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Retaining Qualified Teachers Through School-based Induction: A Study Of Elementary Schools In Two Public School Districts In Flo

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RETAINING QUALIFIED TEACHERS THROUGH EFFECTIVE SCHOOL-BASED INDUCTION: A STUDY OF ELEMENTARY SCHOOLS IN TWO PUBLIC SCHOOL DISTRICTS IN FLORIDA

by

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ABSTRACT

The purpose of this study was to examine teacher induction strategies and effectiveness at the school level, specifically focusing on how the principal designed and implemented induction activities. It also investigated if the following factors influenced teacher retention: (a) number of instructional staff members, (b) number of first-year teachers, (c) number of second-year teachers, (d) number of third-year teachers, (e) principal's gender, (f) principal's age, (g) principal's highest degree earned, (h) principal's total years in education, (i) principal's years in an instructional position, (j) principal's administrative experience, (k) year the school opened, (l) student enrollment, and (m) free and reduced lunch percentages. Common patterns and trends in the data were analyzed to reveal differences between schools with high teacher retention and schools with low teacher retention.

All principals of elementary schools in Hillsborough County Public Schools, Florida and Orange County Publics Schools, Florida were invited to participate in the study. Data were collected through a researcher created, 32-question, online questionnaire. Both quantitative and qualitative data were gathered. A total of 147 principals completed the survey. Descriptive statistics were used to report the findings and recommend various areas in need of further study.

Analyses of these data found that induction activities that were cited in literature as important were being implemented in schools. These induction activities, organized from most implemented to least implemented, were: (a) formal observation by the principal, (b) mentoring, (c) offer school-level professional development, (d) provide an open door policy, (e) visit classrooms of new teachers often, (f) final (end of year) assessment conferences, (g) provide common planning time for grade levels, (h) encourage district level professional development, (i) give time to observe veteran teachers, (j) involve new teachers in decision making, (k) mid-year assessment conference, (l) provide positive feedback for effective practice, (m) preliminary assessment conference, (n) team building activities, (o) allow new teachers to teach same grade level for at least two consecutive years, (p) offer in-service targeting school policies and procedures, (q) reduce number of students with discipline issues when assigning students to new teachers, (r) provide common planning time with mentor, (s) implement professional reading book club (t) reduce workload of new teachers, and (u) certification exams study group.

Data also revealed that schools with high teacher retention tended to be older schools, smaller schools, and schools with fewer percentages of students who received free and reduced lunch. When compared to principals in low retention schools, the principals in high retention schools tended to have more teaching experience, were assigned to their present school for several years, and

were older. High retention schools showed significantly less teacher migration and attrition than low retention schools.

Recommendations based on this study include investigating how school culture relates to teacher retention and examining teacher migration in more detail. Research is needed to determine how mobility of a school district, new construction, rezoning, allocation cuts, and the reappointment process for teachers affects teacher migration rates of schools. In addition, further study could be done to target specific induction components to determine how to make them effective at the school level. Mentoring, team-building activities, and scheduling are components of induction that need further study.

This study is dedicated to my parents, Linda and Don Handley, who are two of the best teachers from whom I have had the privilege of learning. They taught me that there are no limits to what can be accomplished, if you simply work hard enough. Thank you, Mom and Dad, for your lessons in love, integrity, work ethic, and life. Your endless support will not be forgotten.

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CHAPTER ONE:
PROBLEM STATEMENT AND DESIGN COMPONENTS

Introduction

"Teaching is the essential profession, the one that makes all other professions possible" (U.S. Department of Education, 1998). Regardless of its importance, however, maintaining qualified teachers in every classroom for every child became a struggle for many schools. Teachers were leaving. They were exiting the profession for a multitude of reasons, many leaving within the first few years of joining the educating force. To compound the problem, student enrollment had increased by nearly three million more youngsters within the past ten years (U.S. Department of Education, 1998). By lowering standards and hiring less qualified teachers, some districts avoided a teacher shortage. This strategy, however, was no solution as it simply shifted the problem, from a quantity to a quality shortage. From a school leader's perspective, the result was the same. The learning of the children suffered when qualified, effective teachers were not present.

What does it take to transform a new teacher into a career educator? What are the conditions for ensuring that teachers will stay in the field long enough to reach their full potential as an educator? What conditions encourage teachers to remain in the same school year after year? These were questions that leaders of the ever-changing schools of 2007 needed to address in depth if

they hoped to select, develop, and maintain a faculty of top-notch, quality teachers.

Statement of Problem

"The single most important factor in determining student performance is the quality of the teacher" (Utah State Board of Education, 2005, p.4). Since quality education was perceived to be equated with quality teachers, the retention of proficient and effective certified educators in the teaching profession was an important issue for school leaders to investigate in 2007. As Gerstner, the Teaching Commission's chairperson, stated:

> If we don't step up to the challenge of finding and supporting the best teachers, we'll undermine everything else we are trying to do to improve our schools. That's a conscious decision that would threaten our economic strength, political fabric, and stability as a nation. It's exactly that clear cut (Utah State Board of Education, p. 5).

Induction and retention of new teachers was not a new concept for school leaders. Simply stated, retaining quality, competent teachers had always been better than losing them (Bracey & Molnar, 2003). Recent research had shown, however, that the brightest of the novice teachers were often the ones most likely to leave (Britton, Raizen, Paine, & Huntley, n.d; Ingersoll & Kralik, 2004). Due to teacher shortages, whether perceived, real, or circumstantial, it had become critical that principals carefully plan for teacher induction – that was the introduction, development, and support of new teachers. School leaders faced

unique challenges (Wirt et al., 2004). Only deliberate, intentional, and research-based induction programs would work to overcome the problems encountered at the time of this study (Britton et al., n.d.).

A shortage of teachers, especially in large, expanding districts such as Hillsborough County Public Schools and Orange County Public Schools, Florida continued to be a problem (U.S. Department of Education, 2005). Due to this shortage, many schools were staffed with uncertified teachers or teachers who were teaching out-of-field (Blank, 2003). *The No Child Left Behind Act of 2001* created more shortages with its highly qualified and class size reduction requirements. Decreasing class size produced more classes, thus, increasing the need for teachers and possibly lowering rates of highly qualified teachers (Blank).

Large districts were scrambling to find quality teachers for every classroom (Blank, 2003). *The No Child Left Behind Act of 2001* required that every teacher be highly qualified – meaning certified to teach, in possession of a bachelor's degree, and able to demonstrate competency in both subject area knowledge and pedagogy (Blank; U.S. Department of Education, 2002). In order to accomplish this huge feat, school districts recruited teachers from outside – outside the field of education, outside the district, outside the state of Florida, and even outside the United States. The variety of educators that filled the many vacancies were more diverse and more in need of support than any other group before them. Effective induction was critical (Futernick, 2003).

There was a plethora of research to back up the findings regarding induction that worked (Andrews & Quinn, 2005; Colley, 2003; Darling-Hammond, 2003; Futernick, 2003; Millinger, 2004; Renard, 2003; Sargent, 2003; Wong & Britton, 2005). The literature showed why certified teachers were choosing not to teach. It was discovered that teachers were holding out for their ideal work location, which was certainly not in schools in low-income communities with little resources and weak, unsupportive administrators (Johnson & Birkeland, 2003). New teachers had specific needs and wants. If school leaders hoped to retain these new educators, they needed to offer induction programs that fulfilled these needs and wants (Johnson, 2005).

Clarification of the Problem Statement

Definition of Terms

- Attrition
    - Attrition occurred when teachers left the profession completely.
- Comprehensive Induction
    - A package of supports, development, and standards-based assessments provided to beginning teachers during at least their first two years of full-time professional teaching (Alliance for Excellent Education, 2004).

- Educator
    - For the purposes of this research, an educator was a person within a formal schooling environment (employed by a public school system), who developed and trained minds, capabilities, and characters of others.
- High Retention School
    - Determined during data analysis, a high retention school was a school that had three or less teachers leave between the 2005-2006 and 2006-2007 school years.
- Highly Qualified
    - According to Title IX, Part A, Section 9101, of *The No Child Left Behind Act of 2001*, a teacher must (a) have full state certification or have passed the state's licensure exam and hold a license to teach in the state, (b) hold a bachelor's degree which is content specific, and (c) pass the state proficiency test in each content area (The National Council of Teachers of English, 2006).
- Low Retention School
    - Determined during data analysis, a low retention school was a school that had seven or more teachers leave between the 2005-2006 and 2006-2007 school years.

- Mentoring
    - Mentoring was a component of induction. It was the pairing of a veteran teacher and a new teacher for the purpose of providing the new teacher with a safe, friendly, supportive role model and confidant.
- Middle Retention School
    - Determined during data analysis, a middle retention school was a school that had between four and six teachers leave between the 2005-2006 and 2006-2007 school years.
- Migration
    - The transfer of teachers from one school to another (Johnson, Berg, & Donaldson, 2005)
- New Teacher
    - A new teacher, in the scope of this study, was any teacher who had between zero and three years teaching experience, or who was new to a school.
- Turnover
    - Turnover is a general term, used in literature to describe the departure of teachers from their current teaching job. This could be migration or attrition (Johnson et al., 2005).

Limitations and Delimitations

There were limitations (variables for which there were no control) to this study. One limitation which was encountered was the variety of differences among schools. In an attempt to avoid too many differences, the two school districts selected for this study were chosen because they were similar in many ways. According to the Florida Department of Education's Florida School Indicators Report (2004), they were comparable in student membership, minority enrollment, free and reduced lunch rates, teacher salaries, average teachers' years of experience, and FCAT achievement results. However, the actual schools within each district varied quite a bit. School size, socioeconomic status of the surrounding community, and history ranged significantly among schools. Research conducted by the National Center for Education Statistics also showed that beginning teachers were not evenly distributed across schools (U.S. Department of Education, 2003). It was possible that induction efforts were affected by these differences. It was anticipated, however, that the findings showed patterns between similar types of schools across the two districts, thereby providing more data for further analysis and possible future study.

A second limitation involved factors which were harder to determine, but may have had a large impact on each school. Factors in this category include school climate and culture (Johnson et al., 2001), school history, and parent involvement. These factors were subjective in nature and difficult to analyze by a

questionnaire alone. In addition, school leaders may have had a different perception than teachers and other staff regarding these topics. It was challenging to look for patterns without considering these factors, which possibly contributed to the effectiveness of school-level induction.

Assumptions

In addition to the listed limitations, this study assumed that school leaders had some level of control over teacher retention. Richards (2004) supported this assumption by reporting that teachers left most often because of lack of administrative support and overwhelming isolation. One assumption of this study was that the reasons teachers left education did not change due to legislative changes, certification requirements, and/or increased pressure of accountability measures. Induction techniques were being analyzed specifically because research showed school leaders could influence how new teachers felt about their job (Wirt et al., 2004).

This study also assumed that school leaders had an accurate perception of how their teachers felt. As a delimitation regarding the aspect of predicting feelings, the questionnaire remained largely objective. Leaders reported how many teachers left the previous year, how many remained at the school, what induction strategies were in place and for how long, and who within the school supervised the induction process. Though it would be interesting to hear the perceptions of the teachers influenced by the induction programs analyzed by

this study, the focus remained on the leader's actions, the induction strategies implemented and the retention rates of teachers.

Lastly, this study was guided by several core assumptions. First, it was assumed that teacher turnover was important because it was linked to the performance and effectiveness of the school. Second, it was assumed that teacher turnover was important because of its link to student achievement. Finally, it was thought that understanding induction effectiveness meant it must be examined at the school level, that was, the level of the teachers involved.

Significance of the Study

Teacher shortages were cited in literature for many years. Teacher shortages continued to exist in 2007, though the reasons for the shortage may have changed (National Education Association, 2005). New challenges existed in retaining teachers, with *The No Child Left Behind Act of 2001* being just one of many factors. While induction programs had been developed in many states and districts to address the need to retain educators, the programs varied widely in structure and implementation. Induction at the school level was even more scattered in nature, and may have been reported more in theory than in reality of what was being provided to new teachers (American Association of State Colleges and Universities, 2006).

This study was significant in that the results of the study would guide future school leaders on how best to support and retain beginning teachers. It

could provide details for developing and implementing real induction activities within the school. In this way, it would directly impact the success of beginning teachers at the school level. School leaders could revise their existing program using the findings of this research. The gathered data could also be utilized at the district level to better support and train school leaders in the efforts to reduce attrition throughout the district. However, because the actions of the school leader- that is the support they provided- directly influenced if a teacher will stay, it was imperative that the information from the results of this study make its way to the school level.

Purpose of the Study

There remained a number of pressing questions that would require additional research in order to better understand how to retain quality teachers at the school level through effective induction practices, especially in larger, more complex, and less personal school districts. The purpose of this study was to collect detailed data to determine what induction practices were occurring in elementary schools at the time of the study, what the current retention rates were in those schools, and how the induction process influenced the retention of teachers. Knowing which school-based induction activities were the best influences on teacher retention could guide school leaders to better develop their school-level induction program.

Research Questions

The research questions this study sought to answer were:

1. What components of teacher induction are being implemented within Florida's elementary schools in Hillsborough County Public Schools and Orange County Public Schools?
2. What factors are present in schools that have high teacher retention rates, e.g. for migration and attrition?
3. What factors are present in schools that have low teacher retention rates, e.g. for migration and attrition?
4. In schools that have high teacher retention rates, to what do principals attribute those higher retention rates?
5. How does a principal's level of experience (such as years in administration, years teaching prior to an administrative position, total years placed within the school, age, and gender) relate to migration and attrition rates within a school?

Research Methodology

This study was descriptive in nature, involving both quantitative and qualitative data. Data were collected through an online questionnaire.

Population

This study targeted two, large, public school districts within Florida and focused on the induction process of new teachers within those school systems. These large, Florida districts – Hillsborough County Public Schools and Orange County Public Schools – offered a variety of schools that faced many different challenges in the retention of teachers. These two districts were comparable, with similar student membership, minority enrollment, free and reduced lunch rates, teacher salaries, average teachers' years of experience, and Florida Comprehensive Assessment (FCAT) achievement results (Florida Department of Education, 2004).

All elementary schools from each district were invited to participate, with school administrators completing an online questionnaire. This included 147 elementary schools in Hillsborough County Public Schools, Florida and 127 elementary schools in Orange County Public Schools, Florida. Participation was completely voluntary and all information collected was kept confidential. It was hoped that all principals contacted would take the opportunity to respond. In actuality, a total of 147 out of 249 possible participants completed the survey. The overall rate of questionnaire return was 59%. From Hillsborough County Public Schools, 44.2% of the responses were generated. Orange County Public Schools brought in 55.8% of the total responses. One factor that may have influenced the higher rate of return from Orange County Public Schools was that

the researcher was an assistant principal within the district and the four main contacts included this detail in the closing of each letter.

Data Collection

Data were collected through an Internet survey service, known as SurveyMonkey©. Through this service, a custom designed questionnaire was sent to all elementary school principals in Hillsborough County Public Schools, Florida and Orange County Public Schools, Florida.

Four contacts were used to present the survey to the participants. First, an email was sent to notify the administrator that a questionnaire would be coming soon. This message briefly outlined the purpose of the questionnaire and prepared the administrator for the time and information needed to complete it. This first contact can be viewed in Appendix B.

Approximately three days later, a second email message was sent to all participants. This contact reminded the administrator of the purpose of the study and contained a link to the questionnaire. This message also described the length of the questionnaire and estimated time of completion. The second contact is shown in Appendix C.

One week after the second contact, a third email message was sent to all principals who had not yet responded. This was a reminder to complete the questionnaire, and again emphasized the importance of the study. In addition, this notice offered a summary of all findings to anyone who responded. Principals

were given two weeks to complete the online questionnaire. Due to lack of response from the Hillsborough County Public Schools principals, this contact was sent a second time with a hard copy of the questionnaire through the United States Postal Service. The third contact letter is shown in Appendix D.

The last contact for participants was sent via email to all principals who responded to the first three contacts. This was sent after the questionnaire closed online. The purpose of this final contact was to thank the participants who took the opportunity to complete the questionnaire, as well as to offer one more chance to request a summary of the findings at its conclusion. After this time, no further data related to the questionnaire were added.

Instrumentation

A questionnaire (Appendix A) was developed as a method to collect qualitative and quantitative data for this study. The foci of the questionnaire were: (a) the components of school-based induction implemented currently in the two targeted districts, (b) migration and attrition tendencies within schools, (c) factors present in schools that had high and low teacher retention rates, and (d) the relationship of principal's experience (years in administration, years teaching prior to an administrative position, total years placed within the school, age, and gender) to migration and attrition tendencies within schools. In order to ensure reliability and content validity of the survey, two pilot groups provided feedback and recommendations for change prior to its finalization.

The questionnaire contained 32 questions, most of which were multiple choice responses. While some questions allowed the participant to select only one of the listed choices, others allowed several options to be selected. In addition, several questions lent themselves to an open-ended response or an option to add an “other” answer. The final two questions included a choice to receive a summary of the findings of the study and a place to record any further questions or comments for the investigator.

Organization of this Study

Chapter One was an introduction to this study. It examined the problem, introduced the design of the study, and presented the research questions. Chapter Two contains a review of the literature relevant to the study. The procedures for collecting and analyzing the data are outlined in Chapter Three. Chapter Four organizes and explains the results of the data analysis. Chapter Five, the conclusion, is dedicated to summarizing the findings, conclusions, implications for practice, and recommendations for future research.

CHAPTER TWO:
REVIEW OF RELATED LITERATURE

Introduction

Teacher retention was a concern for many school leaders. There were studies which reported that the number of teachers leaving was on the rise (Johnson, Berg, & Donaldson, 2005). Fourteen percent of new teachers left after just one year in education; 33% did not return after three years; and up to 50% of new teachers quit within the first five years of teaching (Alliance for Excellent Education, 2004; Colley, 2003). Half of the current teaching force in 2007 was projected to retire between 2000 and 2010 (Johnson, Berg, & Donaldson). As teachers left, valuable experience was lost and instructional proficiency was difficult to achieve. In order to build a team of educators who boasted experience and strong culture, school leaders had to retain teachers (Alliance for Excellent Education).

Further compounding this problem was the fact that the demand for teachers continued to grow due to increasing student enrollment, teacher retirement, and class size legislation (Bracey & Molnar, 2003; Ingersoll & Smith, 2003). Though the demand for teachers increased, data indicated that many states had fewer teachers with a major in their assigned field than in 1994 (Blank, 2003). How was it possible, then, to ensure 100% highly qualified teachers, as *The No Child Left Behind Act of 2001* (NCLB) required (U.S. Department of

Education, 2002), when the field of education was losing so many so quickly (Blank)?

Based on a review of literature, effective principals should consider the following issues when striving to increase teacher retention within the school setting:

1. Reasons teachers were leaving and the dissatisfiers involved (Cookson, 2005; Darling-Hammond, 2003; Wenders, 2003).
2. Reasons experienced teachers decided to continue teaching (Richards, 2004).
3. The school leader's role in encouraging teachers to stay at their school (Millinger, 2004; Renard, 2003; Sargent, 2003).
4. Components of successful mentoring programs for new teachers (Andrews & Quinn, 2005; Ingersoll & Kralik, 2004; Shea, 2002).
5. Components of effective school based induction programs (Wong & Britton, 2005).

School leaders knew that effective school-level induction took time (Darling-Hammond, 2003). By addressing the identified issues through an in-depth literature review, it may be possible to better understand how leaders could retain quality teachers in order to help them reach their full potential as educators. Though not all new teachers were destined to be life-long educators, principals should consider their role in retaining the quality teachers that enter

their schools. Principals who were aware of what teachers wanted and needed, as well as how to support and encourage higher quality of teaching through effective induction techniques, would be more successful in retaining them (Colley, 2003; Cookson, 2005; Darling-Hammond; Feiman-Nemser, 2003; Futernick, 2003; Johnson, 2005; Renard, 2003; Stuart, 2002).

Evolution of Induction

It was the early 1970s when teacher induction became an area of investigation. It was not until this time that discussion began to take place regarding how best to help beginning teachers enter the profession better prepared for the challenges they would face. It was 1979 before the Educational Testing Service (ETS) conducted a study of orientation programs for new teachers. They found that most programs were incomplete, locally funded, and poorly designed (Alliance for Excellent Education, 2004). Through the early 1980s, induction programs continued to be weak and ineffective.

> Federal support for elementary and secondary education historically has been modest. As it strengthened in the late twentieth century, it was directed largely toward assistance for the nation's neediest children. Only in the last decade has there been a perceptible shift in federal policy, focusing specifically on teacher quality. A promising avenue for productive investment in improving teacher quality is support for novice teachers in their first years in the classroom, a period commonly called induction (Alliance for Excellent Education, 2004, p.iii).

In 1983, however, the publication of *A Nation at Risk* caught the attention of many (Alliance for Excellent Education, 2004; National Commission on Excellence in Education, 1983; The Teaching Commission, 2004; Weiss & Weiss, 1999). Among many claims, this report found teachers were ill-prepared and criticized educators for being lower-level thinkers. *A Nation at Risk* spurred several educational reforms, some of which centered on reasons for teacher attrition. *A Nation Prepared* was published in 1986. This report called for a national board, whose job it would be to establish standards for what teachers should know and be able to do (Weiss & Weiss, 1999). Slowly, it became apparent that teachers were not coming into the field with the experience necessary to teach well (The Teaching Commission, 2004).

The National Commission on Teaching and America's Future (1996), suggested structuring the new teachers' first few years of teaching similar to that of a medical residency. This would include formal evaluations and mentoring by expert educators (Pullin, 2004). Shortly thereafter, it was found that the quality of the teacher was the most important factor in producing student achievement gains (Bracey & Molnar, 2003; Utah State Board of Education, 2005), and induction made its way into the spotlight. In 2003, the majority of teachers reported participating in some kind of induction activities. In 2004, more than thirty states offered induction programs for their novice teachers, and fifteen states required it (Alliance for Excellent Education, 2004).

> Historically, few states, districts, and schools nationwide have had formal or informal programs to support beginning teachers. But states and districts are now recognizing the wastefulness of leaving new teachers to sink or swim, because large numbers of teachers who embark on this career sink (Britton et.al., n.d., p. 2).

In 2006-2007, induction became a hot topic in education (Wayne, Youngs & Fleischman, 2005). Researchers still lacked an exact definition of induction, and it seemed to vary depending on the state, district, or school. For some, it was no more than assigning a mentor to new teachers, while others offered a more comprehensive package of introduction and training (Wayne, Youngs & Fleischman). It was estimated that less than one percent of teachers got what the Alliance for Excellent Education (2004) called a comprehensive induction. Much research began to determine more details about what constituted an effective induction program. To this point, only one study used a random-assignment design. That study found that mentoring played a significant role in keeping new teachers in their school district (Lopez, Lash, Schaffner, Shields, & Wagner, 2004). A second study that hoped to broaden the knowledge in this important field was a large-scale U.S. Department of Education-sponsored study that randomly assigned schools to treatment and control groups. The target completion date for that study was 2008 (Wayne, Youngs, & Fleischman).

What was known about induction programs, and had prompted this increase in concern, was that they varied widely, based on the many definitions and beliefs floating around about them. Generally, induction programs focused

on two strategies: assist and assess (U.S. Department of Education, 1998). However, the effectiveness of these diverse programs was, at this point, unknown.

