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Evaluating the Effectiveness of Novice Teacher Support Structures

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COLLEGE OF EDUCATION

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Walden University
2011

Abstract

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MA, Walden University, 2006
BS, University of Houston-Victoria, 2003

Doctoral Study Submitted in Partial Fulfillment
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Abstract

Teachers are leaving their profession at alarming rates. As a result, retaining novice teachers has become a major concern for policy makers, school districts, administrators, and teaching staff throughout the United States. The purpose of the study was to evaluate the effectiveness of novice teacher induction support structures in a southwestern US state. The conceptual framework is based on research examining teacher attrition; this study extends the research by examining school-based and university-based programs. Research questions focused on the perception of novice teachers regarding mentoring experiences at their certifying universities and employing school districts. Three research questions examined school district comprehensive induction support, certifying university support induction programs, and other support services that supported novice teachers' decisions to remain in the profession. This study used a sequential exploratory mixed methods design to gather data. Quantitative research analyzed survey responses through descriptive statistics. Qualitative research utilized semi-structured interviews. Data analysis involved coding and theme analysis. Results revealed strong school support can compensate for the lack of university support, but strong university support did not compensate for a lack of school support. Implications for social change indicate the need for stronger school supports in induction programs for new teachers. First-year teachers should be followed for a longer period of time to understand difficulties they face as they grow into experienced teachers. This study provided valuable data to identify types of school and university-based support that may aid in the reduction of teacher attrition rates.

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Dedication

This study is dedicated to my family. To my husband, Abdulla F. Warsame, who lovingly and unselfishly devoted valuable hours of comfort to me as I travelled this journey. To my youngest sons, Rasheed A. Warsame and Jamal U.Warsame, who kept me focused, confident, singing, and happy. This study is also dedicated my parents; although no longer with me, my life has been inspired and guided by their values, morals, and strong beliefs. From my father, Samuel D. Springer, I learned to laugh, share a smile, treat others as I would like to be treated, and live morally. From my mother, Connie R. Springer, I learned an appreciation of family, morality, and the importance of organization and cleanliness.

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Section 1: Introduction to the Study

Public schools in the United States are experiencing a crisis in retaining novice teachers. Nearly 30% of new teachers will leave the profession within the first 3 years, according to the National Center for Education Statistics (Maciejewski, 2007). Although schools nationwide have increased the supply of beginning teachers through modern database systems such as k12job.com, Teacher Job Finder, and Nation Job, to mention a few, there is still a lack of priority given to taking proactive measures to retain novice teachers so they may successfully move into a second stage of teaching (Education Week, 2009).

As a solution to the current crisis, various states are implementing induction programs to help novice teachers progress into and beyond the second stage of teaching. Induction programs refer to a comprehensive support system for novice teachers. The Alliance for Excellent Education (2004) identified the components of comprehensive induction as high-quality mentoring, common planning time and collaboration, ongoing professional development, participation in an external network of teachers, and standards-based evaluation. In order to maintain effective teachers, professional development training must be provided continuously throughout their careers (Wong, 2004). Research studies cite teacher induction programs as an accommodating resource for the retention and support of beginning teachers (Davis & Field-Waite, 2006). National studies have revealed that more than 50% of novice teachers with less than 5 years of experience participate in teacher induction programs. As a positive result, induction programs have contributed to beginning teachers' decision to remain in the profession. Conversely,

according to Bolich (2001), teachers who do not participate in teacher induction programs are more likely to leave teaching early in their careers due to job dissatisfaction.

The focus state for this study was Texas, where the need for qualified teachers is evident in statistics that mirror national numbers. A 2001 review of teachers in Grades 5 to 12 found that about one in five instructors in the state's public schools were teaching outside of their areas of expertise for classes in English, foreign languages, math, social studies, and science (Rodriguez & Gerrow, 2008). This study utilized the Texas standards for a comprehensive induction program, the components of which are: (a) support and instruction, (b) classroom management, (c) communication skills, and (d) discipline and teacher performance (DePaul, 2000, p. 2). In order to retain qualified teachers, it is important for administrators and school districts to understand support structures needed to retain novice teachers. In this study, novice teachers were surveyed about their induction experiences and their opinions about their program.

However, in 1996, the National Commission on Teaching America's Futures (NCTAF) asserted that teacher retention has become a national crisis, raising the question of whether there is in fact a teacher shortage or if teacher retention is a problem (1996). Other educational researchers, such as Boe, Cook, and Sunderland (2008), have endorsed the NCTAF's perspective, stating that the apparent shortage of teachers is due to exceptionally high demand created by an excessive rate of turnover rather than an insufficient supply. These researchers believe that the teacher shortage is a myth and claim that the supply of teachers is adequate (Ingersoll, 1997; NCTAF, 2008; Podgursky,

2006). With the high turnover rates novice teachers are being placed in classrooms without sufficient preparation, or support.structures causing negative effects in school districts and on student achievement.

There is a problem with teachers leaving the profession. Teachers quit for various reasons such as, administration support, student discipline and low salaries. Lambert (2006), pointed out 50% of teachers quit the profession due to unpleasant working conditions, and unacceptable pay. For these reasons novice teachers need support. From day one, new teachers, largely on their own, are responsible for running a classroom and ensuring student learning, as well as fulfilling administrative requirements. Novice teachers enter the profession ready to take on a challenge and develop successful students. However, they need professional training to enhance their teaching skills as professional educators. Although the Texas Education Agency (TEA) requires 150 hours of Continuing Professional Education (CPE) per 5-year renewal process, recent research shows most teachers do not believe the professional development they receive is helpful or relevant for improving classroom instruction (National Governors Association,2009). Teachers cite lack of support and poor working conditions as primary factors for their exodus (Wiebke & Bardin, 2009). According to Shakrani (2008), new teachers spend a major part of their day frustrated and isolated as they try making sense of what works and does not work for their students.

Year after year teachers enter the profession to make a difference, develop successful students, and take on active roles as professional educators. They enter their classrooms filled with excitement and theoretical knowledge. Unfortunately, throughout

the school year, teachers lose their momentum for teaching. Their enthusiasm is low, and they feel inadequate in the classroom. New teachers also complain about stress and alienation from colleagues and school administrators. No one can foretell how long any teacher will stay in the profession (Wong, 2004). This study seeks to understand effective induction components that lead to retention of first year teachers. Recent research by the National Education Association (NEA; 2009) pointed out retaining teachers after their first year of service has become a challenge. The NEA reported,

> It's retaining a teacher that's the greatest problem. Over 40% of new teachers leave the profession within the first five years. We must address these high levels of attrition or face a projected need to fill 2.2 million vacancies by 2010. (p. 1)

First year teaching can be overwhelming, with many apparent factors that contribute to first year teacher' disappointment. This results in their decision to leave the profession immediately. A study conducted by Susan Moore Johnson and the Project of the Next Generation of Teachers (2006) stated,

> Threaded through the new teachers' stories were accounts of inattentive or abusive principals, inappropriate or unfair assignments, inadequate supplies, ad hoc approaches to discipline, insufficient time with other teachers, and insufficient opportunities to grow. . . New teachers who worked in schools lacking these basic supports were demoralized and often felt ineffective with their students. They typically were the ones who left teaching. (p. 15)

Teachers are leaving the profession for several reasons. In California, teachers are departing from the profession in disconcerting numbers—22% in 4 years or fewer—but

simply offering them more money will not solve the problem, according to Alliance for Excellent Education (2010). The real issue is working conditions, such as classroom interruptions, student discipline, increasing demands, insufficient supplies, overcrowding, unnecessary meetings, and lack of support—all play a role in teachers burning out (Blume, 2007).

Novice teachers need support and resources during their crucial first years of teaching. Theories and classroom ideas add excellent resource knowledge for new teachers, but many times it is the known practical skills and immediate understanding of how to handle a situation that can either make or break the new teacher's confidence in the classroom. Experienced teachers bring a wealth of knowledge and support to new teachers. Veteran teachers are instrumental in guiding new teachers through the first year of teaching, as well as sharing their own experiences. (Feiman-Nemser, 1988).

Interacting with real life class settings before the first classroom experience or during student teaching can add additional support for new teachers. Woullard (2003) stated, "Twenty percent of all newly hired teachers leave within three years because they are not properly prepared for the realities of the classroom" (p. 2). Novice teachers enter their first teaching positions with the traditional 6 to 8 weeks of student teacher training. Because this training is limited, student teachers are not exposed to, and therefore do not know how to handle, actual student behaviors, classroom management, or interactions with new colleagues until they are employed and assigned their first classroom (p. 39). Alliance for Excellence for Education (2005) found that beginning teachers are particularly vulnerable because they are more likely than their more experienced

colleagues to be assigned low-performing students. Most new teachers are given little professional support, feedback, or demonstration of what it takes to help their students succeed.

Retaining novice teachers has become an outreach effort in several states. Teacher attrition is being challenged in various public school districts across the nation, including those in Tennessee, Texas, and New York. These states and others are making concerted attempts to retain first year teachers past their first 5 years of teaching. The Tennessee Tomorrow Inc. (2002) reported,

> The challenge to policy makers is to (a) implement recruiting mechanisms and improve the attractiveness of teaching in Tennessee to ensure that Tennessee graduates consider jobs in Tennessee schools and (b) to determine why new teachers leave the profession early and to implement policies to address the causes. (p. 5)

In a staff report, it was stated that for the estimated 80,000 teachers in New York public schools, the two year attrition rate is 25%, with 18% of teachers leaving in the first year (The Council of New York, 2004). The report further confirmed that there are many opinions about what causes new teachers to leave the profession, as well as what reforms would redress the problem. The common complaints included lack of support, low pay, and poor working conditions. In order to improve working conditions, teachers request accommodations "such as additional funding, lower class sizes and designated parking spaces for teachers" (The Council of New York City, 2004, p. 4). Factors such as

compensation, immediate teacher support, and working conditions are identified as additional pressures on the first year teacher (Darling-Hammond & Sykes, 2003).

Yet, as noted earlier, New York is not alone in its need to redress the problem of teacher retention. Guevara (2009) stated, "Texas does a poor job of retaining quality new teachers" (p. A1). Another study by Bolich, 2001 acknowledged that 20% of new teachers in Texas left their jobs because they had no support. Retaining novice teachers is an important issue shared by all professional educators. Teachers are the foundation of the U.S. education system; therefore, losing first year teachers to pedagogical disillusions and stress factors is unacceptable for future students. Woullard (2003) asserted,

> Why should students wait until the year before graduation to find out that they do not have what it takes to be teachers? Such costly discoveries remain in the field and either leave after the first or second year of teaching or, even worse, stay and make life miserable for themselves and their students. (p. 4)

Novice teachers need preservice exposure to the classroom.

This study evaluated the effectiveness of novice teacher induction support structures through factors such as mentoring, professional development (offerings/classes), preparation program supervision, and school district support. The Alliance for Excellent Education (2002-2005) stated,

> The only preparation that most beginning teachers had was the semester-long student-teacher experience. This was not sufficient. Student teachers had not survived a series of instructional failures, experienced students' boredom,

> discovered a wall of student learning resistance, or felt the isolation of teaching forever. (p. 1)

Research indicated a connection between well prepared teachers and teacher retention. It demonstrates that first year teachers with longer preservice training are more successful in their first teaching positions, and their desire to stay committed to the profession is strengthened (Barnett, 2009).

The effectiveness of support structures directly impacts the retention rate of first year teachers. Moving forward research reveals nationwide that, more than 3.9 million teachers will be needed by 2014 because of teacher attrition, retirement and increased student enrollment (NEA). Support programs for novice teachers are instrumental in a novice teacher's success. Evidence from the National Center for Education Statistics' Schools and Staffing Survey suggests that participation in comprehensive induction programs can cut attrition by half (Policy Matters, 2006). Weiss and Weiss (2009) point out "within the states that have created programs for beginning teachers, local school districts are not always required to offer the programs, nor are all teachers required to participate" (¶ 5). This study evaluated the effectiveness of the support structures available to novice teachers in Texas.

Background of the Study

Teacher attrition is not a new trend; in fact, it has been a problem since the early 1960's. According to an article in *Life* magazine (1962), "Too many will quit permanently because they are fed up. Their ambition and self-respect will take them into business or other professions….They leave behind an increasing proportion of tired time-

servers" (as quoted in Tye & O'Brien, 2002, p. 1). Statistics published by the U.S. Department of Education in 2008 indicate that the problem persisted in the early part of the 21st century,when, 9% of new teachers left teaching (National Center for Education Statistics, 2008).

Keeping highly qualified teachers in the classroom contributes to the success of students. The issue of highly qualified teachers is being addressed in national legislation like the No Child Left Behind (NCLB) Act of 2002. Section 1119 A of NCLB indicates that if school districts are being supported by program funds, hiring schools should hire highly qualified educators. Based on the high loss of new and first year teachers, there seems to be a disconnection between the NCLB requirement to have qualified teachers and the seemingly low supply of qualified teachers. Ingersoll and Smith (2003) point out that the turnover problem affects beginning teachers more than others because of their lack of experience and their need to acclimate to the new teaching position.

One attempted solution toward the attrition issue has been the practice of implementing support structures for novice teachers. This is not a new concept. For decades, principals have asked respected veteran teachers to be mentors to newcomers. Once they were paired, the mentor and novice teacher were basically left on their own to carve out a relationship that was satisfying and useful (Saphier, Freedman & Ascheim, 2007). This support was simply a mentoring activity, not a true induction program.

In the light of induction programs, it is easy to see that there is much confusion and misuse of the words mentoring and induction. The two terms are not synonymous, yet they are often used interchangeably. Induction is a process—a comprehensive,

coherent, and sustained professional development process—that is organized by a school district to train, support, and seamlessly progress new teachers into a lifelong learning program (Wong, 2004). Experts agree mentoring is an action; that mentors do to develop novice teachers teaching skills. A mentor is a single person, whose basic function is to help a new teacher. Typically, the help is for survival, not for sustained professional learning that leads to becoming an effective teacher. Mentoring is not induction. A mentor is a component of the induction process (Wong, 2004). Clearly, the goal of induction and and mentoring programs are to support novice teachers as they transition into experienced teachers and promote retention.

Problem Statement

Novice teachers are facing a dilemma to either stay or leave the teaching profession. Education research indicates novice teachers leave the profession within the first three to five years of service (South Regional Education Board [SREB], 2001). As a nation in pursuit of exemplary standards in education, it becomes incumbent upon the stakeholders of the system to maintain continuous efforts in retaining high quality educators who can provide opportunities for students to pursue academic excellence. If teachers are to become the skilled professionals they need to be and if they are to stay in the field, stakeholders need to take coordinated action to expand and improve induction programs and to make them more universally available (Policy Matters, 2006).

The focus of this study was to evaluate the effectiveness of novice teacher induction support structures such as mentoring, professional development preparation,

program supervision, and school district support. A more comprehensive review of the literature on these support structures is presented in section 2 of this study.

Some public schools have initiated induction and mentoring programs to compliment preservice training skills and strategies to use with novice teachers. According to Young (2002), many districts and states have implemented induction programs over the past decade. These programs match mentors with new teachers and often feature workshops and courses, as well as opportunities for new teachers to visit other classrooms and schools. Comprehensive induction programs involve more than simply mentoring activities. The Alliance for Excellent Education (2004) identified the components of comprehensive induction as high-quality mentoring, common planning time and collaboration, ongoing professional development, participation in an external network of teachers, and standards-based evaluation. Programs vary, as does their effectiveness, from informal buddy systems in which mentors receive no compensation, training, or reduced workload to comprehensive, formal support provided by highly prepared mentors who are paid for their work (Wiebke & Bardin, 2009).

Quality induction programs are crucial in the professional development of teachers. A quality educator induction program results in educators being introduced to their professional lives by colleagues who support them as they learn and gain expertise in their roles and responsibilities. As educators progress through their careers, quality educator induction results in effective hiring and orientation practices as well as ongoing support as educators continue to develop their knowledge and expertise (Rhode Island Department of Education, 2008).

Far too often, what have been called *induction* programs have been limited to one-on-one mentoring designed to help teachers survive their first year. There has been a lack of ongoing support, and mentors may be undertrained and overextended. Funding is often inadequate and unstable (Policy Matters, 2004). There is a need for the analysis of induction programs and their novice teacher support structures.

Nature of the Study

This sequential explanatory mixed study evaluated the effectiveness of novice teacher induction support structures in Texas schools. Mixed methods research is an approach to inquiry that combines both qualitative and quantitative forms. It involves philosophical assumptions, the use of qualitative and quantitative approaches and the mixing of both approaches in a study (Creswell, 2009). Thus, it is more than simply collecting and analyzing both kinds of data; it also involves the use of both approaches in tandem so that the overall strength of a study is greater than either qualitative or quantitative research (Creswell & Plano Clark, 2007).

Sequential explanatory was the strategy of the mixed method approach that was utilized in this study. It is characterized by the collection and analysis of quantitative data in a first phase of research followed by the collected and analysis of qualitative design in a second phase that builds on the results of the initial quantitative results (Creswell, 2009). Thus the two forms of data are separated but connected to support the intent of the study. This study incorporated a quantitative survey and employed qualitative, open-ended interviews.

Novice teachers were asked to participate in an online survey to help evaluate the effectiveness of novice teacher induction support structures. The population consisted of 500 randomly selected novice teachers, through only 206 teachers responded to the survey request. These teachers were chosen because of their novice teacher status and their involvement in a comprehensive induction program.

Three novice teachers who were not retained in the teaching field and three novice teachers who planned to remain in the profession were also interviewed. The purpose of these interviews was to seek a deeper understanding of the teachers' perception on effectiveness and ineffectiveness of support structures that were present in their first year of teaching.

Overall, this study's intent was to contribute to the literature on the state-wide problem of teacher retention and provide further insight into what is needed to keep good teachers in the profession. More detail regarding the study design and methodology is presented in Section 3.

Research Questions

The following questions guided this study:

1. What are the perceptions of novice teachers relating to their employing school district on comprehensive induction support service?
2. What are the perceptions of novice teachers relating to their certifying university support services in their induction program?
3. What induction support structures better address the needs of the novice teacher in their decision to remain in the teaching profession?

Purpose of the Study

The purpose of this study was to evaluate the effectiveness of novice teacher induction support structures in Texas. This study explored two levels of support within a variety of comprehensive induction programs. The areas of support that were evaluated are provided to the novice teacher through their employing school districts and their certifying university. Specifically, the employing school districts provide support through classroom mentors and professional development opportunities. The certifying university provides support through supervision via university liaisons and electronic mentoring through online support. This study contains a critical analysis of educational research on attrition and its causes with public school teachers. Various research studies were described, detailed and addressed the research behind teacher retention and the components of effective induction programs. Induction support structures that are available for novice teachers were explored for effectiveness. This study addressed various research studies on induction programs and their support structures. Detailed information on current research will be outlined in section two.

Theoretical Base/Conceptual Framework

The foundation of this study was based on the theory that beginning teachers require supportive and structured induction programs as they begin their careers. During the late 1970s, Veeman (1984) examined ideas to support new teachers as they began their first year of teaching. Comprehensive induction programs to support new teachers in public schools were debated by academic scholars, including: extending preservice to 5 years, introducing internships, and establishing induction programs for the first one-to-

three years of teaching (ERIC Clearinghouse [ERIC], 1986, ¶1). Huling and Resta (2001) define teacher mentoring as a "systematic induction and learning process for new teachers, and it is an avenue for instructional renewal and improvement for experienced teachers and principals who serve as mentors" (p. 22). Ingersoll and Smith (2004) stated,

> The most effective induction programs offer bundles or packages of supports and, in particular, provide to beginning teachers a mentor from the same field and opportunity to participate in group or collective planning and collaborative activities. Less effective, from the viewpoint of retention, is the provision of assistance to beginners, such as a reduced teaching schedule, a reduced number of preparations, or extra classroom assistance. (p. 38)

Retaining new teachers through the use of effective support structures is a goal shared by many researchers, universities and school districts. In Texas, the Center for Research, Evaluation and Advancement of Teacher Education (CREATE) has focused in this area. A study was performed utilizing four universities and 14 Texas public school systems. Data were collected from 451 novice teachers (CREATE, n.d., p. 1). It was discovered that providing ample opportunities for new teachers to become professional experts requires effective induction support structures to guide their beginning years of teaching in the classroom. A recent study in Texas (ICF Inernational, 2009) investigated the long range effects of induction support. Huling, Resta and Yeargain (2009) indicated,

> High levels of teacher attrition resulting from lack of induction support make it difficult for schools to achieve a *critical mass* of faculty who possess the skills

> and experience necessary to engage in the type of professional reflection that leads to refinement of educational practices. (p. 15)

This study looked at effective support structures provided by universities and school districts that address new teacher needs. This study indicated that new teachers enter the profession with a minimal amount of preservice teaching experience and a lack of support as a new classroom teacher.

