high degree of efficacy experience more job satisfaction and persevere to create a successful learning environment for their students (Edwards, Green, & Lyon, 2002). To create this type of environment teachers must address both social and academic skills. Social or life skills are the abilities and knowledge apart from academic skills necessary for students to be successful. Researchers have identified four basic competencies: (a) identity development/purpose of life, (b) problem solving, (c) interpersonal relationships, and (d) physical health maintenance (Shechtman et al., 2005). Many students with disabilities fall short in one or more of these basic competencies. One of the functions of special education teachers is to address not only the academic but also the behavior concerns of their students (Brownell et al., 2009). Teachers who have a high degree of personal teaching efficacy conveyed they use a number of effective teaching strategies more frequently than their less efficacious counterparts (Leyser, 2002). A high degree of self-efficacy is also associated with the use of individualized instruction and the adaptation of materials (Minke, Bear, Deemer & Griffin, 1996). It is important for special education teachers to have a high degree of personal teacher efficacy in order to meet the unique academic and social needs of their students (Leyser, 2002).

Research has found that personal teaching efficacy is a better predictor of teacher behaviors than general or teacher efficacy (Minke et al., 1996; Saklofske, Michayluk, & Randhawa, 1988). Teacher efficacy is also associated with higher levels of teacher attendance (Edwards et al., 2002). A high degree of personal teacher efficacy led to a higher percentage of teachers' goals achieved, a teacher more accepting and comfortable

with change, and one who preserved through difficult instruction and demonstrated a willingness to utilize different instructional strategies (Ghaith & Yaghi, 1997). Teacher efficacy might contribute to elevated rates of parent participation in several ways. Higher degree of personal teacher efficacy contributes to increased confidence and a willingness to discuss their teaching programs, goals, and allow parental input (Hoover-Dempsey et al., 1987). High-efficacy teachers use classroom management approaches which keep students on task more effectively (Ross & Bruce, 2007).

The sense of efficacy is significant whether one is considering the effectiveness of a novice special education teacher or an experienced one. For novice teachers, these self-estimate of their personal power and resourcefulness effect students' classroom behavior and learning (Evans & Tribble, 1986). Many times, the success or failure experienced by a beginning or alternative certified special education teacher in their first year in the classroom determines the course of their careers. Teachers are most likely to leave the profession during their early years in the classroom, the first year being the most uncertain. Mumane, Singer, Willett, Kemple, & Olsen, (1991) concluded "teachers who survive the early period are likely to continue to teach for many more years" (pp. 59–60). Administrative support and attention is important in addressing the concerns of these new teachers. It is important to convey the importance of instructional competence to teachers, especially new teachers (Chester, 1992). Classroom observation and evaluative feedback are essential to teacher induction assistance (Deal &Peterson, 1990). When support is in place, it is much more likely teachers will not become as frustrated with their many changing responsibilities (Ware & Kitsantas, 2007). This is particularly imperative for

special education teachers who have a much broader array of supplementary paperwork, grade levels, and variance in their students' academic levels.

Schools can influence a teacher's sense of self-efficacy and the collective efficacy of staff as a whole by providing a positive collaborative culture, supportive administration, resources and direction for their use (Ware & Kitsantas, 2007). Ware & Kitsantas (2007) indicate "commitment is enhanced when teachers believe that they have efficacy to (a) enlist the support of their principals, (b) influence policies at their schools and (c) control their instruction" (p. 309). Educational interventions focusing on personal teacher efficacy and collective efficacy might help retain teachers by enhancing their efficacy beliefs (Ware & Kitsantas, 2007). Research states personal teacher efficacy and collective efficacy are both associated with student achievement as measured by tests (Goddard et al., 2000). Research has been clear—teacher efficacy is important in contributing to teachers' who are persistent, resilient, and can work together effectively to influence student outcomes (Chong et al., 2010).

Summary

Alternative routes to certification in special education have been able to augment the supply of special education teachers for districts across the nation. Additional staffing is a direct result of the increase in numbers of students with disabilities. Areas including Autism, Developmental Delay, and Other Health Impaired have increased at staggering levels (KDE, Department of Exceptional Children, 2010). This trend is not expected to change. On May 10, 2010, the National Coalition on Personnel Shortages in Special Education and Related Services (NCPSSERS) concluded there continues to be a significant shortage of special education teachers and specialized instructional support

personnel who directly contribute to the academic success of America's 7.1 million students with disabilities.

The real issue is not certification, but ensuring quality teachers are assessable to all students with disabilities. It is imperative researchers examine teacher characteristics, including teacher efficacy, that are associated with student achievement and increased job satisfaction. Teachers who have a high degree of self-efficacy are more enthusiastic, willing to "go the extra mile," and demonstrate more commitment to teaching. Gibson and Dembo (1984) found that teachers with high self-efficacy beliefs engage in practices associated with high achievement gains for students.

The construct of teacher self-efficacy (PTE) reflects the "levels of organization, planning and fairness a teacher displayed, as well as clarity and enthusiasm in teaching" (Tschannen-Moran et al., 1998, p. 213).The degree of self-efficacy teachers possess enables them to believe they make a difference in their students learning and lives. Self-beliefs of efficacy enhance or undermine performance (Gagne, 1985).

Chapter Three includes the research design, explanation of the research setting, and the sample population. Data collection methods and procedures are discussed as well as the statistical methods used for data analysis. Chapter Four reviews the findings of the study. Chapter Five includes a discussion of the findings, implications for education, and suggestions for future research.

CHAPTER 3 : METHODOLOGY

This study explores the relations among alternative certification in special education, job satisfaction, and the degree of teachers' personal efficacy. The sample included special education teachers in their initial year through fifth year of service. Analyses were conducted to seek interrelations between number of years serving in the profession, degree of job satisfaction, gender, type of classroom, and area of certification.

The hypothesis was based on the assumption that personal teacher efficacy (PTE) is lower in early-career special education teachers who have completed or are currently enrolled in alternative certification programs than those completing their special education degrees in a traditional program. The study focus was guided by the following research questions:

1. How satisfied are early career special education teachers and what is their sense of self-efficacy?
2. What are the relationships among teacher efficacy, job satisfaction, and alternative certification for early-career special education teachers (initial year through year five) from 21 districts in central Kentucky?
3. What are the relationships among teacher efficacy, job satisfaction, alternative certification, and the number of years in teaching?
4. What are the relationships among teacher job satisfaction, teacher efficacy, and job placement among early-career special education teachers (resource versus collaborative teaching)?

Chapter Three begins with a short discussion of research design and setting, sample population, and participant selection process. Discussion of the data collection

procedures, confidentiality, and data analysis techniques is presented. The focal points of the chapter are the survey instruments, their validity, and reliability, and the statistical methods used.

Research Design

A quantitative research approach was used in this study of teacher efficacy and alternative certification of early-career special education teachers because it is the best approach to test a theory (Creswell, 2003). This quantitative study used a descriptive-correlational model with the following variables: (a) age; (b) gender; (c) certification type (alternative or traditional); (d) years of teaching experience; (e) teaching rank; (f) type of teaching position (resource, collaborative, or combination); (g) teacher efficacy; and (h) job satisfaction.

Research Setting

The distance between districts in Kentucky made it impractical to include the entire geographic area of the commonwealth in this study. Hence, the research setting was reduced to 21 school districts (both countywide and independent) situated in central Kentucky. Both rural and suburban areas are represented in the sample; none of the districts, however, include large urban population centers. The districts varied in size, ranging from a low of approximately 700 to a high of 6,600 students; the average size was approximately 2,900 students (Kentucky Schools Directory, 2008–2009). The low (poverty range) socioeconomic status (SES) of students within counties containing the sample districts ranged from 13% to 34%, with an average slightly over 18.2%. The district with the greatest number of families with low SES (34%) served a rural community located the greatest distance from an urban area with multiple job

opportunities (Kentucky County Data Book, 2007). Agriculture is the primary means of support for most families within this district. Among the 21 districts, student achievement scores on 2008 state accountability tests ranged from a high of 88% to a low of 74%; the average graduation rate of that year was 81% (Kentucky County Data Book, 2007).

A rationale for the choice of these 21 districts was all are members of the Central Kentucky Special Education Cooperative (CKSEC), a state-sponsored agency that offers professional development, resources, and training to districts within its service area. Two districts within CKSEC were omitted from the study. Burgin Independent did not have any special education staff who met the criteria of the study. Fayette County was omitted because it is a large strictly urban district, very different from all other districts within the study. All special education staff within the 21 districts thus has equal opportunity for training and services offered by CKSEC. Additionally, the 21 districts are close to the same universities and colleges that offer traditional and alternative certification programs in special education.

Sample

Special education teachers in their initial through fifth year of service working in one of the 21 CKSEC-member districts in central Kentucky constituted the population for this study. Purposive sampling was used for the selection of the sample (i.e., teachers working in a CKSEC-member district in their initial to fifth year of service). This sampling criterion yielded a study sample of 222 full-time special education teachers. No further randomization of the potential sample population was necessary since 100% of the targeted population were asked to participate. The sample included special education teachers working in elementary, middle, and high schools across all areas of special

education. Their special education settings varied from collaborative to resource room or a combination of both.

No advertising or incentives were given for study participation. There were no potential risks for participation in the study. The demographic information sheet did not require any personally-identifiable information from the participants. Confidentiality was ensured since responses were not tracked in any way that could identify the respondent. The response rate was 51.80 % (*n*=115).

Instruments and Procedures

The covariates of the study are the degree of self-efficacy, job satisfaction, and certification type in the area of special education. The hypothesis assumed that personal teacher efficacy (PTE), or teacher self-efficacy, is lower among early-career special education teachers who have completed, or are currently enrolled in, alternative certification programs than those who completed their special education degrees in a traditional program. Participants were grouped by their certification type.

The Teacher Sense of Efficacy Scale (Tschannen-Moran & Woolfolk-Hoy, 2001), the Brayfield Rothe Job Satisfaction Index (1951) as modified by Warner (1973), and a questionnaire developed by the researcher were utilized to obtain the data for this quantitative study. When choosing an appropriate research instrument, validity and reliability are important factors to consider. Face validity is whether or not the instrument appears to be valid for its intended purpose, whereas content validity is "the test's content and its relationship to the construct it is intended to measure" (Ary et al., 2002, p. 243). Reliability is the "degree of consistency with which the instrument measures whatever it is measuring" (Ary et al., 2001, p.245). Other than the School Supports Questionnaire

(SSQ), reliability and validity of the research instruments was established through previous research.

Teacher Sense of Efficacy Scale

The appropriate measurement of teacher efficacy has been debated for decades. Specificity of the construct being measured is typically at the center of many debates (Tschannen-Moran & Woolfolk-Hoy, 2001). Two researchers and eight graduate students from Ohio State University conducted their study of the measurement of teacher efficacy to address this issue; their goal was to use the Bandura's (1986) scale as a starting point and generate items all participants agreed should be measured to gain a full representation of teacher efficacy. The resulting measure, The Ohio State Teacher Efficacy Scale (OTES) was validated through three different studies (Tschannen-Moran & Woolfolk-Hoy, 2001).

The OSTES measures the areas considered vital to good instruction while giving the researcher information in the three areas representative of teacher's work (i.e., student engagement, classroom management, and instructional practices). Tschannen-Moran & Woolfolk-Hoy (2001) state that this instrument

> is superior to previous measures of teacher efficacy in that it has a unified and stable factor structure and assesses a broad range of capabilities that teachers consider important to good teaching, without being so specific as to render it useless for comparisons of teachers across contexts, levels and subjects. (p. 802)

Tschannen-Moran and Woolfolk-Hoy (2001) changed the name of the Ohio State Teacher Efficacy Scale to the Teacher Sense of Efficacy Scale (TSES). This name change will be used when referring to the efficacy scale used in this study.

Validity correlations for the TSES are: 0.84 in instructional strategies, 0.79 in classroom management, and 0.85 in student engagement. The long form (24 items) of the

TSES was utilized in the study. This measure was chosen due to the scale's ability to measure a broader range of teaching tasks, high validity, and reliability in the three subscale areas of instructional strategies, classroom management, and student engagement. Reliability of TSES individual subscales is instructional strategies (M=7.3, SD=1.1), classroom management (M=6.7, SD=1.1), and student engagement (M=7.3, SD=1.1).All three of these subscale areas are vital in the area of special education.

The nine-point Likert scale ranges along a continuum ranging from *nothing* to *a great deal.* Each of the three constructs consists of eight items. The area of student engagement relates to items 1, 2, 4, 6, 9, 12, 14, and 22. Instructional practices consists of items 7, 10, 11, 17, 18, 20, 23, and 24. The construct of classroom management is determined by the responses to items 3, 5, 8, 13, 15, 16, 19, and 21. Scoring guidelines were set by Tschannen-Moran and Woolfolk-Hoy (2001). Permission was obtained for the use of the TSES in the current study.