Teacher Shortage

Research in the field of education focused on the controversial issue of a continuous shortage of teachers (Bracey & Molnar, 2003; Cromwell, 2002; Wenders, 2003). It was a fact that some schools, especially schools in low-income communities, had many teacher vacancies (Johnson & Birkeland, 2003). In addition, it was estimated that nearly 6% of the teaching workforce would not return to teaching each fall, and, within five years, one out of every two new teachers would quit (Alliance for Excellent Education, 2004). Teacher shortages were attributed to increases in student enrollment, baby boomers retiring, and non-entry of certified teachers (Alliance for Excellent Education). “A recent study estimates that half as many new graduates of teacher education programs entered teaching jobs in 1999 as graduated from such programs in the same year” (Johnson et al., 2005, p. 5). Further complicating the matter, *The No Child Left Behind Act of 2001* created more shortages with its highly qualified and class size reduction requirements (Alliance for Excellent Education). After all, decreasing class size produced more classes, thus increasing the need for teachers and possibly lowering rates of highly qualified teachers (Blank, 2003).

The issue of teacher shortages as it related to retirement was studied by Richard Ingersoll (2001b). He believed that difficulty in filling vacancies stemmed more from inadequate salaries, student discipline, student motivation, poor opportunities for advancement and unsafe environments (Ingersoll, 2001b). In his study, pregnancy, child rearing, health issues, and residential moves accounted for more teacher turnover than retirement (Ingersoll, 2001b).

Migration and Attrition

Though the facts of teacher shortages were alarming, it was important to note that not all teachers who left a school left the field of education. Of the teachers that leave, half were attributed to migration and half were actual teacher attrition (Ingersoll & Smith, 2003; U.S. Department of Education, 2005). Therefore, about half of the teachers who left were simply looking for a new work location (Johnson & Birkeland, 2003). In fact, some research disputed any teacher shortage at all, arguing instead that teachers generally only leave their job early or late in their career (Wenders, 2003). The shortage, from this perspective, was in hard-to-staff schools where even new teachers refused to work (Wenders).

While this was somewhat reassuring for the future of quality education, it was no relief for school leaders. Migration and attrition looked the same to a school principal, left with empty positions to fill (U.S. Department of Education, 2005). The result was that principals found school culture difficult to establish,

students were consistently assigned to inexperienced teachers, and the school community hesitated to make significant personal or financial investments in people who may not stay long (Millinger, 2004). Either way, teachers who left created a gap in the school's culture and weakened the overall team (Alliance for Excellent Education, 2004). Regardless of whether a shortage of certified teachers existed within all schools or not, vacant positions presented a problem for many schools in the 21st century (Darling-Hammond, 2003; Johnson et al., 2005).

Costs of Teacher Turnover

This repeated loss followed by a frantic rush to hire, regardless of the reasons for coming and going, was referred to as the "revolving door" effect (Johnson & Birkeland, 2003, p. 21). Teacher turnover – adding new teachers to replace those that left a school- was costly (Johnson et al., 2005). According to the estimations of the Department of Labor, the unrecoverable cost of recruiting, hiring, and training a new teacher was approximately thirty percent of the exiting teacher's salary (Alliance for Excellent Education, 2004). Based on estimations such as this, induction programs should be considered an excellent investment, as retaining just a few teachers would cover much more than the cost of the induction program (Delisio, 2003).

In addition, schools experienced reduced productivity due to teachers leaving just as their effectiveness within the school was rising (Darling-

Hammond, 2003). Teachers who were new to a school must learn all of the procedures and hidden rules that exist, as well as manage their lesson plans, classroom, and student behavior. The school leader and the veteran staff had to be supportive and teach the culture of the school (Roukema, 2004). When a teacher left after just one or two years, all of that time and effort was wasted and school-wide quality teaching was just out of reach. For this reason, an effective induction program was critical (Roukema).

Successful induction was time consuming, even if new teachers entered as certified professionals. First year teachers, especially, took much time to transition into effectively handling all of the tasks required throughout a school day (Johnson et al., 2001). For these inexperienced educators, lesson planning was tedious and slow, behavior management was evolving, and paperwork seemed unending. It took time to become proficient and expedient at these tasks. It also took support and time from others to assist in this process (Israel, 2002). In the long run, retaining teachers within a school for several years reduced time needed for the induction process and increased effectiveness within the school (Alliance for Excellent Education, 2004). Quality teachers would be molded faster if they stayed stationary in one school location. In other words, in order to minimize the revolving door effect, research suggested that leaders do more than just focus on paper credentials of new hires. Principals were encouraged to focus

on how to develop, support, and retain quality classroom teachers through planned induction strategies (Johnson et al., 2001; Roukema, 2004).

Reasons Teachers Leave

In order to devise strategies for keeping effective teachers, school leaders should understand why so many new teachers migrate to new schools or leave the profession.

Isolation and Burnout

Colley's research (2003) revealed that many new teachers leave because they feel isolated and unsupported. Teaching was, in fact, a uniquely lonely profession. Though set up as a social profession, the "egg crate" manner in which most schools were structured made professional collaboration difficult (Cookson, 2005, p.14). From within the classroom, teachers feel distanced from other adults and co-workers (Cookson).

In addition to feelings of isolation, teachers reported feeling burnout due to work overload, lack of appreciation, poor preparation, inadequate facilities, undesirable student behavior, struggles with self-confidence, lack of time management, and little peer support (Hurst & Reding, 1999; U.S. Department of Education, 2005). Pats on the back and words of encouragement could be few and far between (Johnson et al., 2001). Naturally, the result was that teacher

commitment decreased when they felt unsuccessful or experienced low feelings of efficacy and community at work (Joffres & Haughey, 2001).

Lack of Administrative Support

In the case of teacher migration, dissatisfaction with school administration was cited more often than any other factor for relocating to another work location. Teachers complained that principals were “aloof and inaccessible” (Johnson & Birkeland, 2003, p. 23). Lack of principal support was repeatedly cited in the research (Futernick, 2003; Weiss & Weiss, 1999). Many teachers reported that they left a school not because the work was too hard, but because their effort did not appear to matter (Futernick). Teachers looked to administration for feedback and support because the administrator was the evaluator (Denmark & Podsen, 2000; Joffres & Haughey, 2001). New teachers wanted to be acknowledged and rewarded for a job well done. If these needs were not fulfilled, they simply left (Weiss & Weiss). For all of these reasons- reasons of which school administrators have some level of control- schools were losing well-qualified teachers.

Salary and Entry Job Skills

Darling-Hammond’s research (2003) supported that working conditions and lack of support were two major factors why teachers leave. In addition, though, Darling-Hammond found that salary and teacher preparation also played

roles in influencing teachers' decisions. Compared to other professions, educators received approximately 20% below the salary of others who had similar education and training. When comparing educator salaries relative to the gross domestic product (GDP), data indicated that the United States spent a below-average share of its wealth on salaries of teachers (National Science Board, 2004). Recent years, however, have shown a trend of slowly rising teacher salaries for all levels of experience (National Science Board).

While money alone was not cited as a primary reason for leaving, it had been a more prominent reason for teachers who were just beginning to teach (Darling-Hammond, 2003). It seemed that this factor was amplified when beginning teachers entered the classroom and realized they did not feel adequately prepared for the job. "Research suggests that the more training prospective teachers receive, the more likely they are to stay" (Darling-Hammond, p.10).

Legislative changes, strict certification requirements, and increasing accountability measures all were shown to add pressure to beginning teachers (Johnson et al., 2005). While none of these factors may be a primary reason for leaving, the combination of less salary, more paperwork, more hoops to jump through to be considered qualified, and threat of job loss due to poor student achievement haunted new teachers (Johnson et al., 2005). Effective induction was one strategy for school leaders to retain new teachers and to battle factors

for teacher attrition, some of which were not within the principal's control (Ingersoll & Kralik, 2004).

Unfair Conditions

In this way, school leaders who experienced high teacher turnover had to make critical decisions in the way of planning induction. For all of the listed reasons that teachers left teaching, the field of education became known as "the profession that eats its young" (Ingersoll & Kralik, 2004, p.2). Unfair conditions caused the newest members of the school to wonder if they were cared about at all. "Research shows that quality teaching matters. We've got to stop treating quality teachers as if they don't" (Hunt, 2003, p.4). New teachers were often given the toughest students to teach, the most extracurricular activities to manage, and the least privileges as compared to their more experienced coworkers (Futernick, 2003). As stated before, these were all factors for which the school principal had some control. "Placing new teachers in the most challenging classrooms without comprehensive induction – and expecting them to perform like experienced teachers – is like putting newly licensed drivers in the top heat of a NASCAR race" (Alliance for Excellent Education, 2004, p.2).

Other researchers showed that effective induction sought to change the "seniority earns less work" mentality (Britton et al, n.d., p.6). Beginning teachers progressed in stages from survival to a focus on student learning (Halford, 1999). Experienced teachers required challenge and empowerment to continue their

growth as educators (Johnson et al., 2001). It was the responsibility of the school leader to appropriately assign duties to the staff members who were prepared and experienced enough to effectively perform them. It was this collaborative school environment that was shown to lead to higher morale, more commitment to teaching, and a plan to remain in the profession for new teachers (Weiss & Weiss, 1999).

Incentives: Ineffective for Retaining Teachers

Interestingly, in the past, incentives were offered to persuade new teachers to stay. Bonuses were not proven to be effective, and were not part of a successful induction program. “National studies show that only ten percent of teachers who left the classroom after five years of teaching pinpoint salary and benefit dissatisfaction as the principal reason” (Trussell, 2002, ¶2). The incentives usually targeted beginning teachers – and were geared towards placing these less experienced teachers in the most challenging schools. The hard-to-staff schools still had vacant positions, as money was not solely what new teachers were looking for (Futernick, 2003).

However, there were instances where very disadvantaged schools did attract experienced, skilled instructors. In these situations, teachers reported that the principal, who developed effective programs and supported classroom teachers, attracted them (Richards, 2004). These teachers sought a school with a supportive administration, regardless of the disadvantages of the surrounding

community. As researchers indicated, this kind of teacher commitment was crucial to effective schools, teacher satisfaction, and retention (Joffres & Haughey, 2001).

Well-known teacher advocates, Wong and Wong (2001), supported this theory that beginning teachers would commit regardless of outside disadvantages and incentives, if the administration was supportive. They advised beginning teachers to carefully select the district and school based on the induction program offered. In their article titled, *What Successful New Teachers are Taught,* Wong and Wong outlined the differing levels of induction that existed and suggested that teachers had a definite choice in where they wanted to grow as a professional educator. They believed that most new teachers were simply given an assignment and told to go teach, which they felt was “as ludicrous as an airline that hires a pilot and the pilot is told to go and fly” (p.2).

Reasons Teachers Stay

In the quest to keep effective teachers, the school leader should also be aware of why excellent teachers have stayed in the profession. Career educators reported that they still teach because they love to learn, they incorporate their interests and likes into their teaching, and they love their students (Hurst & Reding, 1999). The younger generation of teachers reported that they do not anticipate staying in any job where they do not feel successful. This “new generation” was seeking a meaningful career, and they did not fear walking away

if teaching did not provide the satisfaction for which they searched (Johnson, 2006, p13)

Although there may be many other reasons why teachers remained in the field of education, it was interesting to note that the reasons given most often were factors for which the school leader had only limited control. In fact, “most new teachers are quick to point out that theirs is a profession that requires a sense of a mission” (Wadsworth, 2001, p. 26). They, too, thought teaching was a lifetime commitment. Three quarters of new teachers said they viewed their current profession as a “life-long choice” (Wadsworth, p.26). The question with which administrators were faced was, if new teachers came into teaching motivated to succeed and left for reasons that school leaders could control, what should principals be doing to change the teacher attrition trend?

The Role of the School Principal

To begin, principals could develop behaviors that new teachers had reported as valuable to them. Teachers admired principals who exhibited the following behaviors: had an open-door policy; were fair, honest and trustworthy; supported them in dealing with parents; and supported them in student discipline matters (Richards, 2004). In short, new teachers wanted principals to be present, positive, and actively engaged (Johnson, 2006). Lack of administrative support was reported as the number one reason teachers left a school (Johnson &

Birkeland, 2003). By adopting the behaviors that teachers said were important to them, the school principal would be taking one measure to retain staff.

The role of the school principal in school-level induction only began with administrative support through principal behavior. The school leader was also responsible for developing and supervising the formal induction program within the school. “The most difficult part about implementing an induction program is wasting time, energy, and resources trying to reinvent the wheel” (Delisio, 2003, p5). Fortunately, with more research being conducted, the components of school-level induction were becoming easier to determine.

The School-Level Induction Program.

Comprehensive Induction

Comprehensive induction was defined as a combination of mentoring, professional development and support, and formal assessments for new teachers during their first few years in the classroom (Alliance for Excellent Education, 2004). Mentoring was often equated with induction, though it was becoming more apparent that mentoring was only one important piece of an effective induction process (Alliance for Excellent Education; Bickmore, Bickmore, & Hart, 2005). Other elements, such as collaboration and networking in teacher teams, received less attention in literature in the past (Bickmore et al.). The current thought was that induction has evolved into a highly organized and comprehensive form of staff development which should be a sustained process

for the first two to five years of a teacher's career, and of which mentoring was a component (Wong & Britton, 2005).

Recruitment and Hiring

A critical first step for principals to consider in the induction process was to carefully select new hires (Johnson, 2005; Wong & Britton, 2005). "Careful selection of new staff provides leaders with the opportunity to change the school's social, instructional, and professional climate" (Sargent, 2003, p. 44). When reviewing teacher applications, letters of recommendation, and interviews, principals should look for teachers who will work well within the school. Selecting the correct match was especially important in retaining teachers in the future because "people don't change that much" (Buckingham & Coffman, 1999, p. 79).

Because quality may come in many different forms and with varying characteristics from teacher to teacher, school leaders should search for talents and skills that would complement their existing school climate and vision. In other words, principals could not make teachers highly qualified, but they could carefully select teachers with qualities that matched their school and complimented the quality that existed there (Buckingham & Coffman, 1999).

It Takes a Team to Raise a New Teacher

Once quality teachers were part of the staff, the principal's responsibility shifted to making certain the new teacher was well supported through a

comprehensive school-based induction program (Wong & Britton, 2005). Most of what new teachers needed (feedback, to be involved, support, a sense of belonging) could be achieved through a team-oriented, family-style school culture. Like raising a child, the entire staff should be encouraged and motivated to assist the new teacher through the beginning learning stages of teaching (Stuart, 2002). Likewise, the experienced teachers should benefit from learning the knowledge brought forth by the new teacher (Israel, 2002). A school culture that envelopes new teachers with a "wrap-around system of support" in which principals "surround them with opportunities to learn about learning," would have a better chance of creating a stable community with little teacher turnover (Stuart, p.19).

Building a school community in which teachers were satisfied could not be done in isolation. Principals should actively promote Participative Leadership by "seeking decisional input, working actively with individuals and groups, involving teachers (both new and experienced) in decision making, and maintaining willingness to modify positions" (Lunenburg & Ornstein, 2000, p.334). To achieve this type of community, new teachers, experienced teachers, and administration all worked side by side. The most important resource for continuing improvement of new teachers was the knowledge and skill of the school's best prepared and most committed teachers (Darling-Hammond, 2003). Veteran teachers should be motivated, and feel personally obligated, to commit to helping. The feeling of

isolation that is felt by new teachers could be lessened by establishing this type of meaningful learning community; one in which wisdom and experience were honored and shared (Danielson, 2002; Johnson, 2005).

Mentoring as Induction

"Effective teaching begins with effective learning" (Stuart, 2002, p. 19). Even within a caring, collaborative community, new teachers needed to be launched into teaching deliberately, with a focus on learning the professional ropes. They needed rigorous guidance about how to teach (Alliance for Excellent Education, 2004). One-on-one mentoring was one way this was accomplished and became the dominant form of teacher induction (Ingersoll & Kralik, 2004). New teachers wanted critical support, knowledge of specific expectations, and corrective feedback from both their principal and mentors (Colley, 2003). New teachers wanted to teach well and mentors could give the instant and consistent support needed to overcome first year challenges. Mentor support allowed the new teacher to progress through survival mode and into the student learning stage sooner. The National Education Association (NEA) called mentoring programs "professional lifelines" because they could alleviate the "sink or swim" factor all new teachers faced (Black, 2001, p. 47).

Principals should use caution, though, when creating mentoring relationships. Mentor programs that haphazardly pair new and veteran teachers without administrative training, support, and direction could result in unsupportive

mentors and new teachers feeling more isolated than ever (Johnson, 2005). Quality mentors should be selected for (a) being a good teacher of students, (b) being a good teacher of teachers, and (c) being in a similar subject area or field as the new teacher (Alliance for Excellent Education, 2004). Mentoring programs often failed because of inappropriate matches, too few mentors to go around, or lack of mentor training (Johnson). Therefore, mentoring should be monitored and revised by the school leader.

Coaching versus Mentoring

Barkley (2006) believed a school should not have a mentoring program until it had established a pure model of coaching. While coaching and mentoring were often discussed interchangeably, Barkley distinguished between the two using a continuum. According to this continuum, peer coaching was the furthest from formal evaluation, and mentoring lay between coaching and evaluation. Mentoring often involved an assigned team and was not always voluntary, whereas coaching was usually based on teacher choice (Barkley, 2006). Coaching could happen only when the school culture had been built into a trusting and non-threatening environment. True coaching existed when “being part of the family involves many people coming into your room to observe” (training November 28, 2006). Once this was established, a well-matched mentoring team would more closely resemble a coaching model.

Barkley's Models of Mentoring

Just as evaluation, mentoring, and coaching had a range of definitions and were dependent on the school in which they were implemented, there were numerous models for a mentoring program. Barkley (2002) presented four distinct models, which seem to cover the array of mentoring possibilities. These models focused on the differences in the way communication occurred within the mentoring team.

Barkley's (2002) Model one was called Two-Way Communication. In this model, there was communication between the mentor and the teacher. Separately, communication then occurred between the principal and the teacher. The mentor and the principal did not discuss the teacher. The strength of this approach was that the teacher felt safe knowing that corrections could be made to teaching before the principal was aware weaknesses existed.

The second model was the Silent Mentor Model. The mentor, in this model, met with the principal about the teacher, but only listened passively as the principal imparted concerns or thoughts about the teacher. The mentor then used the information to guide the new teacher to improvement. Barkley (2002) emphasized that this model also provided safety for the teacher, as anything confided to the mentor was kept confidential from the principal.

Positive Reinforcement was Barkley's (2002) third model. It resembled the Silent Mentor Model, in that the mentor and principal met. However, the mentor

could share thoughts about the teacher. The key to this model was that the mentor could only share positive growth with the principal.

The final model of mentoring, called Full Communication was the most open and trusting of Barkley's models. All three members openly communicated about the teacher's progress. All agreed that the goal was the success of the teacher. Due to the level of trust this model required, it was the toughest model to implement successfully.

Due to the differences in abilities, confidence, strengths, and needs of the people involved a mentoring program would likely look different in every school, even possibly within a school. Whichever model was chosen, the principal should take care to eliminate any situation that seemed threatening or judgmental (Barkley, 2002). If it were to be a successful piece of the induction process, mentoring and/or coaching should not be confused with evaluation.

Mentor Training

As mentioned, mentors must have received adequate training in order to fully understand their role in assisting the new teacher. The mentor's challenge was to recognize the unique needs of the new person and respond appropriately (Shea, 2002). This involved a highly personal equation, which would not be identical in each mentoring relationship. Mentors should know when to be an advisor, when to be a listener, when to give a hug and when to suggest a better alternative (Hammer & Williams, 2005). When developed correctly and mentors

were well trained, mentoring programs encouraged successful transition of teachers from being simply qualified when hired to quality educator overall (Colley, 2003).

Alternative Certification: An Example of Mentoring

Research supported that school-based mentoring could make all of the difference in keeping great teachers, due to increased feelings of support (Andrews & Quinn, 2005). In addition, there were often district level programs that offered similar support. Most districts offered some type of Alternative Certification Programs (ACP), which principals utilized to compliment the mentoring taking place on campus. In recent years, the number of teachers lacking a degree in their area of teaching had become a major concern (U.S. Department of Education, 2005), which resulted in the development of alternative certification routes for teachers to learn basic education strategies. Through a portfolio process, Orange County, Florida teachers were required to submit evidence of proficiency in the twelve Educator Accomplished Practices (Orange County Public Schools, 2004). According to Kelly Prough, director of the ACP program in Orange County Public Schools, one huge benefit with these programs was the connection ACP teachers made within the district, both with other new teachers and with district administrators. The weekly classes and contacts with district personnel provided ACP teachers with time to reflect, ask questions, and

develop gradually into effective teachers. It was a mentoring program in itself (personal communication, September 28, 2006).

Alternative Certification Programs reported extraordinary success in regards to teacher performance and retention. “All of the states that have designed exemplary alternative route programs report that teachers certified through alternative routes perform as well, and in some cases better, on certification examinations as their counterparts who completed traditional education programs” (Feistritzer, 2001, p.3). Orange County, Florida’s ACP Program boasted a 98% success rate, in which ACP teachers from the beginning years of the program were still teaching. Prough reported that, of the few teachers who did leave the field after completing the ACP program, one became an author of children’s books, two became stay-at-home mothers, and one became a professor in an engineering program. Dissatisfaction with the job was not a reason for leaving (personal communication, September 28, 2006).

It was obvious from the success of Alternative Certification Programs that mentoring - serious, there-for-you-at-any-time mentoring – was an invaluable strategy for encouraging new teachers to remain in the field of education. The first years of survival were easier to overcome when a family of strong, experienced coworkers supported beginning teachers (Stuart, 2002).

Comprehensive Induction: More Than Mentoring

"Research demonstrates that comprehensive induction cuts attrition rates in half" (Alliance for Excellent Education, 2004, p. 2). In addition to establishing an effective mentoring program, school principals could support new teachers through several other induction strategies. According to Feiman-Nemser's (2003) research, new teachers needed three to four years to achieve competence and several more to reach proficiency in teaching. Therefore, principals needed to address the workload and expectations of beginning teachers.

Easing Overload & Providing Administrative Support

Because new teachers required more time to do what experienced teachers considered routine (planning, management strategies, learning material prior to teaching), leaders should ease some of the traditional overload new teachers faced (Britton et al., n.d.). This could be accomplished by assigning mentors and new teachers common planning time, allowing new teachers to teach the same content and/or grade level for several years to learn the curriculum, avoiding assigning the toughest students to their classes, and not requiring committee or extracurricular activities for the first few years (Britton et al., n.d.; Renard, 2003). Easing the feeling of overload by taking away any possible unnecessary pressure was one component of induction.

Providing time for collaboration and observation was another component of comprehensive induction (Stansbury, 2001). As stated before, one example

was that mentors and mentees benefited from common planning time. Time together built rapport, strengthened the relationship, and allowed opportunity for quality discussions. A second example of providing time was to release new teachers for opportunities to observe exemplary teaching (Mullinix, 2002). Demonstration and modeling of effective teaching practices was a valuable experience for beginning teachers (Britton, n.d).

In addition to time, providing an “open door policy” for listening to the new teachers’ concerns, providing in-service to acquaint the new teachers with school policy and practice, providing informal acknowledgement of effective practices to boost self-confidence and build rapport, and setting aside time to visit the new teachers’ classrooms periodically was important for a principal to do (Weasmer & Woods, 2000). This one-on-one attention from the school principal was critical to successful induction at the school level (Richards, 2004).

Induction Through Evaluation

One way that principals worked one-on-one with new teachers was through the evaluation process. Most school districts rated teachers on an effectiveness scale. Formal evaluation usually involved the principal observing the teacher, using an observation form and outside criteria to assign a score, and a follow-up session to share the results with the teacher. This was often just a snapshot of the teacher’s abilities and mainly addressed minimum competencies.

Traditional evaluation did not lead to professional growth, as it was used for assessment purposes (Barkley, 1998).