Induction programs provide a precise and comprehensive structure of new teacher support (Sweeny 2008). Darling-Hammond (2001) pointed out, “States and districts need to look at the way that they prepare and hire teachers and how much support new teachers receive during those decisive first years” (p. 14). Darling-Hammond also indicated that some states have made strides toward developing comprehensive induction programs, but limited and uncertain state funds challenge this progress.

Although there is a plethora of induction programs available, few programs meet the immediate needs of novice teachers. This is evident in existing programs that vary according to administration, school levels and teacher needs. Effective induction programs are enhancements as well as a benefit to the teaching profession. Induction programs support first year teachers through their transition from novice to professionally developed teachers. The National Education Agency (NEA) foundation (2002) stated,

> Studies show that well-designed teacher induction programs reduce turnover rates and increase teacher effectiveness during the early career. Such programs provide an array of assistance to new teachers, ranging from help policies and procedures,

> to guidance on classroom management, to feedback on instructional strategies and other aspects of professional practice. (p.1)

Barry Sweeney (2002) defines three types of induction program models:

1. Basic Orientation Model - is a basic model that helps new teachers understand school responsibilities and classroom management issues structured around a series of workshops.
2. Instructional Practice Model - covers policies, procedures, and classroom management. It links induction to state or local standards for accomplished teaching. This model helps teacher's bridge theory and practice through research based classroom strategies.
3. School Transformation Model – this is a rare model it combines the other two models. The model helps new teachers engage in school reform and connect their professional growth to challenging goals for student learning. (p. 2)

Induction programs have steadily increased since the 1980s and are noted as a vehicle to support and retain novice teachers (Huling & Resta, 2000).

As attempts to retain and support new educators, various states are analyzing induction programs to ameliorate the needs of first year teachers. An analysis of national data by Ingersoll (2003) concludes that effective teacher preparation programs can significantly reduce the attrition of first year teachers. He found that when teachers come into the classroom unprepared to deal with the classroom teaching environment, their attrition rate is 25%. But when teachers have engaged in a coherent preparation program that assesses knowledge and teaching skills, including extensive clinical experience

during teacher preparation programs, and when the new teachers are provided induction support in their first years of teaching, rates of beginning teacher attrition drop to 12%, comparable to attrition rates in other professions.

In Texas, a comprehensive induction program is recommended to align vertically with teacher preparation programs, as well as emphasizes standardized skills and knowledge in public education (Texas Education Agency, 2007). This study thus focused on the effectiveness of novice teacher induction support structures in Texas.

Definitions of Terms

The following terms are essential to the study and are defined as follows:

Electronic mentor: Electronic mentors are mentors who support novice teachers through online support sites. They are hand selected experienced teachers, many who have recently retired. These mentors are trained and have signed a confidentiality form stating that no information about individual students will be released (Texas A&M University System [TAMUS], 2009).

Induction programs: Induction programs provide support and guidance throughout the critical first years of teaching. Comprehensive induction programs include training for the mentor, a variety of support programs for new teachers that complement and extend the mentor relationship, administrative support for the mentoring program, and a district or school comprehensive induction plan that formalizes and quantifies the expectation of the induction program (Saphier et al., 2007).

Mentor: A mentor is a person, whose basic function is to help a novice teacher. A mentor is a component of an induction program (Wong, 2004).

Mentoring: Mentoring is an action (Wong, 2004). Mentoring is the establishment of a personal relationship between the mentor and the novice teacher for the purpose of professional instruction and guidance. In education, the value of mentoring has been recognized in the use of teachers and other professionals in one-on-one instruction of students for vocational education, science, and reading (Evenson, 1982).

No Child Left Behind Act of 2001 (NCLB): NCLBis a landmark in education reform designed to improve student achievement and change the culture of America's schools (U.S. Department of Education, 2007, p. 1).

Novice teacher: A public school teacher new to the first year of teaching.

Policy makers: Policy makers make complex decisions that affect billions of public dollars and millions of school children. Policymakers use high-quality, objective research to help guide their decisions (U.S Department of Education, 2007).

Preservice teaching: Teaching under the supervision of a certified teacher in order to qualify for a degree in education (Encyclopedia online, 2007).

Teacher Attrition: Teacher attrition is the loss in the personnel of an organization in the normal course of events, as because of death, retirement, and so on. (*Webster's New World Dictionary*, 2000, p. 90).

University supervisor: The university supervisor serves as a support liaison to the novice teacher and the employing school district.

Assumptions

The following assumptions outline this study:

1. Participants had a basic understanding of computer use to answer their survey online.
2. Truthful responses were provided.
3. Gender will not affect the participant's outlook while answering the survey.
4. This a confidential survey used for research purposes only.

Limitations

Limitations are distinctive features that may affect the outcome of a study. As defined, limitations are factors, usually beyond the researcher's control, that may affect the results of the study or how the results are interpreted (Baron, 2009). The following are potential limitations:

1. Study was conducted in the state of Texas and therefore only depicts that specific population.
2. Participants are all novice teachers and their responses are limited to that specific population.
3. Participants are all from a university system in Texas that is involved in a comprehensive induction program.
4. Participants will be answering an anonymous online survey.
5. The interviews will be gauging the novice teachers' perceptions on support structure effectiveness.

Limitation is also due the sample size of 206, which may not be indiscriminate beyond the population of novice teachers. The study evaluates the effectiveness of novice teacher induction support structures in Texas.

Significance of the Study

The conundrum in education is that the nation is producing enough teachers annually to meet the demand, however, many schools and districts are not able to hold on to their veteran teachers or to retain their newer teachers. Schools serving poor and minority students have turnover rates as high as 50% across the country. Suburban and rural districts have turnover figures that range from 20% to 30% (Saphier et al., 2007). Efficient and comprehensive induction programs can help retain our novice teachers. According to the National Association of State Boards of Education (NASBE, 2008), well-designed induction programs lower attrition rates of new teachers and improve their classroom teaching skills. A study of new teachers in New Jersey reports that first year attrition rates of teachers trained in traditional programs without mentoring was 18%, whereas the attrition rate of first-year teachers whose induction programs included mentoring was only 5% (Shakrani, 2008).

Though much research has been done on the need of effective induction programs, little has been investigated that indicate which support structures within induction programs are most and least effective from the perspective of novice teachers. This research examined the support provided by school districts and by the novice teacher certifying university. This helped gain an insight specifically for these entities that will allow them to expand their areas of effectiveness for their teachers.

A Chinese proverb states, “Tell me and I'll forget; show me and I may remember; involve me and I'll understand” (Roger, trans. 1963). This proverb is a reminder of why teachers are important. A teacher is defined by *Merriam-Webster Dictionary* (1995) as

individuals who (a) tell or show the fundamentals or skills of something, (b) cause to know the consequences, and (c) impart knowledge (p. 340). To tell, to show and to involve are skills and strategies taught by teachers on a daily basis to help produce successful students. By retaining effective teachers, a tangible number of successful students will emerge within our schools districts. Inman and Marlow (2004) asserted, "Simply put, teacher success equals student success. The one clear, abiding hallmark of effective teaching is student learning" (p.65). Teachers make a difference one student at a time; therefore, policy makers and administrators must help to retain first year teacher one teacher at a time for an effective educated society. In studying and analyzing support structures for novice teachers according to the perspective of the teacher, implications to research and best practices will contribute to the retention of teachers.

Summary

It is widely concluded that one of the pivotal causes of inadequate academic performance is a teacher shortage and the resulting inability of schools to adequately staff classrooms with qualified teachers (Shakrani, 2008). There is growing evidence of the positive impact of induction programs on teacher retention, costs, teacher quality and student learning (Policy Matters, 2006). This study evaluated the effectiveness of novice teacher induction support structures in Texas. It explored employing school district support and certifying university support. It examined the teacher supply crisis, noting induction programs and mentoring practices for novice teachers. The literature review in section 2 consists of current and previous research on novice teacher retention. It focuses on attrition rates nationally and in Texas, problems and strategies for teacher retention. It

also addresses teacher preparation programs, traditional routes and alternative certification, first year teacher needs, mentoring history, as well as quality mentoring programs. Section three identifies participants, methodology and instrumentation used in the study. Section four reports data collection. Section five interprets and summarizes the findings, explains suggestions for social change, and provides recommendations for further research.

Section 2: Literature Review

During the past decade or so, teacher turnover has become a major concern, resulting in educational research and policy analysis because of the high demand this turnover creates for replacement teachers (Boe, Cook & Sunderland, 2008). The students in the classrooms lose the benefit of being taught by experienced teachers, and schools and districts must commit time and money to recruit and train their replacements. Student achievement suffers in schools with high teacher turnover (Shakrani, 2008). Why are these novice teachers leaving? What can be done to make them stay? Several studies have been conducted to answer these questions. Induction program support structures are in place to help alleviate teacher attrition. These support structures include classroom mentors, professional development offerings, preparation program supervision, and electronic mentoring. Are these supports effective? This study focused on the teacher support structures provided for Texas novice teachers. The following research questions guided the study:

1. What are the perceptions of novice teachers relating to their employing school district on comprehensive induction support service?
2. What are the perceptions of novice teachers relating to their certifying university support services in their induction program?
3. What induction support structures better address the needs of the novice teacher in their decision to remain in the teaching profession?

This literature review was compiled through the investigation of research in peer reviewed resources in recent teacher retention and support sources. I developed my literature review search from various resources, such as Walden University's EBSCOHost, Texas A&M library, Texas school district websites, peer-reviewed articles, ERIC search engine, Boyd County public library, dissertations from Walden University's PROQuest, and K-12 job search websites. I accessed this information on the Internet using key words and phrases such as *new teacher, support structures, new teacher attrition, mentoring, school district support, mentoring programs, and job satisfaction*.

It was my intent to investigate contrasting information in order to give the reader a non-biased viewpoint of the topic. This section covers teacher attrition at a national and local level. It also examines nationally known induction programs that are noted for their successful results.

Teacher Attrition

Nationally

Nationally, teacher attrition is at an unacceptable rate, with thousands of teachers across the nation leaving school districts. Of course, there are factors contributing to attrition rates such as baby boomers retiring, teachers changing districts or relocating out of state, and administrators releasing unsuitable staff. Research indicates that teaching has long had high rates of attrition among newcomers (Smith & Ingesoll, 2004). Since the 1980s, teacher supply and demand has taken an extraordinary demand on teachers of all grade levels and subject areas; this predicament is reported to continue with a need for "2.2 million teachers in the next ten years" (Webb, Metha , & Jordan , 2007). Presently,

40% of teachers are 50 years or older and leaving the profession to retire. By 2010, 50% of K-12 public high school teachers will leave the profession (National Center for Education Information, 2005).

Attrition rates have plagued many school districts, across states in the United States. California has had staggering rates of teacher attrition. As cited in the report, *A Possible Dream: Retaining California Teachers So All Students Learn,* 22% of teachers in California leave after their first 4 years in the classroom (Futernick, 2007, p. 1). In Illinois, the Education Research Council (2007) states that 28% of new teachers leave public school teaching and do not return. Nevertheless, the Education Research Council strongly disagrees with the notion that the profession is in a crisis. The report claimed one third of new teachers who leave usually return, keeping a balance on attrition rates (DeAngelis & Presley, 2007). In Utah's school districts half of all new teachers leave within their first five years of teaching. Causes for teacher turnover were retirement, relocation, and leaving education (Utah Foundation, 2007). Studies in New York public school systems, suggest 25% of new teachers leave in two years, and 18% leave after the first year of service, as compared to 10% national rate (Council of the City of New York, 2004).

Texas

Historically, teacher attrition has been an ongoing research issue in Texas. Data results from the State Board of Educator Certification (SBEC) indicated more than 14,000 new teachers were prepared and certified to teach during the 1997-1998 school year. It was expected that 50% or more of those teachers would be teaching in Texas

public schools; however, “almost 19% of teachers who were employed during the 1997-98 school year did not return to teach the following school year” (SBEC, 2000; p.18).

“Ingersoll and Kralik, (2004) summarized the results of Texas studies conducted by researchers Eberhard, Reinhardt-Mondragon and Stottlemyer”. These studies focused on mentoring and its impact on retaining new teachers. In their findings, 90% of novice teachers with a mentor decided to teach the following year, whereas 61% without a mentor remained in teaching. However, second year teacher results indicated a slight change with 78% with a mentor stayed and 63% without a mentor remained in teaching.

Another research study by Fuller (2003) indicated that teacher attrition is the single largest component contributing to the need for new teachers each year. On average, 78% of the need for new teachers is from teacher attrition.

Likewise, the National Center for Education Statistics (2008) reported 30% of new teachers left the profession within 5 years of service. These research studies support the importance of novice teacher support structures as they relate to retaining new teachers.

Teacher Retention

Teacher retention is a fundamental concern of every policymaker, school administrator and teacher with a sincere interest in the learning needs of students. Priority must be taken to support and retain teachers. Teachers are one of America’s valued resources contributing to the development of an educated society.

Students’ success is developed through dedicated teachers to cause a change. In the *New York Times*, former President Bill Clinton was quoted as stating, "What most

determines whether students learn is not family background or even dollars spent per pupil, but the talent, the ability and the dedication of their teachers" (Bennet, 1999,¶ 23). Teaching has always been an essential element in developing academic progress (Cavanaugh, 2003). Emphasis must be placed on retaining first year teachers.

Unfortunately, too many novice teachers are leaving the profession, usually within the first two to three years of service. This early exodus stems from various situations that novice teachers are not sure how to, or are prepared, to handle their new positions. Due to high turnover rates school districts continually hire inexperienced teachers who are not satisfied with their compensation, duties, and working standard of the school (Darling-Hammond & Sykes, 2003).

Although novice teachers feel disconnected from their new colleagues, they have a desire to work and learn from them (Lewis, 2006). One first year teacher in a Baltimore new teacher program stated, "I feel more comfortable and have more insight into exactly what to expect. I feel as if I have friends I can reach out to as a support group. I don't feel as if I am doing this alone"(Education World, n.d.,¶1).

Reasons teachers decide to leave the profession, as reported by California State University, include working in isolation, lack of team spirit and a lack of camaraderie with their colleagues quoted by (Abdallah, 2009). The study further reported returning teachers applauded positive teacher relationships emphasizing its importance in public schools stating that collegiality is the most important factor in preventing teacher attrition (Abdallah). Similarly Wong (2004) stated, "New teachers want more than a job. They want to experience success. They want to contribute to a group. They want to make a

difference" (p.50). On the other hand, a study by Association for the Advancement of Retired Persons (AARP's) Educator Community and Farmers Insurance points out that the entire school mood is in chaos when new teachers feel a lack of connection and alienation from their colleagues (AARP, 2003, p. 7).

Teachers in general leave teaching due to low compensation and a feeling of being overworked. Reginald Weaver (2004), president of the National Education Association states, "Teacher salaries do not compare with other professional lines of employment, therefore, in recruiting and retaining teachers the focus should reflect compensation and ongoing staff development" (p. 11). Traditionally, teachers' pay has been less than other professionals. However, in 1986 with a new interest in public education efforts were made to improve salaries (Webb, et al., 2007). Between 1984 to 2005, teacher salaries only increased by 11%. This remained steady for several years. In 2005, salaries ranged from more than $55,000 in California, Connecticut, New Jersey, and New York to under $35,000 in South Dakota (National Education Association, 2005). States with the highest salaries were in the Midwest and Far West, regions of the America and the lowest salaries in the Southeast and the Southwest (Webb, et al., 2007, p. 19). It is important to note that higher salaries are not the main reasons teachers leave. In a report for North Carolina's public schools, 12,507, teachers left teaching. They moved to another district, retired, relocated with families, or left due to personal circumstances, all of which are reasons unrelated to pay or job incentives (John Locke Foundation, 2007).

New teachers bring to the profession new teaching strategies, learning skills, research ideas and excitement to share educational goals and make a change with the fast growing student population. Novice teachers are a bright promise and hope added to the future of professional pedagogy. In a research study, Cavanaugh (2003) claimed new teachers lose interest in their positions and hastily decide to leave teaching because they do not like the structure of presenting the same lessons every year (Cavanaugh). Positive approaches such as mentoring and induction programs are being implemented across the nation to retain teachers. Richard Schramm (1995), Director of Education Programs at the National Humanities Center, states "the professional lives of teachers are exposed to on the job situations that are devastating and forcing them to leave the profession at high percentages" (p 1).

Retaining teachers becomes a bigger problem as school districts search to recruit and retain subject area teachers in math and science and special areas of instruction. Superintendents and recruiters across the nation say the challenge of putting a qualified teacher in every classroom is heightened in subjects like mathematics, science and special education, English as a Second Language and also in high-poverty areas where the turnover rate is highest (Shakrani , 2008). "The problem is particularly acute in secondary schools in the subject areas of mathematics, chemistry, physics, modern languages and technology" (Coulthard & Kyriacou, 2002, p.2).

America has a diverse population of people across every state, in every school district and in almost every working profession in the United States. However, the field of education is lacking in retaining a diverse teaching population throughout classrooms

and school districts. The current teaching force is composed of primarily White women, with only 15% of teachers from minority backgrounds; these figures reveal a modest increase in the number of minority teachers, from 13.5% of a decade ago (Webb, Metha & Jordan, 2007). Pirkle and Peterson (2007), express that the teaching profession has not had the kinds of sustained and structured induction processes common to many other professions.

Novice Teacher Needs

Meeting the needs of novice teachers is a challenge for administrators, mentors, colleagues, policy makers and researchers. Addressing problems or concerns during the first year of teaching is difficult for new teachers, causes stress and a reluctance to remain in the profession. For that reason, "Principals need to understand the issues novice first-year teachers encounter as they assimilate into the work of the school" (Roberson & Roberson, 2009, p. 114). New teachers are overwhelmed with an array of feelings such as, excitement, confidence, stress, lack of confidence, fear, uncertainty, disarray, joy, happiness or lack of organization to mention a few (Wong, 2004).

A research study presented at the American Educational Research Association (AERA) in Chicago reported that "for many new teachers, the transition from their student teaching experience to their first teaching assignment can be traumatic" (Kilburg , 2005, p. 3). Kardos and Johnson (2007) believe new teachers will have more confidence and stay in the profession longer if colleagues worked towards success of all students as well as being patient in understanding their needs as first year teachers. The first year of teaching can be extremely challenging for first year teachers. "No matter how many

classes a teacher takes or standardized test he passes, nothing can prepare him for that first year" (Woeste, 2008, p. 32).

It is essential for teacher training programs, school administrators and universities to recognize and support the needs of first year teachers. In an attempt to understand the needs of first year teachers, school principals and university administrators have begun using end of school year evaluations, exit surveys, reflection notes, and shared journals kept by first year teachers to understand their thinking process throughout the year. The frustration of first year teachers is due to the lack of understanding the depth of their emotions and how to handle them in the school setting (Roberson & Roberson, 2009). A problem first year teachers struggle with is identifying their roles as a professional teacher, their *teacher persona* (McCann & Johannessen, 2004). Without a doubt, the first year of teaching can be frightening. There is a desperate need for guidance and understanding from experienced teachers, mentors and principals to encourage novice teachers to stay in the profession.

One aspect of taking on a new work experience is encountering a world of unknowns. Novice teachers have few relevant points of reference for carving out their roles as teachers and being responsible for the students in their charge. It is natural, then, that novice teachers are often unable to adequately judge their performance and make realistic assessments of their progress through their progress when dealing with students, parents, colleagues, supervisors, curriculum, scope and sequences, and benchmarks (Roberson & Roberson, 2009).