Brayfield Rothe Job Satisfaction Index

The Brayfield Rothe Job Satisfaction Index (1951) as modified by Warner (1973) was the job satisfaction instrument used in this study because this index is focused on a participant's intrinsic level of job satisfaction. Although cognitive appraisals of the job (i.e., salary, fringe benefits, working conditions) are important to job satisfaction, they are not the focal point of this study. The study concentration is participant's feelings and emotions resulting from their current teaching position. Three affective job satisfaction measures were considered for use in the study: (a) Facet Free Job Satisfaction Scale (Quinn & Staines, 1979), (b) the Job Diagnostic Survey (Hackman & Oldham, 1975), and (c) the Brayfield Rothe Job Satisfaction Index (1951) as modified by Warner (1973).

Williams (1988) concluded the Brayfield Rothe Job Satisfaction Index was more affective in its orientation. Moorman (1993) indicated the Brayfield Rothe Job Satisfaction Index includes questions that center on the respondents' emotional reactions to their work (e.g. feelings of being bored, interested, happy, enthusiastic and disappointed).

The Brayfield Rothe Job Satisfaction Index is a unidimensional job satisfaction scale (Moorman, 1993). This job satisfaction instrument was used in research studies by Bowen and Radhakrishna (1991), Bruening and Hoover (1991), and Walker et al. (2004). The psychometric properties of the Brayfield Rothe Job Satisfaction Index as modified by Warner (1973) have been supported by the following research: Brief and Roberson (1987), Williams (1988), and Price and Mueller (1986). Even though it is one of the older job satisfaction scales, the Brayfield Rothe continues to be an effective scale to measure intrinsic job satisfaction. Moorman (1993) reports after comparison of the three job satisfaction scales, Brayfield Rothe represents "a more affective job satisfaction scale" (p. 771). Thus, the Brayfield Rothe Job Satisfaction Index (1951) as modified by Warner (1973) was chosen as the job satisfaction measure used in the study.

The Brayfield Rothe Job Satisfaction Index as modified by Warner (1973) consists of fourteen questionnaire items with five possible responses per item. The possible responses to the items range from *strongly agree* to *strongly disagree*. This scale is considered to be valid and reliable; Cano and Miller (1992) reported a reliability of .94 (Cronbach's Alpha). The Spearman-Brown split-half internal-consistency reliability coefficient for this index is .87.

School Supports Questionnaire

The third research instrument used in the study was a researcher-developed questionnaire, the *School Supports Questionnaire* (SSQ), which was designed to gather two types of data: 1) demographic information about participants, and 2) the educational supports provided. For the demographic section of the SSQ, 10 items were included that consisted of multiple choice and open ended responses related to: (a) gender, (b) age, (c) years teaching, (d) type of certification (alternative or traditional), (e) highest degree obtained, (f) current teaching assignment (resource room, collaboration, or combination), (g) current income range, and (h) the post secondary instruction where the respondent obtained their special education degree. If the respondent had graduated or were currently attending an alternative program, they were asked to include the area of their initial bachelor degree. Information requested did not require personally-identifiable information. The data collected could not be filtered to allow for identification of a specific respondent or their computer. All information and responses were strictly confidential and viewed only by the researcher.

The second section of the SSQ asked participants to indicate education supports available to them. Participants could provide multiple responses. A total of 21 educational supports were included on the questionnaire. These items were developed based on the professional knowledge of the researcher about specific supports offered by CKSEC to all 21 districts, as well as research (e.g., Billingsley & Tomchin, 1992). The responses concerning type of certification from the SSQ allowed the sample to be analyzed and then separated into subgroups of alternative and traditional certified special education teachers for further examination.

Data Collection

Access to the districts was obtained from the directors of special education with agreement of the respective superintendents. The director of special education was the district contact and provided the list of potential participants and their school email address to the researcher. A letter explaining the study and a request to participate was emailed to each of the potential participant's school email address.

Instrument Administration

The researcher contacted the 21 directors of special education to confirm their intent to participate and obtain written consent for access from required administrators. An electronic mail message containing (a) explanation of the study, (b) request to participate, and (c) instructions to access the three survey instruments (i.e. School Supports Questionnaire, Brayfield Rothe Job Satisfaction Index as modified by Warner and Teacher Sense of Efficacy Scale) was sent to each participant. Special education teachers were assured their participation was strictly voluntary and their responses were confidential. Consent was obtained by accessing the research instruments through the link included in the email. The responses were not tracked by name, school, district, or computer internet protocol address. The initial email was sent on October 19, 2009, and subsequent requests were sent November 2, November 9, November 16, and November 24, 2009. Data collection closed in December 2009. Of the 222 potential participants in the sample, 115 responded, generating a 51.8% return rate. Not all respondents answered 100% of the questions on all research instruments.

The survey instruments were sent to the potential participants through Survey Monkey, an Internet-based survey data collection site. The use of electronic correspondence to the participants' school email accounts was expected to increase the likelihood of participation by making it accessible to them at work, and, in most instances, at home as well. The expectation was that electronic submittal of survey instruments would increase the response rate and allow date to be collected more efficiently. Research indicates responses from mailed or emailed instruments result in the collection of similar information as personal interviews (Ary et al., 2002).

After the data were collected through Survey Monkey, it was entered into SPSS 18 for analysis. Answers to numerous surveys were cross-checked to downloaded data from Survey Monkey to ensure accurate transfer. The data set was analyzed by first aggregating it into two groups, traditional and alternative certified special education teachers.

Data were collected via Survey Monkey and collated by the 115 responses. Descriptive statistics were performed on the responses of the survey instruments and the demographic questionnaire. Descriptive statistics were used to organize and summarize data "so that the data are more readily comprehended" (Coladarci, Cobb, Minium, & Clarke, 2004, p. 2).

Response Control Error

Before further analysis began, the responses of the first and last 29 respondents were analyzed by an ANOVA to ensure responses were not significantly different. Reliability of responses across the data-collection period was a concern. Maximizing the number of early respondents is one way to assist control for non-response error. Since not

all participants responded to the initial request, multiple requests for participation were made. The responses of the late respondents were compared to the responses of early respondents. This is critically important step because "late respondents are often similar to non-respondents, thus, one way to estimate the nature of replies of non-respondents is through late respondents" (Miller & Smith, 1983, p. 48). Ary et al. (2002) suggest respondents be divided into early and late groups and then their responses compared to check for significant differences. To insure reliability, the responses of the first and last 29 participants were compared to control for non-response error. A one-way Analysis of the Variance (ANOVA) was used to analyze these responses on the Job Satisfaction Index and the Teacher Sense of Efficacy Scale.

To assess if differences in responses were present, a one-way ANOVA was performed for the responses of each group on the Job Satisfaction Index. Analysis of the ANOVA indicated no significant differences in group responses except in Question 8 of the Job Satisfaction Index. Question 8 requested participants to respond to the following question: *I feel happier in my work than most other people*. The responses to this question indicated a significant difference ($F = 8.08$, $df = 1/53$, $p = .006$). Due to this significance, a Levene Test of Homogeneity of Variances was performed for all questions on the Job Satisfaction Index. This test resulted in no significant differences ($p < .05$) between the group responses on any of the questions, including Question 8 (*Levene Statistic* = 3.887, $df = 1/53$, $p = .054$). There is no significant difference between first and last respondents in the area of job satisfaction, and their responses can be considered representative of the entire sample.

The teacher efficacy responses for the two groups were also compared by performing a one-way ANOVA on the TSES responses of the two groups. Analysis of the data in the subscale areas of student engagement and classroom management indicated no significant differences ($p<.05$). The third area of the TSES, instructional practices, indicated a significant difference between the responses of the two groups on Question 10: *Each day my work seems like it will never end* ($F=5.57$, $df=1/56$, $p=.022$). The Levene Test of Homogeneity of Variances was performed on all TSES question responses and identified no significant differences between the groups on any of the 24 questions. The results of Question 10 indicated (*Levene Statistic*=.360, $df=1/56$, $p=.551$). The responses of the first and last 29 participants can be considered representative of the entire sample population.

To address the control of non-response error, 25% ($N=29$) responses of the early respondents were compared to 25% ($N=29$) of the responses of the late respondents. An ANOVA was used to compare the responses of the early and late respondents and no significant differences were found. All responses can be considered representative of the population. The ANOVA results indicated sample responses were valid and reliable.

Role of Researcher

The researcher had no direct contact with any of the potential participants. A list of potential participants and their school email addresses was provided to the researcher by each district's director of special education. Contact with all potential participants was through a series of email requests over a five-week period. Participant responses were not tracked by district, school, or internet protocol address. Responses were confidential and analyzed only by the principal investigator of the study.

Data Analysis

Quantitative Measures

The survey instruments, Likert-type scales, were the Teacher Sense of Efficacy Scale ([TSES] Tschannen-Moran & Woolfolk-Hoy, 2001) long form(24 items) and the Brayfield Rothe (1951) Job Satisfaction Index (14 items) as modified by Warner (1973). The TSES subscales include classroom management, student engagement, and instructional practices. Validity correlations for the TSES are; 0.84 in instructional strategies, 0.79 in classroom management, and 0.85 in student engagement (Tschannen-Moran & Woolfolk-Hoy, 2001). The Brayfield Rothe Job Satisfaction Index (1951) as modified by Warner (1973) is a unidimensional scale focusing on affective components of job satisfaction (Moorman, 1993). The Brayfield Rothe Job Satisfaction Index is a valid and reliable instrument. Cano and Miller (1992) reported a reliability of .94 (Cronbach's Alpha) as well as the Spearman-Brown split-half internal-consistency reliability coefficient of .87.

A researcher developed questionnaire, the School Supports Questionnaire (SSQ), was also included in the study. The SSQ was not piloted by the researcher prior to usage in the study. The questions on this instrument were designed to gather demographic information as well as educational supports available to the potential participants. The questions were multiple choice and some allowed for additional information to be gathered from each respondent (i.e., initial degree for alternative certified respondents, additional supports available). Participants were allowed multiple answers concerning the educational supports available to them. They were also encouraged to list any additional supports not given as one of the 21 choices available in one of the questions. The data

from this instrument was analyzed by descriptive statistics, including percentages and frequencies.

In addition, reliability coefficients for the composite and subscale measures of the Job Satisfaction Index and Teacher Sense of Efficacy (Cronbach's Alpha) were calculated for the participants' responses on the study's research instruments. The Job Satisfaction Index indicated Cronbach's Alpha of .880. The Cronbach's Alpha for the TSES was .847 for classroom management, .842 for student engagement, and .854 for instructional practices. These results indicate the participants' responses on these instruments are reliable and valid measures of their degree of teacher efficacy and job satisfaction.

Frequency Analysis

Frequency distribution was used to organize the data. Analysis began with measures of central tendency (i.e. mean, median, and mode). Mean is defined as the "sum of all values in a distribution divided by the number of cases" (Ary et al., 2002, p. 128). It can be considered the mathematical average of the distribution. The median is the point in a distribution where 50% of the scores are above and 50% are below. The mode is the score attained by more participants in a group than any other score (Gay, 2000).

Variability is defined as "the degree of dispersion" (Ary et al., 2002, p. 131). The measures of variability are range, variance, and standard deviation. Variance is the observed value minus the mean. The range of the distribution is the difference between the highest and lowest observed scores. Standard deviation is "an index that summarizes data in the same unit of measurement as the original data" (Ary et al., 2002, p. 133) and is the square root of the variable.

Central tendency of the distribution set was calculated through the mean and mode scores from the responses of the entire sample (*N*=115) and then divided into alternative (*n*=72) and traditional certified (*n*=35) groups for further analysis. Frequency and percentage of participants' responses were also calculated.

Analysis of Variance

An ANOVA was used to compare the relationship among variables, including alternative certification, job satisfaction, and teacher efficacy. The ANOVA is often used to compare the means of two or more groups. The ANOVA reflects both with-in group and between-group variations. These variations permit decisions regarding differences among the means (Coladarci et al., 2004). Comparisons of the two groups—traditionally certified (*n*=35) and alternative certified (*n*=72) special education teachers was assessed by the analysis of the ANOVA results.

Limitations of the Study

The geographic location of the study focus is limited to 21 school districts within an area of central Kentucky. The large geographical area of the state and sheer number of county and independent school districts which would have required physical visits to obtain district concurrence for the research precluded performance of a statewide study due to time, travel, and cost considerations. Small to moderate sized county and independent rural districts were the target sample population, and this resulted in the exclusion of one large Central Kentucky urban school district from the study. The limited geographic area chosen and the small number of potential participants (*N*=222) are limitations to this study. The findings of this study might generalize to other geographic areas, but this type of generalization should be approached with caution.

Participants were not tracked according to teaching positions in elementary, middle or high schools. Also, the students' degree of disability (i.e. severe, moderate, or mild) was not considered in this study. These limitations make it impossible to assess differences in perceived self-efficacy or job satisfaction among different areas of education.

Alternative certification programs vary widely among colleges or universities. This difference in entrance requirements, the amount of time in the program, and the courses offered place limitations on the generalizations of the findings of the study. Responses from alternative participants indicate they attended a variety of alternative programs. This further limits generalizations that can be made. In addition, teachers with alternative certification have vastly different knowledge bases upon entrance into the alternative program, support from employing districts, and job experience in the area of education, which leads to further limitations.