In Florida, teachers with less than four years of experience were typically bound by an annual contract. In Orange County Public Schools, per district policy, annually contracted teachers were required to be observed by their administration several times each school year using the Florida Performance Measurement System (FPMS) instrument (Florida Department of Education, 2001). The FPMS used tally marks to evaluate the teacher in four main competency areas: instructional organization and development, presentation of subject matter, verbal and nonverbal communication, and management of student conduct.

Though it was not typical in the past, evaluation could be used as part of an induction program. According to Barkley (1998), it was a valuable tool that ensured beginning teachers, prior to gaining tenure, met all competency requirements. Because evaluation determined if they kept their job, this could be a frightening event for a new teacher (Barkley, 1998). However, if used as the culmination of a coaching and mentoring program, and with a staff built on trust and professional growth, formal evaluation would not be intimidating to the new teacher. Effective induction that included regular observations by a coach or mentor and feedback sessions, in which the teacher implemented new strategies, prepared a beginning teacher for successful evaluations (Barkley,

1998). Furthermore, a principal who promoted classroom observations as a way to continue professional improvement could use evaluation to show a new teacher that it was possible to go far beyond minimum competency.

Professional Development as Induction

Lastly, comprehensive induction involved ongoing professional development. Professional development targeted beginning teacher needs to expand content knowledge, manage student behavior, focus on students' individual needs, and address communication skills (Alliance for Excellent Education, 2004). Seminars, district trainings, team study groups, professional literature book clubs, and school-level workshops were all examples of ongoing professional development that should be encouraged and provided by the principal for new teachers (Britton, n.d.). The Alliance for Excellent Education went further to report that professional development as part of an induction program should be "sustained, intensive, collaborative, long term, and content-driven" (p.16).

Unfortunately, studies found that professional development, in general, often had little impact on student learning because it tended to be disjointed, unfocused, and offered few chances to implement what was learned (U.S. Department of Education, 1998). If not being used, the skills presented, as well as the time and effort, of professional development was wasted. Fortunately, much has since been learned about effective professional development. While it

was especially vital for new teachers, who were rapidly learning the ropes, effective professional development was an ongoing necessity for all teachers (Alliance for Excellent Education, 2004).

For all teachers, research had shown that effective professional development (a) was focused on what the teacher/school needs to know and be able to do for their students, (b) built professional communities committed to higher student learning, (c) utilized student performance data as a tool, (d) promoted continuous inquiry and improvement at the school level, (e) was planned collaboratively by those who would participate, (f) required substantial time, (g) was driven by a coherent and long-term plan, and (h) was evaluated based on their impact on teacher effectiveness and student learning (U.S. Department of Education, 1998). Ultimately, if training was not leading to improvement, it should have been reconsidered.

When developing a professional development program as part of new teacher induction, it was important to remember that beginning teachers were easily overwhelmed. Forcing them to participate in too many learning activities could adversely affect their teaching, if it became part of the overload they felt (Wayne, Youngs, & Fleischman, 2005). Principals should be realistic when planning professional development. To be most beneficial, it should be planned specifically for the needs of the new teacher and balanced with the overall induction program activities (Alliance for Excellent Education, 2004).

School-Level Induction: District and State Support

"Teachers are the most basic educational resource communities provide their children" (U.S. Department of Education, 1998, p.4). Beginning in the 1980s, the number of states and districts creating formal induction programs increased. However, in the 1990s, the number of induction programs began to decrease. Many states eliminated programs due to reduced or restricted funding (Weiss & Weiss, 1999).

With the constant need to retain teachers, states and districts were allotting more resources for induction programs. Because the career of teaching was now being viewed as a continuum of improvement, in which the career began with recruitment, continued through preparation and licensing, and extended to lifelong professional development, policymakers were considering ways to support the entire process in hopes of retaining teachers at all points in the continuum (U.S. Department of Education, 1998).

However, due to the lack of cohesion in induction development, the availability of formal induction programs and their structures vary among states and local districts (Weiss & Weiss, 1999). Many states that had created programs for beginning teachers did not require their districts to participate. Many districts allowed teacher participation to be voluntary. Nationally, only 55% of public school teachers with less than five years of teaching reported having participated in some kind of formal induction (Weiss & Weiss).

Funding levels also varied strikingly among states (Weiss & Weiss, 1999). Some states allotted millions upon millions of dollars, while others limited induction to $20,000. Other states left induction funding up to the district (Weiss & Weiss). The continuation of induction programs relied heavily on continued state and district funds, which were not stable in the past. Induction was often one of the first cutbacks (Weiss & Weiss). Therefore, at the school level where the teacher received the induction, much rested on the principal to create induction effectiveness (Wayne et al, 2005). The principal held the key to developing an induction program with the resources provided and making it work for the beginning teacher. Simply stated, the solution was not in the existence of a program, but in how the program was implemented at the school-level (Ingersoll, 2001a).

Summary

A review of literature has been presented in this chapter. Evidence provided through prior studies was presented to verify teacher retention was a concern for many leaders at the time of this study. A short evolution of induction was given. Many factors relating to teachers leaving their schools (migration), or teaching altogether (attrition), were explored. A few of the factors discussed were the cost of teacher turnover, reasons teachers leave, and reasons teachers stay. The research showed that teachers tended to leave schools and/or education due to lack of administrative support, isolating and/or unfair conditions,

insufficient salary, and insufficient entry job skills. The reasons teacher chose to stay included a love for learning and a love for children. The review of literature also provided a definition of induction as it related to new educators. Induction was described as a combination of mentoring, professional development and support, and formal assessments for new teachers during their first few years in the classroom. Components of teacher induction were presented in detail, as well. Mentoring, administrative support, workload for new teachers, the process of evaluation, and professional development were a few of the components discussed in Chapter Two.

Next, Chapter Three will outline the methodology of this study, including the population, data collection procedures, instrumentation, reliability and validity of the instrument, and data analysis process. Chapter Four will follow with an in-depth analysis of the data collected. The study will conclude with a summary of findings and suggestions for further research in Chapter Five.

CHAPTER THREE:
METHODOLOGY

Introduction

This chapter contains a description of the methodology and procedures used to obtain data for this study. Information collected involved both qualitative and quantitative data, most of which was obtained through response to a questionnaire. Chapter Three is organized into the following sections: (a) Population, (b) Data Collection, (c) Instrumentation, (d) Instrument Reliability and Validity, (e) Research Questions, (f) Data Analysis, and (g) Summary of Research Design and Analysis.

Population

The target population for this study included 274 elementary school principals; of which 147 were from Hillsborough County Public Schools, Florida and 127 were from Orange County Public Schools, Florida. Both districts provided a listing of elementary schools and corresponding principals on their district website, which was available to the public. Email addresses for Orange County Public School principals were found by searching the Orange County Public Schools global address list within the district email system. Email addresses for Hillsborough County Public School principals were provided by the district's Assessment and Accountability office.

Due to changes in principal assignments, the actual population invited to participate included 249 elementary schools principals. This discrepancy resulted from principals who were recently transferred between schools, principals who recently retired but were still listed, and schools which did not have a principal assigned at the time the questionnaire was sent out. In Hillsborough County Public Schools, the first contact reached 135 principals. In Orange County Public Schools, the first contact reached 114 principals.

Data Collection

The initial plan for this study was to send an online questionnaire to all elementary school principals in the Hillsborough County Public School, Florida district and the Orange County Public School, Florida district. However, as the data collection process proceeded, several changes to the plan became necessary.

To begin, approval to research in each district was required. The Hillsborough County Public Schools research request form was an online document, which was sent with the study proposal to the Office of Assessment and Accountability for approval. The approval letter for Hillsborough County Public Schools was obtained by mail from Dr. John Hilderbrand on January 17, 2007. A copy of the approval letter can be viewed in Appendix G.

The Orange County Public School research request form was a one-page document which was completed and submitted to the district's Office of

Accountability, Research, and Assessment. It was submitted for this study on December 6, 2006 and signed for approval on December 18, 2006. A copy of the Orange County Public School's approval for this project can be found in Appendix H.

The first contact email message was sent to Orange County Public School principals on February 1, 2007. This message was sent using Survey Monkey©, the online service used to create and manage the collection process of the questionnaire used. The first contact did not give access to the questionnaire, but instead introduced the study and gave notice that the questionnaire would be coming. It also gave principals the chance to request to see the Orange County Public School Assessment and Accountability office's approval of the research study. One principal replied to this message to inform me that he would like a copy of the approval letter. One email was undeliverable due to an incorrect address, which was quickly corrected and resent. In addition, one principal emailed to inform me that she accidentally hit the decline link and three principals intentionally declined participation. A copy of the first contact can be found in Appendix B.

For Hillsborough County Public Schools, the first contact was sent through regular email, as the approval obtained from this district instructed that each principal must be provided the approval letter. The online survey service used, Survey Monkey©, did not offer an option to send attachments, therefore regular

email was necessary. This first contact with Hillsborough County Public Schools occurred on February 4, 2007. It was the same letter sent to Orange County Public School principals, but contained an attachment to the Hillsborough County Public School Assessment and Accountability office's written approval letter (Appendix G). A copy of the first contact is located in Appendix B. In response to this contact, one Hillsborough County Public School principal informed me of a school assignment change.

On February 7, 2007, the second contact was sent to both districts using the Survey Monkey© service. The second contact email included a brief overview of the purpose of the study, a link to the questionnaire, and a reminder that all information collected would be completely confidential. A copy of the second contact is located in Appendix C. This was the first opportunity for principals to access and complete the questionnaire. As a result of this contact, 7 principals from Hillsborough County Public Schools completed the survey and 45 principals from Orange County Public Schools completed the survey. Therefore, the net response after the second contact was 52 completed questionnaires.

A third contact, which served as a reminder to complete the questionnaire, was sent to Hillsborough County Public School principals and Orange County Public School principals on February 19, 2007. Survey Monkey© was again used to distribute this contact. A copy of the third contact email is located in Appendix D. This letter expressed the value of the participant's response and encouraged

principals to complete the questionnaire. The survey link was again provided. Nine principals from Hillsborough County Public Schools and 27 principals from Orange County Public Schools took this opportunity to complete the questionnaire. Two principals from Hillsborough County Public Schools and 5 principals from Orange County Public Schools declined further participation after the third contact.

At this point in the data collection process, it became necessary to alter the original plans for data collection. With only 16 responses from Hillsborough County Public Schools, it was apparent that the online questionnaire was not yielding enough response. Only 11% of Hillsborough County Public School participants had elected to complete the questionnaire. In contrast, 72 out of 114 (63%) principals from Orange County Public Schools had chosen to participate. It was decided that a hard copy of the questionnaire would be mailed to the Hillsborough County Public School principals who had not yet responded. For principals in Orange County Public Schools, for which the online contacts seemed to work, one additional reminder would be sent through the Survey Monkey© service in an attempt to elicit a few more responses.

On February 27, 2007, a duplicate of the third contact letter (Appendix D) was sent to 39 Orange County Public School principals who had failed to respond to the previous attempts. This final reminder was sent using the Survey

Monkey© service and contained one last link to the questionnaire. In response, 11 more Orange County Public School principals completed the survey.

On February 28, 2007, a hard copy of the questionnaire was mailed using the United States Postal Service, with standard postage, to the remaining 114 Hillsborough County Public School principals who had not responded to the online requests. The package sent included a paper copy of the third contact letter (Appendix D), a paper copy of the Hillsborough County Public School Assessment and Accountability office's letter of approval (Appendix G), a paper copy of the questionnaire (Appendix A), and a stamped envelope addressed for return. From this mail contact, 49 (36%) additional completed questionnaires were obtained.

One final contact was sent to all principals who chose to participate in the online survey. On March 8, 2007, the online questionnaire was closed for further online input. Using the Survey Monkey© service, one final email was sent on this day to thank all of the voluntary participants who completed the online questionnaire. This fourth contact letter, located in Appendix E, simply thanked the participant and offered an opportunity for the principal to request a summary of the findings at the conclusion of the study. No further online questionnaires were accepted. On March 26, 2007, a paper copy of the fourth contact (Appendix E) was mailed through United States Postal Service to the principals in

Hillsborough County Public Schools who chose to respond to the mailed version of the questionnaire.

At the conclusion of the data collection, 65 principals responded and 7 principals declined participation from Hillsborough County Public Schools. Therefore, 48% of the original 135 principals contacted from this district participated. From Orange County Public Schools, 82 principals responded and 8 principals declined participation. Therefore, from Orange County Public Schools, 72% of the 114 contacted principals chose to participate. Overall, from both school districts, 147 principals completed the survey, 15 principals declined participation, and 97 principals did not respond. In summary, 59% of 249 possible participants completed the questionnaire.

Instrumentation

Data for this study were collected using a custom created questionnaire, which is located in Appendix A. The questionnaire was designed using the online survey service, SurveyMonkey©. Subscription to this service was obtained for a fee each month. SurveyMonkey© allowed the researcher to design the survey to fit the needs of the study, with as many questions and question formats as necessary. It also provided necessary features, such as unlimited responses, skip logic based on responses to questions, participant tracking, and downloadable results. Through this service, the questionnaire could be designed

and emailed to all participants, and the data could be collected and manipulated easily.

The questionnaire designed included 32 questions. Twenty-three of the questions were single-response, multiple-choice questions. Six were multiple-response, multiple-choice questions, which included an open-ended option for an "other" response. Two questions were completely open-ended response questions and one was an open-ended question in which participants could request a summary of the findings of the study. No questions required an answer, as this study was entirely voluntary and participants were not made to answer any question unless they chose to. Participants were able to maneuver forward and backward in the questionnaire. They were also able to return to the questionnaire at a later time to add or change their responses, until the online survey was closed on March 8, 2007.

In addition to the carefully created questions, the questionnaire included some script to assist the participants. The questionnaire (Appendix A) opened with a welcome message that included a definition of induction as it applied to this study. It then provided instructions and suggestions to best prepare the volunteers for what they might need to reference when answering the questions. An approximate completion time of ten minutes was given. Questions involving principal experience, school information, and induction activities followed. A definition of mentoring, as it applied to this study, was provided just before

question 18, which involved details about mentoring programs at the school. Questions 20-29 asked specific questions about the staff in the school, and questions 30 and 31 were open-ended questions requesting opinions about effective induction. Finally, a thank you message was included just before question 32, which was an opportunity for participants to request a summary of the findings to be mailed to them at the conclusion of the study.

Instrument Reliability and Validity

Careful thought and deliberation was afforded the development of this questionnaire. In order to address the content validity of the instrument, the questions included were matched directly to the research questions of the study. While three of the questions were asked to identify school demographic information and one question was a request to receive a summary of the findings, the other 29 questions corresponded to the content base of this study. The following table outlines the correlation of survey questions to the five research questions.

Table 1: Correlation Between Survey and Research Questions

Content Base Category	Target Research Question	No. of SQ
Induction Practices	What components of teacher induction are being implemented within Florida's elementary schools in Hillsborough County Public Schools and Orange County Public Schools?	14-19
Teacher Retention	What factors are present in schools that have high teacher retention rates, e.g. for migration and attrition?	21-29
	What factors are present in schools that have low teacher retention rates, e.g. for migration and attrition?	
Induction Practices	In schools that have high teacher retention rates, to what do principals attribute those higher retention rates?	30, 31
Experience of the School Leader	How does a principal's level of experience (such as years in administration, years teaching prior to an administrative position, total years placed within the school, age, and gender) relate to migration and attrition rates within a school?	1-10

This table demonstrated that the questions included in the survey directly provided answers to the research questions, thereby providing content validity to this study. In order to further assess the content validity, the face validity, and the reliability of the instrument, this questionnaire was administered to pilot groups.

The first pilot group was composed of fifteen assistant principals, district personnel, and curriculum resource teachers. Specifically, this group was asked to complete the online questionnaire as if they were an actual principal. They received the four email contacts and the online questionnaire, in the order and timing of the planned study. They were then asked to report (a) how much time it took to complete the survey from start to finish, (b) if the technology worked without error, (c) feedback on the look and feel of the survey, and (d) feedback on the wording of the email contact messages and the survey questions.

The questionnaire was then administered to a second pilot group, which consisted of 25 graduate students. This group was given a paper copy of the survey and asked to assess (a) the accuracy of the questions in regards to the content validity, and (b) the wording of the questions. The wording of the questions was important because it determined the reliability of the instrument. This pilot group assisted with assuring that the questions were well-worded, easy to decipher the meaning of each, and contained no two answers that could be confused. Therefore, both the reliability and the content validity of the questionnaire were reviewed by this pilot group.

Both pilot groups provided valuable feedback, especially in the area of effective wording of the questionnaire and contact letters. Specifically, repetitive wording was eliminated from the contact letters, thereby creating a more concise and less time-consuming contact for principals. Several questions required clarification to avoid confusing the intent of what was being asked. In addition, several questions required an answer of “zero” or “none”, and it was suggested that a definition of mentoring be added before question eighteen.

On January 26, 2007, the questionnaire was exempted from further review by the University of Central Florida’s Institutional Review Board. The exemption letter is located in Appendix F.

Research Questions

Based on the review of literature, this study sought to answer the following questions:

1. What components of teacher induction are being implemented within Florida’s elementary schools in Hillsborough County Public Schools and Orange County Public Schools?
2. What factors are present in schools that have high teacher retention rates, e.g. for migration and attrition?
3. What factors are present in schools that have low teacher retention rates, e.g. for migration and attrition?

4. In schools that have high teacher retention rates, to what do principals attribute those higher retention rates?
5. How does a principal's level of experience (such as years in administration, years teaching prior to an administrative position, total years placed within the school, age, and gender) relate to migration and attrition rates within a school?

Data Analysis

The goal of the analyses was to determine patterns between types and methods of induction programs offered within individual elementary schools and teacher retention rates within those schools. School size, demographics, administration change, and history were considered as patterns were identified.

Data collected through SurveyMonkey©, the online service utilized, were downloaded into a Microsoft Excel spreadsheet program. All data collected from the questionnaires mailed to principals were then entered into the Excel file, so that all data would be analyzed in its entirety. Each Research Question was analyzed separately using SPSS, a statistics analysis software program, to target specific survey items.

Research Question 1 (RQ1) dealt with which components of school-based induction programs were being implemented on the elementary school campuses selected for this study. Survey Question 14 (SQ14) asked which activities were offered as induction at the school. Data from this question were arranged from

activities offered most to those offered least, using a frequency table generated in SPSS. Survey Questions 15-19 (SQ15-SQ19) inquired about specific induction activities. SQ15 targeted team building, SQ16 asked about providing positive feedback, SQ17 focused on reducing the workload of new teachers, and SQ18 and SQ19 targeted mentoring. These data were used to expand upon the information obtained in SQ14, using descriptive analysis.

Research Questions 2 and 3 (RQ2 and RQ3) involved teacher retention rates within the schools that took part in the study. Data from Survey Question 21 (SQ21) were analyzed to determine which schools could be considered to have high retention rates and which schools could be considered as having low retention rates. This was done by calculating, using SPSS, the frequency of teachers who left each school after the 2005-2006 school year. The schools were then arranged from lowest to highest retention ranges. Schools with similar teacher retention were grouped into high, middle, or low retention categories. The criteria of these retention groupings became the definitions for high and low retention schools.

To further analyze teacher retention rates, SQ22 and SQ23 were examined to determine if teachers leaving were attributed to attrition or migration. The frequencies of attrition and migration were calculated, using SPSS, for all schools with low and high teacher retention rates, as described previously. SQ25-SQ29 targeted current staff at each school. Data from these questions

were used to calculate frequencies of first-year, second-year, and third-year teachers at the schools with low and high teacher retention rates. Survey Question 24 (SQ24) addressed this by asking what reasons were given to principals when staff left their school. Data collected from SQ24 on surveys completed by principals in high teacher retention schools and low retention schools were compiled so that patterns or trends among the responses could be identified. This information gave more insight into the factors influencing retention at each school.

Research Question 4 (RQ4) dealt specifically with the schools considered to have high retention rates. The purpose was to find out to what principals attribute their high teacher retention. Survey Questions 30 and 31 directly related to RQ4. Both survey questions required open-ended responses. The answers were compiled from questionnaires completed by principals in high teacher retention schools only. Patterns and trends in answers were identified and descriptively analyzed.

Research Question 5 (RQ5) sought to compare a principal's experience level with the attrition and migration rates within their school. Survey Questions 1-10 (SQ1-SQ10) addressed the principal's level of experience. Specifically, SQ1-SQ10 asked about the principal's age, gender, years in administration, years teaching prior to an administrative position, total years placed within the current school, and experience in higher levels of education (middle school, high

school, or secondary education). Data collected from SQ1-SQ10 were compared to each school's migration and attrition rate, and patterns in the data were identified. High and low retention schools were analyzed in depth, to assess if patterns in principal experience seemed to influence teacher retention.

Survey Questions 11-13 (SQ11-SQ13) did not target a specific research question. However, data collected from these questions gave insight to other factors outside of the principal's control that could influence teacher retention. SQ11 involved the age of the school, SQ12 dealt with the student enrollment of the school, and SQ13 asked for the free and reduced lunch percentage of the school. Data collected were compared to the high retention and low retention schools to determine if school age, size, and/or socioeconomic status showed patterns in the teacher retention data.

This study, as stated previously, included both quantitative and qualitative data. Much of the information gathered required descriptive analysis, as patterns were sought among various factors. Frequency tables developed using SPSS allowed for a clearer image of the results and were used to assist in the descriptive analysis.

Summary

The research design and methodology used in this study have been presented in this chapter. A questionnaire technique was utilized to determine which induction activities used in elementary schools had been most effective at

retaining teachers in two large public school districts in Florida. This chapter presented the population, data collection, instrumentation (including reliability and validity of the instrument), research questions, and data analysis procedures in detail.

Next, Chapter Four will report the collected data in detail. Chapter Five will then conclude the study by discussing the findings and suggestions for further research, as well as present recommendations for future study.

CHAPTER FOUR:
ANALYSIS OF DATA

Introduction

The previous chapters have served to explain the preparation for this study. Chapter One gave an introduction of the contents of the study, Chapter Two presented a review of the related literature, and Chapter Three outlined the methodology used to obtain data. The purpose of Chapter Four is to report and analyze the data collected. It is hoped that this analyses of data will lead to significant findings regarding how to retain teachers through school-based induction.

Analyses of the data for this study involved separating data accordingly to answer each research question individually. Most of the survey responses were first downloaded from the SurveyMonkey© service into a MicroSoft Excel spreadsheet. The data obtained through the U.S. Postal Service were entered into an Excel file. The final data used for analysis in this study contained a total of 147 survey responses.

Once the data collection was finished and the file was complete, each research question was analyzed by focusing on the responses to the survey questions which related directly to the content base of the question. In most analyses, the data were entered into the SPSS program and frequency tables were calculated. The goal of the analyses was to answer each research question

completely by determining patterns between types and methods of induction programs offered in the schools involved in the study. Tables were included to supplement the written analysis. In addition, opportunities for further research were recorded as new questions originated. This need for further research will be addressed in Chapter Five.

Research Question 1

Research Question 1 (RQ1) asked which components of school-based induction were implemented in elementary schools in Hillsborough County Public Schools and Orange County Public Schools. To begin the analysis, responses to survey question 14 (SQ14) were analyzed using the SPSS program. SQ14 allowed participants to check all of the listed components that they implemented in their school as part of teacher induction. There were 21 induction activities from which to choose and an opportunity to list any other activities implemented which were not offered as a choice. Using SPSS, frequency tables were generated to assess how many schools selected each choice. The following table summarizes the frequencies found. The components of induction were listed from activities selected most to those that were selected least by principals.