With the concern of losing novice teachers early in their careers recent research studies have addressed concerns and phases a new teacher goes through. Ellen Moir (n.d.), Director of UCSC New Teacher Center, points out phases a new teacher goes through. The study reports observations of more than 1,500 new teachers describing their characteristics and phrases they encountered as a first year teacher. The first phase is *anticipation* it describes new teachers' excitements and anxieties during student teaching, before accepting their first teaching position. Second is *survival* this phase describes the new teacher's pressures to keep up with school regulations, routines, and developing lesson plans that work. School procedures move quickly and tend to overwhelm new teachers. Third is *disillusionment*; during this phase, new teachers become tired physically from putting in long hours, and not resting for thinking they will become behind. Fourth is *rejuvenation*; during this stage, teachers experience negative attitudes about teaching and need a self-retrieval break to keep up with the balance of the school year. Teachers usually feel a relief period during long holiday breaks. This time off helps new teachers reflect over personal needs, lesson plans, new strategies and skills to use in the classroom, and become more prepared for the rest of the school year. Fifth is *reflection* during this time teachers understand the journey they just traveled as new teachers and can now reflect over positives and negatives to develop their future into successful teaching years. This is a time for clear reflection and strategic thinking over time that went by too fast in the beginning of the school year (Moir, n.d., p. 1).

Novice teachers are the future of a strong professional pedagogy. How they are affected by their first experience guides them to remain or leave teaching. The

beginnings of the school year is fast paced and tend to be overwhelming for many staff members; however, the magnitude of feeling is more pronounced and daunting for new teachers. Many things must be completed, organized, prepared and routines remembered. This new pressure creates stresses without an understanding of how to handle everything. For the beginning years of teaching, new teachers experience a sense of powerlessness in their schools (McCann & Johannessen, 2004). “Many of us remember being lonely and overwhelmed during our first few years of teaching” (Woeste, 2008, p. 1). In a study of 11 new teachers, McCann and Johannessen (2009) reveal eight categories of concern for first year teachers, including relationships, workload, time management, knowledge of subject, curriculum, evaluation, grading and autonomy and control (p.139).
The study discovered these concerns as justifying factors for the satisfaction level of novice teachers.

Most new teachers experience some type of formal training such as student teaching with a four year degree or on the job training with alternative certification programs. New teachers entering the profession without formal student teaching will leave the profession quicker than teachers who took part in pre-service classroom skills (Saphier, Freedman, & Ashheim, 2007) this is a problem due to inadequate skills and strategies to guide them through their first classroom experience. In fact, “Few teachers receive rigorous professional development. The typical teacher spends a day or less per year in professional development on any one content area (Alliance for Excellent Education, 2004, p. 24).

Solutions to Help Novice Teachers

Roberson and Roberson (2009) believe principals, being the direct authority in schools can develop and facilitate new teacher needs through the following suggestions offered by Huling-Austin (1992),

1. Give new teachers one teaching assignment. The repetition of teaching the same assignment will develop accuracy in a particular content area.
2. Assign new teachers to the content they know best or new teachers will be at a disadvantage.
3. Avoid assigning novice teachers to outside and /or extracurricular activities. These activities compete with the time needed to prepare lesson plans, grading, and other critical teaching tasks.
4. Assign novice teachers and mentor teachers in the same department and in close proximity to facilitate interaction. (p. 115)

Providing new teachers with opportunities to be observed and to observe other teachers, especially master teachers, helps novice teachers to begin to generate stores of experience needed to deal with the verities of teaching (Roberson & Roberson, 2009).

Support for Teacher Retention

Fighting the battle to retain high quality teachers has become an ongoing challenge for school districts nationally. An importance is placed on strategies to retain teachers on a long-term basis. In a report by California State University (CSU), according to Chancellor Charles B. Reed (quoted by John McDonald, 2007) stated, “CSU prepares over half of the state’s new teachers and is committed to preparing teachers to succeed

with all students," The report suggested the following recommendations for policy makers to retain teachers in California's public school districts,

> Assess teaching conditions locally and continuously elevate California's student funding to (at least) adequate level resolve the bureaucratic conundrum (not all bureaucracies are bad) refocus school leadership on instructional quality and high-quality teaching and learning conditions establish statewide standards for school teaching and learning conditions assess and address specific challenges in retention of special educations teachers. (¶ 12)

Induction is commonly thought of as a one-on-one mentoring of a new teacher by a veteran. However, to be effective, induction must be surrounded by a constellation of activities for all of the stakeholders involved. Comprehensive induction programs include training for the mentor, a variety of support programs for new teachers that compliment and extend the mentor relationship, administrative support for the mentor program and a district or school comprehensive induction plan that formalizes and quantifies the expectations for the induction program (Saphier, Freedman & Ascheim, 2007). Induction programs are sometimes confused with mentoring activities. Induction is a process—a comprehensive program. Mentoring is an action. It is what mentors do (Wong, 2004). A comprehensive induction program is composed of several mentoring activities. Induction program components can vary from school district to school district. For example, the Massachusetts Department of Elementary and Secondary Education (2002) identified the following components of an induction program to provide a systematic structure of support for new teachers:

1. Mentoring relationships- Beginning teachers work with and learn from veteran teachers. Release time is provided to observer teaching skills, co-teach and develop lesson plans.
2. Support teams- links beginning teacher with a network of colleagues in addition to their mentor.
3. Workshops and training for beginning teachers- professional development to inform new teachers of topics and relevant topics during their first year in the classroom. (p. 1)

Induction programs bring veteran and novice teachers together as a means of support, observation, and practical guidance from experienced teachers. In efforts to help first year teachers make a smooth transition from university student to professional classroom teacher, by 2005-2006, 44 states required the implementation of induction programs (Skinner, 2005). New teachers who are supported by a mentor and a network of supportive colleagues are more likely to remain in their schools and in the profession long enough to "hit their stride" as teachers (Sahier et al., 2007). Numerous research reports indicate that children who are taught by under prepared and unsupported teachers year after year do less well than children who have teachers with strong backgrounds in content areas and teaching approaches. Similarly, research continues to demonstrate that teacher quality is the essential ingredient in student achievement (Hanushek et al., 2005).

Teacher induction programs involve a variety of elements–workshops, collaborations, support systems, orientation seminars, and especially, mentoring (Smith & Ingersoll, 2004). Although induction and mentoring agendas can differ state to state to

address teacher needs, Darling-Hammond reported teachers in induction programs also varied in experience (Darling-Hammond, 1997). These programs include career changers, first year teachers, teachers new to the district, and returning teachers. Significant characteristics defining induction programs are the duration and extent of instruction or observation (Smith & Ingersoll, 2004).

Mentoring is defined as "formal and informal relationships between a beginning teacher and an experienced teacher(s) that are sources of information and support for the beginning teacher" (Webb et al., 2007, p. 432). Mentoring is a trusted relationship between a novice and veteran teacher. As an experienced teacher, one brings wisdom, life skills, theory and practical knowledge to support and develop first year teachers. Because experienced teachers have previously encountered many of the same classroom scenarios a novice teacher experiences, it is easier for the veteran teacher to redirect and guide novice teachers on how to handle immediate situation. Some research studies suggest (Huling-Austin, 1992) that mentor teachers could benefit from training in schema theory, how to discuss subject matter with the novice teacher, and how to use case studies as a framework for discussion about teaching. In a study of school administrators and new teachers, it was reported that 38% of new teachers agreed their teaching skills were more enhanced working with experienced baby boomers (Markow & Martin, 2005).

Research data results from schools and staffing survey reported that between 1999-2000 78% of first year teacher participants were assigned to work with a mentor and took part in induction programs (Smith & Ingersoll, 2004, p. 710). Mentors support and develop a new teacher's professional pedagogy in the early years of their careers.

"Mentoring is the school key to wisdom for all teachers", expressed by a retired teacher (The NEA Foundation, 2001, p. 3). During the early 2000s, mentoring programs were prevalent in school districts across America.. Mentoring may not resemble other collegial or personal friendships because it involves skills such as dedication, thoughtful listening, understanding, observations, constructive feedback, discussions, debates, and sharing. One study analyzing roles, activities and conditions of 150 mentors reported,

> Mentors sometimes used direct tactics, such as telling beginners exactly how to deal with problematic situations with parents, but most also reported a more indirect role where they modeled a reflective posture while trying to analyze a situation or solve a problem with their beginner. (Wildman , Magliaro, Niles , & Niles , 1992, p. 207)

An effective mentor is valuable to novice teachers. Mentoring skills, like teaching skills, require dedicated practice in order to reduce teacher shortage (Miller, 2006). Furthermore, Miller stated, "First year teachers are the future of our profession. Many young teachers get frustrated early and want to give up…. mentoring is a rewarding experience and one I hope you will not pass up" (p 36). Mentoring is a delicate process requiring a thoughtful mentor to carefully prepare and refine a novice teacher into a seasoned professional with self/teacher-confidence.

Mentoring and induction programs are designed to support new teachers through the beginning years as a professional teacher. These programs help to ease complaints, stress and overall dissatisfaction and unpreparedness. The goal is to develop confident teachers so that parents and school districts will benefit from successful students being in

their classes. Mentoring and teacher induction programs are powerful solutions to for new teachers and, therefore, should be evaluated seriously and offered to new teachers (Shakrani, 2008).

Induction Programs

There is growing evidence of the positive impact of induction programs on teacher retention, costs, teacher quality, and student learning. Evidence from the National Center for Education Statistics' Schools and Staffing Survey (2008) suggested that participation in comprehensive induction programs can cut attrition in half. Many smaller studies have corroborated the finding that participation in mentoring and induction programs have a positive impact on teacher retention, though the size of the impact varies by study. There also is evidence that induction programs save money for school districts. It has been estimated that for every $1.00 invested in induction, there is an estimated payoff of nearly $1.50 (Policy Matters, 2006).

Quality Induction Program Components

Teachers are leaving the classroom at alarming rates. In order to remedy this problem, there has been a rapid growth of teacher mentoring and induction programs in recent decades. More than 80% of new teachers participate in some kind of program, up from 40% in 1990-91 (Policy Matters, 2006). Induction programs for novice teachers are prevalent. Due to this prevalence, it is important to understand the components needed in a quality induction program.

Induction programs differ across each school district. A carefully tailored, comprehensive induction program is essential if new teachers are to teach their classes

successfully, work interdependently with their colleagues, and meet a shared commitment to school wide learning (Johnson, 2004). In Johnson's (2007) book, *Finders and Keepers,* she acknowledges the need for school-based induction programs. School-based induction begins with the assumption that each school is unique and intricate and that in order to succeed, a new teacher must understand her school's particular mission, values, norms, traditions, curriculum, policies, and practices. Johnson points to five areas that make an induction program successful:

1. Induction programs are deliberately school-based, that is, they meet the teachers' needs where they are.
2. Induction programs are integrated into the professional life and practice of the school.
3. Induction programs are constantly changing and being refined.
4. Induction programs are dependent upon additional resources. (It cannot be done well on the cheap, both in terms of financial and time allotments.)
5. Induction programs must develop and use professional capacity. (Strong active support of expert staff members.) (pp.221-224)

Schlechty (1985) suggested that signs of effective induction programs can be observed in the faculty and administration attitude and behavior, support of school norms and the general conformity of teacher performance to those norms. He presented a framework for evaluation of induction programs, which can be translated into a checklist of 8 program qualities. His framework is intended to apply to induction programs of vastly differing content and delivery structures.

1. The program explains to the inductees that the process of their selection is based on special requirements and that induction training is crucial to their future success.
2. The induction process is divided into progressive stages of achievement.
3. The program cultivates mutual support within peer groups.
4. The training is oriented toward long-term career goals. The remaining characteristics apply directly to the needs of beginning teachers:
5. Administratively-set expectations and norms of teacher conduct are clearly articulated and disseminated.
6. Teachers must assimilate a professional vocabulary.
7. New teachers receive supervision, coaching, demonstration, and assessment.
8. The responsibility for supervision should be distributed throughout the faculty in a tightly organized, consistent, and continuous program. (¶2)

Schlechty's research proposed these induction program qualities as a framework for building an effective induction program.

In the book, *Beyond Mentoring: Comprehensive Induction Programs,* Sahier, Freedman and Ascheim (2007) stress the importance of having a good strong comprehensive induction program. A comprehensive induction program involves more than just mentors. In fact, mentors alone, thought a critical part of a good induction, cannot be expected to provide the range of input, feedback, and support that beginning teacher needs. Well-designed induction programs include specific roles for principals, superintendents, central office personnel, the teachers union, parents, school boards and

particularly the other staff members in the school or department where the beginning teacher works (Sahier, Freedman & Ascheim). Quality induction programs are within the grasps of any American school district. Such programs take commitment and must start one step at a time.

Nationally Known Induction Programs

Several induction programs are noted throughout the United States. They differ in quality and effective components that meet the needs of first year teachers. However, Texas is the state of focus for this study. This study reviews induction program components such as; campus and university support, mentoring, professional development, and collaboration in addressing new teacher support structures for new teachers in Texas.

Comprehensive induction programs should be aimed at integrating new teachers into the community of learners in the building and the school district. The mentor-protégé pairing provides an important first step. The experienced mentor teacher provides an emotional and professional safety net that orients and supports the new teacher with lesson planning, classroom management, parent communication, collegial relations and the day-to-day managerial requirement (Saphier et al, 2007).

California

The New Teacher Center (NTC) in California has developed a research-based induction model through which educators can build induction programs that improve novice teachers instructional practices, improve student achievement and teacher retention, and build district leadership. The NTC Induction Model is based upon the

nearly two decades of experience drawn from the Santa Cruz/Silicon Valley New Teacher Project that has served more than 2,500 first and second year teachers in over two dozen school districts in the Santa Cruz service area. The NTC Induction Model has regular, one-on-one mentoring by a carefully selected and highly trained mentor as the central element. Additional components are designed to create a network of support for both the new teacher and the mentor, and to align the induction model with other key initiatives in both the pre-service and school site/district contexts. Furthermore, the model is intentionally designed to serve as a catalyst and support for educational reform and the professionalization of teaching (NTC, 2009). Key elements of the NTC Induction Model are as follows,

1. A Carefully-Selected Mentor
2. Full or Substantial Release Time for Mentors
3. Participation by All First- and Second-Year Teachers
4. Mentor Training
5. On-Going Professional Development for Mentors
6. Professional Standards
7. Formative Assessment
8. Classroom Instruction and Content Focused Mentoring
9. Beginning Teacher Network for Professional Development
10. Clear Role for and Communication with Site Administrators
11. Participation by a Variety of Key Stakeholder Groups
12. Focus on Equity and English Language Development

13. Linkages to Pre-service

14. Program Evaluation

15. Beginning Teacher Advocacy (¶4)

Additional strategies to improve teacher retention in California, is California's Beginning Teacher Support and Assessment (BTSA) program, generated by state legislation in 1997 from a research study for new teachers and passed in 1998 as a prerequisite for all new teachers to earn a California teaching certificate (Chait, 2009). This program coupled with induction programs reduced attrition rates by two-thirds, showing promising results for new teachers (Heider, 2005). Darling-Hammond's report for BTSA's induction program draws attention to mentoring support. Specialists oversee the induction plan written for each new teacher, observe and meet with beginning teachers, hold support meetings and observations with site mentors, conduct in-service training, assist site mentors and partner teachers, and oversee the final assessment. Specialists, site mentor, and partner teachers create model lessons for new teachers. Site mentors also hold monthly site meetings, schedule release time for new teachers and partner teachers, assist partner teachers, and meet with BTSA specialists. Partner teachers work with beginning teachers on lesson plans, grading issues, preparing for parent conferences, and other aspects of classroom practice. Professional development sessions, scheduling for release time and budgeting for materials were also emphasized (Chait, 2009).

Texas

Another notable induction program originated in Texas is the Beginning Educator Support System (TxBESS). It is designed to provide systematic support for beginning teachers in their initial years on the job. TxBESS is part of a coherent, standards-based system where performance standards and a reflective assessment serve as useful tools to support coaching and mentoring relationships (Region XIII, 2004). TxBESS functions with 20 regional education centers. The program has three targeted goals:

1. Increase beginning teacher retention.
2. Help beginning teachers develop and refine sound teaching practices that support high-quality instruction.
3. To improve student performance.
4. Evaluation through new teacher assessment and ongoing program evaluation.
5. Dedication of special staff and leveraging of additional assistance from entities outside the district. (Mutchler, Pan, Glover, & Shapley, 2000, p. 3)

TxBESS began in 1999-2000 as a pilot program, in Education Service Center #16 during the second half of the school year. The program supported 981 beginning teachers. After completing the program more than 850 new teachers returned to teach the following year. In 2000-01, TxBESS became a yearly effort for more than 2,000 first and second year teachers. TxBESS has developed quality mentoring components to encourage first and second year teachers to remain in the teaching profession. Figure 1 below indicates the overall percentage of teachers retained by TxBESS support system.

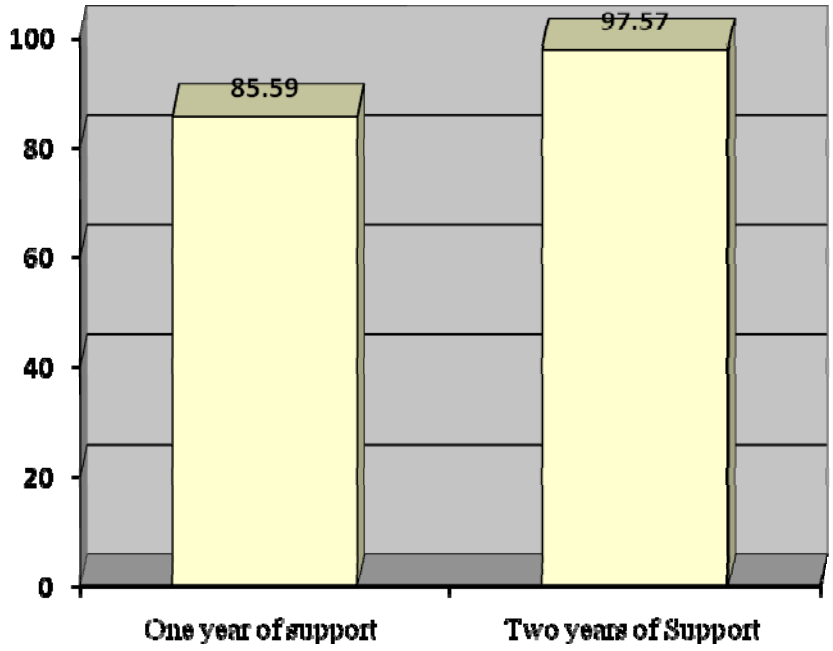


Figure 1. Overall teachers retained by the TxBESS Support System.

Research from this pilot program shows that TxBESS has had a significant positive impact on beginning teachers' retention (Region XIII, 2004). This model is not required by school districts to use for their teachers however the research above is evident of its effectiveness.

New York

New York State has an exemplary teacher induction program. The New York State Mentor Teacher-Internship Program (MTIP) was established in 1986 with the enactment of Section 3033 of Education Law. It is designed to provide peer guidance and assistance to teachers in their first or second year of full-time public school employment (NYSUT, 2009). Essential components of MTIP include but are not limited to

1. Joint development of these programs by school administration and local teachers' bargaining agents.
2. Program focus on the mentor/intern relationship which develops through the project year, as the mentor guides the new teacher to self-assessment, professional confidence and independence.
3. Release time for mentor and interns to participate in mentoring activities.
4. Defined mentor selection process, including establishment of a mentor selection committee.
5. Mentor training.
6. Described activities for mentors and interns.
7. Described role of principals in the program.
8. Program evaluation. (New York State Education Department, 2009 ¶3)

New Jersey

New Jersey has been involved in mentoring programs for two decades, but funding has been uneven. Currently all districts are required to have a Mentoring for Quality Induction plan in place, but they vary widely from district to district (Policy Matters, 2006). The Mentoring of Quality Induction program is designed to support and provide professional development for novice teachers to enhance their classroom effectiveness in providing instruction of the New Jersey Core Curriculum Content Standards to improve student achievement. The professional development is geared toward increasing professional knowledge of subject matter, human growth and development, students' special and diverse needs, assessment, and the learning

environment. In addition, the program provides professional development to allow novice teachers to plan and provide effective instruction, a positive learning environment, and to communicate and collaborate with students, parents, and peers (Sparta Township Public Schools, 2009). The following are goals of the Mentoring for Quality Induction program:

1. To positively impact student mastery of the New Jersey Core Curriculum Content Standards by providing opportunities for the professional staff to develop and enhance the professional knowledge of instructional skills that are vital to acquire and maintain excellence in teaching.
2. To provide professional development, support, and encouragement for experienced mentor teachers through in-district professional development opportunities that focus on the eight key elements of high quality professional development.
3. Assist novice teachers in the performance of their duties to help them overcome the challenges common to teachers who are new to the profession in order to increase novice teacher retention and insure student achievement.
4. Include all stakeholders in the effort to integrate novice teachers into the culture of the school, the district, and the community.
5. Identify and implement research validated practices into instructional practices to insure student mastery of the Core Curriculum Content Standards (¶ 3).