Summary

Chapter 3 focuses on the methodology of this research study. Teachers' degree of personal self-efficacy and level of job satisfaction were examined within this study. Research has indicated a teacher's degree of efficacy can make a difference for students. Dembo and Gibson (1986) concluded teacher efficacy was related to student achievement. Teacher efficacy affects individual students' attitudes toward school, their perception of the importance of what they are learning, and their attitude about their teachers (Woolfolk et al., 1990).

Chapter 3 continued with a brief overview of the purpose of the study, the relations among teacher's sense of self-efficacy, their job satisfaction, and alternative

certified special education teachers from their initial year through year five of their teaching career. The rationales for the choice of the sample and the research setting were discussed.

The research design, including research instruments and procedures were explained. Validity and reliability of the instruments were discussed, as well as a description of the SSQ. Data collection methods, including district access, were depicted. Responses were obtained from special education teachers whose educational knowledge level varied widely. Administration of the instruments was reviewed as well as the role of researcher. Analysis techniques were explained and measures to control for a Type I error were also a focus of this chapter. Limitations of the study were highlighted. Chapter 4 includes a more in-depth discussion of the data analysis from the study and the results. Tables illustrating statistical data are embedded within the text. The chapter ends with a summary of the findings.

CHAPTER 4 : RESULTS

Chapter 4 discusses the data analysis of the study which investigated the relations among alternative certification in special education, job satisfaction, and the degree of teacher self-efficacy.

Descriptive Analysis of the Sample

The total sample *(N*=222*)* was special education teachers in their initial through fifth years of teaching within elementary, middle, and high schools throughout 21 school districts in central Kentucky. The initial year is defined as the first year a teacher is hired by a district. During the initial year, the new teacher has no previous teaching experience as a teacher of record. Upon rehire, the teacher is entering year one, having completed one year of teaching experience. This study focuses on their initial year through year five. The response rate was 51.80 *% (n*=115). Eight of the respondents (6.96*%; n=8*) did not indicate their certification (alternative vs. traditional). The number of special education teachers within the respondents with alternative certification was *(n*=72) and with traditional certification (*n*=35*).* Their responses are included in the data analysis of the sample, but not in the subgroups addressed by the research questions. The majority of the sample (68.*2%; n*=75) was between the age ranges of 26–39. Only a few of the respondents were between the ages of 20–26 (13.6*%; n*=15) or among the ages of 40–49 (17.3*%; n*=19). Only 1 of the sample was over age 50, and no teachers greater than 60 years of age were included in the study.

The majority of participants were females (74.5*%; n=82*), with males in the minority (25.5*%; n=28*). Over three quarters of the sample had their Masters degree (75.5*%; n*=82). One alternative certified participant held a Doctorate and one

traditionally certified and one alternatively certified participant held Specialist Degrees. Over 60% of the sample was Rank II (62.3*%; n*=66) and had a salary range of $30,000–$39,999 (59.1*%; n*=65). None of the participants' salary was less than $20,000 or over $50,000. Little variation was found in the number of teachers employed in their initial year of teaching through year five. The range was (9.2*%; n*=10) in year 1 to (22*%; n*=24) in year 4. The majority of the sample attended two private postsecondary institutions (52.9*%; n*=55), followed by two state universities with (21.2*%; n*=22).

The special education classroom settings were considered. The location choice was resource room, collaboration, and combination of collaboration and resource room. Results indicate teachers within the study were more likely to be found in resource rooms (41.8*%; n*=46), followed by collaboration rooms (35.5*%; n*=39). Fewer teachers taught a combination of resource and collaboration classes (22.7*%; n*=25). Table 4.1 displays the School Supports Questionnaire demographic information of pdarticipants by full sample and subgroup (alternative and traditionally certified).

Table 4.1.
School Supports Questionnaire Data

Variable		Sample (*N*=115)	Alternative (*n*=72)	Traditional (*n*=35)
Gender	Male	25.5% (*n*=28)	29.2% (*n*=21)	17.1% (*n*=6)
	Female	74.5% (*n*=82)	70.8% (*n*=51)	82.9% (*n*=29)
Certification Type			67.3% (*n*=72	32.7% (*n*=35)
Rank	Rank I	17.9% (*n*=19)	15.5% (*n*=11)	24.2% (*n*=8)
	Rank II	62.3% (*n*=66)	67.6% (*n*=48)	48.5% (*n*=16)
	Rank III	19.8% (*n*=21)	16.9% (*n*=12)	27.3% (*n*=9)
Setting	Resource >60% day	41.8% (*n*=46)	45.8% (*n*=33)	37.1% (*n*=13)
	Collaboration >60% day	35.5% (*n*=39)	37.5% (*n*=27)	28.6% (*n*=10)
	Combination 50%/50%	27.7% (*n*=25)	16.7% (*n*=12)	34.3% (*n*=12)
Age	20–25	13.6% (*n*=42)	8.3% (*n*=6)	20.0% (*n*=7)
	26–29	30.0% (*n*=33)	37.5% (*n*=27)	17.1% (*n*=6)
	30–39	38.2% (*n*=42)	37.5% (*n*=27)	40.0% (*n*=14)
	40–49	17.3% (*n*=19)	15.3% (*n*=11)	22.9% (*n*=8)
	50–59	.09% (*n*=1)	1.4% (*n*=1)	0 0
	Over 60	0	0	0
Degree	Bachelor	18.3% (*n*=20)	9.7% (*n*=7)	35.3% (*n*=12)
	Masters	75.2% (*n*=82)	83.3% (*n*=60)	58.8% (*n*=20)
	Specialist	1.8% (*n*=2)	1.4% (*n*=1)	2.9% (*n*=1)
	Doctorate	.09% (*n*=1)	1.4% (*n*=1)	0 0
	Other	3.7% (*n*=4)	4.2% (*n*=3)	2.9% (*n*=1)

Table 4.1 (continued)

Variable		Sample (N=115)	Alternative (n=72)	Traditional (n=35)
Salary	< $20,000	0	0	0
	$20,000–29,999	.09% (*n*=1)	0	2.9% (*n*=1)
	$30,000–39,999	59.1% (*n*=65)	61.1% (*n*=44)	28.6% (*n*=10)
	$40,000–49,999	33.6% (*n*=37)	34.7% (*n*=25)	28.6% (n=10)
	Over $50,000	6.4% (*n*=7)	4.2% (*n*=3)	11.4% (*n*=4)
Teaching Experience	Initial Year	17.4% (*n*=19)	16.9% (*n*=12)	20.0% (*n*=7)
	Year 1	9.2% (*n*=10)	5.6% (*n*=4)	11.4% (*n*=4)
	Year 2	11.9% (*n*=13)	14.1% (*n*=10)	8.6% (*n*=3)
	Year 3	18.3% (*n*=20)	19.7% (*n*=14)	14.3% (*n*=5)
	Year 4	22.0% (*n*=24)	19.7% (*n*=14)	28.6% (*n*=10)
	Year 5	21.1% (*n*=23)	23.9% (*n*=17)	17.1% (*n*=6)
Postsecondary Institution	University of Kentucky	10.6% (*n*=11)	2.9% (*n*=2)	27.3% (*n*=9)
	Eastern Kentucky University	10.6% (*n*=11)	5.8% (*n*=4)	18.2% (*n*=6)
	Western Kentucky University	2.9% (*n*=3)	4.3% (*n*=3)	0
	Morehead State University	5.8% (*n*=6)	4.3% (*n*=3)	8.1% (*n*=3)
	Murray State University	0	0	0
	Asbury College	6.7% (*n*=7)	7.2% (*n*=5)	6.1% (*n*=2)
	Campbellsville University	25.0% (*n*=26)	31.9% (*n*=22)	9.1% (*n*=3)
	Georgetown University	27.9% (*n*=29)	36.2% (*n*=25)	12.1% (*n*=4)

Table 4.1 (continued)

Variable		Sample (*N*=115)	Alternative (*n*=72)	Traditional (*n*=35)
Postsecondary Institution	Kentucky State University	0	0	0
	University of Louisville	3.8% (*n*=4)	5.8% (*n*=4)	0
	Bellarmine University	0	0	0
	Other	6.7% (*n*=7)	1.4% (*n*=1)	18.2% (*n*=6)

In summary, the majority of respondents reported they were female (75*%; n*=80), between the ages of 26 and 39 (69*%; n*=72) and held a Rank II (60*%; n*=64). Most participants held a Master's degree (75.2*%; n*=82). The majority of the sample earned their degree from a private college or private university. The participants enrolled in alternative programs indicated their underlying degree was in education *(n*=13*),* psychology *(n*=6*)* or in a variety of other non-education categories *(n*= 8*).*The most in a single year were in their fourth year of teaching (24%; *n*=24). The average annual salary range for the special education teachers was $30,000–$39,999 (60*%; n*=64). The greatest number of participants taught in resource rooms >60% of their instructional day (41.8*%; n*=46). Table 4.2 reveals the most common sample characteristic data from the SSQ.

Table 4.2.
Most Common Characteristics of the Sample (N=115)

Sample *(N*=115)		
Gender	Females	Males
	74.5*%;(n*=82*)*	25.5*%; (n*=28*)*
Age	26–39	68.2*%; (n*=75*)*
Highest Degree	Masters Degree	75.5*%; (n*=82*)*
Teaching Rank	Rank II	62.3*%; (n*=66*)*
Salary Range	$30,000–$39,999	59.1*%; (n*=65*)*
Teaching Experience	Year 4	22*%; (n*=24*)*
Special Ed. Setting	Resource > 60% of the day	41.8%; *(n*=46*)*
Post-Secondary Institution	Private College or University	59.2*%; (n*=62*)*

Responses from the SSQ were analyzed to compare access to educational supports for the sample *(N*=115) as well as for alternative (*n*=72*)* and traditional (*n*=35) certified special education teachers. Frequencies and percentages were employed for analysis of the sample responses as a whole and within the two groups.

The SSQ allowed respondents to indicate multiple answers to the 21 education supports within the study. They also had the ability to list additional educational supports that were not among the choices. District professional development had the greatest percentage of sample responses indicating a high degree of access (75.7*%; n*=81). The majority of special education teachers within the sample had access to a special education mentor (69.2*%; n*=74), while far fewer had access to a general education teacher mentor (20.6*%; n*=22). Only a small number of special education teachers had access to district-wide professional learning teams (9.3*%; n*=10).

The majority of the sample had access to new teacher training from their prospective districts (63.6*%; n*=68). The Central Kentucky Special Education Cooperative provides additional new teacher training to districts. The respondents indicated they had access to this training as well (57.9*%; n*=62). Teachers indicated

access to Central Kentucky Special Education Cadres (25.2%; *n*=27) and consultants (34.6%; *n*=37).

Responses indicated a high percentages of the sample received informal help at the building level from other special education staff (62.6%; *n*=67). Data revealed slightly less support from regular education staff (39.3%; *n*=42). All special education teachers identified support from building-level administration (64.5%; *n*=69), however, district-level support is much lower (48.6%; *n*=52). District-level special education meetings were occurring (45.8%; *n*=49). Analysis of the data indicates all respondents of the sample had access to a variety of educational supports provided by their districts, outside sources, and their specific schools.

Data were divided into responses provided by alternative (*n*=72) and traditionally (*n*=35) certified special education teachers within the sample. Analysis of the data indicates there was no significant difference in access to district educational supports, including district training and professional developments between the alternative and traditional groups. Both groups have access to special education teacher mentors (alternative=70.4%; *n*=50 and traditional=66.7%; *n*=22). The alternative teachers (23.9%; *n*=17) had access to regular education teacher mentors nearly twice as often as traditional teachers in (12.1%; *n*=4). Special education teachers in the alternative group (60.6%; *n*=43) had more access than teachers traditionally certified (51.5%; *n*=17) to CKSEC new teacher training. The alternative certified teachers (29.6%, *n*=21) have more access to Central Kentucky Special Education Cadres than do the traditional teachers (15.2%; *n*=5) and to consultants (alternative=36.6%; *n*=26; traditional=27.3%; *n*=9). The difference might be a result of additional training requirements for alternative

certification programs. Further analysis of the data does not provide any insight into the basis of the difference between alternative and traditionally certified special education teachers who have access to regular special education meetings at the district level. Data in this study was not tracked by district or school, which might have revealed information essential to aid in clarifying the difference. Table 4.3 depicts the educational support data from the SSQ.