Table 2: Components of Induction Implemented in Schools

Induction Activity	Frequency	Percent
Formal observation by principal	146	98.6
Mentoring	145	98.0
Offer school-level professional development	145	98.0
Provide an open door policy	145	98.0
Visit classrooms of new teachers often	143	96.6
Final (end of the year) assessment conference	143	96.6
Provide common planning time for grade level	137	92.6
Encourage district level professional development	136	91.9
Give time to observe veteran teachers	132	89.2
Involve new teachers in decision making	123	83.1
Mid-year assessment conference	123	83.1
Provide positive feedback for effective practice	122	82.4
Preliminary assessment conference with principal	117	79.1
Team building activities	113	76.4
Allow new teachers to teach same grade level for at least two consecutive years	112	75.6
Offer in-service targeting school policies and procedures	107	72.3
Reduce number of students with discipline issues when assigning students to new teachers	94	56.8
Provide common planning time with mentor	80	54.1
Implement professional reading book club	79	53.4
Reduce workload of new teachers	27	18.2
Certification exams study group	11	7.4

Note: Principals were asked to select all that applied to their school.

As the table shows, all of the induction activities given as a choice in SQ14 were selected by principals. Therefore, all of the anticipated induction components of this study were being implemented to some extent in both Hillsborough County Public Schools and Orange County Public Schools. However, as Table 2 shows, there were definite differences in how many times each component was chosen by principals.

The Top Eight Induction Components

Eight of the activities yielded a selection frequency of 90% or more by principals. Formal observation by the principal was the most implemented induction component. It was selected by 98.6% of principals. Mentoring, offer school-level professional development, and provide an open door policy were all selected by 98% of principals. The next most implemented activities, selected by 96.6% of principals, were visit classrooms of new teachers often and final (end of the year) assessment conference. Provide common planning time for grade level teams was chosen by 92.6% of principals and encourage district level professional development was chosen by 91.9%.

Mentoring

In regards to mentoring, which tied for second most-often implemented induction activity in schools surveyed, more information was obtained by the survey. Survey question 18 (SQ18) asked for more specific details about the

mentoring in each school. Table 3 displays the findings. According to principals, 142 (95.9%) schools offered the opportunity for a mentor to first-year teachers and 139 (93.9%) required that first-year teachers were paired with a mentor. For second-year teachers, 115 (77.7%) schools offered a mentoring program, but only 28 (18.9%) required a mentor to be assigned. For third-year teachers, 72 (48.6%) schools offered mentoring and only 8 (5.4%) required it.

Table 3: Offered vs. Required Mentoring for First, Second, and Third-Year Teachers

	No. that Offer Mentoring		No. that Require Mentoring	
	Frequency	Percent	Frequency	Percent
First-Year Teachers	142	95.9	139	93.9
Second-Year Teachers	115	77.7	28	18.9
Third-Year Teachers	72	48.6	8	5.4

These data show that mentoring, while being one of the most-used components of induction, is usually implemented with only the newest of teachers. Mentoring appeared to be less available for teachers who advanced to the second or third year of teaching. While most (77%) schools allowed mentoring for second-year teachers, less than 20% of schools required it. Furthermore, less than half of the schools surveyed even considered offering mentors for third-year teachers.

The training required for mentors was also investigated. Survey Question 19 (SQ19) asked principals to report what training mentors were required to complete in order to be a qualified mentor. The four choices offered were: (a) district mandated mentor training, (b) school-level mentor training, (c) video training, and (d) online training. Principals could also report additional training by selecting the "other" choice. According to responses, 116 (78.4%) school principals reported that district mandated mentor training was required, 69 (46.6%) schools had school-level training for mentors, 20 (13.5%) schools required a video training, and 9 (6.1%) schools required an online course. Out of 147 total schools, 11 (7.4%) did not require any training at all for their mentors. These results are listed in Table 4. The methods of training are listed as they were on the survey.

Table 4: Methods of Mentor Training

Required Training for Mentors	Frequency	Percent
District mandated mentor training	116	78.4
School-level mentor training	69	46.6
Video training	20	13.5
Online training	9	6.1
No training is required for mentors	11	7.4

Note: Principals were asked to select all that applied to their school.

Five schools listed other methods of required training for mentors. Among those additional comments, principals reported that National Board Certification was sometimes required and the Curriculum Resource Teacher was sometimes utilized to train and work with the mentors. One principal wrote that site-based training and district training were enforced only when deemed necessary.

Components that Didn't Make the Top Eight

There were many components of induction which were selected by 70-90% of school principals. These components did not make the top eight, but deserved mention due to their high frequency of selection. Give time to observe veteran teachers was selected by 89.2% of principals, involve new teachers in decision making and mid-year assessment conference were both selected by 83.1% of principals, and provide positive feedback for effective practice was selected by 82.4% of principals. In the 70% range, preliminary assessment conference was chosen by 79.1% of principals, team building activities was selected by 76.4% of the principals, allow new teachers to teach same grade level for at least two consecutive years was selected by 75.6% of principals, and offer in-service targeting school policies and procedures was chosen by 72.3% of principals.

Of these components, two were targeted in the survey for further information. Provide positive feedback for effective practice and team building activities were addressed in more detail by Survey Question 16 (SQ16) and

Survey Question 15 (SQ15), respectively. The responses from those inquiries follow.

Positive Feedback for Effective Practice

Providing positive feedback for effective practice ranked 12th on the list of most-implemented induction activities. One hundred twenty-two (82.4%) of school principals reported that they used this strategy as part of their induction program. When asked, in SQ16, how this positive feedback was provided, 118 (79.7%) principals used face-to-face meetings with the teacher, 102 (68.9%) principals utilized email, 96 (64.9%) principals wrote comments on formal assessment instruments, 95 (64.2%) principals used handwritten notes to the teacher, 77 (52%) principals made announcements at staff meetings, and 19 (12.8%) principals left postings for staff to see. Table 5 summarizes these findings and lists methods for providing positive feedback in order from most-used method to least-used method. They are listed in the order they appeared in the survey.

Table 5: Methods of Providing Positive Feedback to New Teachers

Method of Providing Positive Feedback	Frequency	Percent
Face to face meeting	118	79.7
Email	102	68.9
Comments on formal assessments	96	64.9
Hand-written notes	95	64.2
Announcements at staff meetings	77	52.0
Postings for staff to see	19	12.8

Note: Principals were asked to select all that applied at their school.

Five principals specified the following "other" methods of providing positive feedback: (a) grade-level team meetings with the administrator, (b) "pat on the back" notes that qualify the teacher for door prizes at the next staff meeting, (c) recognition in the school's weekly newsletter, and (d) classroom walkthroughs with follow-up feedback. Two principals reported that they used the weekly newsletter for providing positive feedback.

Team Building Activities

One hundred thirteen (76.4%) of the surveyed principals marked team building activities as part of their induction program. This strategy ranked 14th out of the 21 listed components of induction. Out of 147 schools, 113 conduct team building activities. SQ15 inquired about how often team building activities

occurred in these schools. According to the responses, 11 (7.4%) schools did team building weekly, 21 (14.2%) schools did it bi-weekly, 50 (33.8%) schools did it monthly, and 23 (15.5%) schools did team building quarterly. Seven principals marked the "other" option for this question. These seven reported a more random approach to team building – these activities did not occur routinely. Two principals wrote that team building activities happened two or three times a year. Table 6 displays the findings, in order of most to least frequent occurrence.

Table 6: Occurrence of Team Building Activities

How Often Team Building Activities Occur	Frequency	Percent
Monthly	50	33.8
Quarterly	23	15.5
Bi-weekly	21	14.2
Weekly	11	7.4
Other	6	4.1

Note: 36 principals did not answer SQ15. This table represents 111 responses.

Less Selected Components of Induction

There were five components of induction, listed in SQ14, that were selected the least. Reduce the number of students with discipline issues when assigning students to new teachers was selected by 56.8% of principals, provide

common planning time with mentor was selected by 54.1% of principals, and implement professional reading book club was chosen by 53.4% of principals. Reduce workload of new teachers was chosen by 18.2% of principals and certification exams study group was selected by 7.4% of principals.

Reduce the Workload of New Teachers

Reducing the workload of new teachers was only reported as part of the induction program for 27 schools. It ranked next to last out of the 21 listed components of induction. Survey Question 17 (SQ17) addressed this component specifically by asking how the workload of new teachers was reduced at these sites. The choices for this question were: (a) assign less before and after school duties than veteran teachers, (b) assign less committee requirements than veteran teachers, (c) reduce the number of meetings new teachers must attend, (d) offer one-on-one assistance for learning paperwork procedures, and (e) specify an “other” method. The results are reported in Table 7. Items are ordered from most frequent selection to least frequent selection.

Table 7: Methods of Reducing Workload for New Teachers

How New Teacher Workload was Reduced	Frequency	Percent
Assign less before and after school duties than veteran teachers	11	7.4
Assign less committee requirements than veteran teachers	27	18.2
Reduce number of meetings new teachers must attend	7	4.7
Offer one-on-one assistance for learning paperwork procedures	47	31.9

Note: Principals were asked to select all that applied at their school.

As the table shows, at least 47 principals responded to SQ17 to report how the workload is reduced for new teachers at their school. Thirty-one point nine percent of principals reported they offer one-on-one assistance for learning paperwork procedures, 18.2% of principals assigned less committee requirements than veteran teachers, 7.4% of principals assigned less before and after school duties than veteran teachers, and 4.7% reduced the number of meetings new teachers must attend.

Only five principals chose the other “option” for reducing workload. These five responses gave the general impression that reducing workload was not always possible even if the principal supported the idea. For example, one principal wrote, “this is not an option.” Another wrote, “We reduce workload for

teachers on an as-needed basis." A third response was, "whenever and whatever possible." One principal reported lowering class size was one way to reduce workload. Overall, it was difficult to determine much significance from the findings regarding reducing workload because so few participants reported using the strategy.

"Other" Induction Components

Nineteen principals chose the "other" option to record additional induction activities offered at their school. From these nineteen comments, several patterns emerged. First, eight principals emphasized routine meetings throughout the year, in addition to meetings new teachers may have had with their mentor. They stressed the importance of a formal program within the school, which met weekly or monthly. One principal included the administrative staff, Instructional Coach, Curriculum Resource Teacher, and mentors in the meetings. Another principal called the meetings "Curriculum Chats." Two principals reported creative names for their program, such as the Explorers Club. Though the specifics may have differed slightly from school to school, five principals' responses in this other category revealed that a formal program with routine meetings, above and beyond the mentoring program, was an important piece to induction.

A second trend that emerged in the "other" comments from SQ14 was providing a before-the-start-of-the year meeting for new teachers. Four principals

offered an opportunity for new teachers to get acquainted with the school before the official welcome back occurred. One principal called it a “getting to know our school” workshop. Another principal titled it the “this is how we do it” in-service. Two principals included mentors in this experience so that new teachers knew their mentor before the first day of school.

Three principals wrote that an “other” induction component at their school was to create a family-like atmosphere. These principals reported that one of their strategies for retaining teachers was to get all staff involved so that new teachers felt like they were supported, as if in a family.

More induction ideas were reported, though no trend or pattern emerged. Though only reported by one principal, these activities could be considered for further investigation. Examples of these various activities were to reduce class size for new teachers, provide additional coaching beyond the mentor’s efforts, and provide certification assistance for new teachers.

Definitions Determined by Data Analysis

In order to answer Research Questions 2-5, it was necessary to clarify several definitions. The following definitions were determined during the process of analyzing data and were based on the data collected.

High, Middle, and Low Retention Schools

Research Question 2 (RQ2) specifically targeted high retention schools. Research Question 3 (RQ3) similarly targeted only low retention schools. It was, therefore, necessary to use the collected data to determine exactly which criteria would be used to classify each school in regards to rate of teacher retention. This was accomplished by using the SPSS program to analyze SQ21, which asked how many teachers left the school (turnover) at the end of the 2005-2006 school year. SQ21 offered seven choices: 0, 1-3, 4-6, 7-9, 10-12, 13-15, and 15 or more. The data, however, showed that these ranges were not equally selected by schools. Sixty principals reported that 1-3 teachers left their school. The answer 4-6 was the next most selected answer (41 schools). Only 4 principals selected zero as an answer and 7 principals chose “more than 15” teachers left their school. Therefore, it was necessary to combine answer selections so that high, middle, and low retention groupings were as close to equally balanced in number of schools as possible. According to the frequency table generated in SPSS, and replicated below to show the groups that resulted, 64 (43.5%) principals reported 3 or less teachers left, 41 (27.9%) principals reported 4-6 teachers left, and 39 (26.5%) principals reported 7 or more teachers left. For the purposes of this study, these criteria were used to develop the definitions of low retention, middle retention, and high retention schools.

Table 8: Criteria for Definition of Retention Categories

	No. of Teachers Who Left	Frequency	Percent
High Retention Schools	3 or less	64	43.5
Middle Retention Schools	4-6	41	27.9
Low Retention Schools	7 or more	39	26.5

Note: 3 principals did not respond to SQ21. Table 8 represents 144 responses.

While the three groups were not identical in frequency, they were as balanced as possible from the data collected and would serve the purpose of the study. To compare these unequal groups, the analysis considered both frequency and percentages of responses.

Research Question 2 and 3

Research Question 2 (RQ2) concerned the factors present in schools that were found to have high teacher retention. There were 64 schools determined to be high retention schools, with 3 or less teachers lost between the 2005-2006 and 2006-2007 school years. The data reported by the 64 principals of those schools were used to answer this research question.

Research Question 3 (RQ3) was similar to RQ2, but instead involved factors present in schools found to have low teacher retention. There were 39 schools determined to be low retention schools, with 7 or more teachers lost

between the 2005-2006 and the 2006-2007 school year. The data reported by the 39 principals of those schools were used to answer RQ3.

Due to the similarity in RQ2 and RQ3, the data for high and low retention schools were analyzed side by side. This allowed for comparisons to be made as each factor was investigated. The factors targeted for these two questions were: (a) migration, (b) attrition, (c) reasons given by teachers for leaving, (d) number of instructional staff members, (e) number of first year teachers, (f) number of second year teachers, and (g) number of third year teachers. These factors were reported in response to survey questions 22, 23, 24, 25, 27, 28, and 29, respectively.

Migration

Migration, in regards to teacher turnover, referred to teachers leaving one school to go to another. Survey Question 22 (SQ22) addressed migration by asking principals how many teachers left their school to teach at another school. The following frequency table, Table 9, displays the migration found in high and low retention schools.

Table 9: Migration in High and Low Retention Schools

No. Schools that Reported Migration	High Retention Schools		Low Retention Schools	
	Frequency	Percent	Frequency	Percent
0	17	26.6	1	2.6
1-3	45	70.3	3	7.7
4-6	0	0	9	23.1
7-9	0	0	14	35.9
10-12	0	0	4	10.3
13-15	0	0	4	10.3
More than 15	0	0	4	10.3

Note: Two principals from high retention schools did not answer SQ22.

The data showed 45 out of 64 (70.3%) high retention schools lost teachers due to migration. All of these high retention schools lost 3 or fewer teachers to another school. Seventeen high retention schools reported zero teachers lost due to migration. In comparison, 38 out of 39 (97.4%) low retention schools reported teachers who migrated. Thirty-five of those (89.7%) schools lost more than 3 teachers and only one school reported zero teachers lost due to migration.

This analysis demonstrated that migration contributed to large percentages of the teacher turnover in both high and low retention schools. However, migration is reported in more extreme numbers in low retention

schools, with nearly 100% of low retention schools experiencing migration and nearly 90% of them losing more than 3 teachers to migration.

Attrition

A second factor, analyzed to compare high retention and low retention schools, was teacher attrition. This was defined as the number of teachers who left a school with the intention to leave the education profession. Survey Question 23 (SQ23) inquired about attrition. In high retention schools, 20 out of 64 (31.3%) principals reported losing at least one teacher to attrition. In low retention schools, 20 out of 39 (51.3%) principals lost teachers to attrition. Four of those low retention schools reported four or more teachers discontinued teaching. Table 10 presents this data.

Table 10: Attrition in High and Low Retention Schools

No. of teachers who discontinued teaching	High Retention Schools		Low Retention Schools	
	Frequency	Percent	Frequency	Percent
0	44	68.7	19	48.7
1-3	20	31.3	16	41.0
4 or more	0	0	4	10.3

Reasons Given for Leaving

Survey Question 24 (SQ24) asked principals for more details about the migration and attrition experienced in their schools. The question asked what specific reasons were given by teachers when they left. The answer choices were (a) residential move, (b) family building, (c) personal issues, (d) illness, (e) continue education, (f) salary, (g) career change, (h) retirement, and (g) position change within the field of education. An “other” option was also provided for principals to specify any unlisted reasons. Twenty-two principals, from the high and low retention schools, chose the “other” option. Table 11 presents the responses. They are ordered from most frequent to least frequent occurrence in high retention schools.

Table 11: Reasons Given by Teachers for Leaving

	High Retention Schools		Low Retention Schools	
Reason	Frequency	Percent	Frequency	Percent
Residential Move	36	56.3	28	71.8
Personal Issues	12	18.8	13	33.3
Retirement	12	18.8	13	33.3
Position Change in Education	9	14.1	12	30.8
Family Building	8	12.5	11	28.2
Continue Education	3	4.7	2	5.1
Career Change	2	3.1	9	23.1
Illness	2	3.1	2	5.1
Salary	2	3.1	1	2.6
Other	11	17.2	11	28.2

Note: Principals were asked to select all that applied at their school.

According to these data, residential move was the reason given most for teachers leaving a school. Fifty-six point three percent of the high retention schools and 71.8% of the low retention schools reported having teachers leave for this reason. Personal issues and retirement were the next most selected answers, closely followed by family building and position change within the field of education. Personal issues and retirement equaled in frequency, reported by

18.8% of high retention school principals and 33.3% of the principals of low retention schools selecting them. Illness, continuing education, salary, and career change were less significantly reported as reasons given by teachers for leaving. Salary, in fact, was the least selected of the listed reasons for leaving.

From the high retention schools, 11 principals added in other reasons for teachers leaving. Similarly, from the low retention schools, 11 principals specified other reasons. From these responses, one major difference emerged. In high retention schools, no principals mentioned allocation cuts or rezoning of schools as a reason for teachers leaving. However, in the low retention schools, 9 out of the 11 “other” reasons were related to allocation cuts and/or rezoning of schools, such as for opening of a relief school.

Further reasons provided in the other category were “to get closer to home”, “difficult population of students”, and “teach abroad for a year.” Two principals from high retention schools clarified that teachers were not reappointed to return to their school and two lost teachers who decided to become stay-at-home moms.

Total Number of Instructional Staff Members

Size of each school was predicted as a possible factor of teacher retention. This factor was analyzed by comparing the total number of instructional staff employed at each school during the 2006-2007 school year. SQ25 targeted the number of total instructional staff. Principals were given the following ranges

to choose from: (a) fewer than 50, (b) 50-75, (c) 76-100, (d) 101-125, (e) 126-150, and (f) more than 150. Table 12 summarizes the collected data for high and low retention schools.

Table 12: Number of Instructional Staff in Each School in School Year 2006-2007

No. of Instructional Staff	High Retention Schools		Low Retention Schools	
	Frequency	Percent	Frequency	Percent
Fewer than 50	25	39.1	13	33.3
50-75	32	50.0	21	53.8
76-100	4	6.3	5	12.8
101-125	2	3.1	0	0
126-150	1	1.6	0	0
More than 150	0	0	0	0

Based on the responses of principals, school size did not appear to be a significant factor of teacher retention. Thirty-nine point one percent of high retention schools and 33.3% of low retention schools were small schools with fewer than 50 instructional staff members. Fifty percent of high retention schools and 53.8% of low retention schools were slightly larger with 50-75 instructional staff members. This distribution parallels the overall data, totaling 147 responses, as most schools had either fewer than 50 instructional staff members or had 50-75 instructional staff members.

Number of First, Second, and Third-Year Teachers

Another factor of teacher retention this study sought to explore regarded the number of less experienced teachers in each school. To analyze this factor, Survey Questions 27, 28, and 29 asked how many first, second, and third-year teachers were employed at each school. The choices for each question were ranges as follows: 0, 1-3, 4-6, 7-9, 10-12, 13-15, and more than 15. Table 13 shows the responses in regards to first-year teachers.

Table 13: Number of First-Year Teachers in High & Low Retention Schools in 2006-2007

	High Retention Schools		Low Retention Schools	
No. of First-Year Teachers	Frequency	Percent	Frequency	Percent
0	5	7.8	3	7.7
1-3	46	71.9	6	15.4
4-6	10	15.6	14	35.9
7-9	2	3.1	9	23.1
10-12	1	1.6	4	10.3
13-15	0	0	0	0
More than 15	0	0	2	5.1

Note: One principal from a low retention school did not answer SQ27.

To examine trends, the percentage of first, second and third-year teachers were compared for high and low retention schools. To begin, the number of first year teachers in high retention schools was compared to low retention schools. For high retention schools, 71.9% of schools employed between 1-3 first year teachers. For low retention schools, on the other hand, only 15.4% of schools indicated having this low range of 1-3 first-year teachers. In contrast, 59% of low retention schools reported employing between 4-9 first-year teachers.

The same trend was found for high and low retention schools when analyzing the number of second-year teachers within the schools. For high retention schools, 54.7% of schools reported having the lowest range of 1-3 second-year teachers. Low retention schools, again, showed more second-year teachers. Fifteen, or 38.5%, of low retention schools reported employing 4-6 second-year teachers. Another 11 (28.2%) of low retention schools reported even higher numbers of second-year teachers, between 7-12 second-year teachers. Table 14 shows the data for numbers of second-year teachers.

Table 14: Number of Second-Year Teachers in High & Low Retention Schools in 2006-2007

No. of Second-Year Teachers	High Retention Schools		Low Retention Schools	
	Frequency	Percent	Frequency	Percent
0	7	10.9	1	2.6
1-3	35	54.7	10	25.6
4-6	14	21.9	15	38.5
7-9	4	6.3	5	12.8
10-12	3	4.7	6	15.4
13-15	1	1.6	0	0
More than 15	0	0	0	0

Note: Two principals from low retention schools did not answer SQ28.

For third-year teachers, high retention schools again reported less third-year teachers than low retention schools. Twenty-eight, or 43.8% of high retention schools reported having between 1-3 third-year teachers. Only 25.6% of low retention schools reported having the lowest range of between 1-3 third-year teachers. In contrast, 41.1% low retention schools reported between 4-9 third-year teachers in their school. Table 15 displays the data for numbers of third-year teachers in schools.

Table 15: Number of Third-Year Teachers in High & Low Retention Schools in 2006-2007

No. of Third-Year Teachers	High Retention Schools		Low Retention Schools	
	Frequency	Percent	Frequency	Percent
0	6	9.4	3	7.7
1-3	28	43.8	10	25.6
4-6	20	31.3	12	30.8
7-9	7	10.9	4	10.3
10-12	3	4.7	4	10.3
13-15	0	0	2	5.1
More than 15	0	0	2	5.1

The overall trend revealed by these data was that high retention school principals reported more of the lowest range in each category, while principals of low retention schools reported more of the larger ranges. Therefore, the high retention schools had more experienced teachers, whereas low retention schools employed larger numbers of first, second, and third-year teachers. The data collected showed that both high and low retention schools had first, second and third year-teachers, though the number (range) of each was greater in the lower retention schools.

Research Question 4

This study's fourth research question focused specifically on high retention schools. Research Question 4 (RQ4) targeted principals' opinions regarding what they attributed their high retention rates. To answer this question, Survey Questions 30 (SQ30) and 31 (SQ31) were analyzed. Both questions required open ended responses. SQ30 inquired, "If you had to advise a new principal of how to begin to develop an effective induction program, what would you suggest as most important?" Out of 64 principals of high retention schools, 53 (82.8%) wrote suggestions in response to SQ30. SQ31 was slightly less structured in nature than SQ30. It asked, "In regards to school level induction strategies and retaining new teachers, please feel free to enter comments, suggestions, and/or concerns." In response to this question, 20 (31.3%) principals added further comments and recommendations. By reading the comments written in response to these two questions, several patterns and trends were identified. Two general themes that emerged from the comments from SQ30 and SQ31 were mentoring and relationships. In addition, several comments about other induction activities were mentioned.