Michigan

Legislation enacted in Michigan more than a decade ago mandated the New Teacher Induction/ Teacher Mentoring Program, requiring three years of mentoring. The state Department of Education has developed guidelines and tools for districts as well as program standards. The New Teacher Induction/Teacher Mentoring process is a cooperative arrangement between peers in which new members of the teaching profession are provided ongoing assistance and support by one or more skilled and experienced teachers. This relationship is collegial in nature, and all experiences are directed toward the development and refinement of the knowledge, skills and dispositions necessary for effective learning. This process is mutually beneficial for all parties involved and results in improved instructional practice and professional performance Michigan Department of Education, 2009). Core experiences for new teachers are as follows:

1. Knowledge of community
2. Classroom Management
3. Parent/Guardian Interaction,
4. Alignment of Curriculum
5. Diversity in the Classroom
6. Networking
7. Knowledge of Teacher Evaluation
8. Use of Volunteers
9. Time management

10. Knowledge of How to Use Resources,

11. Knowledge of Legal Issues (¶7)

Novice Support Structures in Texas

State-level policy support for teacher induction programs can help teachers realize their full potential, keep them in the profession, promote greater student learning, and save money. Higher education institutions and school districts must work together to provide high-quality and well-designed induction programs (Policy Matters, 2007). This study explored those two levels of support within a variety of comprehensive induction programs in Texas. The areas of support that were evaluated are provided to the novice teacher through their employing school districts and their certifying university. The employing school districts provide support through classroom mentors and professional developments. The certifying university provides support through supervision through university liaisons and electronic mentoring through online support.

School-based Supports

Becoming a new employee to any new profession requires an acclimation period to the culture of the institute. New teachers leave their perspective universities as accomplished new teachers ready for their first professional teaching position. Although prepared in theory and pre-service training they find themselves isolated in their classrooms as a new professional. This isolation becomes stressful leaving new teacher wanting to quit teaching. In fact, Gaikwad and Brantley (1992) stated, when teachers complain of feeling isolated, it is reasonable to expect a negative impact on their attitudes and energy levels" Typically new teachers begin their new career without understanding

the many facets of the what's, how's or who to ask dilemma within the new school setting. They struggle through the beginning afraid to ask questions for fear it will be the wrong question that might categorize them as an unqualified teacher. This is an unsettling feeling that requires a lot of self-control to get through the day. Many teachers have gone through these feelings at one point or another during their careers. Nevertheless, this dilemma is changing. School districts throughout the state of Texas are changing this negative view for new teachers.

Classroom Mentoring

Classroom mentors have become a solution to lessen this problem. The DeSoto school district in Texas has resolved new teacher issues by making classroom mentoring a main concern. In the year 2000, Texas State Board of Educator Certification received a federal Title II Teacher Quality Enhancement Grant. This award began the TxBESS to support and mentor new teachers. The State Board for Educator Certification (SBEC 2005) states "The *TxBESS Framework* reflects the research-based standards of teaching described in *Enhancing Professional Practice: A Framework for Teaching* by Charlotte Danielson" (p. 4). From the efforts of this program the DeSoto school district in Texas started *Coaches for Success* a mentoring program for new teachers through the auspices of veteran teachers (McCain Nelson, 2001).

Professional Development

The need for new teacher support is undeniable. Texas has also developed more productive solutions by including Professional Development Schools (PDSs) to enhance teacher performance, develop classroom confidence and elevate student success. To

appreciate other potential benefits PDSs bring to public schools, the National Council for Accreditation of Teacher Education NCATE defines the program in the following way: "Professional development schools (PDSs) are innovative institutions formed through partnerships between professional education programs and P–12 schools. PDS partnerships have a four-fold mission: (a) the preparation of new teachers, (b) faculty development,(c) inquiry directed at the improvement of practice, and (d) enhanced student achievement (p.6). PDSs improve both the quality of teaching and student learning" NCATE (2009). In Fort Worth, Texas, a partnership of community leaders and educators proposed a plan to improve Texas public schools. They recommended implementing PDS as a way to connect public school educators, administrators, and university professors in a collaborate effort to achieve high learning goals for all students (Wilkie V. 1993). The state of Texas encompasses a large population of educators and students within local and regional school districts. Various public school districts in Southwest Texas provide ongoing professional development to support teachers and enhance student learning standards. Katy Independent School District has established professional development standards for all beginning and new teachers to the district. The guiding factors are:

1. *Research-based practices* to continue growth in professional practice.
2. Augment teaching expertise.
3. Stay abreast of the overall *teaching and learning* practice. (p.2)

This school districts professional development goals and focus are based on the diagram in Figure 2 below (Katy Independent School District, (KISD) 2009).

Figure 2: School district professional development goals

To help beginning teachers gain and utilize comprehensive teaching strategies, KISD developed The New Teacher Academy. This academy presents supportive ideas for classroom management and professional development. Through the academy, beginning teachers are exposed to a variety of research-based training and practical teaching experiences. Additionally, beginning teachers are taught proper ways of handling parent situations, interaction with colleagues, student behaviors and classroom management strategies.

To ensure effective teachers and successful students, Fort Bend Independent School district of Southwest Texas also supports new teacher professional development through the following philosophy.

1. Professional development lessons or activities are expressed in collaborative groups.
2. Presented knowledge is guided by research-based practices with the purpose of improving student success.

3. Presented knowledge is organized according to apparent needs of professional teachers.
4. Professional development engagements will reflect the needs of grade level departments according to school *improvement plans*.
5. The district continually supports the efforts of professional development as an ongoing career enhancement. (p. 1)

The vision for this school district is to continual support through professional development as an enhancement to professional teachers. The district views teachers as professional learners prepared to contribute to the community as lifelong professionals (Fort Bend Independent School District, 2009, ¶ 8).

Prosper Independent School District in Texas has high expectations to help beginning teachers succeed in their first year and beyond of teaching. Their goal is to help new teachers recognize their community as an essential component for their success. Another goal is providing significant professional development strategies in "classroom management and instruction" to uphold new teachers. This district also encourages and provides collaborative strategies to build teamwork, among colleagues, parents, administrators and community leaders (Prosper Independent School District, (PISD 2009). In fact, PISD also offers the following services to beginning teachers or to teachers with less than two years of teaching.

1. One to one mentoring
2. PISD Community Orientation
3. Building Procedures/ Resources

4. Curriculum Overview/ Training
5. Customer Care Training
6. Classroom Organization Strategies
7. Behavior Management Strategies
8. Instructional Strategies (Prosper Independent School District, 2009, p. 1).

University-based Supports

Retaining teachers is a major concern in Texas. Local universities have programs that are established to reduce high attrition rates of first year teachers as well as components to retain teachers in the profession. The U.S. Department of Education (2009) reports that 100% of the graduates of a program for first-year teachers from Texas A&M University-Corpus Christi, Texas have stayed on the job after five years of teaching. Texas A&M University teachers have a five year retention rate of 82% (Hoyle, 2009). Research indicated that teachers prepared in university-based teacher certification programs have a more positive impact on student learning than those coming from alternative certification programs (Hoyle). What are universities in Texas doing to retain teachers in the profession? University support involves pre-service clinical experiences, university liaisons/supervisors for new teachers, and electronic mentoring.

Pre-service Clinical Experiences

Practical experience is important in teaching. Research reiterates the need of pre-service teachers to enter the classroom as soon as possible. This exposure to the *real life* classroom is crucial to ensuring that the pre-service teachers are ready for the classroom. According to Tjeedrdsma (1998), pre-service teacher training programs offer university

supervisors or cooperating teachers the opportunity to provide intervention and support to pre-service teachers that would otherwise experience difficulties in the classroom. Pre-service teachers receive encouragement, support, and constructive feedback and ideas from effective cooperating teachers who have had adequate preparation for their role as trainers of pre-service student teachers (Oh, Ankers, Llamas & Tomyoy, 2005).

Traditionally, student teaching is a component of pre-service training. Chapman and Green (2001), in their study on teacher credentialing program graduates, identified attrition as being linked to teachers' pre-service experience. In a study by Oh, et al. (2005), those teachers who had student teaching pre-service experience showed higher levels of confidence in improving student learning, satisfaction with their teaching career, and a higher sense of teacher efficacy. For new teachers, there was a significantly higher level of job satisfaction for those who participated in student teaching and for those who had higher teaching credentials.

University Liaisons/Supervisors

One component of support for novice teachers is the use of university liaisons/supervisors. These liaisons supervise preservice and novice teacher. In a study of student teachers, Turley (1999) found that university supervisors identified students who were having trouble with the student teaching assignment by the fourth week into the program, and two-thirds of pre-service teachers who had problems with their student teaching assignments at the beginning were able to successfully complete their assignment after having received assistance. This guidance and mentoring is a resource supplied by the universities to aid in the retention of teachers.

University liaisons/supervisors from universities within the Texas A&M University System are required to visit their assigned novice teacher each six weeks. This visit involves classroom observations and one-on-one counseling with the first year teacher. The purpose of the observations is for the university liaison/supervisor to assess the teacher's pedagogical skills and classroom management. This observation is followed by a one-on-one counseling session. During this session, the university liaison discusses the observation and offers support for growth and encouragement. The university liaison serves as a mentor and a resource for the novice teacher (I. Harper, Texas A&M System, Assistant Vice Chancellor, Personal communication, September 30, 2009).

Electronic Mentoring

Electronic mentoring is a reflective component that offers support to new teachers via the computer to address their concerns and issues throughout the day. This type of mentoring is creating a revolution in mentoring that will continue and expand through the 21st century. By leveraging the growth in information technology, electronic mentoring provides opportunities for mentoring prohibited by face-to-face mentoring programs (Muller, 1997). Electronic mentoring enables mentors and protégés otherwise constrained by time and geography to participate because e-mentoring programs connect participants through electronic communications, primarily email supplemented by web sites and electronic discussion lists (Single & Muller, 2009).

The Texas A&M University System has an online electronic mentoring program entitled, Performance-based Academic Coaching Teams (PACT). The PACT system is

an on-line novice teacher support induction component. PACT is a secured website where novice teachers are able to access immediate teacher helps, teaching resources, teaching tools, chat rooms, discussion boards, and an electronic mentor. It is designed to continually support these teachers in their first three years of teaching. The program utilizes electronic mentors as a mainstream for support. These electronic mentors are experienced teachers who were selected for their teaching accomplishments (Harper, 2009).

The University of Texas at Austin offers an online telementoring component to support new teachers online. The program is called WINGS which stands for Welcoming Interns and Novices with Guidance and Support. "WINGS online provides guidance and support for apprentice teaches as well as first and second year teachers from the University of Texas at Austin. WINGS' one-to-one telementoring services offer personalized professional assistance from an experienced mentor educator" (The University Of Texas At Austin, 2009, p. 1).

The Texas State University System (TSUS) created Novice Teacher Induction Program (NTIP), a system-wide initiative supporting 320 teachers across six universities in the Texas State University System (TSUS) and 30 campuses. The TSUS provides online support for their novice teachers. The online environment, tools, and resources have been effective in building a community of practice between faculty, mentor teachers and novice teachers. It also provides a 24 hours a day, 7 days a week means of helping novice teachers address and solve their problems, for sharing resources and expertise and to provide both professional and social support (TSUS, 2009).

Research Method Reviewed

This study explored the effectiveness of novice teacher induction support structures such as mentoring, professional development preparation, program supervision, and school district support. The research method used to determine the effectiveness of teacher support structures was the mixed method approach. Mixed methods research offers great promise for practicing researchers who would like to see methodologists describe and develop techniques that are closer to what researchers actually used in practice. Mixed methods research as the third research paradigm can also help bridge the schism between quantitative and qualitative research (Onwuegbuzie & Leech, 2004).

Mixed methods research was chosen because of the dual set of data collection capabilities. The use of quantitative and qualitative data adds to the overall strength of the study rather than simply using one approach with one set of data. The advantages of mixed research are:

1. The strength of the research;
2. Use of multiple methods in a research helps to research a process or a problem from all sides;
3. Usage of different approaches helps to focus on a single process and confirms the data accuracy. (Hunt, 2007, p.12)

A mixed research complements a result from one type of research with another one. Mixed methods research also is an attempt to legitimate the use of multiple approaches in answering research questions, rather than restricting or constraining researchers' choices.

It is an expansive and creative form of research, not a limiting form of research (Johnson & Onwuegbuzie, 2004).

Sequential explanatory strategy was chosen because of the emphasis of the quantitative data. The first phase of data collection was quantitative, therefore placing an emphasis on the quantitative data. Once that data was collected and analyzed, the results were used to guide the second phase of data collection which was the qualitative component. This allowed the researcher to delve deeper in the minds of the novice teachers.

Although quantitative research has been done in the past on novice teacher support structures and retention, conclusive results were not obtained and require additional research. Therefore, the researcher has decided to use mixed methods to take advantage of the strength of the qualitative method to interact directly with novice teachers.

There are limited studies to represent a combined approach using quantitative and qualitative data, which includes both quantitative surveys and personal interviews to understand novice teachers' perspectives. In a quantitative study (Parker, 2009), which examined factors that affects first year middle school teachers to remain in the profession, the results concluded, as Parker states, "the findings of this study could not determine if certification route or demographics influenced novice middle school teachers' intentions to remain in the profession" (pg. 13).

Davis and Higdon (2008) conducted a mixed method approach study. Their study examined the influence on first year teachers, mentor/induction support, and retention

rates. The final data results concluded positive in each area. Both researchers agreed that the mixed method approach gave results that they felt represented their population.

Because this study asked participants their perspective of the effectiveness of the support structures that they have experienced during their first year of teaching, only descriptive statistics were used in the quantitative portion of the study. This allowed the researcher to determine the relative effectiveness support structures. This analysis was followed by interviews to get full perspective from the teachers. The purpose of this study was to evaluate the effectiveness of novice teacher induction structures in Texas.

Conclusion

This literature review investigated the effectiveness of novice teacher support structures in Texas. This study explored two levels of support provided to new teachers: (a) their employing school districts and (b) certifying universities. The literature review investigated the following areas: (a) teacher attrition (b) teacher retention nationally, (c) first year teacher needs, and (d) support for teacher retention. Induction programs were reviewed in the areas of (a) quality program components (b) nationally known induction programs, such as the NCT in California, the TxBESS in Texas, the MTIP in New York, the Mentoring for Quality Induction Programs in New Jersey, and the New Teacher Induction/Teacher Mentoring Program in Michigan.

The review further explores, in Texas, Novice Support Structures reviewing school based and university-based support, and Pre-service Clinical Experiences reviewing university supervisors, as well as electronic mentoring support. Section 3 will describe the research design and selected population.

Section 3: Research Method

Introduction

This mixed method single study investigated the effectiveness of novice teacher support structures. The purpose of this research was to understand effective induction components that lead to retention of first year teacher as dependent variables of the study. This study explored the two levels of support provided to novice teachers: (a) their employing school districts and (b) certifying universities.

This study utilized a sequential explanatory mixed method approach. The quantitative approach was administered through survey research and the qualitative approach was administered through the interview process. A survey was administered to 500 novice teachers to determine what areas of teaching support structures were effective. Approximately 41% of the sampling population receiving the link responded to the survey, leaving a study sample of 206 teachers for analyses. Once descriptive statistical data were retrieved and analyzed, interviews were held using a purposeful sampling of teachers to delve deeper into the topic.

Research Questions

In exploring the effectiveness of novice teacher induction support, this study was guided by the following research questions:

1. What are the perceptions of novice teachers relating to their employing school district on comprehensive induction support service?
2. What are the perceptions of novice teachers relating to their certifying university support services in their induction program?

3. What induction support structures better address the needs of the novice teacher in their decision to remain in the teaching profession?

Each survey question was designed to gather a better understanding of how various components of induction impact a teacher's perceived effectiveness.

This section summarizes the research design, setting, sample population, instrumentation and materials, validity, reliability, and justification for mixed method research. This section also includes participants' rights, the role of the researcher data collection, and analysis of research questions.

Research Design

This study used a sequential explanatory mixed method design to gather data from novice teachers in Texas universities through surveys and interviews. The mixed method approach is characterized by the collection and analysis of quantitative data in the first phase of research, followed by the collection and analysis of qualitative data in a second phase that builds on the results of the initial quantitative results (Creswell, 2009). Thus, the two forms of data are separated but connected to support the intent of the study. The study incorporated a quantitative survey and employed qualitative, open ended interview questions.

The first phase of the study utilized quantitative design through survey research. The survey was administered online. "A survey design provides a quantitative or numeric description of trends, attitudes, or opinions of a population by studying a sample of the population" (Creswell, 2009, p. 145). The survey approach provided novice

teachers an opportunity to answer direct questions regarding the effectiveness of support structures for novice teachers in Texas.

Survey research was the chosen data collection method due to several advantages. First, a survey design has a user friendly approach and is less intimidating for novice teachers to express their views about teacher support structures at their school of employment. Fink (2009) pointed out,

> A survey instrument is useful when evaluating programs and conducting research when the information you need should come directly from people. The data they provide are descriptions of feelings and perceptions, values, habits, and personal background or demographic characteristics such as age, health, education, and income. (p.22)

Second, survey designs are cost effective, as they can be administered online and allow for fast data collection.

The second phase of the research process was qualitative, utilizing case study as the strategy of inquiry. Case studies are inquiries in which the researcher explores in depth a program, event, activity, process or one or more individuals (Creswell, 2009). Interviews were conducted to give the study more depth. The idea behind qualitative research is to purposefully select participants that will best help the researcher understand the problem and the research questions (Creswell, 2009). Three teachers who have chosen to remain in the profession and three teachers who have chosen not to remain in the profession were purposefully selected to be interviewed.

Setting and Sample

The population for this study was drawn from a population of novice teachers in a large university system in Texas during their first year of teaching experience. These teachers were chosen because of their novice teacher status and their involvement in a comprehensive induction program. This comprehensive induction program includes a combination of mentoring, professional development and support, and formal assessments for new teachers during their first years of teaching. Such programs have proven to be highly effective in keeping quality teachers in the profession, identifying teachers who perform poorly, providing clinical training, and building a strong community of teacher learners (National Partnership for Teaching At-Risk Schools, 2005).The criterion for the selection of participants in this study was based on the fact that participants have first hand interaction with induction support structures in Texas including certifying university and employing school districts supports.

For the quantitative component of the study, 500 hundred novice teachers were randomly selected from a population of 2,000. Because of cost, inaccessibility and time constraints, samples were drawn from the population for testing purposes, and statistics were computed so the results can be generalized to the larger population (Lunsford & Lunsford, 1995). It was the hope of the researcher, that in utilizing a population of 500, a large return rate will be expected. Approximately 41% of teachers receiving the survey completed the study, yielding a sample size of 206 teachers for analyses.

The sampling design was a single stage sampling. A single-stage sampling procedure is one in which the researcher has access to names in the population and can

sample the people (or elements) directly (Creswell, 2009). The procedure for selecting the random sampling was from using a random numbers table. This process secured that all of the population will have the same opportunity for participation the study.

For the qualitative component of the study, six teachers were chosen through purposeful selection by administrating principals at Texas public school districts. Three teachers who chose to remain in the profession and three teachers who left the profession were interviewed. The interviews allowed the researcher to examine the topic through both perspectives of retention and attrition.

The researcher's role was to administer the survey through the distribution of the instrument online after the consent from the university system and the participants have been obtained. The researcher also conducted the interviews. The final stage included data analysis and reporting of results.

Instrumentation and Materials

The first phase of the data collection involved a quantitative survey. It employed a survey instrument developed by the researcher, entitled Novice Teacher Support Structure Evaluation Survey (Appendix A). Since there has been little research in the area of support structures for novice teachers, an established instrument was not available. This survey was designed specifically for this study by the researcher. The survey involved the two components of support: School District Support and Certifying University Support. Under *School District Support*, participants were asked to comment on administrative support, classroom mentor support and professional development support. In the area of *Certifying University*, the participants will be asked to comment

on support provided by their university including university supervisor/ liaisons, electronic mentoring and course preparation. A 5-point Likert-type scale was utilized to measure novice teachers' perceptions on effective support structures in Texas universities. Responses options were interval in nature with the following choices: 1 = *strongly disagree*, 2 = *disagree*, 3 = *undecided*, 4 = *agree*, and 5 = *strongly agree*. The survey was administered in a manner in which the recipients could remain anonymous.