Table 4.3.
Educational Supports

Variable	Sample (*N*=115)	Alternative (*n*=72)	Traditional (*n*=35)
Special Education Teacher Mentor	69.2% (*n*=74)	70.4% (*n*=50)	66.7% (*n*=22)
Regular Education Teacher Mentor	20.6% (*n*=22)	23.9% (*n*=17)	12.1% (*n*=4)
New Teacher Training (District)	63.6% (*n*=68)	64.8% (*n*=46)	63.6% (*n*=21)
CKSEC New Teacher Training	57.9% (*n*=62)	60.6% (*n*=43)	51.5% (*n*=17)
Professional Development (District)	75.7% (*n*=81)	76.1% (*n*=54)	72.7% (*n*=24)
Professional Development (Out of District)	31.8% (*n*=34)	33.8% (*n*=24)	21.2% (*n*=7)
Professional Development (CKSEC)	66.4% (*n*=71)	66.2% (*n*=47)	63.6% (*n*=21)
Professional Learning Teams (District)	9.3% (*n*=10)	11.3% (*n*=8)	6.1% (*n*=2)
CKSEC Cadres	25.2% (*n*=27)	29.6% (*n*=21)	15.2% (*n*=5)
Joint Planning (General and Special Education)	39.3% (*n*=42)	38.0% (*n*=27)	39.4% (*n*=13)
Regular Scheduled Meetings (General and Special Education)	37.4% (*n*=40)	36.6% (*n*=26)	42.4% (*n*=14)
Informal Support from Building level general education staff	48.6% (*n*=52)	49.3% (*n*=35)	45.5% (*n*=15)
Informal Support from Building level special education staff	62.6% (*n*=67)	60.6% (*n*=43)	63.6% (*n*=21)
Support Building Level Administration	64.5% (*n*=69)	62.0% (*n*=44)	69.7% (*n*=23)

Table 4.3 (continued)

Variable	Sample (*N*=115)	Alternative (*n*=72)	Traditional (*n*=35)
Support District Level Administration	48.6% (*n*=52)	49.3% (*n*=35)	45.5% (*n*=15)
Assistance from District Consultants or Specialists	32.7% (*n*=35)	31.0% (*n*=22)	33.3% (*n*=15)
Assistance from CKSEC Consultants or Specialists	34.6% (*n*=37)	36.6% (*n*=26)	27.3% (*n*=9)
Regular Building Level Special Education meetings	44.9% (*n*=48)	45.1% (*n*=32)	45.5% (*n*=15)
Regular District Level Special Education meetings	45.8% (*n*=49)	50.7% (*n*=36)	36.4% (*n*=12)
Assistance from other Professionals	27.1% (*n*=29)	29.6% (*n*=21)	24.2% (*n*=8)
Other supports	0	0	0

Research Question 1

How satisfied are early career special education teachers and what is their sense of self-efficacy?

The degree of teacher efficacy was determined using responses of The Teacher Sense of Efficacy Scale. The long form containing 24 items was used in the study. This efficacy scale is based on a 9-point Likert scale: *nothing* coded (1), *very little* coded (3), *some influence* coded (5), *quite a bit* coded (7), and *a great deal* coded (9). The 24 items of the TSES are divided into three subscales: classroom management, student engagement, and instructional practices. The response rate of the 24 questions varied from a low of 112 on Question 16 to the entire sample of 115 answering 13 of the questions. The Teacher Sense of Efficacy Scale indicated teachers in the study felt they had *quite a bit* (*M*=6.87) of influence on their students in the areas addressed by the scale: classroom management, student engagement, and instructional practices. The teachers within the sample (*N*=115) have a high degree of teacher self-efficacy. Tables

4.4and 4.5 portray the overall sample and subscale areas of teachers' sense of self-efficacy.

Table 4.4.
Teacher Sense of Efficacy: Total Sample/ Teaching Setting/Years Teaching (N=115)

Teaching Setting	Mean	SD
Resource > 60%	6.97	1.31
Collaborative >60%	6.90	1.39
Combination 50/50	6.85,	1.25
Years Teaching	**Mean**	**SD**
Initial	6.90	1.57
1	7.20	1.44
2	7.03	1.48
3	7.48	1.46
4	7.23	1.38
5	7.53	1.16

Note: *nothing* coded (1), *very little* coded (3), *some influence* coded (5), *quite a bit* coded (7), and *a great deal* coded (9).

Table 4.5.
TSOE, Subscales: Total Sample, Years Teaching

Years Teaching	Classroom Management		Instructional Practice		Student Engagement	
	M	SD	M	SD	M	SD
Initial	6.90	1.57	6.81	1.28	6.23	1.46
1	7.20	1.44	7.03	1.25	6.59	1.19
2	7.03	1.48	6.75	1.26	6.14	1.39
3	7.48	1.46	7.19	1.15	6.56	1.50
4	7.33	1.38	7.06	1.34	6.55	1.44
5	7.53	1.16	7.17	1.06	6.59	1.45

Note: *nothing* coded (1), *very little* coded (3), *some influence* coded (5), *quite a bit* coded (7), and *a great deal* coded (9).

Job satisfaction was calculated using the Brayfield Rothe Job Satisfaction Index (1951) as modified by Warner (1973). This job index contains 10 items on a 5-point Likert scale: *strongly disagree* coded (1), *disagree* coded (2), *undecided* coded (3), *agree* coded (4), and *strongly agree* coded (5). The participants in the study *(N*=115) responses indicated they *agree* (*M*=4.28) they are satisfied with their jobs. The responses also

concluded the participants from the sample were enthusiastic about their job, looked forward to coming to work, and were satisfied with their employment selection. Tables 4.6 (Total Sample/ Teaching Setting) and 4.7 (Total Sample/ Years of Experience) depict the job satisfaction survey data.

Table 4.6.
Job Satisfaction Index: Total Sample/ Teaching Setting

Teaching Setting	Sample *(N*=110*)* *(GM*=4.28, *SD*=.737*)*
Resource room>60%	(M=4.17, SD=.807)
Collaboration >60%	(M=4.36, SD=.716)
Combination 50/50	(M=4.36, SD=.584)

Note: *strongly disagree* coded (1), *disagree* coded (2), *undecided* coded (3), *agree* coded (4), and *strongly agree* coded (5).

Table 4.7.
Job Satisfaction Index: Total Sample/ Years of Experience

Years Teaching	Sample *(N*=115*)* *(M*=4.29, *SD*=.733*)*
Initial Year	(M=4.33, SD=.671)
1.	(M=4.26, SD=.624)
2	(M=4.25, SD=.714)
3	(M=4.30, SD=.726)
4.	(M=4.27, SD=.788)
5.	(M=4.28, SD=.731)

Note: *strongly disagree* coded (1), *disagree* coded (2), *undecided* coded (3), *agree* coded (4), and *strongly agree* coded (5).

There was no significant difference between groups or settings in the area of teacher sense of efficacy or job satisfaction.

Research Question 2

What are the relations among teacher efficacy, job satisfaction, and alternative certification for early career special education teachers (0 to 5 years) from twenty-one districts in central Kentucky?

In order to explore the relations among alternative certification, job satisfaction, and teachers' sense of efficacy, the SSQ was used to determine the number of participants who completed their certification in special education through alternative programs. The sample (*N*=115*)* was divided into groups dependent upon the certification of the participant. The result of the analysis is uneven groups, alternative certified (67.3*%; n*=72) and traditionally certified (32.7*%; n*=35).

In addition to the reliability analysis, a one-way ANOVA was conducted on the responses of the Job Satisfaction Index. The significance level ranged from a low of *p*=.165 on Question 5 (*I feel satisfied with my job)*, to a high of *p*=.945 on Question 1 (*My job is interesting enough to keep me from getting bored)*. The analysis of the variances indicated both groups of teachers are comparable.

Reliability analysis was completed on the Teacher Sense of Efficacy. There was a very small difference between groups in the area of student engagement, alternative group (*M*=6.45, *SD*=.98*)*, and the traditional group (*M*=6.56, *SD*=.91). Both groups' responses represented a high degree of teacher efficacy. Classroom management responses revealed even less difference between group means, alternative group (*M*=7.29, *SD*=.96*)*, traditional group (*M*=7.2, *SD*=1.16). The difference between groups in the area of instructional practices were also negligible, alternative (*M*=7.063, *SD*=.84*)*, and the traditional group (*M*=7.06, *SD*=1.01). Their responses indicated the teachers believed they possess *quite a bit* of influence over their students in all areas of the TSES.

An ANOVA was performed to compare group responses in the area of teacher efficacy. No significant differences between groups were found. The ANOVA produced significance levels ranging from a low of (*p*=.081) on Question 4 (*How much can you do*

to help your students think critically) to a high of (p=.996) on Question 10 (*How much can you do to help your students value learning)*. All significance levels (p=<.05) were positively related to teacher efficacy.

In conclusion, analysis of the data indicated there was no significant difference in the degree of teacher efficacy or job satisfaction between alternatively certified and traditionally certified teachers in the study. Both groups of participants demonstrated a high degree of personal teacher efficacy and job satisfaction. Tables 4.8 (ANOVA: Job Satisfaction Index) and 4.9 (ANOVA: Teacher Sense of Efficacy) depict the job satisfaction survey data.

Table 4.8.
ANOVA: Job Satisfaction Index

Mode		Range	Questions	SS	df	F.	Sig.
Alt.	Trad						
5.00	5.00	2.00–5.00	1.	.002	1/103	.005	.945
1.00	2.00	1.00–5.00	2.	.019	1/103	.022	.881
4.00	4.00	1.00–5.00	3.	.478	1/104	.799	.373
1.00	1.00	1.00–5.00	4.	.012	1/103	.017	.897
4.00	4.00	2.00–5.00	5.	1.083	1/104	1.956	.165
1.00	1.00	1.00–4.00	6.	.033	1/104	.063	.803
4.00	4.00	1.00–4.00	7.	.033	1/104	.093	.761
4.00	4.00	2.00–5.00	8.	.171	1/102	.269	.605
4.00	4.00	2.00–5.00	9.	.000	1/104	.001	.982
2.00	2.00	1.00–4.00	10	.043	1/103	.073	.788
4.00	4.00	2.00–5.00	11.	.679	1/104	1.173	.281
1.00	1.00	1.00–5.00	12.	.626	1/104	.858	.356
5.00	4.00	2.00–5.00	13.	.509	1/104	.982	.324
1.00	1.00	1.00–4.00	14.	.003	1/103	.008	.929

p>.05

Table 4.9.
ANOVA: Teacher Sense of Efficacy

Mode		Range	Questions	SS	df	F.	Sig.	TSOE: Subscale
Alt.	Trad.							
7.00	7.00	2.00–9.00	1.	1.389	1/105	.573	.471	Student Engagement
7.00	7.00	3.00–9.00	2.	.210	1/105	.151	.698	Student Engagement
7.00	7.00	3.00–9.00	3.	.264	1/105	.135	.714	Classroom Management
7.00	5.00	1.00–9.00	4.	7.797	1/105	3.104	.081	Student Engagement
9.00	9.00	5.00–9.00	5.	.837	1/105	.544	.462	Classroom Management
7.00	7.00	3.00–9.00	6.	.538	1/105	.286	.594	Student Engagement
7.00	7.00	4.00–9.00	7.	.754	1/105	.570	.452	Instructional Practices
7.00	9.00	4.00–9.00	8.	.964	1/104	.613	.435	Classroom Management
7.00	7.00	3.00–9.00	9.	.517	1/104	.267	.607	Student Engagement
7.00	7.00	4.00–9.00	10.	.000	1/104	.000	.996	Instructional Practices
7.00	7.00	5.00–9.00	11.	.273	1/104	.212	.646	Instructional Practices
7.00	7.00	3.00–9.00	12.	.267	1/104	.159	.691	Student Engagement
7.00	7.00	3.00–9.00	13.	.022	1/103	.011	.917	Classroom Management
7.00	5.00	3.00–9.00	14.	.452	1/105	.298	.586	Student Engagement
7.00	7.00	2.00–9.00	15.	1.380	1/104	.743	.391	Classroom Management
9.00	7.00	4.00–9.00	16.	2.118	1/102	1.231	.270	Classroom Management
7.00	7.00	5.00–9.00	17.	.633	1/105	.412	.523	Instructional Practices
7.00	7.00	3.00–9.00	18.	.232	1/104	.130	.719	Instructional Practices
7.00	7.00	2.00–9.00	19.	1.786	1/105	.729	.395	Classroom Management
7.00	7.00	4.00–9.00	20.	.617	1/105	.358	.551	Instructional Practices

Table 4.9 (continued)

Mode		Range	Questions	SS	df	F.	Sig.	TSOE: Subscale
Alt.	Trad.							
7.00	7.00	1.00–9.00	21.	1.038	1/105	.441	.508	Classroom Management
7.00	5.00	3.00–9.00	22.	.020	1/104	.009	.925	Student Engagement
7.00	7.00	4.00–9.00	23.	1.709	1/104	1.207	.274	Instructional Practices
7.00	7.00	3.00–9.00	24.	.942	1/105	.670	.415	Instructional Practices

P >.05

Research Question 3

What are the relations among the number of years in teaching, alternative certification, teacher efficacy, and job satisfaction?

Frequencies and percentages were executed to compare number of sample respondents and their years of experience. Responses indicate little variance between the participants from their initial year of teaching through year five. The greatest number of respondents within the sample were in year 4 of teaching (22%; *n*=24). The fewest number of teachers were in year 1 (9.2%; *n*=10). Analysis of the traditional and alternative subgroups indicated the greatest number of respondents was in year 4. However, the least number of teachers reporting for both groups was in year 2 (alternative=14.0*%; n*=10) and (traditional=8.6*%; n*=3*).*

Means and standard deviations were used to analyze total sample response, and results were compared to the analysis of the responses of the alternative and traditional groups. Analysis of individual questions from the Job Satisfaction Index and the Teacher Sense of Efficacy Scale were completed to identify patterns and significant differences between groups or among the years of experience.