Mentoring

The most commonly mentioned suggestion given in response to SQ30 focused on pairing new teachers with veteran teachers, or mentoring. Twenty-two principals wrote that this pairing of teachers was the most critical aspect of

their successful induction program. Four more comments referencing the importance of mentoring were noted for SQ31. While it could not be assumed that these four comments were from principals other than the 23 from SQ30, the repeated mention of mentoring suggested its value in the opinion of these principals from high retention schools.

The individual statements about mentoring provided very specific recommendations for making the experience effective for new teachers. Eight of the responses clarified that the pairing of new teachers must be with strong, experienced, well-trained veteran teachers. They stressed the importance of a good match and a strong role model. In addition to the careful matching of mentor and new teacher, principals also emphasized that the pairing should be immediate and to the same grade level; and mentoring should be continuous. Table 16 lists the mentor related comments of high retention school principals. Comments are listed in alphabetical order.

Table 16: Advice from Principals of High Retention Schools Regarding Mentoring

"Accommodate the teacher by immediately pairing them with a veteran teacher."
"Be sure to provide a mentor. Have a special meeting to welcome them."
"Building trust with a mentor."
"Choose carefully who will be a good mentor. Make sure you follow up with the mentor and the teacher to ensure a good fit."
"Encourage your best experienced teachers to be trained to be mentors."

"Find a team of teachers who will mentor and be there to offer support to new teachers."

"Have someone on the grade level adopt this person as their 'little sibling' and inform them of the ins and outs."

"Hiring and mentoring of teachers."

"Link new teacher with someone on grade level."

"Make sure mentors are continually working with new teachers."

"Mentor teachers are a plus for new teachers."

"Mentoring."

"Mentoring, coaching."

"Most of my teachers are veterans. Using them as mentors yields stability in the new teachers."

"Must have mentors in place who are highly effective and motivated teachers."

"Pair immediately with a mentor."

"Pair with experienced teachers."

"Pairing up with an outgoing, effective mentor."

"Pairing with another teacher."

"Provide a mentoring program that is safe and secure for new teachers. I use National Board Certified Teachers (NBCT) as the mentors."

"Provide a strong, organized, exciting teacher as a mentor for the new teacher."

"Provide strong mentors."

"Set regular meeting times for new teachers and mentors."

"Special assistance is needed in the classroom side-by-side with a mentor teacher."

“Strong, effective mentors.”
“We have a welcome wagon of veteran teachers for new teachers who meet monthly.”

Relationships

Though mentoring involves building relationships, 16 principals wrote, in response to SQ30, detailed descriptions of the importance of forging personal relationships with new teachers. These responses were kept separate from mentoring because they did not target matching or pairing teachers, but instead focused on school-wide relationships. Out of the 16 relationship-related comments, 11 of them specifically spoke of the relationship between the principal and the new teacher and 9 of them targeted grade level teams. Principals wrote about the importance of creating a positive, safe, and caring culture in the school. Having an open door policy was mentioned three times, and several responses recommended getting to know new teachers on a personal level. Six additional comments regarding the importance of developing a relationship with new teachers were recorded in response to SQ31. Again, it could not be assumed that these were six additional principals to the 16 who mentioned it in question 30. However, it did highlight relationships as a priority for induction in the opinion of the principals in this study. Table 17 lists the responses to SQ30 and SQ31 that related to relationship building. Comments are listed in alphabetical order.

Table 17: Advice from Principals of High Retention Schools Regarding Relationships

"Build a team school."
"Build the relationship. Listen to concerns and remove barriers."
"Building community in your school and making sure new teachers are part of that."
"Concerted effort to build a strong family-type atmosphere."
"Create a positive culture that includes sharing ideas and decision making."
"Develop a personal relationship with the new teacher from day one."
"Develop trusting relationships where honesty and integrity are vital components."
"Encourage teams to work together."
"Get to know one another on a personal level."
"Get to know your teachers personally as a family."
"I think formal induction is secondary to strong team building. If a grade level team is strong, there will be a group of teachers supporting the new teacher rather than an isolated group."
"Make all new teachers feel welcome and that they can come to you at any time."
"Make it personable and meaningful."
"Make all teachers feel like part of a team."
"Mix teams."
"Principal needs to be involved."
"Provide new teachers with as much support as possible and build a relationship with those teachers so they feel valued and supported."

“Strong interpersonal connection.”
“Take a personal interest in new teachers. This helps them feel comfortable with you when they know you care about them.”
“Teacher-Principal trust.”
“Treat them like a family and provide all the help they need to be successful.”
“Treat them like human beings with a brain. Be there in total support. Listen.”

Other Components of Induction

Principals of high retention schools wrote other suggestions in response to SQ30 and SQ31. Though mentoring and relationship-building were written about most, several other components of induction were also mentioned. Providing common time for planning, scheduling meetings to provide more support, feedback for new teachers, allowing observation of other teachers, and avoiding assigning students with behavior issues were all considered important according to the principals in high retention schools. Ten statements were written about scheduling meetings for new teachers, 6 were written about providing feedback, and 2 related to providing common planning time. Single responses were written about avoiding assigning students with behavior problems to new teachers, allowing observation of other teachers, building confidence at one grade level before moving new teachers to another, and providing more non-class time for new teachers to complete data analysis and paperwork. Table 18 provides the

suggestions provided by principals of high retention schools. Again, the comments were arranged alphabetically.

Table 18: Other Advice from Principals of High Retention Schools Regarding Induction

"Always look for and compliment the things they are doing well."
"Avoid placing struggling students or serious behavior problems with new teachers."
"Be persistent with scheduling meetings and trainings in advance."
"Be sure to provide common planning time for teams."
"Build confidence at a grade level before move to another."
"Celebration and honest feedback."
"Common team planning time."
"Constructive criticism is part of the principal's job."
"Frequent walkthroughs and feedback."
"Have school-level meetings often with new teachers to ask questions or clarify policy."
"Lots of face to face feedback."
"Meet regularly with new teachers."
"Opportunities to observe fellow teachers."
"Provide lots of time and feedback."
"Provide time for informal meetings with the new teachers."
"Regularly scheduled meetings for new teachers."

“Schedule orientation meetings to support beginning stages.”
“Schedule regular meetings for new teachers.”
“Set regular meeting times for new teachers.”
“Set up monthly meetings for new teachers. Proactively select topics to discuss.”
“Support for classroom management.”
“Support with curriculum and planning.”
“New teachers need more non-class time or they will burn out.”
“Tell new hires a timeline for meeting with them so they can plan ahead.”

RQ4 sought to find out to what principals in high retention schools attributed their teacher retention success. The principals’ comments listed in response to SQ30 and SQ31 showed that mentoring and relationship building ranked high on their list of priorities in relation to teacher retention.

Research Question 5

The fifth research question (RQ5) of this study asked how principals’ levels of experience related to the retention rates within schools. For this study, experience included factors such as: (a) years in administration, (b) years teaching prior to an administrative position, (c) total years placed within the school, (d) degree earned, (e) age, and (f) gender. Survey Questions 1-10 (SQ1-SQ10) targeted these experience-related and principal-specific factors. For analysis, each factor was separately compared to the retention rate of each

school using a frequency table in the SPSS program. Frequencies were first analyzed for high retention schools, then repeated with low retention schools, and then data for all schools was presented.

Gender

Gender was included as an experience factor because it could directly relate to the life experiences of the principal. This study sought to find out if gender of the principal had any effect on the teacher retention within an individual school. Survey Question 1 (SQ1) asked principals to identify their gender.

The data showed that there were more female principals than male principals. In the group of 64 high retention schools, 52 (81.3%) principals were female and 12 (18.7%) were male. Out of the 39 low retention schools, 32 (82%) were from female principals and 7 (18%) were from male principals. When analyzing the full set of data, including all schools involved in the study, the results were similar. Out of 147 responses, 122 (83%) were female principals and 25 (17%) were male principals. From these data, it was inconclusive whether gender of the principal influenced teacher retention. It could only be determined that this data set showed more female principals than male principals; and that there were more female principals than male principals in both high and low retention schools. Table 19 displays the findings regarding gender of the principals.

Table 19: Gender of Principals

Gender of Principal	High Retention Schools		Low Retention Schools		All Schools	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Female	52	81.3	32	82.0	122	83.0
Male	12	18.7	7	18.0	25	17.0

NOTE: All schools included high, middle, and low retention schools.

Age

This study also sought to discover if a principal's age had any influence on the retention of teachers. For this study, age was considered an experience factor. Age was analyzed in a similar manner to gender. The high retention groups were first compared to age using a frequency table, followed by low retention schools. All participating schools were also analyzed to determine how all data related to the two retention groups. Table 20 displays the results.

Table 20: Age of Principals

Age of Principal	High Retention Schools		Low Retention Schools		All Schools	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
30-39	10	15.6	6	15.4	21	14.2
40-49	13	20.3	12	30.7	40	27.2
50 or More	41	64.1	21	53.8	85	57.8

NOTE: All schools included high, middle, and low retention schools. One participant, not from a high or low retention school, left this item blank.

The data showed that the breakdown of percentages across age groups were relatively similar among the groups of schools analyzed. High retention schools had slightly more principals who fell in the age range of 50 years or older than the low retention group. Forty-one (64.1%) high retention schools had principals who were 50 years or older, whereas only 21 (53.8%) low retention schools had principals in this age range. In contrast, high retention schools had fewer principals in the 40-49 years old range – 10.4% less than the low retention schools. However, when analyzing all collected data by age, the percentages were similar. According to this analysis, high retention schools tended to have slightly older principals than low retention schools.

Highest Degree Earned

Survey Question 3 (SQ3) asked principals to report their highest degree earned. This was considered an experience factor, as it related to the level of schooling experience obtained. This study sought to find out if high retention schools tended to have principals with higher degrees earned.

The data did not display a pattern between teacher retention and the level of schooling of the principal. In high retention schools, one (1.6%) principal reported having a bachelors degree as the highest degree (which should not be possible according to hiring criteria), 44 (68.8%) principals had a masters degree, 6 (9.4%) principals had a specialist degree, and 13 (20.3%) had doctorate degrees.

In low retention schools, no principals had a bachelors degree, 28 (71.8%) principals had masters degrees, 3 (7.7%) principals had specialists degrees, and 8 (20.5%) principals earned doctorate degrees. When compared to the overall data, including all participating schools, the data were similar.

Analyzing the total of principals' responses from the 147 schools, one (0.6%) had a bachelors degree, 103 (70%) earned a masters degree, 14 (10%) had a specialist degree, and 29 (19.7%) had a doctorate degree. Therefore, the level of degree earned by the principal did not seem to have a significant influence on teacher retention. Table 21 contains the data regarding highest degree earned.

Table 21: Highest Degree Earned by Principals

Highest Degree Earned	High Retention Schools		Low Retention Schools		All Schools	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Bachelors	1	1.6	0	0	0	0
Masters	44	68.8	28	71.8	103	70.0
Specialist	6	9.4	3	7.7	14	10.0
Doctorate	13	20.3	8	20.5	29	19.7

NOTE: All schools included high, middle and low retention schools. One principal, not from a high or low retention school, did not answer SQ3.

Total Years in Education

Principals were asked, in Survey Question 4 (SQ4), how many total years they served in education, including the current year of the study. Table 22 displays the principals' responses for SQ4.

Table 22: Principals' Total Years in Education

No. of Years in Education	High Retention Schools		Low Retention Schools		All Schools	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Less than 5	0	0	0	0	0	0
5-10	2	3.1	2	5.1	5	3.4
11-15	7	10.9	4	10.3	14	9.5
16-20	8	12.5	10	25.6	28	19.0
21-25	11	17.2	5	12.8	26	17.7
26 or more	36	56.3	18	46.2	74	50.3

The data related to the total years in education revealed several significant differences between high and low retention schools. First, high retention schools had a significantly higher percentage of principals with 26 or more years experience in the field of education. High retention schools had 36 out of 64 (56.3%) principals with 26 or more years in education. Low retention schools had 18 out of 39 (46.2%) principals with 26 or more years in education.

Principals with 21-25 years of experience in the field of education tended to be higher in high retention schools as well, though not as significant. High retention schools had 11 (17.2%) principals with 21-25 years in education, whereas low retention schools only had 5 (12.8%) principals with the same time in education.

A second difference in these data was that low retention schools reported significantly more principals with 16-20 years experience in education. High retention schools reported 8 (12.5%) principals with 16-20 years in education, whereas low retention schools had 10 (25.6%) principals with comparable education experience.

From these data, it appeared that high retention schools tended to have principals who had been in the field of education slightly longer than lower retention schools. However, the limitations of this study prevent these data from proving an exact correlation existed.

Years in an Instructional Position

In addition to the previous experience factors addressed, this study asked principals about their experience in an instructional position in the field of education. Survey Question 5 (SQ5) asked how many years each principal served in an instructional position within an elementary setting. Survey Question 6 (SQ6) asked the same question about a setting higher than elementary, such as middle school, high school or at the university level. Two tables were created to show the data collected for these two items. The data were analyzed for high retention schools, low retention schools, and compiled to compare the total data. Table 23 contains the data collected regarding the number of years principals served in an instructional position at the elementary school level.

Table 23: Number of Years in an Instructional Position at the Elementary Level

	High Retention Schools		Low Retention Schools		All Schools	
No. of Years	Frequency	Percent	Frequency	Percent	Frequency	Percent
None	1	1.6	3	7.7	6	4.1
Less than 5	5	7.8	8	20.5	14	9.5
5-10	21	32.8	11	28.2	49	33.3
11-15	20	31.3	11	28.2	42	28.6
16-20	8	12.5	5	12.8	21	14.3
More than 20	9	14.1	1	2.5	15	10.2

When compared to all schools, as well as in comparison to each other, two main differences emerged between high retention schools and low retention schools. First, low retention schools tended to have higher percentages of principals with less than five years experience in an instructional position in an elementary setting. Eight of the 39 (20.5%) low retention school principals reported serving less than five years of teaching in an elementary position. High retention school principals, however, reported only 5 out of 64 (7.8%) principals with this amount of elementary instructional experience. When compared to all schools, low retention schools had a higher percentage of principals with less than five years in an elementary position and high retention schools had a lower percentage of principals with less than five years in the same setting.

The second major difference, shown by the data in Table 23, was that high retention schools tended to have a higher percentage of principals with more than 20 years experience in an instructional position in an elementary setting. High retention schools had 9 (14.1%) principals who boasted more then 20 years teaching at the elementary level. This was higher than the percentage found for all schools. Low retention schools, on the other hand, had only one (2.5%) principal with more than 20 years of elementary teaching experience. This was lower than the percentage found for all schools.

Based on these two differences, years of experience in an elementary, instructional position seemed to matter for teacher retention. According to the data collected, principals with more experience instructing at the elementary level tended to have better teacher retention when they became school leaders.

Next, Table 24 shows the data collected for SQ6, which asked each principal how many years were served in an instructional position in a setting higher than elementary level, such as middle school, high school, or university. The data received showed that very few elementary school principals surveyed had much, if any, experience teaching in a setting higher than elementary. In fact, the majority of all schools and the majority of high retention schools had no experience instructing at a higher level.

Table 24: Number of Years in an Instructional Position Higher than Elementary Level

No. of Years	High Retention Schools		Low Retention Schools		All Schools	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
None	44	68.8	19	48.7	90	61.2
Less than 5	13	20.3	15	38.5	38	25.9
5-10	6	9.4	2	5.1	12	8.1
11-15	0	0	2	5.1	4	2.7
16-20	1	1.6	0	0	2	1.3
More than 20	0	0	0	0	0	0

NOTE: One principal from a low retention school did not answer SQ6.

Though most principals had very little experience at a setting higher than elementary, the data revealed a slight difference between high and low retention schools. First, principals at low retention schools reported more instructional experience in a school setting higher than elementary. Low retention school principals had a lower percentage of principals with no experience (48.7%) in a higher setting and a higher percentage (38.5%) of principals in the less than five years range, when compared to high retention schools (68.8%, 20.3%, respectively).

Overall, the data collected in relation to principals' teaching experience prior to becoming an administrator showed that elementary principals tended to have instructional experience in an elementary setting. It also introduced the possibility that more years of experience in an instructional position at the elementary level might give principals an advantage towards retaining teachers in their school.

Assistant Principal Experience

This study also addressed the experience principals had as assistant principals. Specifically, SQ7 asked principals how many years they were employed as an assistant principal prior to becoming a principal. The following table (Table 25) outlines the findings for all of the data collected.

Table 25: Number of Years as an Assistant Principal

No. of Years	High Retention Schools		Low Retention Schools		All Schools	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
None	1	1.6	0	0	2	1.4
Less than 3	20	31.1	7	17.9	37	25.2
3-6	27	42.2	25	64.1	72	49.0
7-9	9	14.1	0	0	18	12.2
10 or More	6	9.4	6	15.4	16	10.9

NOTE: Two principals did not answer SQ7. One principal was from a low retention school and one principal was from a middle retention school.

The overall trend of the data showed that about half of all principals (49%) had 3-6 years experience as an assistant principal. Similarly, the 3-6 year range was most selected by principals at both high and low retention schools. Twenty-seven (42.2%) principals at high retention schools reported serving 3-6 years as an assistant principal, while principals from low retention schools reported slightly more experience, with 25 (64.1%) principals in the 3-6 year range. Approximately 25%, or 37, of all principals selected less than 3 years as their assistant principal experience. High retention schools showed slightly more (20 principals or 31.1%) and low retention schools reported slightly less (7 principals or 17.9%) in the less than 3 year category. The overall pattern of the data collected for SQ7 demonstrated that the majority of principals for all schools, as well as in the high and low retention focus groups, served between 1 and 6 years in an assistant principal position before becoming a principal.

Experience as a Principal

This study also sought to find out if years of experience in a principal position influenced teacher retention. The preliminary assumption was that more years in a principal position might lead to better teacher retention. Survey Question 8 (SQ8) targeted this level of experience. Principals could choose less than 3 years, 3-6 years, 7-9 years, or 10 or more years in a principal position.

The results for all schools were well-distributed. Thirty-six principals (24.5%) reported less than 3 years experience, 40 principals (27.2%) reported 3-6 years experience, 30 principals (20.4%) reported 7-9 years experience, and 38 (25.9%) principals reported 10 or more years in a principal position.

Data collected for high retention schools were evenly distributed among the choices. Principals with less than 3 years experience as a principal numbered 20, or 31.1%. Twenty-seven (42.2%) principals at high retention schools had 3-6 years experience, 9 principals (14.1%) had 7-9 years principal experience, and 6 (9.4%) had 10 or more years in a principal position. For high retention schools, more than 73% of principals had between 1-6 years experience as a principal.

Data collected for low retention schools also differed from the total data compiled. In low retention schools, 15 (38.5%) principals had less than 3 years experience, 8 (20.5%) had 3-6 years experience, 5 (12.8%) had 7-9 years experience, and 10 (25.6%) had 10 or more years experience in the principal position.

Compared to high retention schools, low retention schools had a higher percentage of principals with less than 3 years experience as principal, but less in the 3-6 year range. Both groups reported a majority of principals with 1-6 years experience as a school leader. Table 26 presents the data for SQ8.

Table 26: Number of Years as a Principal

No. of Years	High Retention Schools		Low Retention Schools		All Schools	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Less than 3	20	31.1	15	38.5	36	24.5
3-6	27	42.2	8	20.5	40	27.2
7-9	9	14.1	5	12.8	30	20.4
10 or More	6	9.4	10	25.6	38	25.9

NOTE: Three principals did not answer SQ8. Two of these principals were from high retention schools and one was from a low retention school.

Years as Principal in the Current School

Another item on the survey, SQ9, addressed experience as principal at the current school. This question asked how many years the principal was assigned to the current school, including the current school year. The answer choices included one year, two years, or three or more years. For this analysis, only high and low retention schools were included. Table 27 contains the data.

The data showed that high retention schools had slightly higher percentages of principals who were assigned to their current school for three or more years. High retention schools reported 17 (26.6%) principals with only one year at the current school, 12 (18.8%) principals with two years, and 34 (53.1%) principals with 3 or more years assigned to the current school. Low retention

schools, on the other hand, had 13 (33.3%) principals with only one year, 8 (20.5%) with two years, and 17 (43.6%) principals with three or more years assigned to the current schools.

Table 27: Number of Years at the Current School

	High Retention Schools		Low Retention Schools	
No. of Years	Frequency	Percent	Frequency	Percent
1	17	26.6	13	33.3
2	12	18.8	8	20.5
3 or More	34	53.1	17	43.6

NOTE: One principal from a high retention school and one principal from a low retention school did not answer SQ9.

Analysis for RQ5 involved investigating how principals' levels of experience influenced teacher retention in schools. Responses from SQ1-SQ10 were used to determine patterns or trends in the data. From this analysis, total years in education, years of instructional experience in an elementary setting, and years as principal in the current school seemed to show differences between high retention, low retention, and all schools.

Additional Retention Factors

In addition to the experience factors targeted in RQ5, this study added several survey questions that focused on demographics. For example, survey questions 11-13 (SQ11-SQ13) asked about the year the school opened, student enrollment, free and reduced lunch percentages, and district. These were considered outside factors that may or may not influence teacher retention. Though they did not directly answer any of the five research questions, it was thought that they may add depth and consideration to this study.

Year Current School Opened

SQ11 asked principals what year their school opened. When analyzing the year the school opened for high and low retention school groups, two trends emerged. First, high retention schools tended to be older schools. More than 60% of high retention schools were opened in 1970 or earlier. Low retention schools were older schools. However, only 51.3% of the low retention schools were opened in 1970 or before.

The second pattern that appeared in the data concerned the newer schools. Low retention schools reported a higher percentage of newer schools. For example, 38.5% of low retention schools opened in 1991 or later. Only 25% of high retention schools opened after 1990. Table 28 shows the data collected by principals' responses to SQ11.

Table 28: Year School Opened

Year	High Retention Schools		Low Retention Schools	
	Frequency	Percent	Frequency	Percent
Before 1960	24	37.5	9	23.1
1960-1970	15	23.4	11	28.2
1971-1980	4	6.3	1	2.6
1981-1990	5	7.8	2	5.1
1991-2000	5	7.8	10	25.6
2001-2005	8	12.5	4	10.3
2006-2007	3	4.7	1	2.6

NOTE: One principal, from a low retention school, did not answer SQ11.

Student Enrollment

Student enrollment was also analyzed for high and low retention schools. SQ12 asked about student enrollment. The purpose was to discover if the number of students in a school (another measure of school size) influenced teacher retention. The data revealed one significant difference between high and low retention schools. Only two (3.1%) high retention schools were large schools with more than 900 students enrolled. In comparison, 10 (25.6%) low retention schools had a student enrollment of more than 900 students. For the high retention school group, the majority of schools housed 900 or less students,

whereas the majority of low retention schools ranged from 500 to more than 900 students. Table 29 contains this data.

Table 29: Student Enrollment

	High Retention Schools		Low Retention Schools	
No. of Students	Frequency	Percent	Frequency	Percent
Fewer than 500	15	23.4	6	15.4
500-700	25	39.1	13	33.3
701-900	22	34.4	9	23.1
More than 900	2	3.1	10	25.6

NOTE: One principal, from a low retention school, did not answer SQ12.