Reliability and Validity

Reliability, according to Salkind (2003), "is when a test measures the same things more than once and results in the same outcomes" (p. 108). All scores will include true scores and scores that take into account random error. Reliability was obtained from measures without random error, thereby reducing error and increasing the reliability of the instrument. According to Creswell, reliability includes consistency in test administration and scoring. To ensure reliability, Tourkin et al. (2007) required that all instruments developed must have met an explicit set of specifications. The instrument that was used in this study clearly specifies the purpose, framework, relevant questions and domain.

Roberts (2004) defined validity as the degree to which your instrument truly measures what it purports to measure. Validity can either be content or construct. According to Creswell (2003), content validity is proven when the instrument measures the content it was intended to. Construct validity, as stated by Fink (2006), is

"experimentally obtained proof that a survey intended to measure a specific feeling, attitude, belief or behavior truly measures it" (p. 31).

A pilot study was performed to develop, adapt and check the feasibility of techniques to determine the reliability of measures. The pilot study included 10 novice teachers to verify the validity and reliability of the self developed survey. Participants in the pilot study were informed of their obligations and duties during the study (Lodico, Spaulding, & Voegtle , 2006). They were given a copy of the survey, the research questions and asked to make comments and suggestions on how to improve the survey. Statistical analyses were performed on the pilot study data as well. Once an inconsistency in the data was detected,an item was considered invalid and adjustments were made.

After the 500 potential participants were selected, the survey was administered to them through Survey Monkey. The participants were asked to answer the questions in a way that reflects their own attitudes. Upon the completion of the survey, an item analysis was done. This estimated the reliability of the instrument by measuring internal consistency of the items, and the extent to which the items correlate well with one another. This process also helped identify troublesome items to determine if any questions should be dropped from the study (Wuensch, 2009).

The qualitative component of the data collection utilized an interview guide. The following questions guided the interviews:

1. When you reflect on the support that your employing school district gave you during your first year teaching experience, what support was the most effective in helping you become a better teacher?
2. When you reflect on the support that your certifying university gave you during your first year teaching experience, what support was the most effective in helping you become a better teacher?
3. When you reflect on your first year of teaching, what support activity if any, would have made your teaching experience better?
4. Is there anything else you would like to tell me regarding the support you received during your first year of teaching.

This is an advantage of utilizing sequential explanatory as a strategy because the second phase of data collection allows the research to go into more depth of the topic and allows for a deeper understanding.

Member check was used to validate the interview questions. In quality research, a member check, also known as informant feedback or respondent validation, is a technique used by researchers to help improve the accuracy, credibility, validity, and transferability of a study (Yanow & Schwartz-Shea, 2006). Member checking was done during the interview process, at the conclusion of the study to increase the credibility and validity of a qualitative study. The interviewer strove to build rapport with each interviewee in order to obtain honest and open responses. During the interviews, the researcher restated the information, and then question, to the participant to determine accuracy. Member checks completed after a study were completed by sharing all of the

findings with the participants involved. This allowed participants to critically analyze the findings and comment on them. The participants affirmed that the summaries reflect their views, feelings, and experiences, providing credibility to the study.

Data Collection

The data collection process was done in two phases using sequential explanatory as the research strategy in this mixed method study. Phase one was quantitative in nature, utilizing online survey methodology. Phase two was qualitative, using semi-structured interview methodology.

Quantitative

The study utilized survey quantitative research. The purpose of survey research is to generalize from a sample to a population so that inferences can be made about some characteristic, attitude, or behavior of the population (Babbie, 1990). Survey design was chosen because of the economy of the design and the rapid turnaround in data collection.

The survey (Appendix A) was distributed as an online survey utilizing the survey platform Survey Monkey. The surveys were digitally encrypted to maintain security and privacy. The prospective participants received an email with a letter of explanation (Appendix B) of the study and its importance. Automatic electronic reminders were sent out by email at two, three, and four weeks into the study to all that did not previously respond.

The form of data collection that will be used is self-administered questionnaires. Survey Monkey was developed in 1999. Using this online survey tool, the researcher can create their own survey quickly using a template and post them on a website. The survey

allowed participants to fill it out the survey one time from that email, but after the first entry, their link was deactivated, to prevent someone, else from filling out another survey on that account. This guaranteed that there was only one survey completion per participant. Survey Monkey can generate results and report them back to the research in the form of descriptive statistics (Creswell, 2009). The initial data collection was disaggregated by research question. Scores for each interval question was tallied with mean, and standard deviation, while the nominal responses were tallied with a total number of responses (frequency counts) and percentages. The results were provided in a table format.

Qualitative

The second phase of the data collection process utilized case studies as it strategy of inquiry. This allowed the researcher to explore the teacher's perspective on the effectiveness of the support structures in depth. The data collection procedure used in this study was face-to-face interview method. Denzin and Lincoln (2000) noted that the use of interviewing in qualitative research to acquire information allow interaction between two people and provides powerful means of capturing everyday experiences of the research subjects.

The interview sample consisted of six teachers. These teachers were selected by administrating principals in Texas Public School District; three of these teachers were teachers who planned to remain in the profession and three will be teachers who were planning on leaving the profession. This allowed the researcher to have input on all aspects of teacher attrition and retention in regards to induction activities. A full

explanation of the study was given to the participants. Once the teachers agreed to participate, they were given a consent form (Appendix C) for participation in the study. After their agreement was received, interviews were scheduled. The interviews were recorded to help prevent misinterpretation on behave of the researcher. In addition the researcher took extensive notes after all teachers had given their consent. The interviews took approximately 60 minutes to achieve an accurate representation of each participant's thoughts and experiences.

This study incorporated an indirect method of questioning the participants. In this technique, the interviewer wasl asked projective questions. Projective questions are questions that allow respondents to answer questions indirectly by imposing their personal beliefs, attitudes on others. This technique can be particularly useful for eliciting responses on a topic which participants may be reluctant to express their own true feelings openly or directly (Powell, 1997).

When indirect questioning is used the phenomenon of power asymmetry needs to be avoided. Power asymmetry is an exertion of power by the interviewer. The description of power asymmetry concerns the structural positions in the interview, for example subjects may, more or less deliberately, express what they believe the interviewer authority wants to hear (Kvale & Brinkman, 2009). Kvale and Brinkman note that power asymmetry can be easily overlooked if the interviewer only focuses on the open mode of understanding and the close personal interaction of the interview. The researcher should be reflective of this role of power in the production of interview knowledge. Kale and Brinkman assert the interview process is not intended to be an

"open every day conversation between equal partners. The interviewer has scientific competence. He or she initiates and defines the interview situation, determines the interview topic, poses questions and decides which answers to follow up, and also terminates the conversation" (p.33).

Data Analysis

The purpose of the data analysis was to determine the effectiveness of support structures for first year teachers. The data analysis process was done in two phases in this mixed method study. Phase one was quantitative in nature, utilizing online survey methology. Phase two was qualitative, using open-ended structured interviews.

Quantitative

Quantitative data analysis procedures for this study are presented in steps to help with the clarity of the complete analysis process. The data was analyzed utilizing the steps as recommended by Creswell (2009).

Step 1 of the analysis process was to report information about the number of members of the sample who did and did not return the survey. A table with numbers and percentages describing respondents and nonrespondents was utilized to present this data. Survey Monkey generated this report.

Step 2 discussed the method by which response bias was determined. Response bias is the effect of nonresponses on survey estimates (Fowler, 2002). Wave analysis is used to determine biases. In wave analysis the researcher will examine returns on select items week by week to determine if average responses change (Leslie, 1972). This will be based on the assumption that those who return surveys in the final weeks of the

response period are nearly all nonrespondents, if the responses begin to change, a potential exist for response bias (Creswell, 2009).

Step 3 will be the identification and a discussion of a plan to provide a descriptive analysis for the study. Descriptive statistics were conducted done to determine the means, and standard deviations, of quantitative items that are interval in nature, as well as frequencies and percentages for nominal data. Descriptive statistics are used to describe the basic features of the data in a study. They provide simple summaries about the sample and the measures (Trochim, 2006).. Descriptive statistics are typically distinguished from inferential statistics. With descriptive statistics data describes what is or what the data shows. Once this data was collected, the analysis were conducted and presented in table format.

"What are the perceptions of novice teachers relating to their employing school district on comprehensive induction support service?" This research question was answered by calculating descriptive statistics on school based support items. The corresponding survey headings and items that were analyzed for this this research question were as follows:

Administrative Support:

1. I felt the administration was supportive of me and my professional growth.
2. I felt the classroom visits/evaluations that my administration performed were beneficial in my effectiveness as a teacher.

Classroom Mentors:

3. I felt my classroom mentor was helpful in giving me guidance and support.

4. I felt teacher collaboration/networking-talking with other teachers in my building/district was helpful in allowing me to express ideas and frustrations and gain effective ways to deal with them.

Professional Development:

5. I felt professional development provided during the school year for the whole faculty was helpful in giving me strategies to use in my classroom to be a more effective teacher.
6. I felt staff development provided to new teachers only before the start of school was helpful in giving me guidelines for the first days of school.

Descriptive statistics were also utilized to analyze the second research question: "What are the perceptions of novice teachers relating to their certifying university support services in their induction program?" The corresponding survey headings and items that were analyzed for this research question were as follows:

University Liaisons/Supervisor

7. I felt my university liaison/supervisor was supportive of me and my professional growth.
8. I felt the classroom visits/evaluations that my university liaison/supervisor performed were beneficial in my effectiveness as a teacher.

Electronic Mentoring

9. I felt the support from the electronic mentors I received from my certifying university during my first year of teaching was beneficial to me in my first year of teaching.

10. I felt the networking and the resources from the electronic mentoring website were beneficial to me in my first year of teaching.

Course Preparation

11. I felt the education courses I took at my certifying university were helpful in giving me strategies to use in my classroom to be a more effective teacher.

12. I felt the clinical experiences I experienced at my certifying university were helpful in giving me guidelines for the first days of school.

Finally, frequencies and percentages were used to assess the following nominal question (with response options being school-based support vs. university-based support):

13. What support system better fit your needs as a first year teacher?

Step five in the process of data analysis involved the identification of the statistical computer program for testing the major inferential research questions in the study. Statistical Package for the Social Sciences (SPSS) was used for the data analysis. Data was transferred Survey monkey to SPPS. SPSS is among the most widely used programs for statistical analysis in social science. It is used by market researchers, health researchers, survey companies, government, education researchers, marketing organizations and others.

The sixth step in the data analysis process involved the presentation of the data. The results were presented in tables with the interpretation of the results following each table in the text. All research questions will be answered as well as the implications of these answers.

Qualitative

Qualitative data was derived from semi-structured interviews with the use of indirect questioning. These interviews answered the third research question of the study: *What induction support structures better address the needs of the novice teacher in their decision to remain in the teaching profession?* The analysis process involved five steps as suggested by Creswell (2009, p. 185-190).

Step 1: involve transcribing the interviews, optically scanning materials, tying up field notes and sorting and arranging the data into different types depending on the sources of information.

Step 2: a general sense of the information was obtained to reflect on its overall meaning. The researcher asked herself questions regarding what general ideas the participants were saying, the tone of ideas, and the impression of the overall depth, credibility, and use of the information.

At this point, the researcher wrote notes in margins and start recording general thoughts about the data at this stage.

Step 3: Begin detailed analysis with a coding process.

Coding is the process of organizing the materials into chunks or segments of text before bringing meaning to information (Rossman & Rallis, 1998). It involved text data or pictures gathered during data collection, segmenting sentences into categories, and labeling those categories with a term, often a term based in the actual language of the participants.

Tesch (1990) provided a useful analysis of the process in eight steps:

1. Get a sense of the whole. Read all the transcriptions carefully. Perhaps jot down some ideas as they come to mind.
2. Pick one document - the most interesting one, the shortest, the one on the top of the pile. Go through it, asking yourself, "What is this about?" Do not think about the substance of the information but its underlying meaning. Write thoughts in the margins.
3. When you have completed this task for several participants, make a list of all the topics. Cluster this task for several participants; make a list of all topics. Cluster together similar topics. Form these topics into columns, perhaps arrayed as major topics, unique topics, and leftovers.
4. Now take this list and go back to your data. Abbreviate the topics as codes and write the codes next to appropriate segments of the text. Try this preliminary organizing scheme to see if new categories and codes emerge.
5. Find the most descriptive wording for your topics and turn them into categories. Look for ways of reducing your total list of categories by grouping topics that relate to each other. Perhaps draw lines between your categories to show interrelationships.
6. Make a final decision on the abbreviation for each category and alphabetize these codes.
7. Assemble the data material belonging to each category and alphabetize these codes.
8. If necessary, recode your existing data. (p. 186)

In Step 4, the coding process was used to generate a description of the people and responses, as well as categories or themes for analysis.

Description involves a detailed rendering of information about people, places, or events in a setting. Researchers can generate codes for description. These descriptions generated a small number of themes that were consistent with the quantitative survey themes regarding types of school-and university-based support.

In Step 5, the description and themes were represented in the qualitative narrative.

A narrative passage was used to convey the findings of the analysis. This narrative included a detailed discussion of the themes. Tables were used to help convey the analysis.

Finally, Step 6 inolved interpretation of the data.

This step discussed the *lessons learned* by the research on the analysis. This included the researcher's personal interpretation of the findings in relation to the school-based and university-based themes explored in the quantitative categories. A comparison will also be made between the study's findings and the findings from other studies found in the literature review.

Protection of Participants' Rights

The participants in the study took part in an online survey. They were considered as volunteers in this study. Their names, personal information and or data were used for research purposes only. Every effort was made by the researcher to keep participants identity and personal information protected. The researcher provided an assurance to participants that data was kept confidential and participants will not be identified by name.

The data were gathered after approval from the Institutional Review Board (IRB) at Walden University to protect the rights of participants in the study. The aaproval number was 07-29-10-0298442 and will expire on July 11, 2011. Participants were provided with the researcher's name, telephone numbers and address.

The Role of the Researcher

Is an assistant professor at Morehead State University, Department of Education. Current assignments include, Instructor for Middle and Secondary graduate and undergraduate course work, and University Supervisor for student teachers. The researcher has been in education for fifteen years and the researcher's positions at times have included mentor and team leader to first year teachers. During my teaching career, I developed a passion to understand and research why first year teachers were quitting the profession at such high rates.

The researcher's role was to administer the survey through the distribution of the instrument online after the consent from the university system and the participants were obtained. The researcher also conducted the interviews. The final stage included reviewing data analysis and interpreting/reporting the findings.

Summary

This section detailed the research design, setting, sample population, instrumentation and materials, validity, reliability, and justification for survey research. This section also included participants' rights, the role of the researcher data collection, and analysis of research questions. Following this, section 4 presents the study's data collection and analysis. In the final section, an overview of why and how the study was

done will be presented, including a brief summary of the findings. Recommendations for actions and further study will also be presented.

Section 4: Results

The purpose of this research study was to evaluate the effectiveness of novice teacher induction support structures in Texas. The study was focused on employing school district and certifying university support. The study examined teacher supply crisis, as well as reviewed induction programs and mentoring practices for novice teachers. This research study includes a description of the research behind teacher retention and the components of effective novice teacher support programs.

A sequential explanatory mixed method design was implemented to gather data from novice teachers in Texas universities and school districts using surveys and interviews. The survey instrument used was the Novice Teacher Support Structure Evaluation, which comprises 13 questions, and was used to gather data for the quantitative part of the study. The purpose of the quantitative data was to address the first two research questions of the study:

1. What are the perceptions of novice teachers relating to their employing school district on comprehensive induction support service?
2. What are the perceptions of novice teachers relating to their certifying university support services in their induction program?

After gathering and analyzing the quantitative data, six teachers from the sampling population were interviewed face-to-face for the qualitative research of the study. Of the six teachers, three remained in the profession and three teachers have left the profession. These interviews helped support the quantitative findings from the first

two research questions, and also helped to answer the third research question of the study:

3. What induction support structures better address the needs of the novice teacher in their decision to remain in the teaching profession?

The quantitative data was coded and analyzed using descriptive statistics. The qualitative data were analyzed using thematic analysis. The outcomes of the quantitative and qualitative data analysis phases are compiled in this section. The final part of section 4 discusses data analysis procedures, findings, and a summary section.

Quantitative Data Analysis

Preliminary Analyses

Of the 500 novice teachers randomly selected for the study, only 206 teachers responded to the survey request. Of these 206, only 198 teachers completed all the items in the survey, resulting in a final sample of 198 for statistical analyses. Before conducting analyses, reliability estimates for the measures and wave analysis to detect response bias were conducted.

Reliability estimates for each of the school-based and university-based support measures were calculated using Cronbach's alpha. Administrative support (2 items; $\alpha = 0.85$), classroom mentor support (2 items; $\alpha = 0.71$) had acceptable reliability, though professional development support (2 items; $\alpha = 0.50$) was lower than the typical 0.70 cutoff for acceptable reliability. However, this is not uncommon for exploratory measures with only two items. For example, Nunnally (1978) noted that "for the early stages of research...reliabilities of 0.60 or 0.50 will suffice (p. 226)." Therefore, this

measure was retained for subsequent analysis. All six of the items representing school-based support, maintained acceptable reliability (α = 0.80). In terms of aspects of university-based support, university/liason support (2 items; α = 0.92), electronic mentoring support (2 items; α = 0.90), and course preparation support (2 items; α = 0.83) all had acceptable reliability. All six of the items representing university-based support maintained acceptable reliability (α = 0.87). Thus, overall the instrument for this study was reliable.

Second, wave analyses were conducted to determine the response to bias (Leslie, 1972; Creswell, 2009). The sample was divided into six equal groups of 33 responses. Means for each group of responses were calculated for items averaged for school-based support (six items) and university-based support (six items). Two one-way analysis of variance were used determine if there were differences in response groups (independent variable) on school-based and university-based support factors (dependent variables). There were significant mean differences in terms of school-based support, $F(2, 192) = 4.54$, $p < .01$, but not university based support, $F(2, 192), = 0.15$, $p = .98$. Figure 3 shows how means for Group 3 and Group 6 were much lower than the others in terms of school-based support.

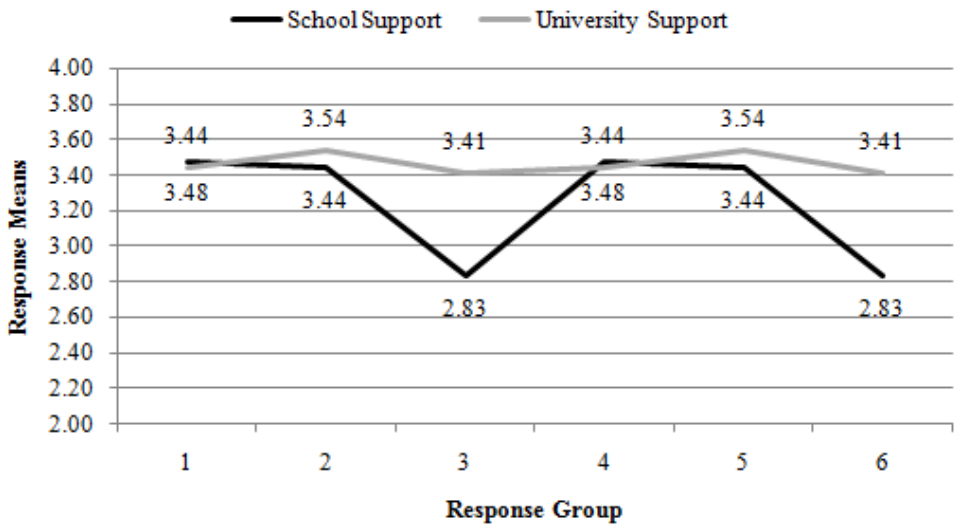


Figure 3*:* Mean responses for school-based and university-based support across response groups.

Specifically, it appears that teachers who responded quickly after the initial survey request (e.g., Groups 1 and 2) and reminder (Groups 3 and 5) reported more school-based support than those responding more slowly. This indicates some evidence of response bias on school-based items (but not university-based support items), as teachers who did not respond to the survey may have less school-based support than those who completed the survey.