The responses from the Job Satisfaction Index were evaluated by means and standard deviations. The alternative certified respondents enjoyed the greatest degree of job satisfaction in year 5 (*M*=4.36, *SD*=.677) compared to the highest degree of job satisfaction for the traditional group (*M*=4.57, *SD*=.621) in year 1. The lowest degree of job satisfaction for alternatives occurred in year 1 (*M*=4.14, *SD*=.673). Traditional special education teachers indicate they are less satisfied in year 5 (*M*=4.07, *SD*=.845). This is interesting, but no pattern of diminishing job satisfaction as years of teaching experience increased could be established. The traditional group indicated the lowest degree of job satisfaction in year 5 *(M*=4.07, *SD*=.*845*) followed by year 2 (*M*=4.20, *SD*=.808*).* The means of both groups indicate these teachers *agree* they are satisfied with their jobs. There is no significant difference between the standard deviations among the years of teaching experience for job satisfaction, nor does a pattern occur as teaching experience increases for either group. Table 4.10 delineates the means and standard deviations versus years of teaching for the total sample and the alternative and traditionally certified respondents.

Table 4.10.
Job Satisfaction Index: Total Sample/Subgroup/Years Teaching

Years Teaching	Sample *(N*=115*)* *(M*=4.29, *SD*=.733*)*	Alternative *(n*=72*)* *(M*=4.27, *SD*=.715*)*	Traditional *(n*=35*)* *(M*=4.31, *SD*=.722*)*
Initial Year	(M=4.33, SD=.671)	(M=4.34, SD=.603)	(M=4.29, SD=.778)
1	(M=4.26, SD=.624)	(M=4.14, SD=.673)	(M=4.57, SD=.621)
2	(M=4.25, SD=.714)	(M=4.27, SD=.661)	(M=4.20, SD=.808)
3	(M=4.30, SD=.726)	(M=4.24, SD=.784)	(M=4.53, SD=.578)
4	(M=4.27, SD=.788)	(M=4.16, SD=.754)	(M=4.42, SD=.771)
5	(M=4.28, SD=.731)	(M=4.36, SD=.677)	(M=4.07, SD=.845)

Note: *strongly disagree* coded (1), *disagree* coded (2), *undecided* coded (3), *agree* coded (4), and *strongly agree* coded (5).

The responses to the Teacher Sense of Efficacy Scale were analyzed by group means and standard deviations in the subscale areas of classroom management, student engagement, and instructional practices. Both the alternative and traditional groups indicated the greatest sense of efficacy in the area of classroom management, alternative group (*M* 7.29, *SD*=1.37*)*, and the traditional group (*M*=7.27, *SD*=1.44). This is followed closely by instructional practices, alternative group (*M*=7.05, *SD*=1.19*)* and the traditional group (*M*=6.88, *SD*=1.26). The area indicating the lowest degree of teacher's efficacy was student engagement, alternative group (*M*=6.44, *SD*=1.41*)* and the traditional group (*M*=6.56, *SD*=1.35). The grand means of all groups indicate both groups of special education teachers agree they have at least *quite a bit* to *a great deal* of influence over their students.

The classroom management responses indicate both alternative and traditionally certified special education teachers have a high degree of teacher efficacy. Their responses signify both groups consider they have *quite a bit* in year 2 for the alternative group, and in the initial year and year 4 for the traditional group. All other years for both groups indicate they think they have *a great deal* of influence over students. The questions in this area reflect a teacher's sense of efficacy on controlling disruptive behavior, setting expectations, establishing routines, developing and implementing a classroom management system, and persuading of students to follow classroom rules. Special education teachers are responsible for monitoring behavior of many of the most disruptive students within the district. Teacher responses indicate they consider themselves up to the task whether they are in their initial year or in year 5. No significant difference in the degree of efficacy was found among groups.

Instructional practices consists of questions concerning teachers' ability to develop and respond to difficult questions, gauge student degree of comprehension, lesson modifications, develop and implement appropriate assessments, and challenge even the most capable students. The means in this area indicate very small difference between groups or among years of teaching experience. The lowest degree of efficacy for the alternative group of teachers occurred during year 2 (M=6.76, SD=1.24) and for the traditional group in year 4 (M=6.62, SD=1.33). The highest degree of teacher efficacy for alternative teachers was in year 4 (M=7.20, SD=1.23) and in the traditional group in year 3 (M=7.98, SD=.83). No pattern between groups or among the years was found. However, the traditional group of special education teachers' responses were more consistent with lower standard deviations in years 1, 3, and 5 (SD=.94, .83, .81). Responses from both groups indicate teachers believe they have *quite a bit* of influence over their students in instructional practices. No significant difference was found between groups or among years of teaching experience.

Student engagement was the area where both groups consider they have the least amount of student influence and lowest degree of teacher efficacy. Student engagement includes areas regarding motivation of students, guiding them to think critically, increasing the degree students feel they can successfully complete tasks in school, facilitate them learning to value education and erudition, increase their comprehension for difficult content, and assist families in helping their students be successful. It is not surprising special education teachers' sense of efficacy is lower in this area. Many students with disabilities find little or no success in academics. Families of students with disabilities might struggle with their children's physical, emotional, and academic

requirements. As a teacher, working with these families can be both frustrating and rewarding, but challenging the majority of times. Unlike the other areas of teacher efficacy, neither group indicates responses that are at or above *quite a bit* of influence. The majority of responses in both groups and across years of teaching experience indicate the respondents believe they have only *some influence* in this area.

Student engagement is unique in the years that the highest degree of teacher efficacy experienced diverges between the two groups. The alternative group's mean was higher than the traditional group in their initial year, year 4, and year 5, but lower in years 1, 2, and 3. Alternative responses indicated a variance between the means of *(M*=6.08, *SD*=1.25*)* and *(M*=6.69, *SD*=1.44*).* This group's sense of efficacy was highest in year 4 and lowest in year 2. The traditional group reported their highest sense of efficacy in year 3 and their lowest in their initial year of teaching (*M*=7.04, *SD*=.86 *and M*=6.03, *SD*=1.36). The differences between the two groups and among the years were not significant. No specific patterns were found in either group; however, it is interesting to note the means in both groups are lower for the questions concerning motivation and reaching the most difficult students, alternative (*M*=5.56*)* and traditional *(M*=5.92).

There is no significant difference in the degree of teacher efficacy between the two groups or among the years of teaching experience. Both groups of special education teachers believe they have at least *some influence*, but most consider they have *quite a bit* of influence in the areas addressed by the Teacher Sense of Efficacy Scale. No patterns emerge dependent upon the number of years teaching experience from analysis of the means of either group. . Table 4.11 presents the three distinct areas of teacher sense of efficacy survey data.

Table 4.11.
Teacher Sense of Efficacy Scale: Subgroup/Subscale/Years Teaching

Subscale	Years Teaching	Alternative Certification (*n*=72)		Traditional Certification (*n*=35)	
		M	SD	M	SD
Student Engagement	Initial Year	6.29	1.49	6.03	1.36
	1	6.59	0.89	7.09	0.86
	2	6.08	1.25	6.38	1.86
	3	6.34	1.57	7.40	0.86
	4	6.69	1.44	6.34	1.45
	5	6.61	1.34	6.56	1.11
Classroom Management	Initial Year	7.12	1.40	6.75	1.79
	1	7.09	1.38	7.97	0.85
	2	6.75	1.49	7.67	1.15
	3	7.15	1.48	8.26	0.17
	4	7.55	1.23	6.76	1.47
	5	7.63	1.18	7.27	1.02
Instructional Practices	Initial Year	6.90	1.22	6.77	1.44
	1	7.00	1.43	7.41	0.94
	2	6.76	1.24	6.71	1.34
	3	6.96	1.12	7.98	.083
	4	7.20	1.23	6.62	1.33
	5	7.15	1.13	7.23	0.81

Note: *nothing* coded (1), *very little* coded (3), *some influence* coded (5), *quite a bit* coded (7), and *a great deal* coded (9).

Research Question 4

What are the relations among teacher job satisfaction, teacher efficacy, and job placement among early career special education teacher (i.e., resource, collaborative, combination)?

Participants in the sample were asked to indicate their current special education teaching setting. The SSQ choices for the teaching settings were: (a) resource instruction >60% of the instructional day, (b) collaboration >60% of the instructional day, or (c) combination of resource 50% and collaboration 50% of the instructional day.

Only 110 participants from the sample indicated their teaching setting. Of the *9*5.6*% (N*=110*)* of the sample that responded, 41.8*% (N*=46*)* were teaching in resource rooms, 35.5*% (N*=39*)* were in collaborative settings, and 22.7*% (N*=25*)* taught approximately half of their instructional day in resource rooms and the other half in collaborative settings.

Alternative certified special education teachers were more often teaching in resource room settings (45.8*; n*=33) than traditionally certified special education teachers traditional teachers, (37.1*%; n*=13). Alternative certified special education teachers were also assigned to collaboration > 60% of their day more often (37.5*%; n*=27), as compared to their traditionally certified peers, (28.6*%; n*=10*).* Special education teachers who have traditional certification are most often teaching equal amounts in resource and collaborative classrooms (34.3*%; n*=12). The alternative group of special education teachers were much less prone to be dividing their day equally between resource and collaboration (16.7*%; n*=12). Table 4.12 portrays the special education teaching setting for the survey respondents.

Table 4.12.
Special Education Teaching Setting: Total Sample/Subgroup

Teaching Setting	Sample *(N*=110*)*	Alternative *(n*=72*)*	Traditional *(n*=35*)*
Resource > 60%	41.8%, (n=46)	45.8%, (n=33)	37.1%, (n=13)
Collaboration > 60%	35.5%, (n=39)	37.5%, (n=27)	28.6%, (n=10)
Combination 50% / 50%	22.7%, (n=25)	16.7%, (n=12)	34.3%, (n=12)

Data was analyzed to examine the relationship between special education setting and job satisfaction. There was no significant difference between the means of the two groups or between the three special education settings. The alternative group's mean was highest in the collaborative setting where they spent greater than 60% of their day as a

collaborative special education teacher in a general education classroom. There was not a significant difference between the mean of the alternative group and the traditional group in this setting; alternative (*M*=4.39, *SD*=.656*)* and traditional *(M*=4.27, *SD*=.760*).* The traditional group indicated the greatest satisfaction in the combination setting *M*=4.34, *SD*=.618 while the alternative group mean was only slightly less *(M*=4.38, *SD*=.562*).* Alternative special education teachers indicated the least amount of job satisfaction was in the >60% resource room setting *M*=4.11, *SD*=.757) and the traditional group responses indicated the least job satisfaction in the >60% collaboration setting *(M*=4.27, *SD*=.760*).* There was no significant difference among settings or groups in the area of job satisfaction. Both groups indicated they were satisfied with their teaching positions; however, resource room setting was slightly less satisfying for the overall sample than collaboration or a combination assignment.). Table 4.13 depicts the job satisfaction index special education teaching setting for survey respondents.

Table 4.13.
Job Satisfaction Index: Total Sample/Subgroup/Teaching Setting

Teaching Setting	Sample *(N*=110*)* *(M*=4.28, *SD*=.737)	Alternative *(n*=72*)* *(M*=4.26, *SD*=.721*)*	Traditional *(n*=35*)* *(M*=4.3, *SD*=.728*)*
Resource >60%	(M=4.17, SD=.807)	(M=4.11, SD=.757)	(M=4.32, SD=.908)
Collaboration >60%	(M=4.36, SD=.716)	(M=4.39, SD=.656)	(M=4.27, SD=.760)
Combination	(M=4.36, SD=.584)	(M=4.38, SD=.562)	(M=4.34, SD=.618)

Teacher efficacy was divided into three subscales for analysis. Means and standard deviations were used to compare the responses alternative and traditional certified special education teachers, special education setting, and each subscale of the TSES: classroom management, student engagement, and instructional practices. The

grand means of the subscales for the alternative certified group are: *Classroom Management (M*=7.29, *SD*=.96*), Student Engagement (M*=6.45, *SD*=.98*),* and *Instructional Practices (M*=7.06, *SD*=.84*).* The traditionally certified special education teachers responses resulted in grand means as follows: *Classroom Management (M*=7.27, *SD*=1.16*), Student Engagement (M*=6.56, *SD*=.9*), Instructional Practices (M*=7.06, *SD*=1.01*).* This data indicates a high degree of teacher efficacy for the entire sample, the teachers with alternative and traditional certification, and in all three subscale areas of the TSES.