Free and Reduced Lunch Percentage

The free and reduced lunch percentage of each school was obtained to assess a measure of the socioeconomic status of the school. One significant difference was found in the results. Low retention school principals reported higher percentages of free and reduced lunch in their schools. Seventeen (43.6%) low retention schools reported having 76-100% free and reduced lunch, whereas only 19 (29.7%) high retention schools had this same level of free and reduced lunch percentage. Both high and low retention schools had approximately 13% schools in the “less than 25%” free and reduced lunch category. Table 30 contains the data regarding free and reduced lunch.

Table 30: Percentage of Students in the Free and Reduced Lunch Program

Percentage of Students	High Retention Schools		Low Retention Schools	
	Frequency	Percent	Frequency	Percent
Less than 25%	8	12.5	5	12.8
25-50%	20	31.3	9	23.1
51-75%	17	26.6	7	17.9
76-100%	19	29.7	17	43.6

NOTE: One principal, from a low retention school, did not answer SQ13.

District

The district from which each principal responded was tracked as responses were collected. Originally, Hillsborough County Public Schools (SDHC) and Orange County Public Schools (OCPS) were selected for this study because they shared many similarities in size and demographics. Therefore, tracking the district of each school was strictly for informational purposes. It was not expected that a major difference in teacher retention would be found between districts.

Table 31 shows the results. For high retention schools, both SDHC and OCPS had exactly 50% of the schools in the group. For low retention schools, OCPS had more schools. For low teacher retention, 26 out of 39 (66.7%) schools were from OCPS and 13 (33.3%) schools were from SDHC. However, for all schools involved in the study OCPS had more schools participate than SDHC.

Eighty-two schools (55.8%) that participated in the study were from Orange County Public Schools, while 65 (44.2%) schools were from Hillsborough County Public Schools.

Table 31: Comparison of Districts in High and Low Retention Schools

	High Retention Schools		Low Retention Schools		All Schools	
District	Frequency	Percent	Frequency	Percent	Frequency	Percent
OCPS	32	50.0	26	66.7	82	55.8
SDHC	32	50.0	13	33.3	65	44.2

NOTE: OCPS represents Orange County Public Schools; SDHC represents Hillsborough County Public Schools.

Summary

This chapter, Chapter Four, focused on the analyses of the data. It addressed each Research Question individually and dissected each Survey Question as it applied. Tables were used to show the data as well. For RQ1, the components of induction were listed from most-implemented to least-implemented, according to the responses to SQ14. Formal observation by the principal was the most reported component of induction. For RQ2 and RQ3, definitions of high retention and low retention schools were provided. Sixty-four schools comprised the high retention group and 39 schools made up the low retention school group. These two groups were compared as each of the

following factors were analyzed: (a) migration, (b) attrition, (c) reasons given for leaving, (d) total number of instructional staff members, (e) and number of first, second, and third-year teachers. RQ4 provided trends in advice given by principals in high retention schools. Mentoring and relationships were two trends discussed. Finally, the findings for RQ5 showed how principals' level of experience related to teacher retention.

Chapter Five, the final chapter, will discuss these findings in more depth. Each Research Question will again be addressed individually and conclusions will be developed according to the data collected. Chapter Five will also provide recommendations for future study and implications for practice.

CHAPTER FIVE:
SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Introduction

Teacher retention continued to be a critical issue in education in 2007 (U.S. Department of Education, 2005). The purpose of this study was to determine if school-based induction strategies could help retain teachers. This study focused on many variables of teacher retention, including migration, attrition, school size, demographics, and principal's experience. In addition, components of inductions were investigated. Schools that had high teacher retention and schools that had low teacher retention were compared and contrasted.

Chapter Five will share a summary of findings and conclusions. Each Research Question will be discussed individually. A summary of findings and recommendations for future research will follow. Chapter Five will conclude with implications and recommendations for practice.

Statement of the Problem

This study sought to show what induction strategies were being implemented within selected elementary schools in 2007, as well as describe and compare the effectiveness of those induction programs. This knowledge will enable school leaders to strengthen existing school-level induction programs.

Methodology

This was a descriptive study. It involved both quantitative and qualitative data, which were intended to create a picture of the induction taking place in the schools that participated.

Elementary schools in two, large, public school districts in Florida, and the induction programs within those schools, were targeted by this study. These districts - Hillsborough County Public Schools and Orange County Public Schools – were comparable, with similar student membership, free and reduced lunch percentages, teacher salaries, average teachers' years of experience, and Florida Comprehensive Assessment Test achievement results (Florida Department of Education, 2004).

The principal from every elementary school in the two districts were invited to participate. This included principals from 147 schools in Hillsborough County Public Schools and 127 schools in Orange County Public Schools. Due to changes in principal assignments and schools that experienced principal transition, the actual population for this study included 249 elementary school principals. Participation was voluntary and it was emphasized that all information collected would be kept confidential. At the conclusion of the data collection, a total of 147 principals had participated; of which 65 (44.2%) were from Hillsborough County Public Schools and 82 (55.8%) were from Orange County Public Schools.

An Internet survey service, SurveyMonkey©, was utilized to gather data for this study. Through this service, an electronic questionnaire (Appendix A) was sent to all elementary schools in Hillsborough County Public Schools and Orange County Public Schools. Four contacts were used to present the purpose of the study, send the survey, and thank participants for their involvement. These contacts can be viewed in Appendices B, C, D, and E. Due to initial low participation from Hillsborough County Public Schools, a paper copy of the survey was sent to 114 principals through the United States Postal Service. At the conclusion of the study, a total of 147 surveys provided the necessary data for analyses.

The questionnaire designed for this study (Appendix A) collected both qualitative and quantitative data. It contained 32 questions, each of which correlated directly with a content-based category of at least one of the five Research Questions of the study. Most questions offered a multiple choice response. Some questions allowed only one response, whiles others allowed multiple items to be selected. Several survey questions asked for an open-ended response, or added the option to input an “other” answer. In addition, the questionnaire included a space to add any further questions or comments about induction and an option to request a summary of the results.

Two pilot groups were invited to sample the questionnaire. One pilot group consisted of school administrators, resource teachers, and doctoral students.

The second group included graduate students. These groups assisted with ensuring reliability and validity of the survey by providing feedback on the survey and contact letters. On January, 26, 2007, the questionnaire and corresponding contacts were exempted from further review by the University of Central Florida's Institutional Review Board (Appendix F).

Data Analysis

This study was guided by the following five research questions.

1. What components of teacher induction are being implemented within Florida's elementary schools in Hillsborough County Public Schools and Orange County Public Schools?
2. What factors are present in schools that have high teacher retention rates, e.g. for migration and attrition?
3. What factors are present in schools that have low teacher retention rates, e.g. for migration and attrition?
4. In schools that have high teacher retention rates, to what do principals attribute those higher retention rates?
5. How does a principal's level of experience (such as years in administration, years teaching prior to an administrative position, total years placed within the school, age, and gender) relate to migration and attrition rates within a school?

Research Question 1

What components of teacher induction are being implemented within Florida's elementary schools in Hillsborough County Public Schools and Orange County Public Schools?

The analysis of data for RQ1 involved organizing the components of induction that were implemented in schools, according to principals' responses to Survey Question 14 (SQ14). The components were listed from most implemented in schools to least implemented, and percentages for each were calculated. Based on these percentages, several significant findings were revealed.

First, it was noticed that every induction activity listed as a response for SQ14 was chosen by participants. The most selected activity was formal observation by the principal, which was selected by 146 of the 147 (98.6%) principals. The least selected activity was certification exams study group, which was selected by 11, or 7.4%, of the principals. Therefore, every activity was implemented to some extent in schools.

Nineteen of the 21 induction activities were implemented in more than 50% of the participating schools. Twelve of the components listed were implemented in more than 80% of the schools. These 21 activities were chosen for the survey because they were reported in the literature as important components of induction. These findings suggested that principals should consider these components as important features of a successful induction

program. Whether they are, in fact, effective strategies could not be determined by the limited data that resulted from the study.

As stated in Chapter Four, the top eight induction components, each selected by more than 90% of principals, were: (a) formal observation by the principal, (b) mentoring, (c) offer school-level professional development, (d) provide an open door policy, (e) visit classrooms of new teachers often, (f) final (end of the year) assessment conference, (g) provide common planning time for grade level, and (h) encourage district-level professional development. Out of these eight, it was interesting to note that four of the choices were typically induction components that were either required or highly encouraged by the district. While each district differed in requirements, most districts mandated formal observations of new teachers. Likewise, mentoring (to some degree), district professional development, and conferencing at the end of the year to review the teacher's final assessment were all typically mandated for schools.

In regards to mentoring, which tied for second most often implemented induction activity, it was discovered that mentoring tended to be required for first-year teachers, but not nearly as often for second or third-year teachers. For first-year teachers, mentoring was required in 93.9% of the schools. On the other hand, it was required for second-year teachers in only 18.9% of schools and for third-year teachers in 5.4% of schools. Because mentoring was typically required

(and funded) by the school district for first-year teachers only, these data were not surprising.

The questionnaire also asked if each school offered mentoring, as opposed to requiring it. This information better demonstrated how important mentoring was to the principal. The results revealed that 95.9% of principals offered mentoring to first-year teachers, 77.7% offered it to second-year teachers, and 48.6% offered mentoring to third-year teachers. These numbers showed that mentoring was often offered even if it was not required. It suggested that providing mentoring was, indeed, considered an important component of induction by principals.

The type of training required for mentors was also investigated. It was found that most schools, 78.4%, sent their mentors to district mandated training. Fewer schools (46.6%) provided school-level mentor training. Video and online training were seldom required (13.5% and 6.1%, respectively). Little could be determined by the data, except that mentors were usually trained by the district.

There were eight components of induction selected by between 70-90% of principals. These components of induction were: (a) give time to observe veteran teachers, (b) involve new teachers in decision making, (c) mid-year assessment conference, (d) provide positive feedback for effective practice, (e) preliminary assessment conference with principal, (f) team building activities, (g) allow new teachers to teach same grade level for at least two consecutive years, and (h)

offer in-service targeting school policies and procedures. As mentioned before, the high percentages indicated that many principals considered these induction activities to be important.

Providing positive feedback ranked 12th on the list of most-implemented induction activities, with a selection rate of 82.4%. The most selected method for providing positive feedback (79.7%) was face-to-face meetings with the teacher. Email (68.9%), comments on formal assessment (64.9%), and handwritten notes (64.2%) were used slightly less for this purpose. Fifty-two percent of principals made announcements at staff meetings and only 12.8% left postings for all staff to see. According to the data, it appeared that face-to-face meetings with new teachers were the preferred method for providing feedback. These data also positively corresponded to the advice written by principals in response to SQ30, in which they reported that relationship building, through personal connections, was critical to supporting and retaining teachers.

Team building was investigated further by SQ15, which asked how often team building occurred. Though team building was reported by 76.4% of principals as an induction component implemented in the school, only 55.4% said they offer team building activities once a month or more often. Comments written in the “other” option verified that some principals felt team building was necessary only a few times each year, or on an as-needed basis. For these

reasons, it appeared that team building might be recognized as important by principals, but not implemented often.

There were five induction activities that were selected by less than 60% of principals. Compared to the other 16 induction components, these stand out as the least implemented. These components were: (a) reduce the number of students with discipline issues when assigning students to new teachers, (b) provide common planning time with mentor, (c) implement professional reading book club, (d) reduce workload of new teachers, and (e) certification exams study group. The low ranking of these strategies indicated that they were less important for induction in the opinions of the principals, as compared to the other listed activities. However, another possibility was that these components were compromised by the higher ranked activities. For example, encouragement of school and/or district professional development may conflict with making in-service for school policies and procedures a priority. Further investigation would be necessary to discover if any of the listed activities compete with each other.

Similarly, scheduling conflicts may create competition between induction components. In this area of analysis, it was interesting to note the discrepancy between mentoring (98%) and providing common planning time with mentor (54.1%). Mentoring was the 2nd most implemented induction activity, whereas common planning time with mentor ranked 18th. In regards to planning time, it appeared that providing common planning time for grade levels (92.6%) was

more important to principals than providing common planning time for mentors and their protégés. Providing common planning time for grade levels ranked 7th on the list of induction components. Therefore, the possibility existed that there may not be enough flexibility in scheduling to allow for both types of common planning times within the school day.

Though it ranked next to last out of the 21 components of induction, conflicting data made it hard to determine much about how principals reduced the workload of new teachers. Only 27 (18.2%) principals named this as a form of induction at their school in SQ14, yet at least 47 (31.9%) principals responded to SQ17 and explained how they reduced workload in their school. According to SQ17 results, the two most implemented forms of reducing the workload of new teachers was by assigning less committee requirements than veteran teachers and by offering one-on-one assistance for learning paperwork procedures. More data would need to be obtained to determine a reason for the discrepancy in data or conclude any finding.

Research Question 2 and 3

What factors are present in schools that have high teacher retention rates, e.g. for migration and attrition?

What factors are present in schools that have low teacher retention rates, e.g. for migration and attrition?

Due to the similarity of RQ2 and RQ3, and the benefits of comparing and contrasting results, the data were analyzed together. For the purposes of this

study, high retention schools were defined as schools that lost 3 or less teachers to migration and/or attrition. There were 64 high retention schools. The definition of low retention schools was any school that lost 7 or more teachers due to migration and/or attrition. There were 39 low retention schools. Schools that lost between 4-6 teachers (there were 41 in this study) were considered middle retention schools, according to this study, and were not included in the analysis or discussion of findings for RQ2 or RQ3.

The factors targeted for RQ2 and RQ3, and reported in response to SQ22-29, were: (a) migration, (b) attrition, (c) reasons given by teachers for leaving, (d) number of instructional staff members, (e) number of first-year teachers, (f) number of second-year teachers, and (g) number of third-year teachers.

Migration, in this study, referred to the occurrence of a teacher leaving one school to go to another school. Responses to SQ22 showed that 70.3% of high retention schools lost teachers due to migration and 97.4% of low retention schools experienced migration of teachers. In addition, SQ22 offered ranges of numbers for how many teachers left to go to another school. All 70.3% of high retention schools who reported migration lost 3 or less teachers to migration. In contrast, 89.7% of low retention schools reported experiencing migration and losing more than 3 teachers. Therefore, low retention schools experienced significantly higher rates of teacher loss due to migration.

It was expected that low retention schools would have higher percentages of teacher migration, and lose higher numbers of teachers within each school, as compared to high retention schools. The real significance of these findings was in the reason behind why the teachers chose to continue teaching but not at their present school. SQ22 could not provide this insight. More information was necessary to reveal why low retention schools could not retain these teachers.

Attrition, like migration, occurred when teachers left their school. Attrition, however, was defined as teachers who left with the intention to leave the education profession. Attrition numbers were not as high as migration. In high retention schools, 31.3% of principals reported experiencing attrition. In low retention schools, 51.3% of principals reported teachers left due to attrition.

Again, it was expected that low retention schools would have higher percentages of teacher attrition. However, it was interesting to note that so many schools in each category could report zero attrition. In high retention schools, 68.7% of schools had zero attrition and in low retention schools 48.7% also reported zero attrition. These data indicated that schools were losing teachers more to migration than to attrition.

The reasons teachers gave for leaving were important to gain a better understanding of migration and attrition. The reasons for leaving listed in SQ24 were: (a) residential move, (b) family building, (c) personal issues, (d) illness, (e) continue education, (f) salary, (g) career change, (h) retirement, and (g) position

change within the field of education. An “other” option was provided for principals to add any unlisted reasons given to them. Twenty-two principals wrote additional reasons in this “other” category.

For both high retention schools and low retention schools, residential move was the reason given most for leaving a school. In high retention schools, 56.3% (36) of principals reported teachers leaving due to residential move and 71.8% (28) of low retention school principals reported the same reason. These percentages were significantly higher than those reported for any of the other listed reasons. Though it would have to be assumed that these teachers continued to teach, residential move would most likely fall into the migration category, and could possibly explain some of those high numbers.

Personal issues and retirement were the next most selected choices for reasons for leaving. In high retention schools, 18.8% (12) of principals selected personal issues. In low retention schools, 33.3% (13) of principals selected personal issues. It was impossible to determine if personal issues accounted for migration or attrition.

Retirement, in comparison, was a definite example of attrition. It was reported as the reason for leaving by the same number and percentages of principals as personal issues. In high retention schools, 18.8% (12) of principals selected retirement. In low retention schools, 33.3% (13) of principals selected retirement. This study was limited to the reports of retirement that occurred in the

schools studied. Due to this study's focus on new teachers and induction strategies, retirement was not considered beyond the responses given in SQ24.

Position change in education was the next most selected reason, in both high and low retention schools. In high retention schools, 14.1% (9) of principals lost teachers due to position change and in low retention school 30.8% (12) of principals lost teachers for this reason. Position change in education was an example of migration.

Family building, selected by 12.5% (8) of high retention school principals and by 28.2% (11) of low retention school principals, was an example of attrition. Maternity leave, or other leave for the purpose of family-building, could be a temporary change for schools, as the teacher usually returns to work at a later time. It could also become an example of migration, if the teacher decided to return to a different school. Like retirement, this study was limited to the responses in SQ24, and did not pursue family building further. Unlike retirement, however, family building often affects the younger and newer teachers, which might have an impact on reports of induction success.

SQ24 also listed illness, continuing education, salary, and career change as reason why a teacher might leave a school. However, these reasons were significantly less reported as an issue by schools. By the infrequency of selection, some inferences could be made about these reasons. First, it was not surprising that illness was not reported often. Because illness was not a decision,

but a situation, the decision to leave a career due to illness would be considered a last resort.

It was also not surprising that continuing education was not selected often. Continuing their education may be a decision teachers make in addition to teaching. It would not necessarily lead to migration or attrition, but could be pursued while teaching.

Salary, as a reason for leaving teaching, was an interesting finding. Salary would be an example of attrition, as salary typically would not change just by changing schools. The lack of selection by principals seemed to correspond to the literature on retention, which reports that salary was not a major reason why teachers decide to quit (Darling-Hammond, 2003). According to the data collected for this study, it did not appear to be a reason why teachers chose to leave.

Another factor of teacher retention this study sought to explore, through RQ2 and RQ3, was the size of each school. It was predicted, by the researcher, that the size of the school might be a factor of teacher retention. The total number of instructional staff members employed in each school in the 2006-2007 school year was used to analyze the size of each school. SQ25 asked principals for this number. Based on their responses, and contradictory to the prediction, school size did not appear to be a significant factor of teacher retention. High and low retention school principals reported comparable numbers of instructional staff

members in each of the size ranges listed. In fact, one high retention school principal reported 126-150 staff members, and two other high retention school principals reported between 101-125 staff members. No low retention schools were as large. In addition, the size of high and low retention schools paralleled the pattern of data for all participating schools.

The last factor studied for RQ2 and RQ3 was the number of first, second, and third-years teachers in each high and low retention school. It was predicted by the researcher that high retention schools would have more experienced teachers and low retention schools would contain more of the newest teachers.

The data showed that high retention schools did, in fact, employ more experienced teachers. For high retention schools, 71.9% (46) of schools employed between 1-3 first-year teachers. For low retention schools, only 15.4% (6) reported the low range of 1-3 first-year teachers. The majority (23 schools or 59%) of low retention school principals reported having between 4-9 first-year teachers. The same trend was found between high and low retention schools for second and third-year teachers. Therefore, the high retention schools had more experienced teachers, whereas the low retention schools employed higher numbers of first, second, and third-year teachers.

Research Question 4

In schools that have high teacher retention rates, to what do principals attribute those high retention rates?

Of the 64 high retention schools, 82.8% (53) of the principals chose to answer the question in SQ30, “If you had to advise a new principal of how to begin to develop an effective induction program, what would you suggest as most important?” SQ31 was slightly more open-ended and asked, “In regards to school-level induction strategies and retaining new teachers, please feel free to enter comments, suggestions, and/or concerns.” In response to this statement, 31.3% (20) of principals of high retention schools chose to add a comment about induction. The analysis of these two questions involved describing the patterns between principal statements.

RQ4 was especially significant for this study, as it specifically targeted what high retention schools were doing to retain teachers. The comments made by principals directly reported what they value in regards to induction methods at their school. Two general themes about induction, mentoring and relationships, emerged from these statements.

Twenty-two principals wrote about the importance of pairing new teachers with veteran teachers, or mentoring, in response to SQ30. Another 4 statements were written about mentoring in response to SQ31. This was the most commonly mentioned suggestion among the responses. Mentoring, therefore, was at the top of the list as priority for induction, according to the principals who had proven successful at teacher retention. This positively corresponded to the list of most

implemented induction activities (SQ14) in all of the schools participating in this study, as mentoring ranked second on that list (see Table 2).

The individual statements made about mentoring provided detailed recommendations for making the experience effective for new teachers. This distinction was important because most of the schools in the study seemed to value mentoring, so high retention schools may have implemented it differently. Eight responses stressed the importance of pairing the new teacher with strong, experienced, and well-trained veteran teachers. A good match and strong role model were also emphasized. Principals of high retention schools wrote about mentoring being immediate, within the same grade level, and continuous.

Many of these comments circled the issue of who was chosen to be a mentor. Overall, the strength of the mentor and “fit” of the match seemed to determine the effectiveness of the mentoring, according to principals in high retention schools. However, according to the data analysis in the previous section, low retention schools had significantly higher percentages of first, second, and third-year teachers who would require mentors. In this way, low retention school principals may not have had the flexibility in choosing mentors that high retention schools had. More new teachers and less experienced teachers would make the mentor matching more difficult for low retention school principals.

It was interesting to discover that the two most suggested induction components were mentoring and relationships. Mentoring, in itself, revolves around the relationship built between mentor and protégé. Yet, the next most advised component of induction was building relationships. Sixteen (25%) principals wrote about this concept in response to SQ30, and another 6 (9.4%) mentioned it in SQ31. Eleven comments were specifically about the relationship between the principal and new teacher and 9 were about grade level team relationships. The culture of the school was referred to in this context, as well. The words “personal”, “trust”, and “team” were repeatedly included in these statements.

This, along with the similar statements about the relationship building necessary for effective mentoring, indicated a strong belief by principals in high retention schools that personal connections were directly linked to teacher retention. This concept was also verified by many of the most-implemented induction activities listed in response to SQ14 and discussed in the RQ1 section. For example, the statement, provides an open door policy was ranked 4th on the list of induction activities, with 98% (145) of all principals reporting that they used this strategy. Providing an open door, thereby increasing availability and personal contact, was one way the literature showed principals could support new teachers (Richards, 2004). Visit classrooms of new teachers often was ranked 5th on the list, with 96.6% (143) of principals reportedly using the strategy at the time

of this study. Provide common planning time for grade levels (92.6%, 137 schools, ranked 7th) and involve new teachers in decision making (83.1%, 123 schools, ranked 10th) were other examples of activities that could increase chances for relationship building. It seemed, from the comments written, that a focus on the relationships built during these moments of contact was more important to successful induction than simply offering the activity.

In addition to mentoring and relationships, principals from high retention schools wrote other suggestions about induction in response to SQ30 and SQ31. Providing common time for planning, scheduling meetings to provide more support, feedback for new teachers, allowing observation of other teachers, and avoiding assigning students with behavior issues were all considered important according to principals at high retention schools. Many of these other statements involved induction activities listed in SQ14. However, no distinct pattern or trend in comments relating to these induction components could be determined.

Research Question 5

How does a principal's level of experience (such as years in administration, years teaching prior to an administrative position, total years placed within the school, age, and gender) relate to migration and attrition rates within a school?

For this analysis, three groups of schools were considered for each type of experience examined. High retention schools (64 schools), low retention schools (39 schools), and all schools that participated in this study (147 schools) were

compared to determine if differences existed. The experience factors examined were: (a) gender, (b) age, (c) degree earned, (d) total years within the school, (e) years in an instructional position, and (f) years in an administrative position.