Perceptions of Novice Teachers Regarding School-Based Support

Descriptive statistics for each item measuring the three types of school-based support are shown in Table 1. Teachers reported that collaboration/talking with other teachers was the most helpful ($M = 3.57$; $SD = 1.29$), while staff development before the start of the school year was least helpful ($M = 3.07$; $SD = 1.29$; 39.8% agreement). The majority of teachers also agreed that the administration support for their professional growth (56.3%) and classroom mentors (50.5%) were helpful. Although not the majority,

when compared to teachers who disagreed or were undecided, well over one third of the teachers responding also felt that the classroom visits or evaluations from administrators (44.7%) and professional development during the school year (48.6%) were beneficial.

Table 1

Descriptive Statistics for School-Based Support by Percentages and Frequencies

	Percentage and frequencies					Response averages
	Strongly disagree	Disagree	Undecided	Agree	Strongly agree	*M* (*SD*)
Administrative support						
The administration was supportive of me/my professional growth	12.6 (26)	16.5 (34)	14.6 (30)	35.9 (74)	20.4 (42)	3.35 (1.32)
The classroom visits/ evaluations from my administration were beneficial	13.6 (28)	23.3 (48)	18.4 (38)	31.1 (64)	13.6 (28)	3.08 (1.28)
Classroom mentor support						
My classroom mentor was helpful in giving me guidance/support	16.5 (34)	18.4 (38)	14.6 (30)	24.3 (50)	26.2 (54)	3.25 (1.44)
Collaboration/ talking with other teachers was helpful	10.7 (22)	10.7 (22)	17.5 (36)	33.0 (68)	28.2 (58)	3.57 (1.29)
Professional development support						
Professional development during the year was helpful	10.7 (22)	14.6 (30)	26.2 (54)	36.9 (76)	11.7 (24)	3.24 (1.16)
Staff development before the start of school was helpful	12.6 (26)	21.4 (44)	26.2 (54)	26.2 (54)	13.6 (28)	3.07 (1.24)

M = Mean; *SD* = Standard Deviation

Perceptions of Novice Teachers Regarding University-Based Support

Descriptive statistics for each item measuring the three types of university-based support are shown in Table 2. Teachers reported that having a supportive liaison/supervisor was the most helpful (M = 3.92; SD = 1.16; 75.8% agreement), while networking and resources from the electronic networking website was least helpful (M = 2.82; SD = 1.17; 26.3% agreement). The majority of teachers also agreed that classroom visits/evaluations from their supervisor (72.7%) education courses (62.6%), and clinical experiences (54.6%) were helpful. Only a little over one third of teachers responding to the survey felt that support from electronic mentoring (37.3%) was beneficial.

Perceptions of Novice Teachers across the Three School-Based and Three University-Based Support Types

The last item on the survey asked respondents to indicate which form of general support (school-based or university-based) they felt better fit their needs as a first-year teacher. The results for this item indicated more teachers (122; 61.6%) reported school-based support as fitting their needs better than university-based support (76; 38.5%). However, it was unclear how each of the three school-based and three university-based aspects of support compared to one another because this item only referred to school-based support versus university-based support broadly. To examine specific aspects of school-based and university-based support, items for each of the six main types of school-based and university-based support were averaged to create overall mean scores for administrative, classroom mentor, professional development, liaison/supervisor, electronic mentoring, and course preparation support.

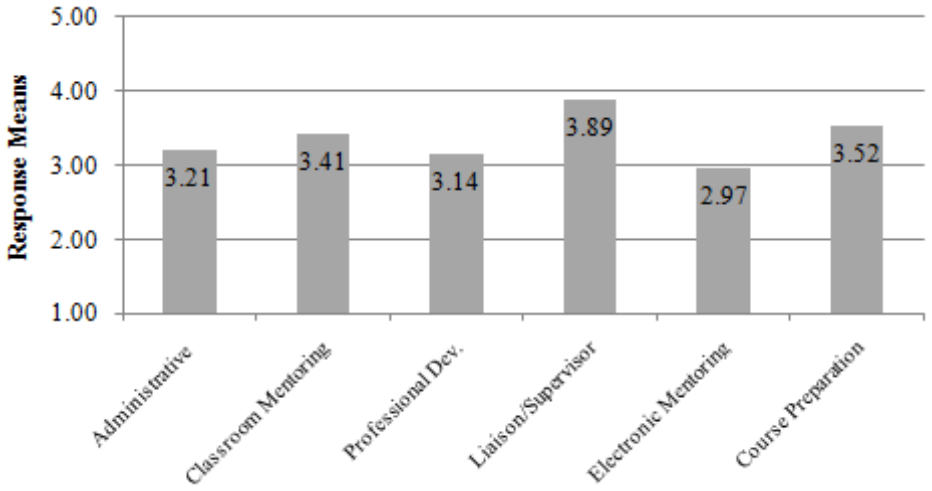
Table 2

Descriptive Statistics for University-Based Support by Percentages and Frequencies

	Percentage and (Frequencies)					Response averages
	Strongly disagree	Disagree	Undecided	Agree	Strongly agree	M (SD)
University liaison/supervisor						
My university liaison/ supervisor was supportive of me and my growth	7.1 (14)	6.1 (12)	11.1 (22)	39.4 (78)	36.4 (72)	3.92 (1.16)
The classroom visits/ evaluations that my supervisor performed were beneficial	4.0 (8)	9.1 (18)	14.1 (28)	41.4 (82)	31.3 (62)	3.87 (1.08)
Electronic mentoring						
Support from electronic mentors was beneficial to me	11.1 (22)	16.2 (32)	35.4 (70)	23.2 (46)	14.1 (28)	3.13 (1.18)
Networking and resources from the electronic mentoring website were beneficial to me	16.2 (32)	21.2 (42)	36.4 (72)	17.2 (34)	9.1 (18)	2.82 (1.17)
Course preparation						
The education courses were helpful for me to be a more effective teacher	8.1 (16)	10.1 (20)	19.2 (38)	38.4 (76)	24.2 (48)	3.61 (1.19)
The clinical experiences I experienced were helpful	9.1 (18)	10.1 (20)	26.3 (52)	36.4 (72)	18.2 (36)	3.44 (1.17)

M = Mean; *SD* = Standard Deviation

Figure 4 shows that, across all six types of school-based and university-based support, teachers found support from their liaison/supervisor to be the most helpful (M = 3.89; SD = 1.08) and electronic mentoring to be the least helpful (M = 2.97; SD = 1.12).



†*Note: The two items for professional development had relatively low reliability compared to others, and thus should be interpreted with caution.*

Figure 4: Mean responses for the six types of school-based and university-based support

Qualitative Data Analysis

Personal face-to-face interviews were conducted with six first year teachers, three that remained and three that left the teaching profession. Interviewees were a diverse group of teachers with teaching experiences from Grades K-6 (see Table 3; respondents are color coded for analytical purposes). The interviews were used as a guide to help teachers reflect on their first- year teacher support from their certifying universities and employing school districts.

Table 3

Demographic Information for Interview Participants

Teachers remaining in profession			Teachers who left profession		
Participant	Grade level	Years in teaching	Participant	Grade level	Years in teaching
Teacher 1 (Hispanic female)	1	1	Teacher 2 (European American female)	4	1
Teacher 4 (Asian American female)	2	1	Teacher 3 (African American female)	2	1
Teacher 6 (European American female)	1	1	Teacher 5 (Asian American female)	3	2

Four interview questions were asked to help teachers reflect over their first-year support structures from their certifying universities and their employing school districts. The interviews took approximately 25-30 minutes. The interview questions focused on teachers' employing school district support, university support, support activities, and other types of support that helped or not become a better teacher (see Appendix C for interview questions and full responses). The interview data, which was audio recorded, used member checking to help improve the accuracy, credibility, validity, and transferability of a study (Yanow & Schwartz-Shea, 2006) and margin notes taken during the interview. In addition, the transcribed notes were peer reviewed and verified. Interview transcripts were read several times, during which time I coordinated data to develop research question themes. Each transcript was coded and examined for themes based on school-based and university-support systems, as well as whether the comments

were positive or negative. Transcripts were cut apart by question then arranged by theme to obtain a better understanding of the interviewees' perspectives on support structures and their decisions to remain or leave the profession.

Qualitative Responses to School-Based Support

The first interview question asked, "When you reflect on the support that your employing school district gave you during your first year teaching experience, what support was the most effective in helping you become a better teacher?" Shortened responses to interviewee responses are presented in Table 4, organized by teaching status (still teaching/left teaching) and the emotional nature of the comment (positive/negative). All three of the teachers who are still teaching had only positive things to say about their school-based support, and their comments hit on all three of the themes examined in the quantitative phase: administrative, classroom mentoring, and professional development. In contrast, all three of the teachers who left the profession had negative experiences with school-based support, specifically the absence of any support from administrators, other teachers/mentors, and even parents. It is interesting to note that the issue of parental support arose, given this topic was not explored in the quantitative survey.

Table 4
Qualitative Responses to School-Based Support

Teaching status	Responses	
	Positive comments	Negative comments
Still teaching	Teacher 1: Mentor....went above and beyond the expectations assigned...made sure that I understood all of the lesson plans as well as materials needed to be successful. Teacher 5: Our team leader helped my team to become stronger teachers.... I managed my first year well, thanks to my team leader. Teacher 6: My school district is great! My school administrators are even greater. They care, about students and staff and it shows in our professional development meetings. The principals in my employing school seek out training opportunities to help new teachers become more effective in the classroom.	None
Left Teaching	Teacher 3: A reading coach....was very helpful. After she finished working with my struggling readers, she would stay over to offer teaching suggestions based on what she saw while visiting my classroom.	Teacher 2: I did not receive help from teachers, administrators, or parents. Teacher 5: My employing school district was not resourceful to new teachers. I searched for help by myself.... I was disappointed with the lack of help and concern our school district had for new teachers. Teacher 3: I wouldn't say I had support to become a better teacher, but the little support I did have helped me survive my first year classroom experience.

Qualitative Responses to University-Based Support

The second interview question asked, "When you reflect on the support that your certifying university gave you during your first year teaching experience, what support was the most effective in helping you become a better teacher?" Shortened responses to interviewee responses are presented in Table 5, organized by teaching status (still teaching/left teaching) and the emotional nature of the comment (positive/negative).

Only two of the three teachers who are still teaching had positive things to say about their university-based support (specifically noting university liaison/supervisor support), while the other comment was negative and focused on feeling courses did not prepare her for *real life* disruptive students and her university liaison/supervisor's visits were too brief and unstructured to be helpful. Surprisingly, two of the three teachers who left teaching also had positive things to say regarding course preparation, student teaching experiences, and university/liaison support. This might indicate that, despite strong university-based support, the comparative lack of school-based support was the most important factor contributing to those who decided to leave teaching. This is consistent with the quantitative results that indicated teachers reported school-based support as most relevant to fulfilling their needs, and more specifically the helpfulness of having a mentor at the school.

Table 5

Qualitative Responses to University-Based Support

	Responses	
Teaching Status	Positive Comments	Negative Comments
Still Teaching	Teacher 1: I had a mentor from the university who also supported me through frequent visits. Teacher 6: My university only did what was required...for supervisors to visit their student teachers in their classroom at least once after graduation. My supervisor visited my class a couple of times. She would leave a list of positive teaching skills observed as well as things I needed to work on...it was a positive experience.	Teacher 4: I was not prepared with classroom management strategies and had many disruptive students. First, I only understood classroom management from course text, which was not aligned with real life. Second, although my university supervisor visited my classroom several times during the semester, I never knew what to ask on her. The classroom issues seemed to happen so fast I did not have time to reflect, and my supervisor's visits were short and quick.
Left Teaching	Teacher 2: My student teaching experience helped prepare me to be a better teacher. Also my classroom management courses helped to guide my actual classroom experience. Teacher 3: The most effective support I had from my university was being taught how to develop effective lessons. I was prepared how to write lessons and apply standards to what I was teaching. Teacher 5: My certifying university was very helpful. My supervisor visited my class three times after I graduated and provided constructive advice, the things I learned from her during my first semester in public school was a blessing.	

Qualitative Responses to Desired Support Activities

The third interview question asked, "When you reflect on your first year of teaching, what support activity if any, would have made your teaching experience better?" Interviewee responses are presented in Table 6, organized by school-based versus university-based support. All six respondents unanimously mentioned forms school-based support, specifically in terms of classroom mentor support (e.g., team teaching and colleague support), the administration (e.g., appreciation of diversity) and professional development activities. None of the responses discussed aspects of university-based support. Again, this is consistent with the quantitative data suggesting school-based support best fit the needs of first-year teachers, with an emphasis on classroom mentoring.

Table 6

Qualitative Responses to Support Activities to Improve Experiences

Responses	
School-based	University-based
Teacher 1: My experience would have been better if the school district appreciated diversity. Instead I spent many hours of my day translating between parents and the Caucasian counselor.	None
Teacher 2: A mentor to guide me through my first year as well as understanding the logistics of the benefits package for new teachers in addition to district lesson planning.	
Teacher 3: Team building skills and team teaching.	
Teacher 4: Professional development, teacher collaboration and team teaching this way I could see experienced teaching being modeled and understand how to use teaching strategies in my classroom.	
Teacher 5: Professional development, and grade level planning, this would help teachers feel more connected as a teams.	
Teacher 6: I think if my colleagues would learn to accept first year teachers in a positive way, I would have had a better teaching experience.	

Qualitative Responses to Closing Comments

The fourth interview question asked, "Is there anything else you would like to tell me regarding the support you received during your first year of teaching?" Interviewee responses are presented in Table 7, organized by teachers who remained versus those who left the teaching profession. Two of the teachers who remained in the profession referenced the school district (one of which switched school districts), while the other cited a rough classroom experience (though did not elaborate). Among teachers who left

the profession, all responses were overwhelming negative with respect to school-based support. That is, they found the district to be unsupportive, and one teacher even mentioned having demeaning work colleagues.

Table 7

Qualitative Responses to Closing Comments

Responses	
Teachers who remain in profession	Teachers who left profession
Teacher 1: Although, I had a rough class experience, my heart is with teaching low income students and I will continue to teach.	Teacher 2: I always thought teaching was my calling until I was employed in a school district with no support. I am currently employed as a make- up artist.
Teacher 4: I am still teaching but went to another school district.	Teacher 3: I couldn't believe the language that came from the other kindergarten teachers. They spent their day yelling and screaming at children and I refused to hear it for another year. I tried talking with my colleagues and they were so full of hatred that they demeaned me for approaching them with these issues. I feel that I would not have been productive as a loving and supportive teacher at this school and I didn't want to be like them. I am not teaching now.
Teacher 6: I learned a lot during my first year teaching. School district support was very helpful.	Teacher 5: I love teaching and I believe I will always want to teach. But public school districts are missing important elements in understanding how to retain a new teacher. I quit my first teaching job because the district was not supportive.

Evidence of Quality

Evidence of quality was demonstrated in this study in that the procedures outlined in the proposal were followed during the course of the research study. Each step discussed in the proposal, which had IRB approval, was followed. This can be noted through the detailed procedures discussed throughout the body of this study. A measure of quality in the work was demonstrated in that the information is portrayed honestly given the potential biases have been addressed using rigorous research methodology – (e.g., the use of random selection, anonymous survey completion, and structured interviews) and the researcher's adherence to ethical guidelines for collecting, analyzing, and reporting the data (Creswell, 2008). Trustworthiness was evidenced by providing survey and interview participants with all relevant and necessary information in the initial contact letter as well as by providing all interview participants with a copy of the transcript of their responses. This promotes reciprocity, indicating that trust and sharing exists as all data pertaining to each individual participant is available to the participant (Creswell, 2003). Interviews were recorded, transcribed placed in themes and coded. The data collected were examined and used to build a justification for the perceptions identified in the study by consistently finding connections between the survey and interview responses (Creswell, 2008).

Summary

This mixed method study focused on support structures for novice teachers in Texas. This study explored two levels of support within a variety of comprehensive

induction programs. The areas of support that were evaluated are provided to the novice teacher through their employing school districts and their certifying university.

The quantitative portion of the study answered the first two questions regarding perceptions of novice teachers relating to induction program support with respect to (a) their employing school district and (b) their certifying university. The responses to the survey questions indicated that teachers wanted face-to-face support from their colleagues and supervisors rather than electronic mentoring. Additionally teachers reported that classroom visits from supervisors, education courses, and clinical experiences were helpful.

The qualitative data were collected through face to face interviews. These interviews were conducted with six first year teachers, three that remained and three that left the teaching profession. The interviews were recorded and transcripts were created. The transcripts were read several times, during which data was coordinated to develop research question themes. Each transcript was coded and examined for themes based on school-based and university-support systems, as well as whether the comments were positive or negative. Transcripts were cut apart by question then arranged by theme to obtain a better understanding of the interviewees' perspectives on support structures, and according to their decision to remain or leave the profession.

For the qualitative findings, teachers who were still teaching expressed that university-based support, especially that given by the liason/supervisor, was a positive help for them. Teachers who left the profession had only positive comments to make about the university-based support. Teachers who left the field cited that school-based

support was insufficient for helping them navigate through the first year of teaching. All three of the teachers who left the field of teaching were disappointed by their perceived lack of support from the school district.

Section 5: Discussion, Conclusions, and Recommendations

Providing effective support structures for first-year teachers is a goal shared by many universities, school districts, and administrators. Induction programs provide a precise and comprehensive structure of new teacher support (Sweeny, 2008). The purpose of this study was to understand effective induction components that lead to retention of first-year teachers. This study was designed to evaluate the effectiveness of university- and school-based support structures. In addition, this study provided face-to-face interviews with six teachers to explore the subject in depth.

A sequential explanatory mixed method design was used to gather data from novice teachers in Texas universities through surveys and interviews. Both quantitative and qualitative data were analyzed and interpreted. Quantitative data were collected using a 5-point Likert-type scale to measure novice teachers' perceptions on effective support structures. The survey instrument was developed by the researcher and entitled *Novice Teacher Support Structure Evaluation Survey* (see Appendix A). Data were coded and analyzed using descriptive and inferential statistics. The data allowed the researcher to understand whether or not school-based or university-based support was more fitting to the needs of first-year teachers.

Interpretation of Findings

The quantitative portion of the study answered the first two research questions regarding perceptions of novice teachers relating to induction program support with respect to (a) their employing school district and (b) their certifying university. For the quantitative part of the study, teachers reported that they found support from their

liaison/supervisor to be the most important aid during their first-year of teaching. First-year teachers did not think that electronic mentoring offered them the type of support they needed in order to be successful in their first year of teaching. Additionally teachers reported that classroom visits/evaluations from supervisors, education courses, and clinical experiences were helpful. The responses to the survey questions showed that teachers wanted and needed face-to-face support from individuals who worked in their school rather than electronic mentoring. First year teachers who were supported by their supervisors were more likely to be comfortable in their jobs.

For the qualitative findings, two out of three teachers who were still teaching expressed that university-based support, especially that given by the liason/supervisor, was a positive help for them. One teacher who remained in the profession felt that the courses at the university had not really prepared her for what she had to face in the classroom. Teachers who left the position had only positive comments to make about the university-based support. Clearly, the training that these teachers received at the university did not contribute to (nor deter) their desire to leave the teaching profession.

Teachers who left the field cited that school-based support was insufficient for helping them navigate through the first year of teaching. All three of the teachers who left the field of teaching were disappointed by their perceived lack of support from the school district. Although one teacher who left the profession did have some positive things to say about school district support, the consensus among the three teachers who left the profession was that the district and the school failed to support them during their first year of teaching. In fact, one of the teachers mentioned that she felt no support at all

from other teacher colleagues. She reported that her colleagues were very negative about teaching, and she observed that these teachers spent all their time yelling at the children and were not responsive when she came to them for help.

Based on what the findings showed from the qualitative interviews, teachers who perceived a lack of support from their school districts or school administrators were more likely to give up on teaching, not because they disliked teaching, but because they were discouraged by the attitudes at the schools where they taught. Support from others seemed to be the single most important factor in the decision to stay in teaching or to leave the profession. Teachers who remained in the profession felt that they had received enough support from their school districts that they could overcome the difficulties experienced by all novice teachers. Only two of the three teachers who are still teaching had positive things to say about their university-based support (specifically noting university liaison/supervisor support), while the other comment was negative and focused on feeling courses did not prepare her for *real life* disruptive students and her university liaison/supervisor's visits were too brief and unstructured to be helpful. Taken together, these findings indicated that school-based support best met first-year teacher needs, and the lack of such support may have lead teachers to leave the profession.