In the area of student engagement, there was no significant difference between the special education teachers with alternative and traditional certification or among the three settings. The alternative group indicated the highest degree of efficacy in the collaborative setting (*M*=6.57, *SD*=1.43) as compared to the traditional group (*M*=6.18, *SD*=1.33). This indicated the lowest degree of teacher self-efficacy in any of the three settings for both groups. The traditional group's highest degree of efficacy in the area of student engagement was in the resource room setting (*M*=6.87, *SD*=1.23). The alternative group was nearly the same as the two other settings, with resource being *(M*=6.36, *SD*=1.43*),* and the combination of resource and collaboration being *(M*=6.35, *SD*=1.33*).* Traditional special education teachers indicate *(M*=6.53, *SD*=1.36*)* in the area of student engagement. The responses of all special education teachers within both groups indicated means within the range of 6.0–7.0. This indicates special education teachers within the study and regardless of teaching setting felt they had *quite a bit* of influence on their students. This indicates a high degree of efficacy in the area of student engagement by both alternative and traditional certified special education teachers.

The degree of efficacy in the area of instructional practices for the two groups and across the three settings resulted in special education teachers indicating they felt they had quite a bit of influence over students in the area of instruction. The mean for the collaborative setting for alternative certified special education teachers (*M*=7.28, *SD*=1.24*)* was lower than their traditional colleagues (*M*=6.93, *SD*=1.31). In the combination setting the mean of the alternative group *(M*=7.02, *SD*=.98*)* was also higher than the traditional group (*M*=6.78, *SD*=1.21). Very little variance is found between the means of the groups in the collaboration and combination settings. There is a greater difference between the means of the two groups in the resource setting. Overall, the alternative group indicated the least amount of efficacy in the resource room (*M*=6.90, *SD*=1.19) while the traditional group indicated the greatest degree of efficacy (*M*=7.44, *SD*=1.17).

Data from the classroom management area of Teacher Sense of Efficacy indicates the highest degree of teacher efficacy of the three areas. The means of both groups and across all three settings indicate the special education teachers believe they have between quite a bit and a great deal of influence on students in the area of classroom management. Traditional special education teachers have the highest sense of efficacy in the resource room setting (*M*=7.75, *SD*=1.39) and the lowest degree of efficacy in the collaborative setting (*M*=6.86, *SD*=1.46). Alternative certified special education teachers had the highest degree of efficacy in a combination setting (*M*=7.40, *SD*=1.00) and the lowest degree in the resource setting (*M*=7.19, *SD*=1.39). The variance of the means between settings for both groups was very narrow. The range of the alternative group (*M*=7.19 - 7.40*)*, indicated less variance than the traditional group where the range was (*M*=6.86 -

7.75*).* Tables 4.14 displays data from the three distinct areas of teacher sense of efficacy versus classroom setting survey data.

Table 4.14.
Teacher Sense of Efficacy Data: Total Sample/Subgroup/Subscale/Teaching Setting

Subscale	Teaching Setting	Full Sample (*N*=110)		Alternative Certification (*n*=72)		Traditional Certification (*n*=35)	
		M	SD	M	SD	M	SD
Classroom Management	Resource > 60%	7.35	1.33	7.19	1.39	7.75	1.39
	Collaborative > 60%	7.16	1.45	7.37	1.44	6.86	1.46
	Combination 50 / 50%	7.24	1.32	7.40	1.00	7.09	1.62
Student Engagement	Resource > 60%	6.50	1.40	6.36	1.43	6.87	1.23
	Collaborative > 60%	6.42	1.43	6.57	1.43	6.18	1.33
	Combination 50 / 50%	6.40	1.13	6.35	1.33	6.53	1.36
Instructional Practices	Resource > 60%	7.05	1.23	6.90	1.19	7.44	1.17
	Collaborative > 60%	7.11	1.27	7.28	1.24	6.93	1.31
	Combination 50 / 50%	6.89	1.07	7.02	0.98	6.78	1.21

In summary, no significant difference was found among job satisfaction, teacher's sense of efficacy, and the type of certification held by the participants in the study. Both alternative and traditionally certified special education teachers are satisfied with their present jobs and their choice of teaching as a profession. They believe they have at least *quite a bit* of influence on their students. Their degree of teacher efficacy and job satisfaction is not significantly different regardless of number of years in teaching (0–5)

or among the three settings explored. In the next chapter, the results are discussed, with an emphasis on implications for policy and procedure improvements and future research.

CHAPTER 5 : IMPLICATIONS AND CONCLUSIONS

The primary purpose of this study was an exploration of the relations among teacher efficacy, job satisfaction, and alternative certification for special education teachers in their initial through fifth year of service. The secondary purpose was to examine the interrelations among teacher efficacy, number of years in the profession, degree of job satisfaction, type of classroom setting (resource or collaborative), and type of special education certification (alternative or traditional).

The researcher hypothesis assumed that teacher self-efficacy was lower in early career special education teachers who were pursuing or had recently completed certification through alternative programs compared to those special education teachers prepared through traditional programs. Analysis of survey data revealed that there was no significant difference in the degree of self-efficacy between these two groups of teachers. Further, analyses of responses gathered through the Job Satisfaction Index (Brayfield Rothe Job Satisfaction Index (1951) as modified by Warner (1973) indicated no significant difference between groups with regard to their satisfaction with their jobs.

Discussion of Findings

Since the data failed to support the hypothesis, discussion of the findings is not based on statistical significance; descriptive data, however, may prove interesting. The 115 special education teachers who completed the surveys reported a high degree of self-efficacy, which was high throughout all subscales of the TSES: (a) classroom management, (b) student engagement, and (c) instructional practices.

Responses from the Job Satisfaction Index indicate there was no significant difference in the job satisfaction of alternative or traditionally certified special education

teachers with regard to years of experience. Special education teachers in the sample indicated they are satisfied with their jobs throughout the first five years of their careers. The variance between satisfaction levels among the years in teaching is not consistent or significant enough to allow for generalization. In addition, no pattern among the years and between the groups could be established. Analysis of individual questions found the entire sample of special education teachers are satisfied with their jobs, enthusiastic about their work, and satisfied with their current position.

Teacher Efficacy

Instructional practices had a total subscale of *M*=7.05 for alternatively certified special education teachers and *M*=6.88 for the traditionally certified group. Alternative and traditionally certified special education teachers signify a high degree of self-efficacy by indicating they have *quite a bit* of influence on students in the area of instructional practices.

The student engagement subscale indicated no significant difference between the alternative and traditionally certified special education teachers. The alternative group had a total subscale of *M*=6.44 while the traditional group was *M*=6.56. Both indicate special education teachers in the survey judge they have *some influence* in the area of student engagement. Teachers indicate their sense of self-efficacy is high; however, keeping students engaged is an area of concern for a portion of the respondents and is discussed in the subsequent student motivation section.

Responses indicated both groups had the highest degree of self-efficacy in the area of classroom management. The alternative group's total subscale (*M*=7.29) and the traditional (*M*=7.27) indicate teachers in the sample consider they have *quite a bit* of

influence on their students in this area. The means signify a high degree of teacher self-efficacy when addressing behavior and classroom management issues. Responses indicated teachers in the sample were more confident in establishing classroom rules than managing student's behavior when rules were broken.

Years of teaching experience did not affect teachers' degree of self-efficacy: all teachers in the sample reported a high degree of self-efficacy from their initial year through fifth year of service. No significant loss or gain was reported in teachers' sense of self-efficacy across the years targeted in the study. The largest gain in the degree of self-efficacy was in the subscale area of instructional practices, which may be explained by repetitive exposure to a variety of methods and materials. That is, teacher's confidence may well have increased due to recurring instruction presentation and thus sense of self-efficacy remained high.

Variance in Student Motivation

Research has indicated teacher self-efficacy is related to increased student motivation (Midgley et al., 1989), better student self-direction (Rose & Medway, 1981), and more positive attitudes toward school (Miskel, McDonald, & Bloom, 1983). The questions within the subgroups were analyzed to determine if supplementary information or patterns could be ascertained. Question 4 of the TSES indicated the lone area of real difference: This question dealt with motivation of students. Alternative and traditionally certified special education teachers rated their degree of influence on student motivation lower across all five years addressed in the study. The means were lower than in most other subscales and ranged from an alternative group low in their initial year of M=5.66 to a high of M= 7.6 in Year 3 for the traditional group. It should be noted that the group

of alternatively certified teachers rated this area lower than the total sample and their traditionally certified colleagues in all years except Year 4: however, the differences were not significant. The table in Appendix F delineates respondents' means of student motivation versus years of experience for the total sample as well as the alternatively and traditionally certified respondents.

Variance in Effectiveness with Families

The lowest mean scores across settings and between groups concerned teachers' effectiveness in assisting families. The mean range indicated a low of *M*=5.8 (*some influence*) for traditionally certified teachers in a collaborative setting to a high of *M*= 6.26 for alternatively certified special education teachers in the same setting. Many of the additional responsibilities assumed by contemporary special education teacher were once handled by parents. For example, teachers and students now bear increased responsibilities for homework completion and other school related activities that parents once handled (Conklin &Weil, 1997). Special education teachers normally have a greater level of contact with parents than their general education colleagues, which may be attributable to the academic and behavioral needs of special education students and the diverse meetings with parents required under IDEIA.

Teachers with a high sense of self-efficacy and job satisfaction "tend to foster a classroom climate that is warm and supportive of student needs" (Fritz, 1995, p. 201). A higher degree of personal self-efficacy contributes to increased confidence and willingness to discuss their instructional programs and professional goals and to allow parental input (Hoover-Dempsey et al., 1987). However, these study findings warrant

further investigation. The table in Appendix G displays results for analysis of subgroup responses from the TSES for Question 22 concerning responses on assistance to families.

Summary of Teacher Efficacy Findings

In summary, analysis of TSES indicates no significant difference among the two groups of special education teachers (i.e., alternatively certified, traditionally certified) in the areas of classroom management, student engagement, or instructional practices. The sample indicated a high degree of teacher self-efficacy regardless of teaching setting. Both groups of special education teachers within the study feel confident they are able to keep students engaged, provide instruction, manage behavior, work with families, and utilize a variety of methods and materials. High-efficacy teachers use classroom management approaches that keep students on task more effectively (Ross & Bruce, 2007). Based on analysis of survey data collected for this small sample, alternative certification does not result in any statistically significant difference in the degree of teacher self-efficacy of the special education teachers within the study.

Job Satisfaction

Participation in this survey study was limited to early career special education teachers (i.e., those serving in their initial to fifth year when data were collected). Their responses indicated that most found their jobs interesting (i.e., their jobs made them happy, provided satisfaction, created an atmosphere of enthusiasm that helped them look forward to going to work). Data indicated the majority of participants were satisfied with their decision to accept their current teaching positions.

Length of teaching experience had little effect on respondents' reported job satisfaction. Most teachers in the sample indicated satisfaction with their teaching

position from their initial year through fifth year. No significant loss or gain was reported in teachers' degree of job satisfaction across the years targeted in the study. There was no indication of dissatisfaction as participants gained teaching experience.

Teaching assignments did not have a significant influence on their degree of job satisfaction; however, traditionally certified teachers within the collaborative setting indicated a slightly lower degree of job satisfaction than their alternatively certified counterparts. The table in Appendix H portrays data from Question 4 of the Job Satisfaction Index which supports analysis that resource room settings may be more challenging for alternative certified teachers. Traditionally certified teachers indicated they had the highest degree of job satisfaction in resource rooms, while alternative teachers indicated the most satisfaction in a combination setting. None of the means within the groups were significantly different than the means of the sample as a whole. The difference was slight, but noteworthy.

Alternative certification does not result in any significant difference in the amount of job satisfaction of the special education teachers within the study regardless of their teaching setting.

Educational Supports

Demographic data indicated all special education teachers in the sample—both those alternatively certified and traditionally certified—have access to a variety of supports such as teacher mentors and professional development. The survey responses included informal support from building-level staff and regularly-scheduled special education meetings at the district and building levels. Opportunities for additional training from the districts' special education cooperative associations were highlighted.

The participants' responses indicated school districts within the sample provide many opportunities for training, support at the building level, and professional development. Although more than one-third of both alternatively and traditionally certified special education teachers have joint planning periods with their regular education colleagues, nearly two-thirds of the sample indicated time was not allotted in their daily schedules to meet with the regular education teachers on a regular basis.

Nearly 50% of the sample reported meeting with other special education staff periodically at the building level; however, only one-third had regularly-scheduled district-level special education meetings. Responses from study participants indicate access or lack of access to educational supports did not have an adverse effect on their sense of self-efficacy or job satisfaction.

Limitations of the Study

This study has limitations due to its modest geographical region, small sample size, ratio of alternatively certified to traditionally certified teachers (72 to 35), and absence of responses by teachers from an urban school district. Only one district within the study had greater than one-third of its families reporting low SES. Further, neither the students' degree of disability (i.e. severe, moderate, mild) nor the grade levels taught by respondents were considered in this study. Further, alternative certification programs vary widely among colleges and universities; however, the differences in entrance requirements, program length, program completion time, and courses offered were not considered in this study, which creates further limitations on the generalization of the study findings. Alternatively certified teachers likely possess vastly different knowledge bases upon entrance into the alternative program, receive different types of support from

their employing districts, and have diverse career experiences within and outside the field of education—none of which were considerations in this study. Finally, the fact no significant differences were found within the study is a limitation in and of itself.