For high retention schools, low retention schools, and all schools, the data regarding gender were closely matched. In high retention schools, 81.3% (52) of principals were female. In low retention schools, 82% (32) of principals were female. Similarly, in all schools, 83% (122) of principals were female. From these data, it could be concluded that there were more female principals than male principals.

The age of the principal was considered as an experience factor. The data showed that high retention schools tended to have slightly older principals than low retention schools, though the difference was not great. In high retention schools, 64.1% (41) of principals were 50 years old or older. In low retention schools, 53.8% (21) of principals were in this age range. In the next youngest age range, 40-49 years, high retention schools had 10.4% less principals in this range as compared to low retention schools. When contrasting these two groups with all schools, the percentages were relatively similar. High retention school principals tended to be slightly older and low retention principals were slightly younger than the average for all schools.

This study also sought to find out if teacher retention was influenced by the level of schooling the principal had received. The data collected showed that

most principals (68.8%, or 44, principals in high retention schools; 71.8%, or 28 principals in low retention schools; and 70%, or 103, principals in all schools) had earned as high as a masters degree. Doctorate degrees were the next most reported degree. More than 20% (13) of the principals in high retention schools, 20.5% (8) of the principals in low retention schools, and 19.7% (29) of the principals in all schools had earned a doctorate degree. According to these data, very little difference emerged between high retention, low retention, and all schools. Highest degree earned did not appear to have an influence on teacher retention.

From the gathered data, several significant differences were found between high and low retention schools. High retention schools had higher percentages of principals with 26 or more years experience in education, which was the highest range of years a principal could select. In high retention schools, 56.3% (36) of principals had 26 years experience or more, whereas 46.2% (18) of principals in low retention schools had as much experience. Principals with 21-25 years of experience in education tended to be slightly higher in high retention schools, as well. High retention school principals reported 17.2% (11) had 21-25 years in education, whereas 12.8% (5) of low retention school principals had the same number of years of experience. The differences in data indicated that high retention schools tended to have principals who had slightly more years experience in the field of education.

To reiterate this finding, the data showed that low retention schools had slightly larger numbers in the less experience category of 16-20 years. High retention schools reported 12.5% (8) of principals with only 16-20 years in education, while low retention schools had 25.6% (10) of principals in the 16-20 year range.

In addition to total years in education, this study explored various positions held. SQ5 asked principals to report how many years they taught in an instructional position in an elementary setting prior to becoming an administrator. SQ6 then asked the same question about a setting higher than elementary, such as at a middle school, high school, or university level. From the information gathered, several interesting findings emerged.

First, low retention schools tended to have higher percentages of principals with less than five years teaching experience in an elementary setting. Low retention schools had 20.5% (8) of the principals with less than five years instructional experience in an elementary setting, whereas only 7.8% (5) of high retention school principals reported the same experience.

Second, principals at high retention schools reported higher percentages who taught at the elementary level for 20 or more years. High retention school principals at 9 schools (14.1%) reported they taught at the elementary level for 20 or more years, whereas low retention school principals reported only 2.5% (1) who taught at the elementary level for 20 or more years.

When considering principals' teaching experience in a setting other than elementary, the data showed that very few of the participating elementary school principals had taught in a setting higher than elementary. The majority of principals in all schools did not have experience teaching in a higher setting.

Overall, the data collected in relation to principals' experience teaching prior to becoming an administrator demonstrated that elementary principals tended to have instructional experience at the elementary level. It also introduced the possibility that more years of teaching experience at the elementary level might give principals an advantage towards retaining teachers in their elementary school.

SQ7 addressed the principals' years of experience as an assistant principal. This inquiry revealed an interesting, though inconclusive, finding. First, the overall trend in data showed that about half (49%, or 72) of all principals had between 3-6 years experience as an assistant principal. Low retention school reported higher percentages (64.1%, or 25) and high retention school principals reported slightly less (42.2%, or 27) in this 3-6 year experience range. The overall pattern of data collected for SQ7 demonstrated that the majority of principals for all schools, as well as in the high and low retention groups, served between 1-6 years as an assistant principal before becoming a principal. Due to the similarity of data across retention groups and all schools, the influence of assistant principal experience on teacher retention could not be determined.

One preliminary prediction of this study was that more years experience as a principal might result in better teacher retention. To investigate this idea, SQ8 asked principals how many years they had served as a principal. When compared to high retention schools, low retention schools had a higher percent of principals with less than 3 years experience as a principal, but less in the 3-6 year range. Both groups reported a majority of principals with between 1-6 years experience as a principal. Interestingly, low retention schools had significantly more principals with 10 or more years of experience as a principal. Low retention schools reported 25.6% (10) of principals with 10 or more years experience as a principal, whereas high retention schools had 9.4% (6). However, this high percentage for low retention schools mirrored the data for all schools, which reported 25.9% (38) of all principals with 10 or more years school leader experience. From this data, it could not be determined if more experience as a principal would lead to better teacher retention.

Next, principals were asked to report how many years they had served as principal in their current school at the time of this study. The answer choices were one year, two years, or three or more years. According to the responses provided, high retention schools had slightly less (6.7% less) principals with only one year at their current school than low retention schools. The percentages between high and low retention schools for principals with two years experience at the school were similar, with only 1.7% difference. The biggest difference

between high and low retention schools in SQ9 involved the principals with 3 or more years as principal in their current school. For high retention schools, 53.1% (34) of the principals had 3 or more years there, while low retention schools had 43.6% (17) of the principals with 3 or more years at the school. Therefore, it appeared that high retention schools tended to have slightly higher percentages of principals with more than 3 years time in that school. While it was impossible to conclude for certain, these data may indicate that more time at a school allows principals to implement a better teacher induction program.

Additional Retention Factors

Four additional retention factors were presented in this study. Though these four factors involved demographics of the schools and were not targeted in the five Research Questions, it was thought that they would add depth to the study. The four factors were: (a) the year the school opened, (b) student enrollment, (c) free and reduced lunch percentages, and (d) district in which the school resides. For these factors, only high and low retention schools were compared, except for the district comparison which included all schools.

Two trends emerged during the analysis of the data relating to the year the school opened. First, high retention schools tended to be older schools. In high retention schools, 60.9% were opened in 1970 or earlier. Low retention schools also had higher percentages in older schools; however, only 51.3% of the low retention schools were opened in 1970 or before.

The second pattern that appeared in the data concerned the newer schools. A higher percentage of low retention schools were newer schools. For example, 38.5% (15) of low retention schools opened in 1991 or later. Only 25% (16) of high retention schools opened after 1990. According to these data, it appeared that higher retention of teachers occurred in older schools and lower retention of teachers occurred in newer schools.

Student enrollment, another measure of school size, was also considered in relation to teacher retention. The data revealed one significant difference between high and low retention schools. Only 2 (3.1%) high retention schools were large schools with more than 900 students enrolled. In comparison, 10 (25.6%) low retention schools had a student enrollment of more than 900 students. For the high retention school group, the majority of schools housed 900 or less students, whereas the majority of low retention schools ranged from 500 to more than 900 students.

These findings suggested that larger schools may have lower teacher retention. There could be many reasons for this. According to previous findings of this study, relationships may play a part of this finding. Perhaps larger schools are less cohesive, with less intimate connections and personal experiences. Isolation was found to be a reason teachers decide to leave, according to Cookson (2005).

The free and reduced lunch percentages of each school were obtained to assess a measure of the socioeconomic status of the school. One significant difference was found between high and low retention schools. Low retention schools reported higher percentages of free and reduced lunch in their schools. One example of this was that 43.6% (17) of low retention schools had 76-100% of the students on free and reduced lunch, whereas 29.7% (19) of high retention schools had 76-100% free and reduced lunch students.

This information was significant because it demonstrated the possible challenges faced by principals in low retention schools. Just as low retention schools tended to have less experienced teachers (and mentor candidates), they also appeared to have more low socioeconomic students in their school, based on their free and reduced lunch percentages.

The last comparison made in this study was the district of the school and teacher retention. Initially, these two districts were selected because they shared commonalities in size and demographics. Therefore, it was felt that they would report similarities in teacher retention among schools.

Almost exactly as predicted, 50% (32) of high retention schools were from Hillsborough County Public Schools and 50% (32) were from Orange County Public Schools. For low retention schools, 33.3% (13) were from Hillsborough County Public Schools and 66.7% (26) were from Orange County Public Schools. Out of all 147 schools that participated in this study, 44.2% (65) were

from Hillsborough County Public Schools and 55.8% (82) were from Orange County Public Schools. For the purposes of this study, the district the school resided in did not appear to influence teacher retention.

Summary and Discussion of Findings

This study was designed to determine how school-based induction could assist in effectively retaining new teachers at the elementary level. The five research questions targeted various aspects of induction and teacher retention, including 21 induction strategies and several factors relating to principals' experience. Schools found to have high teacher retention were examined closely to determine reasons for their teacher retention success.

The data showed that principals were implementing the induction strategies that were listed in the questionnaire. The activities implemented most were: (a) formal observation by the principal, (b) mentoring, (c) offer school-level professional development, (d) provide an open door policy, (e) visit classrooms of new teachers often, (f) final (end of the year) assessment conference, (g) provide common planning time for grade levels, and (h) encourage district-level professional development. Though this list helped to show which induction components were most used by schools, it did not help explain why high retention schools had more success with the components of induction and teacher retention.

Based on the advice given by principals from high retention schools in response to Research Question 4, the most important factors of school-level induction for new teachers were effective mentoring and school-wide relationships. High retention school principals attributed their success most to immediate, carefully-matched mentor pairs and a school culture of personal connections, principal availability, and a positive working environment. Of all the factors investigated, this was the most valuable information provided, as it directly linked a factor that is within the principal's control to teacher retention. While other components of induction and factors of teacher retention were found to be significant, personal relationships seemed to be the one area that all principals could influence regardless of other challenges unique to their school.

When comparing various factors of high and low teacher retention schools, several additional findings occurred. Low retention schools had higher migration and attrition rates than high retention schools. Though migration was high in both groups, more than 90% of low retention schools experienced migration versus 70.3% in high retention schools. Low retention schools also lost significantly more teachers per school due to migration as compared to high retention schools. In addition to these differences, high retention schools were found to have more experienced teachers. Low retention schools had significantly more first, second, and third-year teachers than high retention schools.

Some factors did not differ between high and low retention schools, according to the data. First, the size of the school, as measured by the number of instructional staff, did not appear to differ. There was also no significant difference in the reasons teachers gave for leaving their school. In both high and low teacher retention schools, residential move, personal issues and retirement were most often reported as the reason for leaving. In both high and low retention schools, illness, continuing education, salary and career change were reported less often as the reason for leaving.

Principal experience was also explored as a possible factor that may influence teacher retention. It was found that the principal's age, total years in education, years spent in an instructional position, and number of years as principal in the present school tended to have higher teacher retention.

Principal experience factors that were not significant, or could not be determined, in relation to teacher retention were the principal's gender, educational degree, number of years in an assistant principal position, and number of years in a principal position. Very few principals had experience in a setting higher than the elementary level.

Conclusions

School-based induction programs can influence teacher retention. The factors involved in teacher retention are many and vary from school to school, but school-based induction efforts that are adjusted to fit the needs and dynamics of the individual school can help to retain teachers.

As a result of the review of literature and analysis of the data, the following conclusions were drawn (listed in order of importance):

1. Principals from high retention schools attributed their teacher retention success to effective mentoring and relationship building with new teachers.
2. High retention schools were older schools and smaller schools, as measured by student enrollment.
3. Migration rates were significantly higher than attrition rates in regards to teacher turnover.
4. High retention schools had lower migration and attrition than low retention schools.
5. Principals in high retention schools tended to have more teaching experience than principals in low retention schools.
6. Principals in high retention schools tended to have been assigned to their present schools longer than principals from low retention schools.

7. Principals in high retention schools tended to be older than principals in low retention schools.
8. The 21 components of induction, obtained from literature related to teacher induction and used in this study, were being implemented in schools to some extent.
9. High retention schools had more experienced teachers than low retention schools.
10. High retention schools had lower percentages of students in the free and reduced lunch program.

Recommendations for Future Research

Analysis of the data from this study, in conjunction with the literature review conducted as part of this study, has led to the following recommendations for future studies:

1. Study the relationship of school culture to teacher retention.
2. Investigate how mentoring is being implemented within schools. Assess the training of the mentors and the effectiveness of the school-based program. Compare the findings to current research related to mentoring.
3. Explore the relationship of team-building to teacher retention. Find the critical components to implementing meaningful team-building activities.

4. Investigate how master scheduling within a school may affect teacher retention and induction strategies. Focus on the creation of a schedule that is conducive to induction, including common planning times, meeting times, mentor time, and all other time demands that exist within the school setting.
5. Conduct a qualitative study to target migration of teachers. This study could involve several factors, such as how non-reappointment, loyalty to principals, rezoning of schools, and allocation cuts influence teacher migration.
6. Conduct a study of teacher migration. Explore the possibility that teachers may migrate many times during their career. Assess how much attrition occurs with teachers who have migrated in previous years.
7. Assess the mobility rates in large school districts. Investigate if high mobility (residential moving) is associated with teacher migration rates.
8. Track teachers who change position within the educational system. Compare this movement of teachers to overall migration rates.
9. Investigate several districts of differing sizes and dynamics. Compare the migration rates between the districts. Assess if teachers who have more schools from which to choose migrate more.

10. Conduct a study of teacher induction to investigate how principals could overcome challenges involving an imbalanced new and experienced teacher ratio.
11. Investigate if a principal's experience teaching in multiple grade levels, being a teacher leader, being a resource teacher, or previous years in another field influences a principal's success with teacher retention.
12. Replicate this study in states other than Florida.
13. Replicate this study to explore the perceptions of the first, second, and/or third-year teachers regarding induction within the schools.

Implications and Recommendations for Practice

This study revealed that there were many factors involved in, and that influenced, teacher retention. It focused on several variables, some of which were within the principal's control, and some which were not. Throughout the analyses of the data, it became evident that teacher induction at the school level, and the teacher retention that resulted, was affected by the unique dynamics of each school.

One underlying implication for practice that this study revealed was that all schools are not the same. Even within large, comparable districts, schools can differ significantly from one another. In order to develop an appropriate induction program within a school, the principal will need to recognize the challenges unique to his/her school. This study showed that the school's size, the school's

history, the principal's instructional experience, the principal's age, and the number of first, second, and third-year teachers could influence teacher induction efforts and retention. Though not targeted by this study, factors such as school culture and community involvement may also present challenges for the success of an induction program. Assessing these challenges while developing the induction program may help a principal make appropriate decisions.

Another factor of teacher retention related to teacher induction is continuous, and sometimes necessary, teacher migration. The principals in the two large districts studied reported migration due to rezoning, allocation cuts, and teachers following principals to new work sites. For this reason, migration may have created a domino effect that impeded teacher retention strategies. The implications for practice regarding this type of migration involve the district and school levels. While some migration may be inevitable as new schools are built and residential neighborhoods grow larger, the district may want to consider the effects of moving principals too often. Principals, on the other hand, will have to work harder to challenge the choice of schools teachers are tempted with by building a strong culture and foundation of trust at their school; a community that teachers would not want to leave.

The purpose of this study was to discover what principals could do to increase teacher retention through school-level induction. Comprehensive induction was found to be the support, professional development, and

assessment of teachers which helps them learn and grow into effective educators. The data collected in this study revealed several components of induction that worked for the schools who participated. Keeping in mind that each school differed, the strategies that tended to work for most schools follow.

First, mentoring was emphasized by many principals of high retention schools. Mentoring that was immediate, that carefully matched each new teacher to veteran teacher, and that involved the principal's ongoing support was most effective. Mentors should be effective, dynamic, nurturing, well-trained, and willing to help. Mentoring seemed to be the first step in building personal and supportive relationships for new teachers.

Second, induction needed to involve the entire school. Building personal relationships and creating a team or family-like staff was another underlying theme reported by principals of high retention schools. Availability and support of the principal was crucial. An open door policy and providing time for teams to meet were also emphasized. Overall, this study found that the connections made between staff, as well as the same trust established with the principal, would encourage teachers to stay.

Personal connections and relationship building could be the difference necessary for teacher retention in schools that struggle continuously with teacher turnover. It would be interesting to study how relationship building affects teacher retention in areas of poverty. In this study, the high retention schools tended to

be older and smaller (as based on student enrollment), but the schools reported all ranges of percentages of students in the free and reduced lunch program. Due to this finding, it seemed that building relationships was an effective teacher retention strategy, regardless of the socioeconomic status of the surrounding community.

With a foundation of trust and relationships, other induction components could be selected for retaining teachers. The most-implemented activities used by the schools in this study were: (a)formal observation by the principal, (b) mentoring, (c) school-level professional development, (d) providing an open-door policy, (e) visiting classrooms of new teachers often, (f) final assessment conference, (g) providing common planning time for grade-level teams, and (h) encourage district-level professional development.

In addition to these components of induction, principals may want to consider reducing the workload of new teachers. Though not reported as a strategy used by many principals in this study, the review of literature strongly emphasized reducing the workload of new teachers. Some ideas for reducing workload include limiting before and after school duties, excusing teachers from professional development for which they are not ready, providing common planning time with their mentor in order to learn strategies for recordkeeping and paperwork, and limiting number of students with excessive documentation requirements. While it may not be easy to justify reducing a new teacher's

workload when all teachers face exhausting requirements, a principal may be able to influence teacher retention by finding one or two workload reduction strategies that work within his/her school.

Again, principals will need to assess their individual school. Lack of experienced teachers could make an effective mentoring program difficult to establish. A brand new school will have to develop a team building program for all staff, in addition to providing induction for the beginning teachers. A principal with very few years in the classroom may decide to increase his/her own instructional leadership training in order to build knowledge of best practices for teaching. While this study should serve as a guide for school leaders, it can not predict the unique balance of challenges and strengths each school possesses. Each principal, with a passion for retaining his/her teachers, will have to design an induction program that works for his/her school.

Summary

Chapter Five discussed the analysis of the data reported in Chapter Four. This chapter assessed the findings of each Research Question individually, presented conclusions, and made recommendations for future study. Chapter Five concluded with implications and recommendations for practice.

APPENDIX A:
QUESTIONNAIRE

Retaining Qualified Teachers through Effective School-Based Induction Questionnaire

Thank you for taking a few minutes to respond to this questionnaire! As you answer the questions, please keep in mind the following definition of school-based teacher induction:

INDUCTION is all of the mentoring, professional development and support, and formal assessments for new teachers taking place in your school during their first few years of teaching.

This questionnaire will take approximately 10 minutes to complete, and has 32 questions for you to answer. To save time you may wish to have the following items available:

- A staff roster from the 2005-2006 school year
- A current 2006-2007 staff roster

All responses will be kept confidential. No principal or school's name will be used in the analysis of this information.

START

Please answer the following questions, choosing the answer that best fits your experiences as an elementary school principal.

1. **Gender**
   - ☐ Female
   - ☐ Male

2. **Age**
   - ☐ Less than 30 years old
   - ☐ 30-39 years old
   - ☐ 40-49 years old
   - ☐ 50 or more years old

3. **What is your highest degree earned?**
   - ☐ Bachelors
   - ☐ Masters
   - ☐ Specialist
   - ☐ Doctorate

4. **Including the current year, how many total years have you worked in the field of education?**
   - ☐ Less than 5 years
   - ☐ 5-10 years
   - ☐ 11-15 years
   - ☐ 16-20 years
   - ☐ 21-25 years
   - ☐ 26 or more years

5. **How many years were you employed in an instructional position in an elementary setting?**
   - ☐ None
   - ☐ Less than 5 years
   - ☐ 5-10 years
   - ☐ 11-15 years
   - ☐ 16-20 years
   - ☐ More than 20 years

6. **How many years were you employed in an instructional position in a setting higher than elementary level (middle school, high school, or university) before becoming an administrator?**
   - None
   - Less than 5 years
   - 5-10 years
   - 11-15 years
   - 16-20 years
   - More than 20 years

7. **How many years were you in an assistant principal position, at any level?**
   - None
   - Less than 3 years
   - 3-6 years
   - 7-9 years
   - 10 or more years

8. **Including the current year, how many years have you served in an elementary principal position?**
   - None
   - Less than 3 years
   - 3-6 years
   - 7-9 years
   - 10 or more years

9. **Including the current year, how many years have you been the principal at your current school?**
   - 1 year
   - 2 years
   - 3 or more years

10. **If you have served in a principal position in a setting other than at the elementary level, please mark how many years spent in that setting.**
    - I have not been a principal in a setting other than elementary
    - Less than 3 years
    - 3-6 years
    - 7-9 years
    - 10 or more years

11. **Year current school opened**
    - Before 1960
    - between 1960-1970
    - between 1971-1980
    - between 1981-1990
    - between 1991-2000
    - between 2001-2005
    - 2006-2007

12. **Student enrollment**
    - Fewer than 500 students
    - 500-700 students
    - 701-900 students
    - More than 900 students

13. **Free and Reduced Lunch percentage**
    - Less than 25%
    - 25-50 %
    - 51-75%
    - 76-100%

14. Please select all of the following components of school-level induction that are currently offered to the teachers at your school who have less than four years teaching experience.

- ☐ Mentoring
- ☐ Team building activities
- ☐ Involve new teachers in decision making
- ☐ Provide positive feedback for effective practice more often
- ☐ Visit classrooms of new teachers more often
- ☐ Offer school level professional development
- ☐ Encourage district level professional development
- ☐ Offer in-service regarding school policies & procedures
- ☐ Provide common planning time with mentor
- ☐ Provide common planning time for grade level teams
- ☐ Give time to observe veteran teachers
- ☐ Provide an open door policy
- ☐ Formal observation by the principal
- ☐ Preliminary assessment conference with the principal
- ☐ Mid-year assessment conference
- ☐ Final (end of year) assessment conference
- ☐ Certification exams study group
- ☐ Implement professional reading book club
- ☐ Reduce workload of new teachers
- ☐ Allow new teachers to teach same grade level for at least two consecutive years
- ☐ Reduce number of students with discipline issues when assigning students to new teachers
- ☐ Other (please specify)

_____
_____
_____
_____
_____

15. **If team building activities are offered as part of your induction program, how often do you offer these activities to your staff?**
- □ weekly
- □ bi-weekly
- □ monthly
- □ quarterly
- □ Other (please specify)

_____

16. **If you provide positive feedback for effective practice, how do you provide positive feedback?**
(check all that apply)
- □ face to face meeting
- □ hand written notes
- □ email
- □ comments on formal assessment instruments
- □ announcements at staff meetings
- □ posting for staff to see
- □ Other (please specify)

_____
_____

17. **If you reduce the workload of new teachers, how do you reduce it?**
(check all that apply)
- □ Assign less before and after school duties than veteran teachers
- □ Assign less committee requirements than veteran teachers
- □ Reduce number of meetings new teachers must attend
- □ Offer one-on-one assistance for learning paperwork procedures
- □ Other (please specify)

_____

When answering the following questions, please use the following definition:

MENTORING is a component of induction. It is the pairing of a veteran teacher and a new teacher for the purpose of providing the new teacher with a safe, friendly, supportive role model and confidant.