Previous research (Saphier, Freedman & Ascheim, 2007; Skinner, 2005; Wong, 2004) has noted the importance of providing first-year teachers with a support system that includes support, observation, and practical advice from experienced teachers. Mentoring, according to research, is especially helpful for first year teachers who often need someone on how to manage classroom problems (Wong, 2004). The findings in this

study supported these previous findings. Teachers who were supported by colleagues, professional development activities, and who were provided with a mentor were more likely to continue in their profession. Teachers who had a difficult time relating to their colleagues or who had little access to resources from the district were unlikely to continue in the profession.

Previous research has also suggested that preservice teachers must be given practical teaching experience (Tjeedrdsma, 1998) by their university teaching program and their cooperating teachers. Training programs for preservice teachers help these new teachers understand better what managing a classroom in real world is like (Tjeedrdsma, 1998; Wong, 2004). Researchers have noted that preservice teachers have to be made aware of the realities of teaching (Tjeedrdsma, 1998; Wong, 2004). Up until their preservice teaching experience, student teachers have been in classes where theory was emphasized but little or no practical advice was offered (Tjeedrdsma, 1998; Wong, 2004). The findings in this present study support previous findings. Teachers in this study reported that at the university they had only learned about classroom management from a textbook and that textbook experience had done nothing to prepare them for managing a classroom full of children with different learning styles and needs. Additionally, teachers in this study reported that when their university supervisors did come to observe them in the classroom, the inexperienced teacher had difficulty articulating his or her concerns about classroom management. Teachers who felt they were underprepared for their first year of teaching often left the profession disheartened and believing that they do not have what they need to be a teacher.

Implications for Social Change

The findings in this study have the following implications for social change in educational institutions in terms of teacher preparation and training at the university, as well as support programs in school districts. First, teacher preparation programs in the university need to implement more real-time teaching experience into the design of their program. It may be important to have student teachers work in a classroom two years rather than the one semester or one school year that usually occurs. That extra time would give prospective teachers a better perspective of what they may face in the real world and assess their own strengths, weakness, and developmental goals. Additionally, the way individuals are trained to be teachers needs to be redesigned. Certainly knowledge of educational theory is an important tool, but it should not be emphasized over practical experience. It would be advised to have classes at the university level that incorporated time for dialogue between practicing teachers and new teachers, expecially before and after clinical experiences emphasizing classroom management. At such a form, experienced teachers can share practical tips and suggestions, while students could feel free to ask experienced teachers such things as what made them want to teach, and has teaching lived up to their expectations. This type of forum would give new teachers a place to ask questions that they have been too afraid to ask their instructors. Having these forms after clinical experiences also gives teachers time to reflect on their own strengths and weakness in the classroom.

Second, school districts need to develop special support programs for new teachers that include being paired up with an experienced teacher and frequent observation by administrative staff who can see what problems may be occurring in the first-year teacher's classroom. Additionally, school districts need to set aside the resources necessary to provide professional development for new teachers. Topics should include open discussions about how specifically to handle classroom management problems. First- year teachers should also be required to observe experienced teachers in their classroom so that the experienced teachers can model appropriate teacher behaviors for classroom management.

Recommendations for Action and Further Study

Based on the findings and limitations of this study, there are a number of recommendations for further research in this area. First, researchers should follow new teachers for a longer period of time to see what other difficulties they had as they grew as more experienced teachers. Such a study would give school leaders knowledge about what types of professional development would best help new teachers, and how mentoring relationships may continue and change during this time period.

Second, researchers should interview and survy a large number of teachers who entered the profession but who quit teaching before having taught for five years. Such interviews might give school leaders more insight into why teachers leave a profession after they have invested in being teachers. Prehaps questions could also be more directly phrased to ask what types of support would have changed their decisions to leave the profession.

Finally, researchers might want to explore the role of parental support and how it effects novice teacher retention. Although, this was not addressed in this study, one of the teachers interviewed, complained that parental support for limited English speaking parents was a problem. The candidate suggested more support should be given to new teachers to help parents handle their situations. Parental support would be a great place to investigate research for a future study.

Researcher's Reflections

Throughout my profession as a teacher and mentor in public school education, I observed that many first year teachers were dissatisfied with their teaching position, thus eventually leading teachers to quit the profession. My love for teaching compelled me to understand the depth of this problem and why teachers were leaving the profession. I spent hours in dialogue with first year teachers trying to understand the basis of this problem. Several teachers stated public school administrators and colleagues do not want to help new teachers or that they were overwhelmed with discipline problems. Statements like these and others guided my passion to further research the topic.

To understand the depth of the problem regarding school-based and university-based support, I conducted face to face interviews with six teachers, three that left the profession and three that are still teaching. This was very enlightening as teachers candidly shared their perspectives, which sustained my desire to continue research in this area to evaluate effective support structures through the perspectives of first-year teachers.

With qualitative research, there is always the possibility of the researcher's biases

(e.g., values and beliefs) affecting the tone of the interview and interpretation of results. Although I strove to minimize these biases, I cannot completely rule them out. For example it is possible my biases was revealed from the tone of my voice or facial expressions in how I framed my questions. Another concern is participants all met at the same time, the interviews were individual but participants had ample time to talk with each other before attending their interview. With that being the case it is possible their answers were affected from meeting in a group setting. All participants were chosen by school administrators. We did not know each other. With that being the case it is possible biases were present in how participants responded to me. Overall, I found the interview experience to be a helpful learning experience that somewhat changed my previous thinking on the subject. For example, this experience changed my previous thinking and challenged some misconceptions I had. I was completely surprised that school-based support was considered far more important. And I felt disappointed that university-based support seemed not to matter as much. This was an interesting learning experience and well worth the time to understand the depth of this research.

Conclusion

This study sought to contribute to the broader literature on support systems that may contribute to first-year teacher retention. Using a mixed method design, this study shed light on how school-based versus university-based support was perceived among first-year teachers. The quantitative findings in reference to university-based support and school-based support indicated more teachers found school-based support fit their needs better than university-based support. Findings for qualitative research indicated all three

teachers who are still teaching had positive things to say about their school-based support, and their comments reflected the three themes examined in the quantitative phase: administrative, classroom mentoring, and professional development. In contrast, all three of the teachers who left the profession had negative experiences with school-based support, specifically the absence of any support from administrators, other teachers/mentors, and even parents. Taken together, both the quantitative and qualitative findings may indicate that school-based support is perceived the most integral to first year teacher success and decisions to stay within the profession. Specifically, it appears that (a) strong school-based support can potentially compensate for the lack of university-based support and (b) strong university-based support cannot compensate for the lack of school based support for a novice teacher. Thus, this study suggests that school districts should strive to increase administrative, classroom mentoring, and professional development support for first-year teachers in order to increase first-year teacher retention. Additionally, universities should provide better teacher preparation and training through more *real-world* classroom experiences and discussion forums with experienced teachers.

References

Alliance for Education. (2004). Tapping the potential: Retaining and developing high-quality teachers. Retrieved from http;//www.all4ed.org /files/archive/publications/Tapping The Potential

Bolich, A. (2001). Reduce your losses: Help new teachers become veteran teachers. Retrieved from http://publications.sreb.org/2001/01S05_TeacherAttrition.pdf

Babbie, E. (1990). *Survey research methods* (2nd ed.) Belmont, CA: Wadsworth.

Blume, H. (2007, April 27). Teachers dropping out too, *Los Angeles Times*, (p. 2).

Center for Research, Evaluation and Advancement of Teacher Education . (n.d.). *Featured research activities*. Retrieved from http://www.createtx.org

Creswell, J. (2009). *Research design: Qualitative, quantitative and mixed methods approaches.* Thousand Oaks, CA: Sage Publications.

Creswell, J., & Plano Clark, V. (2007). Designing and conducting mixed methods research. Thousand Oaks, CA Sage Publications,

Cronbach, L., &. Shavelson, R. (2004). My current thoughts on coefficient alpha and successor procedures. *Educational and psychological measurement, 64*(3): 391-418. doi:10.1177/0013164404266386.

Davis, & Field-Waite. (2006). *The long-term effects of a public school/state university Induction program*. The Professional Educator, 9(3), 24-36. Retrieved from http://www.therprofessional educator.ogr/articles/archives/fall2006.pdf

Denzin, N.K., & Lincoln, Y.S. (2002). *Handbook of qualitative research.* Thousand Oaks, CA: Sage Publications, Inc.

DePaul, A. (2000). *Survival guide for new teachers: How new teachers can work Effectively with vetern teachers, parents, principals, and teacher educators*. Jessup, MD: U.S. Department of Education, Office of Educational Research and Improvement.

Eberhard, J., Reinhardt-Mondragon, P., & Stottlemyer, B.(2002). Strategies for new teacher retention: Creating a climate of authentic professional development for teachers with three or less years of experience. Retrieved from http://www.eric.ed.gov/ERICWebPortal/custom/portlets/recordDetails/detailmini jsp?_nfpb=true&_&ERICExtSearch_SearchValue_0=ED450116&ERICExtSear ch_SearchType_0=no&accno=ED450116

Education Commission of the States. (2003). Eight questions on teacher preparation: What does research say. Retrieved from http://www.ecs.org/html/educationIssues/teachingquality/tpreport/home/summar y.pdf

Education Week (2009). American education news site of record. Retrieved from www.edweek.org/we/section/free content/index.html

Education World. (n.d.). *Baltimore program helps new teachers get off to a good start*. Retrieved from http://www.educationworld.com/preservice/classroom/first-day.shtml

Evenson, J. S. Teacher Mentoring. Educational Research and Development. 1982. ED 246182

Fantilli, R. D., & McDougall , D. E. (2009). A study of novice teachers: Challenges and

supports in the first years. *Teaching and Teacher Education*, *6*, 814-825.

Fink , A. G. (2009). *How to conduct surveys: A step-by-step guide*. California: Sage Publications, Inc.

Fort Bend Independent School District. (2009). *The professional development gold standard*. Retrieved from http://www.fortbend.k12.tx.us/OD/ProDev/default.cfm#ProDev

Fowler, F. (2002). Survey research methods (3rd ed.) Thousand Oaks, CA: Sage.

Glassford , L. A., & Salinitri , G. (2007). Designing a successful new teacher induction program: An assessment of the ontario experience . *Canadian Journal of Educational Administration and Policy*. Retrieved from http://www.umanitoba.ca/publications/cjeap/articles/glassfordsalinitri.html

Harper, I. (2009). PACT & PEER: On-line mentoring for the ACP science intern (abstract). National Science Foundation. Retrieved from www.stemtec.org/act/ABSTRACTS/IRMA%20HARPER.doc

Hopkins, W. (2000). Quantitative research design. Sportscience 4(1). Retrieved from http://www.sportsci.org/jour/0001/wghdesign.html

Hoyle, J. (2009). Texas A&M bracing for teacher shortages. Retrieved from http://tamunews.tamu.edu/archives/article.php/

Huling , L., Resta , V., & Yeargain , P. (2009). Novice teacher induction program: an investigation of the long-range effects of induction support. *Insight Texas Association of School Administrators Professional Journal* , *25*(4), 15-19. Retrieved from http://www.createtx.org

Hunt, O. (2007). A mixed method design. retrieved from http://www.articlealley.com/article_185975_22.html

Ingersoll, R. (2003). Teacher turnover and teacher shortages: An organizational analysis. American Educational Research Journal, 30 (5) 499-536

Johnson, R. & Onwuegbuzie, A. (2004). Mixed methods research: A research paradigm whose time has come. Retrieved from http://www.aera.net/uploadedFiles/Journals_and_Publications/Journals/Educational_Researcher/Volume_33_No_7/03ERv33n7_Johnson.pdf

Katy Independent School District (2009). *Professional learning*. Retrieved from www.katyisd.org

Leslie, L. (1972). Are high response rates essential to valid surveys? Social Science Research, 1, 323-334.

Lodico, M. G., Spaulding , D. T., & Voegtle , K. H. (2006). *Methods in educational research* . San Francisco, CA: Jossey-Bass.

Lambert, L. (2006). Half of teachers quit in 5 years. *The Washington Post*. Retrieved From http://www.washingtonpost.com/wp-dyn/content/article

Lunsford B. & Lunsford T. (1995). Research forum: The research sample, part II: Sample size. *Journal of Prosthetics & Orthotics. 7*(4) pp 17-141.

McCain Nelson, C. (2001). Mentors provide a beacon of hope to a rookie teas educator. *The Dallas Morning News,* pp. 1-4.

National Center for Education Staistics (2007). State Education Reforms. Retrieved May 19, 2009, from http://nces.ed.gov

National Commission on Teaching and America's Future. (1996). What matters most. Retrieved April 11, 2008, from http://www.nctaf.org/resources/archives/ProgramsHighlightedinWhatMattersMost.htmNational Partnership for Teaching At-Risk Schools. (2005). Qualified Teachers for at- risk schools: A national imperative. Retrieved from NPTARS@learningpt.org

Nunnally, J. C. (1978). *Psychometric theory* (2nd ed.). New York: McGraw-Hill.

Onwuegbuzie, A & Leech, N. (2004). Enhancing the interpretation of significant findings: The role of mixed methods research. Paper presented at the annual meeting of the Eastern Educational Research Association, Clearwater, Florida.

Oh, D. Ankers, A. Llamas, J. & Tomyoy, C. (2005). Impact of pre-service student teaching experience on urban school teachers. *Journal of Instructional Psychology.32*(1)pp. 82-98.

Parker, M.(2010). Retention of novice middle school teachers: An examination of factors that affect their decisions to remain. Ph.D. dissertation, Virginia Commonwealth University, United States -- Virginia. Retrieved from Dissertations & Theses: Full Text.(Publication No. AAT 3356817).

Prosper Independent School District. (2009). *New teaching mentoring* (Prosper Independent School District). Texas: Prosper Independent School District.

Rikard, G., & Knight, S. (1997). Obstacles to professional development: interns' desire to fit in, get along, and be real teachers. *Journal of Teaching in Physical Education 16*(4) 440-453.

Rodriguez, B. & Gerrow, R. (2008).Tackling the Texas teacher shortage. The University of Texas at Austin. Retrieved from http://www.utexas.edu/features/archive/2003/uteach.html

Rhode Island Department of Education (2008). Retrieved from http:// Rhode Island Department of Education

Rossman, G. & Rallis, S.(1998). Learning in the field: An introduction to qualitative research. Thousand Oaks, CA: Sage

Saphier, J., Freeman, S., & Aschheim, B. (2007). Beyond mentoring: Comprehensive induction programs. Wellesley, MA: Teachers21.

Salkind, N. (2003). *Exploring research* (5th ed.). Upper Saddle River, New Jersey: Pearson-Prentice Hall.

Shakrani, S. (Ed.). (2008). *Teacher turnover (*Michigan State University). Michigan: College of Education .

Single, P. & Muller, C. (2009). Electronic mentoring programs: A model to guide practice and research. MentorNet. Retreived from http://www.mentornet.net/Documents/Files/EmentoringIssues.pdf

SPSS (2010). 15.0 Command Syntax Reference. Chicago Ill., SPSS Inc.

Sweeny , B. (2002). *Using data to improve teacher induction programs*. Retrieved from NEA Foundation : http://www.neafoundation.org

Texas State Board for Educator Certification. (2005). *Texas beginning educator support system txbess training materials*. Retrieved from http://ate.utsa.edu/PDF/atep/txbess/IntroTrainingMaterials.pdf

Texas State University System. (2009). Teacher induction and retention initiatives. Retrieved from http://www.tsus.edu/epic/ntip.html

The University of Texas at Austin. (2009). *WINGS online* . Retrieved from https://uteach.utexas.edu/go/wings/home

Tjeerdsma, B. (1998). Cooperating teacher perceptions of and experiences in the student teaching practicum. *Journal of Teaching in Physical Education 17*(2), pp. 214-230.

Trauth, M. (2006). Matlab: Recipes for earth science. Germany. Springer Berlin Heidelberg

Triola, M. (2008) Elementary statistics. 10th Edition, New Jersey, Pearson Publishing.

Trochim, W. (2006). Research methods knowledge base. 2nd Edition. Retrieved from http://www.socialresearchmethods.net/kb

Turley, S. (1999). Indicators of *at-risk* performance by student teachers in a pre-service elementary education program. *Education 119* (3) 490-503.

UCLA (2010). Introduction to SAS. UCLA: Academic Technology Services, Statistical Consulting Group. Retrieved from http://www.ats.ucla.edu/stat/sas/notes2/

U.S. Department of Education. (2009). Become a teacher: Survival guide for new teachers. Retrieved from http://www.ed.gov/teachers/become/about/survivalguide/message.html

Varah, L. J., Theune, W. S., & Parker, L. (1986). Beginning teachers: Sink or swim. *Journal of Teacher Education, 37*(1), 30-34.

Veeman, Simon. (1984). “Perceived problems of beginning teachers”. Review of Educational Research 54(1), p. 143-178

Weiss , E. M., & Weiss , S. G. (1999). *Beginning teacher induction* (ED436487). Washington DC: ERIC Clearinghouse . (ERIC Document Reproduction Service No. ED436487)

Wendorf, C. (2004). Manuals for univariate and multivariate statistics. Retrieved from http://www.uwsp.edu/psych/cw/statmanual/index.html

Wilkie V. (1993). *Plan to improve educational system in Texas’ public schools* (Richardson Foundation). Forth Worth, Texas

Wiebke, K. & Bardin J. (2009). New teacher support. National Staff Development Council. Vol. 30 (issue 1) page 34

Wong, H. (2004). Induction Programs That Keep New Teachers Teaching and Improving. *Vol. 88* (issue 638), pages 46, 55

Wuensch, K. (2009). Karl Wuensch’s statistics lessons: A brief introduction to reliability, validity and scaling. East Carolina University. Retrieved from http://core.ecu.edu/psyc/wuenschk/StatsLessons.htm#pca

Yanow, D.& Schwartz-Shea,P. (2006). Interpretation and method: Empiracal research methods and the interpretive turn. New York, NY. M.E. Sharpe,Inc.

Appendix A:

Novice Teacher Support Structure Evaluation Survey

This questionnaire was designed to help get a better understanding of how the various components of induction impact a teacher's perceived effectiveness. Please indicate your opinions about each of the statements below by clinking on the appropriate number. The represented numbers are indications of your perception regarding each item. The numbers are as follows:

1. Strongly disagree
2. Disagree
3. Undecided
4. Agree
5. Strongly agree

SCHOOL DISTRICT SUPPORTS:

Your employing school district offers several forms of support to you as a first year teacher. Please rate to what degree you feel your school has provided you the support you need to become an effective teacher.

Administrative Support:

1. I felt the administration was supportive of me and my professional growth.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1	2	3	4	5

2. I felt the classroom visits/evaluations that my administration performed were beneficial in my effectiveness as a teacher.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1	2	3	4	5

Classroom Mentors:

3. I felt my classroom mentor was helpful in giving me guidance and support.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1	2	3	4	5

4. I felt teacher collaboration/networking-talking with other teachers in my building/district was helpful in allowing me to express ideas and frustrations and gain effective ways to deal with them.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree

1 2 3 4 5

Professional Developments:

5. I felt professional development provided during the school year for the whole faculty was helpful in giving me strategies to use in my classroom to be a more effective teacher.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1	2	3	4	5

6. I felt staff development provided to new teachers only before the start of school was helpful in giving me guidelines for the first days of school.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1	2	3	4	5

UNIVERSITY SUPPORTS:

Your certifying university has offered several forms of support to you as a pre-service teacher.

Please rate to what degree you feel your university has provided you the support you need to become an effective teacher.

University Liaisons/Supervisor

7. I felt my university liaison/supervisor was supportive of me and my professional growth.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1	2	3	4	5

8. I felt the classroom visits/evaluations that my university liaison/supervisor performed were beneficial in my effectiveness as a teacher.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1	2	3	4	5

Electronic Mentoring

9. I felt the support from the electronic mentors I received from my certifying university during my first year of teaching was beneficial to me in my first year of teaching.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1	2	3	4	5

10. I felt the networking and the resources from the electronic mentoring website were beneficial to me in my first year of teaching.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1	2	3	4	5

Course Preparation

11. I felt the education courses I took at my certifying university were helpful in giving me strategies to use in my classroom to be a more effective teacher.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1	2	3	4	5

12. I felt the clinical experiences I experienced at my certifying university were helpful in giving me guidelines for the first days of school.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1	2	3	4	5

13. What support system better fit your needs as a first year teacher?

School-based Support University-based Support

Appendix B

Consent Form (Quantitative)

You are invited to take part in a research study to evaluate the effectiveness of novice teacher induction support structures through factors such as mentoring, professional development (offerings/classes), preparation program supervision, and school district support. You were chosen for the study because of your novice teacher status and your involvement in a comprehensive induction program. This form is part of a process called "informed consent" to allow you to understand this study before deciding whether to take part.