Future Research

This study concentrated on current teaching settings (i.e. resource, collaborative, combination), but did not account for the categories of students' special needs within those settings. Additional knowledge could have been gained by shifting the focus of the current study from special education settings to categories of students on special education teachers' rosters. A combination of the teaching setting and students' degree of disability (i.e. severe, moderate, mild) may be worthy of investigation. For example, future research could investigate special education teachers responsible for emotionally behaviorally disabled (EBD) self-contained classrooms, functional mental disability (FMD) self-contained classrooms, and classrooms serving severely autistic students. A study comparing perceptions of self-efficacy and job satisfaction among special education teachers assigned to these more severe categories and among special education teachers who serve less severely disabled students (e.g., specific learning disability, mild mental disability, other health impairments) may be valuable. Students with less severe disabilities are typically assigned to collaborative classes where both a general education teacher and collaborative special education teacher share responsibilities.

Additionally, future research is recommended to explore the differences among elementary, middle, and high school special education staff in the areas of self- efficacy and job satisfaction. Research focusing on collective efficacy at elementary, middle, and high school levels special education teachers would be beneficial to determine

differences in the degree of self-efficacy among schools within the same district. In addition, an examination comparing perceptions of self-efficacy and job satisfaction of experienced special education teachers (i.e., more than five years of experience) and novice special education teachers is warranted. A larger sample size and broader geographic area of the study could allow for generalization to a larger population.

Van de Berg (2002) indicated a growing number of researchers are convinced that teaching and learning not only involve knowledge, cognition, and skills, but also an affective component such as a teacher's sense of self-efficacy. For this reason, continued research concerning teacher self-efficacy may enhance understanding regarding the attributes, characteristics, supports, and activities that contribute to the differences between the daily practices of teachers within the same school culture. Additional research is necessary to determine if all teachers, regardless of their of certification type, have skills necessary to be successful in the classrooms and to meet the needs of the most vulnerable students within the district. Teachers' behaviors, attitudes, and emotions should be considered when examining their working context (Van de Berg, 2002).

According to Stempien and Loeb (2002), the retention rate after one year of teaching was significantly lower for special education teachers (89%) than it was for general education teachers (94%). A survey of 402 teachers serving students with behavioral disorders found that nearly half of them considered taking a job in general education during the previous few years (McManus & Kauffman, 1991).Without further knowledge of what affects teachers' sense of self-efficacy, and ultimately their job satisfaction, attrition of special education teachers will likely occur. Greater knowledge of teacher efficacy, job satisfaction and alternative certification programs could assist

districts and schools in creating an atmosphere that aids in stabilizing special education teaching staffs.

Implications for Policy and Practice

Analyses of data from this survey study revealed no statistically significant difference between the two groups of teachers (i.e., alternatively certified, traditionally certified) in all areas analyzed. Although the research hypothesis—that teacher self-efficacy is lower in early career special education teachers who were pursuing or had recently completed certification through alternative programs compared to early career special education teachers prepared through traditional programs—was proven to be inaccurate, several implications are warranted.

The results of the study indicate special education teachers from alternative programs had a high degree of teacher self-efficacy and job satisfaction. Responses from the TSES indicated this was true for the area of instructional practices. This is in conflict with research from Gomez and Grobe (1990) which concluded alternative candidates rated lower in the areas including knowledge of instructional techniques and instructional models. Gomez and Grobe's study found a wider variance in the performance of alternative teachers than in traditionally trained participants.

Alternative route teachers from short-term programs reported less job satisfaction than fully certified beginning teachers (Lutz & Hutton, 1989; Sciacca, 1987).This current study found no significant difference between the job satisfaction of alternative special education teachers and their traditional counterparts. Both alternative and traditionally certified teachers indicated a high degree of job satisfaction. Lutz and Hutton (1989) found alternative certified teachers lose more self-confidence in their first year of

teaching than do their traditionally certified colleagues. The results of this study do not concur with these findings. Both alternative and traditionally certified special education teachers indicated job satisfaction from their initial year through year five with no significant decrease among either group.

In addition, Hawley (1990b) found traditionally certified teachers had received more instruction in theory, research, and teaching strategies. Hawley concluded this might explain why these teachers with traditional certification have been found to be more responsive to student needs, more capable, and more interested in helping struggling students who have not mastered materials presented. If the degree of teacher self-efficacy is used as the measure for a teachers willingness to be more responsive to student's needs, this study indicates no significant difference between traditionally trained and special education teachers from alternative programs.

Rosenberg and Sindelar (2001) found only seven studies of special education preparation through alternative routes. All seven studies found alternative certification reported favorable outcomes (Sindelar et al., 2004). Zeichner and Schulte (2001) arrived at the same conclusion; alternative route certification programs can produce effective teachers, especially if certain elements are part of the program. These elements include meaningful methods courses, field experience, supervision, and mentorship (Sindelar et al., 2004). This current study agreed with these findings.

Adelman, Michie, and Bogart (1986) found alternative certification programs attracted well-educated individuals who were serious about their intent to be teachers, provided participants with more field experience and more intense supervision in the field than traditional programs, and produce subject area proficient teachers. This study added

the knowledge that alternative post-secondary programs were sending teachers with a high degree of self-efficacy to classrooms within the 21 districts of the sample. These alternatively certified teachers indicated a high degree of job satisfaction from their initial year through year five. This may be a sign of teachers who are willing to stay in teaching for the long haul, leading to decreased attrition and perhaps increased student achievement as teachers perfect the skills necessary to move them to the category of "master teacher."

The results of the study support the success of alternative certification in the areas of teacher self-efficacy and job satisfaction. Others, including our federal government, also support alternative routes to teaching. President George W. Bush supported state development of alternative certification strategies in his "America 2000" education reforms (Darling-Hammond, 1990). The No Child Left Behind Act of 2001 (NCLB) encouraged "development of alternative programs by noting these approaches streamline the process of certification to move candidates into the classroom on a fast-track basis" (p. 15). Alternative certification is also supported by some corporations and foundations who want to benefit from or influence school reform efforts (Darling-Hammond, 1990). Politicians who support school choice see alternative certification and deregulation of education policy as a step in the right direction (Fenstermacher, 1990). Alternative programs within this study produced special education teachers with a high degree of self-efficacy and job satisfaction. This is good news for districts and students who depend on teachers from alternative programs for daily instruction.

Conclusions

Analysis of the data indicates all special education teachers, alternative and traditionally certified, within the sample indicated a high degree of self-efficacy. There was no significant difference between special education teachers who have completed alternative certification programs and their traditionally certified counterparts in terms of their degree of self-efficacy from their initial year through their fifth year. Differences in teaching setting (collaborative, resource, combination) did not have a significant effect on the degree of teacher self-efficacy.

Responses from the Job Satisfaction Survey indicated no significant difference between groups and both alternative and traditionally certified special education teachers indicated satisfaction with their jobs. The high degree of job satisfaction among the special education teachers within the study agrees with current research findings. MetLife's 2010 Teacher Survey indicates job satisfaction for teachers is at an all-time high: "Teachers are more satisfied with their jobs now than they have been in the last 25 years" (p. 1). This study indicates job satisfaction among the 1,000 teachers surveyed increased from 40% in 1984 to 62% in 2008. Increased job satisfaction may be one way to retain qualified staff. Chapman (1984) indicates job satisfaction is "significantly related to a person's decision to leave (or never enter) teaching" (p. 654). Garton and Robinson (2006) found that "job satisfaction plays an important role in determining whether or not graduates remain in their chosen career" (p. 553). This may mean a decrease in attrition for special education staff. Reduced turnover in special education classrooms may lead to increased student achievement. This is good news for districts,

schools, and students in the classrooms where alternative certified special education teachers are the teacher of record.

The high degree of teacher self-efficacy indicated by the responses from special education teachers within the sample may lead to their increased willingness to persevere when faced with the many challenges of working with students' with disabilities and their families. However, meeting the demand is simply not enough; the ability of these teachers to make a difference in their students' lives is the real goal.

The rationale for this study was the need to ensure placement of quality special education teachers in every classroom across the nation regardless of type of certification. To achieve this goal, new special education teachers must have a high degree of self-efficacy, adequate skills, and knowledge leading to a high degree of job satisfaction. Research has been clear—teacher efficacy is important in contributing to teachers' who are persistent, resilient, and can work together effectively to influence student outcomes (Chong et al., 2010). Knowledge gained from the study validates alternative programs within the sample produced teachers who possess a high degree of teacher self-efficacy and job satisfaction. Chester and Beaudin (1996) state, "By understanding how individual and institutional characteristics affect teacher efficacy beliefs, we provide knowledge base for administrators who must develop policies to enhance teachers' first-year experiences and improve the likelihood of their continued commitment to teaching" (p. 235). Additional knowledge will hopefully lead to less attrition, greater retention of quality special education teachers, increased knowledge in the area of teacher self-efficacy, and activities or professional development promoting greater efficacy and job satisfaction among teachers.

APPENDIX A: INSTITUTIONAL REVIEW BOARD APPROVAL LETTER

UNIVERSITY OF KENTUCKY

Office of Research Integrity
IRB, IACUC, RDRC
315 Kinkead Hall
Lexington, KY 40506-0057
859 257-9428
fax 859 257-8995
www.research.uky.edu/ori/

Initial Review

Approval Ends	Project Ends	IRB Number
September 20, 2010	May 30, 2011	09-0596-P4S

TO: Brenda Voris
Education
111 Dickey Hall
Campus 0017
PI phone #: (859)733-1626

FROM: Chairperson/Vice Chairperson NVT/PS
Non-medical Institutional Review Board (IRB)

SUBJECT: Approval of Protocol Number 09-0596-P4S

DATE: September 21, 2009

On September 21, 2009, the Non-medical Institutional Review Board approved your protocol entitled:

Teacher Efficacy, Job Satisfaction and Alternate Certification in Early Career Special Education Teachers

Approval is effective from September 21, 2009 until September 20, 2010 and extends to any consent/assent form, cover letter, and/or phone script. If applicable, attached is the IRB approved consent/assent document(s) to be used when enrolling subjects. **[Note, subjects can only be enrolled using consent/assent forms which have a valid "IRB Approval" stamp unless special waiver has been obtained from the IRB.]** Prior to the end of this period, you will be sent a Continuation Review Report Form which must be completed and returned to the Office of Research Integrity so that the protocol can be reviewed and approved for the next period.

In implementing the research activities, you are responsible for complying with IRB decisions, conditions and requirements. The research procedures should be implemented as approved in the IRB protocol. It is the principal investigators responsibility to ensure any changes planned for the research are submitted for review and approval by the IRB prior to implementation. Protocol changes made without prior IRB approval to eliminate apparent hazards to the subject(s) should be reported in writing immediately to the IRB. Furthermore, discontinuing a study or completion of a study is considered a change in the protocol's status and therefore the IRB should be promptly notified in writing.

For information describing investigator responsibilities after obtaining IRB approval, download and read the document "PI Guidance to Responsibilities, Qualifications, Records and Documentation of Human Subjects Research" from the Office of Research Integrity's Guidance and Policy Documents web page [http://www.research.uky.edu/ori/human/guidance.htm#PIresp]. Additional information regarding IRB review, federal regulations, and institutional policies may be found through ORI's web site [http://www.research.uky.edu/ori]. If you have questions, need additional information, or would like a paper copy of the above mentioned document, contact the Office of Research Integrity at (859) 257-9428.

Norman Van Tubergen, Ph.D./PS
Chairperson/Vice Chairperson

APPENDIX B: INITIAL PARTICIPANT CONTACT LETTER

Research Study: Teacher Efficacy, Job Satisfaction, and Alternate Certification in Early Career Special Education Teachers

Principal Investigator: Brenda C. Voris

Date:

Dear Special Education Teachers,

My name is Brenda Voris. I am a former special education teacher and Special Education Director. I have recently retired and will be working toward my goal of completing my Doctorate at the University of Kentucky. One of the most important aspects of this program is my research study; Teacher Efficacy, Job Satisfaction, and Alternate Certification in Early Career Special Education Teachers. I have been given access to contact early career teachers in your district by your Director of Special Education. This letter will explain my study and ask for your participation.

Although you will not get personal benefit from taking part in this research study, your responses may help us understand more about the relationships among teacher efficacy, specifically personal teacher efficacy, alternate certification, and job satisfaction in early career teachers in the area of special education. The focus of the study is only special education teachers who have been teaching for five or less years. This includes teachers in alternate certification programs as well as special education teachers who graduated in traditional certification programs. The surveys and the demographic information form can be completed online via Survey Monkey and will take no longer than 15 to 20 minutes of your time. All information can be completed within this time frame with no additional commitment to the study. The timeframe of the study is September 30, 2009 to May 30, 2011.

If you choose to participate in this research study you will be asked to complete a demographic information form. This form will not ask you to provide any personally identifiable information but will ask your age, gender, type of certification (alternate or traditional), years of teaching, rank, type of teaching assignment in special education (resource, collaborative, combination of both), age and your initial degree if alternate certified. You will be asked to complete two short surveys, Teacher Efficacy Survey and Job Satisfaction Survey. All special education teachers with five years or less of teaching experience within your district will be asked to participate. There are no known risks to participating in this study.