This study is being conducted by a researcher named Kitty Warsame, who is a doctoral student at Walden University.

Background Information:
The purpose of this study is to is to evaluate the effectiveness of novice teacher induction support structures in Texas. It will explore two levels of support within a variety of comprehensive induction programs. The areas of support that will be evaluated are provided to the novice teacher through their employing school districts and their certifying university. Specifically, the employing school districts provide support through classroom mentors and professional development opportunities. The certifying university provides support through supervision via university liaisons and electronic mentoring through online support. The study involves a critical analysis of educational research on attrition and its causes in public school teachers. In doing so, the study will describe and detail the research behind teacher retention and the components to effective induction programs. Induction support structures that are available for novice teachers will be explored for effectiveness. This study will address various research studies on induction programs and their support structures

Procedures:
If you agree to be in this study, you will be asked to:

- Complete a consent form for participation
- Take part in a brief survey

Voluntary Nature of the Study:
Your participation in this study is voluntary. This means that everyone will respect your decision of whether or not you want to be in the study. No one at your school will treat you differently if you decide not to be in the study. If you decide to join the study now, you can still change your mind during the study. If you feel stressed during the study you may stop at any time. You may skip any questions that you feel are too personal.

Risks and Benefits of Being in the Study:
There are no risks involved with your participation. If you choose to participate, your responses will help your school to become cognizant of novice teacher's needs.

Compensation:
There will be no compensation for your participation in this study.

Confidentiality:
Any information you provide will be anonymous. The researcher will not use your information for any purposes outside of this research project. Also, the researcher will not include your name or anything else that could identify you in any reports of the study.

Contacts and Questions:
You may ask any questions you have now. Or if you have questions later, you may contact the researcher via 713 806-6017 kitty.warsame@waldenu.edu . If you want to talk privately about your rights as a participant, you can call Dr. Leilani Endicott. She is the Walden University representative who can discuss this with you. Her phone number is 1-800-925-3368, extension 1210. Walden University's approval number for this study is 07-29-10-0298442 and it expires on July 28, 2011.

The researcher will give you a copy of this form to keep.

Statement of Consent:

I have read the above information and I feel I understand the study well enough to make a decision about my involvement. By clicking below, I am agreeing to the terms described above.

Printed Name of Participant _____

Date of consent _____

Participant's Written Signature _____

Researcher's Written Signature _____

Electronic signatures are regulated by the Uniform Electronic Transactions Act. Legally, an "electronic signature" can be the person's typed name, their email address, or any other identifying marker. An electronic signature is just as valid as a written signature as long as both parties have agreed to conduct the transaction electronically.

Appendix C:

FIRST YEAR TEACHER INTERVIEW GUIDE AND RESPONSES

Teacher Information:

Teacher 1: Still teaching (1st grade), Hispanic female
Teacher 2: Left teaching (4th grade), Caucasian female
Teacher 3: Left teaching (2nd grade), African American female
Teacher 4: Still teaching (2nd grade), Asian American female
Teacher 5: Left teaching (3rd grade), Asian American female
Teacher 6: Still teaching (1st grade), Caucasian female

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1. When you reflect on the support that your employing school district gave you during your first year teaching experience, what support was the most effective in helping you become a better teacher?

Teacher 1: I had a mentor teacher who went above and beyond the expectations assigned by the district. The kindergarten class I had was made in October after the school year started and the children were unruly. My mentor made sure that I understood all of the lesson plans as well as materials needed to be successful.

Teacher 2: I did not receive help from teachers, administrators or parents.

Teacher 3: I wouldn't say I had support to become a better teacher but the little support I did have helped me survive my first year classroom experience. We had a reading coach on campus that was very helpful. After she finished working with my struggling readers, she would stay over to offer teaching suggestions based on what she saw while visiting my classroom. I was always thankful to have her in my classroom.

Teacher 4: Well, the best support I had was from my grade level team. Our team leader helped my team to become stronger teachers. The team leader always guided our team in a supportive way. I was scared to death my first week of school. I had heard many horror stories how new teacher could not handle their students and how some teachers actually walked away from the school and never returned. I managed my first year well, thanks to my team leader.

Teacher 5: No one helped or guided me to become a better teacher. I worked on that by myself. My employing school district was not resourceful to new teachers. I searched for help by myself. My colleague and friend from another school district that gave me advice, shared teaching strategies, and even guided me through student assessments that I did not understand. Sorry, to go on but, I was disappointed with the lack of help and concern our school district had for new teachers.

Teacher 6: My school district is great! To narrow that down my school administrators are even greater. They care, about students and staff and it shows in our professional development meetings. Everything I have done in this school has helped me to become a better teacher. The principals in my employing school seek out training opportunities to help new teachers become more effective in the classroom.

2. When you reflect on the support that your certifying university gave you during your first year teaching experience, what support was the most effective in helping you become a better teacher?

Teacher 1: I had a mentor from the university who also supported me through frequent visits.

Teacher 2: My student teaching experience helped prepare me to be a better teacher. Also my classroom management courses helped to guide my actual classroom experience.

Teacher 3: The most effective support I had from my university was being taught how to develop effective lessons. I was prepared how to write lessons and apply standards to what I was teaching.

Teacher 4: My university sort of prepared me for my first classroom. I was not prepared with classroom management strategies and had many disruptive students. First, I only understood classroom management from course text, which was not aligned with real life. Second, although my university supervisor visited my classroom several times during the semester, I never knew what to ask on her. The classroom issues seemed to happen so fast I did not have time to reflect, and my supervisor's visits were shot and quick. It would have helped to have longer observation time and feedback from my university supervisor.

Teacher 5: My certifying university was very helpful. My supervisor visited my class three times after I graduated and provided constructive advice, the things I learned from her during my first semester in public school was a blessing. Another thing that helped was the suggested books list she encouraged I read. My favorite author (now my classroom bible, smile) was Harry Wong.

Teacher 6: My university only did what was required, no more and no less. It was required for supervisors to visit their student teachers in their classroom at least once after graduation. My supervisor visited my class a couple of times. She would leave a list of positive teaching skills observed as well as things I needed to work on. She stayed in touch with me until the end of my first year of teaching. It was a positive experience.

3. When you reflect on your first year of teaching, what support activity if any, would have made your teaching experience better?

Teacher 1: Working with mainstream (Caucasian female) school counselor in a low income Hispanic community was difficult because she didn't understand the needs of the students. (i.e. social assessment keeping in mind that the parents were not educated in understanding the American culture). My experience would have been better if the school district appreciated diversity. Instead I spent many hours of my day translating between parents and the Caucasian counselor.

Teacher 2: A mentor to guide me through my first year as well as understanding the logistics of the benefits package for new teachers in addition to district lesson planning.

Teacher 3: Team building skills and team teaching.

Teacher 4: Professional development, teacher collaboration and team teaching this way I could see experienced teaching being modeled and understand how to use teaching strategies in my classroom.
Teacher 5: Professional development, and grade level planning, this would help teachers feel more connected as a teams.
Teacher 6: I think if my colleague's would learn to accept first year teachers in a positive way, I would have had a better teaching experience.

4. Is there anything else you would like to tell me regarding the support you received during your first year of teaching?
Teacher 1: Although, I had a rough class experience, my heart is with teaching low income students and I will continue to teach.
Teacher 2: I always thought teaching was my calling until I was employed in a school district with no support. I am currently employed as a make- up artist.
Teacher 3: I couldn't believe the language that came from the other Kindergarten teachers. They spent their day yelling and screaming at children and I refused to hear it for another year. I tried talking with my colleagues and they were so full of hatred that they demeaned me for approaching them with these issues. I feel that I would not have been productive as a loving and supportive teacher at this school and I didn't want to be like them. I am not teaching now. (I plan to return to teaching after) I complete my masters degree.
Teacher 4: I am still teaching but went to another school district.
Teacher 5: I love teaching and I believe I will always want to teach. But public school districts are missing important elements in understanding how to retain a new teacher. I quit my first teaching job because the district was not supportive.
Teacher 6: I learned a lot during my first year teaching. School district support was very helpful.

Appendix D:

Consent Form (Qualitative)

You are invited to take part in a research study to evaluate the effectiveness of novice teacher induction support structures through factors such as mentoring, professional development (offerings/classes), preparation program supervision, and school district support. You were chosen for the study because of your novice teacher status and your involvement in a comprehensive induction program. This form is part of a process called "informed consent" to allow you to understand this study before deciding whether to take part.

This study is being conducted by a researcher named Kitty Warsame, who is a doctoral student at Walden University.

Background Information:
The purpose of this study is to is to evaluate the effectiveness of novice teacher induction support structures in Texas. It will explore two levels of support within a variety of comprehensive induction programs. The areas of support that will be evaluated are provided to the novice teacher through their employing school districts and their certifying university. Specifically, the employing school districts provide support through classroom mentors and professional development opportunities. The certifying university provides support through supervision via university liaisons and electronic mentoring through online support. The study involves a critical analysis of educational research on attrition and its causes in public school teachers. In doing so, the study will describe and detail the research behind teacher retention and the components to effective induction programs. Induction support structures that are available for novice teachers will be explored for effectiveness. This study will address various research studies on induction programs and their support structures

Procedures:
If you agree to be in this study, you will be asked to:

- Complete a consent form for participation
- Take part in a 60 minute interview

Voluntary Nature of the Study:
Your participation in this study is voluntary. This means that everyone will respect your decision of whether or not you want to be in the study. No one at your school will treat you differently if you decide not to be in the study. If you decide to join the study now, you can still change your mind during the study. If you feel stressed during the study you may stop at any time. You may skip any questions that you feel are too personal.

Risks and Benefits of Being in the Study:
There are no risks involved with your participation. If you choose to participate, your responses will help your school to become cognizant of novice teacher's needs.

Compensation:
There will be no compensation for your participation in this study.

Confidentiality:
Any information you provide will be kept confidential. The researcher will not use your information for any purposes outside of this research project. Also, the researcher will not include your name or anything else that could identify you in any reports of the study.

Contacts and Questions:
You may ask any questions you have now. Or if you have questions later, you may contact the researcher via 713 806-6017 kitty.warsame@waldenu.edu . If you want to talk privately about your rights as a participant, you can call Dr. Leilani Endicott. She is the Walden University representative who can discuss this with you. Her phone number is 1-800-925-3368, extension 1210. Walden University's approval number for this study is 07-29-10-0298442 and it expires on July 28, 2011.

The researcher will give you a copy of this form to keep.

Statement of Consent:

I have read the above information and I feel I understand the study well enough to make a decision about my involvement. By signing below, I am agreeing to the terms described above.

Printed Name of Participant _____

Date of consent _____

Participant's Written Signature _____

Researcher's Written Signature _____

Appendix E:

INVITATION TO PARTICIPATE

My name is Kitty Warsame, Assistant Professor, Department of Education. I am working on my Doctorate of Education (Ed.D.) from Walden University. In order to complete my degree, I must do a research study, and I am requesting your help.

My study focuses the effectiveness of first year teacher induction support structures in Texas. I would like to interview 6 teachers, three teachers planning to remain in the profession and three teachers who are planning on leaving the profession.

The interviews will be face to face and will last one hour. I will take detailed notes, recording our conversation. You will be given the option to be tape recorded. Your name and what you say will not be shared with anyone. You do not have to take part in the research and you can change your mind about taking part at any time, even after you have been interviewed.

Would you be interested in being interviewed for my study? If you would, please let me know which day and time is convenient for you. If this is not possible for you, I understand. If you have any questions, you may leave a message on my cell at 606-XXX-XXXX and I will return your call during lunch or after school. You may also contact my dissertation advisor, Dr. Irma Harper at Walden University. Her contact information will be provided upon request.

Thank you and I look forward to meeting with you during our scheduled date and time.

Kitty Warsame
Assistant Professor

Appendix F:

PERMISSION STATEMENT

May 28, 2010

Irma Harper
Texas A&M University System
200 Technology Way
College Station, TX 77845

Dear Ms. Warsame,

Based on my review of your research proposal, I give permission for you to conduct the study entitled "Evaluating the Effectiveness of Novice Teacher Support Structures in Texas" within the TAMUS Performance-based Academic Coaching Teams (PACT) website. As part of this study, I authorize you to administer surveys and conduct interviews of the PACT participants. Individuals' participation will be voluntary and at their own discretion. We reserve the right to withdraw from the study at any time if our circumstances change.

I confirm that I am authorized to approve research in this setting.

I understand that the data collected will remain entirely confidential and may not be provided to anyone outside of the research team without permission from the Walden University IRB.

Sincerely,

Irma Harper
Asst. Vice Chancellor
Texas A&M University System

Curriculum Vitae

Kitty B. Warsame

Assistant Professor, Department of Education Middle and Secondary

Date of Initial Rank Assignment: August 6, 2009

Area of Specialization: Middle and Secondary Education

EDUCATION

Ed.D. Teacher Leadership -Department of Education, Walden University Dissertation: "Evaluating the Effectiveness of Novice Teacher Support Structures" Chair : Dr. Irma Harper, Texas A&M University **(In progress)**

M.S., Elementary Literacy and Reading – Department of Education, Walden University (2006).

B.S., Interdisciplinary Studies- University of Houston-Victoria, Victoria, Texas (2003)

PROFESSIONAL CERTIFICATIONS

2010- Present TESOL Teaching English to Speakers of Other Languages

2003-Present English as Second Language

TEACHING AND PROFESSIONAL EMPLOYMENT – Prior to MSU

Paul Blazer High School, Ashland, KY

Long term Substitute March 2009-May 2009

- Taught grades: 9th, 10th 11th and 12th
- Courses taught: English 1 and Spanish 1

KATY INDEPENDENT SCHOOL DISTRICT, Katy, TX (2007 – 2008)

Elementary Teacher

- Instructed mainstream, English as a Second Language and Autistic students
- Facilitated literacy workshops to raise struggling reader scores
- Provided parent communication interaction

HUTCHISON ELEMENTARY SCHOOL LAMAR, Richmond, TX (2005 – 2007)

Elementary Teacher / Team Leader

- Instructed mainstream, English as a Second Language and Gifted & Talented Students
- Designed and implemented literacy and reading skill programs
- Team Leader to seven teacher
- Teacher Mentor to new and first year teachers

BARBARA JORDON ELEMENTARY – FORT BEND ISD, Richmond, TX (2003 – 2005)

Elementary Teacher / Team Leader

- Instructed mainstream, English as a Second Language ,Gifted & Talented students as well as struggling readers
- Instructed a diverse population of students
- Designed a classroom strategy to accommodate the diversity of student needs and abilities
- Team Leader to five teachers
- Teacher Mentor to new and first year teachers.

MONTESSORI SCHOOL, Sugarland, TX (2002 – 2003)

Teacher / Supervisor

- Instructed and integrated existing programs to educate pre-school students through the secondary level.
- Developed lesson plans and after-school activities
- Mentored teachers on teaching strategies and implementation in the classroom.
- Interacted regularly with parents to discuss student needs and accomplishments.

UNIVERSITY SCHOOL, Doha, Qatar (2002 – 2001)

- **Principal / Administrator / Head Teacher**
- Chosen by The Royal Family (Overseas) to launch start-up and establishment of new elementary school
- Registered students, administered entrance exams, prepared forms and report cards, and planned field trips.
- Researched and adapted Texas curriculums for Kindergarten through Fifth Grade. Recruited and hired global teachers and staff from Holland, Germany, France, Middle East, London, and United States to teach in international school.
- Spearheaded huge project, incorporating numerous dedicated hours, to ensure successful opening and operation of international school. Received numerous accolades from students and parents.

AL-NOOR ENGLISH LANGUAGE SCHOOL, Doha, Qatar (1995 – 1998)

English Teacher

- Taught English as a Second Language for government school system in Seventh, Eighth, and ninth grade.
- Orchestrated development of school wide behavioral plan
- Observed and mentored student teachers.
- Interacted regularly with parents to discuss student needs and accomplishments.

TEACHING WORKLOAD EACH SEMESTER

Fall 2010

EDMG 636: Middle School Curriculum (on-line)	4.0 c.h.
EDSE 312: Educ. Methods & Tech	3.0 c.h.
EDSE 416: Student Teaching	2.55 c.h.
Release time: English as a Second Language Project	3.0 c.h.
Workload Total	**12.55 CH**

Summer 2 2010

EDMG 636: Middle School Curriculum	3.6 c.h.
ENG 476: Special Problems	.76 c.h.
Workload Total	3.76 c.h.

Spring 2010

EDMG: 636 Middle School Curriculum	4.0 c.h.
EDSE 312: Educ. Methods & Tech	3.74 c.h.
EDSE 416: Student Teaching	1.70 c.h.
Release time: English as a Second Language Project	3.0 c.h.
Workload Total	**12.44 CH**

Fall 2009

EDEE 323: Lang Arts Early Elem	3.74 c.h.
EDEE 331: Read Ear Elem Teachers	3.74 c.h.
EDEE 423: Student Teaching Supervision	1.70 c.h.
Release time: ESL project	3.00 c.h.
Workload Total	**12.18 CH**

TEACHING EVALUATIONS SUMMARY

Student Evaluations

Fall 2010

- **Course EDMG 636**: IDEA forms summary Evaluation
- **Course EDSE 312**: IDEA forms summary Evaluation

Spring 2010

- **Course EDMG 332**: IDEA forms summary Evaluation
- **Course EDMG 636**: IDEA forms summary Evaluation

Fall 2009

- **Course EDEE 323:** IDEA forms summary Evaluation
- **Course EDEE 331:** IDEA forms summary Evaluation

Chair or Peer Evaluations

Fall 2009

EDEE 323 Dr. Lynne Fitzgerald, Chair

PROFESSIONAL ACHIEVEMENT

Professional Contributions

- Reviewer for American Association of Colleges For Teacher Education Spring 2010

Work in Progress

- Dissertation by: K. Warsame *Evaluating the Effectiveness of Novice Teacher Support Structures*
- Presentation proposal for 21st NAAC Annual Conference
- Member of Editorial Advisory Board- proposal reviewer
- Writing a case study for author Ken Henson

ACADEMIC ORGANIZATIONS

Memberships

- International Society for Technology in Education (ISTE) 2009-present
- Member of National Association of Professional Development Schools (PDS) 2010- Present
- Member AACTE American Association of Colleges for Teacher Education 2010 present
- Member of AERA 2008-present
- Member International Reading Association 2006-present
- Member, NAACP May 2004- present
- Member International Mentoring Association 2010-present

Attendance at Professional Conferences

- International Reading Conference, Chicago March 2010
- PDS conference, Florida March 2010
- Diversity Mosaic Conference, Lexington, Kentucky February 2010
- National Association of Professional Development Schools March 2010

CONTINUING EDUCATION

Workshops Attended and Form of Participation:

- TESOL Online Teacher Training Certification September 2010
- TESOL virtual training seminar June 2010
- Collaboration on World Language certificate program Frankford, Kentucky April 2010
- Morehead State University Sexual Harassment Online Training, August 2009

COMMITTEES AND SERVICE

University Committees

- Department of English Chair Search Committee

College of Education

- MGSE Department - COE interdisciplinary curriculum committee 2010-2011
- MGSE Department – COE Professional Development committee 2010-2011
- NCATE steering Committee 2009-present
- Chair's Leadership Cabinet

Representative of Morehead State University

- College of Education in Lexington Kentucky 2010

Regional Campus Service

- Professional Partnership Networking (PPN), Committee member (MSU Ashland campus) 2009- present

Collaborations

- Collaboration with École Normale Supérieure in Mali, Africa NA 2009-present

Community Service

- Presented English as a Second Language strategies to Rowan County Elementary School teachers and staff April 2010
- McBrayer Elementary 2010 – Observed a struggling ESL Kindergarten student, to offer suggestions and strategies on how to work with the student.
- Faculty Development Andragogy Workshop (Kentucky Adult Learner Initiative) Lexington, Kentucky April 2010

- **Other Services**

Reviewer for AACTE's 2011 annual meeting

Volunteer

- Global Day for Walden University 2010
- Teach literacy skills in a battered women and children shelter