If you decide to take part in this study, it should be because you really want to volunteer. You will not lose any benefits or rights you would normally have if you choose not to volunteer. You can stop at any time during the study and still keep the benefits and rights you had before volunteering. Your choosing or not choosing to participate in the research study will have no impact on your job status. There are no costs associated with taking

part in the study. You will not receive any rewards or payment for taking part in the study. Your response to the surveys is anonymous which means no names will appear or be used on research documents, or be used in presentations, or publications. The research team will not know that any information you provided came from you, nor even whether you participated in the study.

We hope to receive completed questionnaires from approximately 75 teachers, so your answers are important to us. If you decide to take part in the study you still have the right to change your mind and decide at any time that you no longer want to continue. You will not be treated differently if you decide to stop taking part in the study. You are free to skip any questions or discontinue at any time.

Before you decide whether to accept this invitation to take part in this study, please ask any questions that might come to mind now. Later, if you have questions, suggestions, concerns, or complaints about the study, you can contact the investigator, Brenda C. Voris at 859-733-1626. If you have any questions about your rights as a volunteer in this research, contact the staff in the Office of Research Integrity at the University of Kentucky at 859-257-9428 or toll-free at 1-866-400-9428.

Thank you in advance for your assistance with this important project and for helping me accomplish my personal goal. I would appreciate your response within two weeks of receipt of this letter. You can choose to participate in the study by clicking on the link included in the email. Accessing this link will require you to enter a password to obtain access to the research instruments on Survey Monkey. Clinking on the link in the email indicates you have read and understood the description of the study and agree to participate.

Sincerely,
Brenda C. Voris
Doctoral Student, Department of Leadership Studies, University of Kentucky
859-733-1626
Email: maxukfan@aol.com

APPENDIX C: TEACHERS SENSE OF EFFICACY SCALE

Teacher Efficacy and Job Satisfaction Survey

1. Part 1 of 3

Teacher Efficacy: This questionaire is designed to help us gain a better understanding of the kinds of things that create difficultties for teachers in their school activities. Please indicate your opinion about each of the statements below.

1. How much can you do to get through to the most difficult students?

	Nothing		Very Little		Some Influence		Quite A Bit		A Great Deal
Answer	○	○	○	○	○	○	○	○	○

2. How much can you do to help your students think critically?

	Nothing		Very Little		Some Influence		Quite A Bit		A Great Deal
Answer	○	○	○	○	○	○	○	○	○

3. How much can you do to control disruptive behavior in the classroom?

	Nothing		Very Little		Some Influence		Quite A Bit		A Great Deal
Answer	○	○	○	○	○	○	○	○	○

4. How much can you do to motivate students who show low interest in school work?

	Nothing		Very Little		Some Influence		Quite A Bit		A Great Deal
Answer	○	○	○	○	○	○	○	○	○

5. To what extent can you make your expectations clear about student behavior?

	Nothing		Very Little		Some Influence		Quite A Bit		A Great Deal
Answer	○	○	○	○	○	○	○	○	○

6. How much can you do to get students to believe they can do well in school work?

	Nothing		Very Little		Some Influence		Quite A Bit		A Great Deal
Answer	○	○	○	○	○	○	○	○	○

7. How well can you respond to difficult questions from your students?

	Nothing		Very Little		Some Influence		Quite A Bit		A Great Deal
Answer	○	○	○	○	○	○	○	○	○

8. How well can you establish routines to keep activities running smoothly?

	Nothing		Very Little		Some Influence		Quite A Bit		A Great Deal
Answer	○	○	○	○	○	○	○	○	○

9. How much can you do to help your students value learning?

	Nothing		Very Little		Some Influence		Quite A Bit		A Great Deal
Answer	○	○	○	○	○	○	○	○	○

Teacher Efficacy and Job Satisfaction Survey

10. How much can you gauge student comprehension of what you have taught?

	Nothing		Very Little		Some Influence		Quite A Bit		A Great Deal
Answer	○	○	○	○	○	○	○	○	○

11. To what extent can you craft good questions for your students?

	Nothing		Very Little		Some Influence		Quite A Bit		A Great Deal
Answer	○	○	○	○	○	○	○	○	○

12. How much can you do to foster student creativity?

	Nothing		Very Little		Some Influence		Quite A Bit		A Great Deal
Answer	○	○	○	○	○	○	○	○	○

13. How much can you do to get children to follow classroom rules?

	Nothing		Very Little		Some Influence		Quite A Bit		A Great Deal
Answer	○	○	○	○	○	○	○	○	○

14. How much can you do to improve the understanding of a student who is failing?

	Nothing		Very Little		Some Influence		Quite A Bit		A Great Deal
Answer	○	○	○	○	○	○	○	○	○

15. How much can you do to calm a student who is disruptive or noisy?

	Nothing		Very Little		Some Influence		Quite A Bit		A Great Deal
Answer	○	○	○	○	○	○	○	○	○

16. How well can you establish a classroom management system with each group of students?

	Nothing		Very Little		Some Influence		Quite A Bit		A Great Deal
Answer	○	○	○	○	○	○	○	○	○

17. How much can you do to adjust your lessons to the proper level for individual students?

	Nothing		Very Little		Some Influence		Quite A Bit		A Great Deal
Answer	○	○	○	○	○	○	○	○	○

18. How much can you use a variety of assessment strategies?

	Nothing		Very Little		Some Influence		Quite A Bit		A Great Deal
Answer	○	○	○	○	○	○	○	○	○

Teacher Efficacy and Job Satisfaction Survey

19. How well can you keep a few problem students from ruining an entire lesson?

	Nothing		Very Little		Some Influence		Quite A Bit		A Great Deal
Answer	○	○	○	○	○	○	○	○	○

20. To what extent can you provide an alternative explanation or example when students are confused?

	Nothing		Very Little		Some Influence		Quite A Bit		A Great Deal
Answer	○	○	○	○	○	○	○	○	○

21. How well can you respond to defiant students?

	Nothing		Very Little		Some Influence		Quite A Bit		A Great Deal
Answer	○	○	○	○	○	○	○	○	○

22. How much can you assist families in helping their children do well in school?

	Nothing		Very Little		Some Influence		Quite A Bit		A Great Deal
Answer	○	○	○	○	○	○	○	○	○

23. How well can you implement alternative stategies in your classroom?

	Nothing		Very Little		Some Influence		Quite A Bit		A Great Deal
Answer	○	○	○	○	○	○	○	○	○

24. How well can you provide appropriate challenges for very capable students?

	Nothing		Very Little		Some Influence		Quite A Bit		A Great Deal
Answer	○	○	○	○	○	○	○	○	○

APPENDIX D: JOB SATISFACTION INDEX

Teacher Efficacy and Job Satisfaction Survey

2. Part 2 of 3

Current Job Satisfaction: Please respond by checking the response that best describes your opinion of each item.

	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1. My job is interesting enough to keep me from getting bored.					
Answer	○	○	○	○	○
2. My friends seem more interested in their jobs than I am.					
Answer	○	○	○	○	○
3. I consider my job pleasant.					
Answer	○	○	○	○	○
4. I am often bored with my job.					
Answer	○	○	○	○	○
5. I feel satisfied with my job.					
Answer	○	○	○	○	○
6. Most of the time, I have to force myself to go to work.					
Answer	○	○	○	○	○
7. I definitely dislike my work.					
Answer	○	○	○	○	○
8. I feel happier in my work than most other people.					
Answer	○	○	○	○	○
9. Most days I am enthusiastic about my work.					
Answer	○	○	○	○	○
10. Each day of work seems like it will never end.					
Answer	○	○	○	○	○
11. I like my job better than the average worker does.					
Answer	○	○	○	○	○

Teacher Efficacy and Job Satisfaction Survey

12. My job is uninteresting.

	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
Answer	◯	◯	◯	◯	◯

13. I find real enjoyment in my work.

	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
Answer	◯	◯	◯	◯	◯

14. I am disappointed that I ever took this job.

	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
Answer	◯	◯	◯	◯	◯

APPENDIX E: SCHOOL SUPPORTS QUESTIONNAIRE

Teacher Efficacy and Job Satisfaction Survey

3. Part 3 of 3

Demographic Information: Please complete the following by checking the response(s)that apply to you or your teaching position this year.

1. What is your age?

◯ 20-25 ◯ 26-29 ◯ 30-39 ◯ 40-49 ◯ 50-59 ◯ Over 60

2. What is your gender?

◯ Male ◯ Female

3. What is your highest degree?

◯ Bachelor's ◯ Master's ◯ Specialist ◯ Doctoral ◯ Other

Other (please specify)

4. What is your current teaching rank?

◯ Rank I ◯ Rank II ◯ Rank III

5. What is your annual salary?

◯ Less than $20,000. ◯ $20,000. to $29,999. ◯ $30,000. to $39,999. ◯ $40,000. to $49,999. ◯ Over $50,000.

6. How long have you been teaching (at the beginning of this 2009-2010) school year?

◯ Initial teaching year (0) ◯ 1 year ◯ 2 years ◯ 3 years ◯ 4 years ◯ 5 years

7. At what institution did you get your special education degree?

◯ University of Kentucky ◯ Eastern Kentucky University ◯ Western Kentucky University ◯ Morehead State University ◯ Murray State University ◯ Asbury College ◯ Campbellsville University ◯ Georgetov University

Other (please specify)

8. What type of certification program did you attend?

◯ Alternate ◯ Traditional

Alternate (please specify initial major)

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9. In what type of special education setting do you spend the majority of your day?

- ◯ Resource room greater than 60% of instructional time.
- ◯ Collaborative (regular education classroom) greater than 60% of instructional time.
- ◯ Resource/collaborative settings equal amounts of instructionaltime during the day.

10. Please indicate any additional supports provided to early career special education teachers within your current district.

- ☐ Special Ed teacher mentor
- ☐ Regular Ed teacher mentor
- ☐ District new teacher training
- ☐ Central Kentucky Special Education Coop (CKSEC) new teacher training
- ☐ District professional development
- ☐ Out of district professional development
- ☐ CKSEC professional development
- ☐ District Professional Learning Team
- ☐ CKSEC Cadres
- ☐ Joint planning with team (including regulr education teachers)
- ☐ Regular meetings with other new teachers (special and/or regular ed)
- ☐ Informal help from building level regular education staff
- ☐ Informal help from building level special education staff
- ☐ Assistance and support from building level administrators
- ☐ Assistance and support from district level administrators
- ☐ Assistance from district consultants and specialists
- ☐ Assistance from CKSEC consultants and specialists
- ☐ Regular school level special education meetings
- ☐ Regular district level special education meetings
- ☐ Assistance from other professionals

Other (please specify)

APPENDIX F: TEACHER SENSE OF EFFICACY SCALE: STUDENT ENGAGEMENT, QUESTION 4: MOTIVATION OF STUDENTS

Table F.1.
Teacher Sense of Efficacy Scale: Student Engagement, Question 4: Motivation of Students

Years Teaching	Sample (N=109)	Alternative (n=71)	Traditional (n=35)
Initial Year	(M=5.89, SD=1.33)	(M=5.66, SD=1.50)	(M=6.29, SD=0.95)
1	(M=6.60, SD=1.58)	(M=6.05, SD=1.29)	(M=7.25, SD=0.85)
2	(M=5.77, SD=1.54)	(M=7.00, SD=1.25)	(M=6.00, SD=2.65)
3	(M=6.60, SD=2.06)	(M=6.29, SD=1.41)	(M=7.60, SD=0.89)
4	(M=6.50, SD=1.47)	(M=7.78, SD=1.25)	(M=6.50, SD=1.90)
5	(M=6.43, SD=1.53)	(M=7.00, SD=1.48)	(M=6.83, SD=1.60)

APPENDIX G: TEACHER SENSE OF EFFICACY SCALE: STUDENT ENGAGEMENT, QUESTION 22: ASSISTANCE TO FAMILIES

Table G.1.
Teacher Sense of Efficacy Scale: Student Engagement, Question 22: Assistance to Families

Settings	Sample (N=109)	Alternative (n= 71)	Traditional (n=35)
Resource >60%	(M=6.04, SD=1.45)	(M=6.00, SD=1.41)	(M=6.15, SD=1.57)
Collaboration >60%	(M=5.97, SD=1.56)	(M=6.26, SD=1.56)	(M=5.80, SD=1.03)
Combination 50/50%	(M=6.00, SD=1.71)	(M=5.75, SD=1.69)	(M=6.25, SD=1.86)

APPENDIX H: JOB SATISFACTION INDEX: QUESTION 4: BOREDOM

Table H.1.
Job Satisfaction Index: Question 4: Boredom

Settings	Sample (N=108)	Alternative (n= 71)	Traditional (n=35)
Resource >60%	(M=4.43, SD=0.81)	(M=4.42, SD=0.16)	(M=4.46, SD=1.13)
Collaboration >60%	(M=4.47, SD=0.98)	(M=4.54, SD=0.18)	(M=4.30, SD=0.79)
Combination 50/50%	(M=4.63, SD=0.49)	(M=4.58, SD=0.18)	(M=4.33, SD=0.65)

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