18. **If mentoring is offered as part of your induction program, please check yes or no to the following:**

Is mentoring offered to your first year teachers?
- □ yes
- □ no

Is mentoring required for your first year teachers?
- □ yes
- □ no

Is mentoring offered to your second year teachers?
- □ yes
- □ no

Is mentoring required for your second year teachers?
- □ yes
- □ no

Is mentoring offered to your third year teachers?
- □ yes
- □ no

Is mentoring required for your third year teachers?
- □ yes
- □ no

19. **If mentoring is offered, what training is required of mentors? (check all that apply)**
- ☐ no training is required
- ☐ district level mentor training
- ☐ school level mentor training
- ☐ video training
- ☐ online training
- ☐ Other (please specify)

_____

20. **About how many total instructional staff members did you employ in the 2005-2006 school year?**
- ☐ Fewer than 50
- ☐ 50-75
- ☐ 76-100
- ☐ 101-125
- ☐ 126-150
- ☐ More than 150

21. **Of those teachers, about how many instructional staff did NOT return to the school for the 2006-2007 school year?**
- ☐ 0
- ☐ 1-3
- ☐ 4-6
- ☐ 7-9
- ☐ 10-12
- ☐ 13-15
- ☐ More than 15

22. **Of those who left, how many teachers that you know of went to another school?**
- ☐ 0
- ☐ 1-3
- ☐ 4-6
- ☐ 7-9
- ☐ 10-12
- ☐ 13-15
- ☐ More than 15

23. **Of those who left, how many teachers that you know of chose to discontinue teaching?**
- ☐ 0
- ☐ 1-3
- ☐ 4-6
- ☐ 7-9
- ☐ 10-12
- ☐ 13-15
- ☐ More than 15

24. **Of those who left, what other reasons were given to you for leaving?**
- ☐ Residential move
- ☐ Family building
- ☐ Personal issues
- ☐ Illness
- ☐ Continue education
- ☐ Salary
- ☐ Career change
- ☐ Retirement
- ☐ Position change within field of education
- ☐ Other (please specify)

_____

25. **About how many instructional staff do you employ in the current 2006-2007 school year?**
- ☐ Fewer than 50
- ☐ 50-75
- ☐ 76-100
- ☐ 101-125
- ☐ 126-150
- ☐ More than 150

26. About how many of your current instructional staff are new to the school this year?

- ☐ 0
- ☐ 1-3
- ☐ 4-6
- ☐ 7-9
- ☐ 10-12
- ☐ 13-15
- ☐ More than 15

27. About how many of your current instructional staff are first-year teachers?

- ☐ 0
- ☐ 1-3
- ☐ 4-6
- ☐ 7-9
- ☐ 10-12
- ☐ 13-15
- ☐ More than 15

28. About how many of your current instructional staff are second-year teachers?

- ☐ 0
- ☐ 1-3
- ☐ 4-6
- ☐ 7-9
- ☐ 10-12
- ☐ 13-15
- ☐ More than 15

29. About how many of your current instructional staff are third-year teachers?

- ☐ 0
- ☐ 1-3
- ☐ 4-6
- ☐ 7-9
- ☐ 10-12
- ☐ 13-15
- ☐ More than 15

30. If you had to advise a new principal of how to begin to develop an effective induction program at his/her school, what would you suggest as most important?

_____
_____
_____
_____

31. In regards to school level induction strategies and retaining new teachers, please feel free to enter comments, suggestions, and/or concerns in the field below:

_____
_____
_____
_____
_____
_____
_____

THANK YOU for taking the time to complete this questionnaire! Your responses will be valuable in determining which induction strategies are most successful in retaining new teachers.

If you would like a summary of the results of this study, please enter an email or physical address where it can be sent. Any address may be used. Please remember that your feedback is completely confidential. The address given here will only be used to send a summary of the results, then discarded.

_____
_____
_____

APPENDIX B:
EMAIL CONTACT LETTER #1

To: ELEMENTARY SCHOOL PRINCIPALS
From: Handley, Junella
CC: District Contact
Subject: Teacher Retention

Introduction email
to all elementary principals

Dear [First Name] [Last Name],

Greetings to you, and thank you for taking a moment to read this message!

A few days from now, you will receive an email request to fill out an online questionnaire for an important research study I am conducting at the University of Central Florida. The purpose of the study is to find out what types of induction activities are being offered to beginning teachers in elementary schools, and to determine which of those activities are most effective in retaining teachers. I am writing in advance because it has been found that many people like to know ahead of time that they will be contacted. As I respect your limited time, the survey will only take about ten minutes.

There are no anticipated risks or benefits for participating in this study. In addition, you as a participant are not expected to answer every question or complete every task if it makes you feel uncomfortable. You will not be penalized for refusing to answer a question and your identity and responses will only be published in aggregate form and will not link your responses to your name or the name of your school. Thank you, in advance, for your time and consideration in completing the questionnaire when it arrives. It is only with the generous help of people like you that research can be conducted and program improvements made. I wish you a wonderful day!

Information regarding your rights as a research volunteer may be obtained from:
IRB Coordinator
Institutional Review Board (IRB)
University of Central Florida (UCF)
12201 Research Parkway, Suite 501
Orlando, FL 32826-3246
Telephone: (407) 823-2901

The faculty supervisor for this study is:
Dr. George E. Pawlas
Educational Research, Technology and Leadership
University of Central Florida
Telephone: (407) 823-1472.

Yours in education,
Ms. Junella Handley
Ed.D. Candidate, University of Central Florida
Assistant Principal, Durrance Elementary School, Orange County Public Schools

APPENDIX C:
EMAIL CONTACT LETTER #2

To: ELEMENTARY SCHOOL PRINCIPALS
From: Handley, Junella
CC: District Contact
Subject: Teacher Retention

Questionnaire email to all elementary principals

Dear [First Name] [Last Name],

Last week, you received an email that briefly introduced my research study, which involves learning about the school-based induction activities new teachers are receiving in your district. As a principal of an elementary school in Orange County, Florida, your feedback will be especially valuable to me.

I am writing to respectfully request your help with this study by completing a brief questionnaire. It takes about ten minutes to complete. Participation is voluntary and you will not be made to answer any question that you do not wish to answer. In addition, your answers will be completely confidential and will be released only in summaries in which no individual school's answers can be identified. By participating in this questionnaire, you will be assisting me to understand what induction methods are currently being used with new teachers and how teacher retention rates relate. This will be very valuable information! I'll be happy to share my findings in summary with you once the study is complete. To access the questionnaire, simply click on this link:

If you have any questions, or have difficulty accessing the link, please contact me by email reply or by phone at (407)247-9833. I can't thank you enough for your help with this study!

For a copy of the Orange County district approval for this study, please email me at: handlej@ocps.net

Information regarding your rights as a research volunteer may be obtained from:
IRB Coordinator
Institutional Review Board (IRB)
University of Central Florida (UCF)
12201 Research Parkway, Suite 501
Orlando, FL 32826-3246
Telephone: (407) 823-2901

The faculty supervisor for this study is:
Dr. George E. Pawlas
Educational Research, Technology and Leadership
University of Central Florida
Telephone: (407) 823-1472.

Yours in education,
Ms. Junella Handley
Ed.D. Candidate, University of Central Florida
Assistant Principal, Durrance Elementary School, Orange County Public Schools
"Imagine what you could achieve if you knew you could not fail." -author unknown

APPENDIX D:
EMAIL CONTACT LETTER #3

To: ELEMENTARY SCHOOL PRINCIPALS
From: Handley, Junella
CC: District Contact
Subject: Teacher Retention

Reminder email
to all elementary principals

Dear [First Name} {Last Name],

Approximately one week ago, a questionnaire seeking your feedback on school-level induction activities offered at your school was emailed to you. As an elementary school principal who holds valuable insight regarding school-based induction and how to retain teachers, your feedback is very important to me!

I'd like to offer the link to you again today. It takes about ten minutes to complete. Participation is voluntary and you will not be asked to answer any question you do not wish to answer. Please remember that all responses are completely confidential! If you have any questions or concerns, please contact me by reply email or by phone at (407)247-9833.

To access the questionnaire, simply click on this link:

Again, thank you for your time and consideration! Your generosity is appreciated.

For a copy of your school district's approval for this study, please email me at:
handlej@ocps.net

Information regarding your rights as a research volunteer may be obtained from:
IRB Coordinator
Institutional Review Board (IRB)
University of Central Florida (UCF)
12201 Research Parkway, Suite 501
Orlando, FL 32826-3246
Telephone: (407) 823-2901

The faculty supervisor for this study is:
Dr. George E. Pawlas
Educational Research, Technology and Leadership
University of Central Florida
Telephone: (407) 823-1472

Yours in education,
Ms. Junella Handley
Ed.D. Candidate, University of Central Florida
Assistant Principal, Durrance Elementary School, Orange County Public Schools
"Imagine what you could achieve if you knew you could not fail."
-author unknown

APPENDIX E:
EMAIL CONTACT LETTER #4

To: ELEMENTARY SCHOOL PRINCIPALS
From: Handley, Junella
CC: District Contact
Subject: Teacher Retention

Thank you email
to all elementary principals

Dear [First Name] [Last Name],

I am writing one final time – not to bother you, but instead to thank you! I sincerely appreciate all who took a few minutes to respond to my questionnaire. As promised, I will be sending a summary of my findings when the study is complete to all who requested one. If you are unsure if you requested this, please feel free to contact me at any time by reply email. I'm happy to share the results with all!

If you have not completed the questionnaire, it will only be open for a few more days. Participation is voluntary and you will not be required to answer any question that you do not wish to answer. The survey takes about ten minutes to complete. I'll include the link below, just in case. To access the questionnaire, simply click on this link:

Surveymonkey.com link here

Again, thank you for taking part in this very important study. If requested, I'll be in touch at its conclusion!

Information regarding your rights as a research volunteer may be obtained from:
IRB Coordinator
Institutional Review Board (IRB)
University of Central Florida (UCF)
12201 Research Parkway, Suite 501
Orlando, FL 32826-3246
Telephone: (407) 823-2901

The faculty supervisor for this study is:
Dr. George E. Pawlas
Educational Research, Technology and Leadership
University of Central Florida
Telephone: (407) 823-1472

Yours in education,
Ms. Junella Handley
Ed.D. Candidate, University of Central Florida
Assistant Principal, Durrance Elementary School, Orange County Public Schools
"Imagine what you could achieve if you knew you could not fail."
-author unknown

APPENDIX F:
IRB APPROVAL LETTER

University of Central Florida

Office of Research & Commercialization

January 26, 2007

Junella Handley
3718 East Kaley Avenue
Orlando, FL 32812

Dear Ms. Handley:

The University of Central Florida's Institutional Review Board (IRB) received your protocol IRB #06-4056 entitled, "Retaining Qualified Teachers through Effective School-Level Induction: A Study of Elementary Schools in Two Public School Districts in Florida." The IRB Chair reviewed the study on 1/25/2007 and did not have any concerns with the proposed project. The Chair has indicated that under federal regulations (Category #1, research conducted in established or commonly accepted educational settings, involving normal educational practices, such as research on the effectiveness of or the comparison among instructional techniques, curricula, or classroom management methods) this research is **exempt** from further review by our IRB, so an approval is not applicable and a renewal within one year is not required.

Please accept our best wishes for the success of your endeavors. Should you have any questions, please do not hesitate to call me at 407-823-2901.

Cordially,

Joanne Muratori
(FWA00000351 Exp. 5/13/07, IRB00001138)

Copies: IRB File
George Pawlas, Ph.D.

JM:jm

12201 Research Parkway • Suite 501 • Orlando, FL 32826-3246 • 407-823-3778 • Fax 407-823-3299

APPENDIX G:
HILLSBOROUGH COUNTY PUBLIC SCHOOLS APPROVAL LETTER

Hillsborough County
PUBLIC SCHOOLS
Excellence in Education

January 17, 2007

Junella Handley
3718 East Kaley Avenue
Orlando, Florida 32812

Dear Ms. Handley:

The Hillsborough County Public School district has agreed to participate in your research proposal, *Retaining qualified Teachers Through Effective School-Based Induction: A Study of Elementary Schools in Two Public School Districts in Florida.* A copy of this letter MUST be presented to the principals to assure them your research has been approved by the district. Approval is given, however, under the following conditions:

1) Participation by the principals at elementary schools is to be on a voluntary basis. That is, participation is NOT MANDATORY and you must advise each participant that they are not obligated to participate in your study.

3) Confidentiality must be assured for all. That is, ALL DATA MUST BE AGGREGATED SUCH THAT THE PARTICIPANTS CANNOT BE IDENTIFIED. Participants include the district and the principals.

3) You have indicated that you will not come into contact with students and that you will not be visiting any school campuses in the district. IF THIS SITUATION CHANGES, YOU MUST NOTIFY US IMMEDIATELY. You will not be allowed on campus without first contact us for further instructions.

Please forward one copy of your completed study for our files.

Good luck with your endeavor. If you have any questions, please advise.

Sincerely,

John A. Hilderbrand, Ph.D., Director
Assessment and Accountability

JAH/dsr

Raymond O. Shelton School Administrative Center • 901 East Kennedy Boulevard • Tampa, FL 33602 • Website: www.sdhc.k12.fl.us
School District Main Office: 813-272-4000 • P.O. Box 3408 • Tampa, FL 33601-3408
Assessment & Accountability • Phone: 813-272-4341 • Fax: 813-272-4341 • email: john.hilderbrand@sdhc.k12.fl.u8s

APPENDIX H:
ORANGE COUNTY PUBLIC SCHOOLS APPROVAL LETTER

Submit this form and a copy of your proposal to:
Accountability, Research, and Assessment
P.O. Box 271
Orlando, FL 32802-0271

Orange County Public Schools

RESEARCH REQUEST FORM

Your research proposal should include: Project Title; Purpose and Research Problem; Instruments; Procedures and Proposed Data Analysis

Requester's Name Junella Handley Date December 6, 2006

Address: Home 3718 E. Kaley Ave, Orlando, FL 32812 Phone 407-247-9833

Business 8101 Benrus St., Orlando, FL 32827 Phone 407-858-3110

Project Director or Advisor Dr. George Pawlas Phone 407-823-1472

Address University of Central Florida, Orlando, FL

Degree Sought: (check one) ☐ Associate × Doctorate ☐ Bachelor's ☐ None ☐ Master's ☐ Specialist

Project Title Retaining Qualified Teachers Through Effective School-Based Induction: A Study of Elementary Schools in Two Public School Districts in Florida

ESTIMATED INVOLVEMENT

PERSONNEL/CENTERS	NUMBER	AMOUNT OF TIME (DAYS, HOURS, ETC.)	SPECIFY/DESCRIBE GRADES, SCHOOLS, SPECIAL NEEDS, ETC.
Students	0	NA	NA
Teachers	0	NA	NA
Administrators	127	10-15 minutes	All elementary principals will be invited to participate
Schools/Centers	127	NA	NA
Others (specify)	0	NA	NA

Specify possible benefits to students/school system: A summary of findings will be offered to all participants. The purpose of this study is to determine which school-based induction strategies are most effective in retaining new teachers.

ASSURANCE

Using the proposed procedures and instrument, I hereby agree to conduct research in accordance with the policies of the Orange County Public Schools. Deviations from the approved procedures shall be cleared through the Senior Director of Accountability, Research, and Assessment. Reports and materials shall be supplied as specified.

Requester's Signature Junella D Handley

Approval Granted: ☒ Yes ☐ No Date: 12-18-06

Signature of the Senior Director for Accountability, Research, and Assessment Lee Baldwin

NOTE TO REQUESTER: When seeking approval at the school level, a copy of this form, signed by the Senior Director, Accountability, Research, and Assessment, should be shown to the school principal.

Reference School Board Policy GCS, p. 249

LIST OF REFERENCES

Alliance for Excellent Education. (2004, June). *Tapping the potential: Retaining and developing high-quality new teachers.* Retrieved on August 29, 2006 from http://www.all4ed.org/publications/TappingThePotential/TappingThePotential.pdf

American Association of State Colleges and Universities. (2006, October). Teacher induction programs: Trends and opportunities. *Policy Matters, 3* (10). Retrieved December 24, 2006 from http://www.aascu.org/policy_matters/pdf/v3n10.pdf

Andrews, B., & Quinn, R. (2005, January/February). The effects of mentoring on first-year teachers' perceptions of support received. *The Clearing House, 78* (3), 110-116.

Barkley, S. (1998, Late Summer). Alternative to teacher evaluations. *Performance Learning Systems: Journal*, 8-9, 26.

Barkley, S. (2002, May). Teacher-centered relationships: Create powerful learning environments. *Instructional Leader,* 6-8.

Barkley, S. (2006, November). *Conferencing skills.* Training presented at the Educational Leadership Center of Orange County Public Schools, Orlando, FL.

Bickmore, D., Bickmore, S., & Hart, L. (2005, September). Interdisciplinary teaming as an induction practice. *NASSP Bulletin, 89*, 30-53.

Black, S. (2001, September). A lifeboat for new teachers. *American School Board Journal, 188* (9), 46-48.

Blank, R. K. (2003). Meeting NCLB goals for highly qualified teachers: Estimate by state from survey data. Washington, DC: CCSSO.

Bracey, G., & Molnar, A. (2003, February). Recruiting, preparing and retaining high quality teachers: An empirical synthesis. Retrieved August 29, 2006, from http://www.asu.edu/educ/epsl/EPRU/documents/EPSL-0302-102-EPRU.doc

Britton, E., Raizen, S., Paine, L., & Huntley, M. A. (n.d.). More swimming, less sinking: Perspectives on teacher induction in the U.S. and abroad.Retrieved on August 29, 2006 from http://www.wested.org/online_pubs/teacherinduction/

Buckingham, M., & Coffman, C. (1999). *First, Break All the Rules.* New York, New York: Simon & Schuster. Colley, A. C.

Colley, A. C. (2003, March). What can principals do about new teacher attrition? *Principal, 81*.(4), 22-24.

Cookson, P. (2005, October). The challenge of isolation. *Teaching Prek-8, 36* (2), 14,16.

Cromwell, S. (2002, June 11). The teacher shortage: Solutions that work. *Education World.* Retrieved on May 12, 2005 from http//www.educationworld.com/a_admin/admin274.shtml

Danielson, L. (2002, March/April). Developing and retaining quality classroom teachers through mentoring. *The Clearing House, 75* (4), 183-185.

Darling-Hammond, L. (2003, May). Keeping good teachers: Why it matters, What leaders can do. *Educational Leadership, 60* (8), 6-13.

Delisio, E. (2003, August 21). Induction programs help keep better teachers. *Education World.* Retrieved December 24, 2006 from http://www.education-world.com/a_issues/chat/chat071.shtml

Denmark, V., & Podsen, I. (2000, Fall). The mettle of a mentor: What it takes to make this relationship work for all. *Journal of Staff Development, 21* (4), 1-8.

Feiman-Nemser, S. (2003, May). What new teachers need to learn. *Educational Leadership*, *60* (8), 25-29.

Feistritzer, E. C. (2001, May). *Alternative routes to teaching.* Testimony before the Subcommittee on Labor, Health and Human Services, Education and Related Agencies. Retrieved July 7, 2004, from http://www.ncei.com/Testimony 010521.htm

Florida Department of Education. (2001). *Florida performance measurement system.* Memo sent to District School Superintendents and Non-public School Directors on February 23, 2001. Retrieved on March 14, 2007 from http://www.firn.edu/doe/dpe/memos/dpe01-12.pdf

Florida Department of Education. (2004). *Florida School Indicators Report: Elementary, 2004-2005.* Tallahassee, FL: Bureau of Education Information and Accountability Services. Retrieved on July 17, 2006 from http://data.fldoe.org/fsir/

Futernick, K. (2003). Why current campaign to recruit new teachers won't solve the problem. Retrieved May 18, 2004, from http://www.edfordemocracy.org/tqi/TQI_Why_Current.htm

Halford, J. M. (1999). Easing the way for new teachers. In Scherer, Marge (Ed.), *A Better Beginning: Supporting and Mentoring New Teachers*. (p. 13-18). Alexandria, Virginia: Association for Supervision and Curriculum Development.

Hammer, M., & Williams, P. (2005, Summer). Rejuvenating retires: Mentoring first-year teachers. *The Delta Kappa Gamma Bulletin, 71* (4), 20-25.

Hunt, J. B. (2003). A quid pro quo for teacher quality. *Education Week, 23* (40), 52.

Hurst, B., & Reding, G. (1999). Helping new teachers keep the light in their eyes. In Scherer, Marge (Ed.), *A Better Beginning: Supporting and Mentoring New Teachers.* (p. 217-224). Alexandria, Virginia: Association for Supervision and Curriculum Development.

Ingersoll, R. (2001a, January). A different approach to solving the teacher shortage problem. *Teaching Quality Policy Briefs (n3)*. Center for the Study of Teaching and Policy. Retrieved December 24, 2006 from http://depts.washington.edu/ctpmail/PDFs/Brief_three.pdf

Ingersoll, R. (2001b, Fall). Teacher turnover and teacher shortages: An organizational analysis. *American Educational Research Journal*. p.499-534.

Ingersoll, R., & Kralik, J. (2004, February). The impact of mentoring on teacher retention: What the research says. Retrieved May 18, 2004, from http://www.ecs.org/clearinghouse/50/36/5036.htm

Ingersoll, R., & Smith, T. M. (2003, May). The wrong solution to the teacher shortage. *Educational Leadership, 60* (8), 30-33.

Israel, M. (2002, March 18). Mentoring programs that work! *Education World.* Retrieved February 24, 2005 from http://www.educationworld.com/a_issues/chat/chat042-2.shtml

Joffres, C., & Haughey, M. (2001, March). Elementary teachers' commitment declines: Antecedents, processes, and outcomes. *The Qualitative Report, 6* (1), 36-55.

Johnson, S. M. (2005, May). Bridging the generation gap. *Educational Leadership, 62* (8), 8-14.

Johnson, S. M. (2006, Summer). Why new teachers stay. *American Educator.* p7-21.

Johnson, S. M., Berg, J. H., & Donaldson, M.L. (2005, February). Who stays in teaching and why: A review of the literature on teacher retention. The Project on the Next Generation of Teachers: Harvard Graduate School of Education. Retrieved on August 29, 2006 from http://assets.aarp.org/www.aarp.org_/articles/NRTA/Harvard_report.pdf

Johnson, S. M., & Birkeland, S. E. (2003, May). The schools that teachers choose. *Educational Leadership, 60* (8), 20-24.

Johnson, S.M., Birkeland, S.E., Kardos, S.M., Kauffman, D., Liu, E., & Peske, H. (2001). Retaining the next generation of teachers: The importance of school-based support. The Project on the Next Generation of Teachers: Harvard Graduate School of Education. Retrieved on August 29, 2006 from http://www.edletter.org/current/support.shtml

Lopez, A., Lash, A., Schaffner, M., Shields, P., & Wagner, M. (2004). *Review of research on the impact of beginning teacher induction on teacher quality and retention.* Menlo Park, CA: SRI International.

Lunenburg, F., & Ornstein A. (2000). *Educational Administration: Concepts and Practices (3rd Ed).* Belmont, CA: Wadsworth.

Millinger, C. (2004). Helping new teachers cope. *Educational Leadership, 61* (8), 66-69.

Mullinix, B. (2002, December). *Selecting and retaining teacher mentors.* Washington DC: ERIC Clearinghouse on Teaching and Teacher Education. (ERIC Document Reproduction Service No. ED477728)

National Commission on Excellence in Education. (1983, April). *A nation at risk*. Retrieved on March 14, 2007 from http://www.ed.gov/pubs/NatAtRisk.html

National Commission on Teaching and America's Future. (1996). *What matters most: Teaching for America's future*. New York: Author, Teachers College Columbia University.

National Council of Teachers of English. (2006). *Teacher quality key terms*. Retrieved August 29, 2006 from http://www.ncte.org/print.asp?id=122587&node=1182

National Education Association. (2005, May). *It's hard to stick around.* Retrieved March 14, 2007 from http://www.nea.org/neatoday/0505/spotlight.html

National Science Board. (2004). *Science and engineering indicators 2004: Elementary and secondary education, Chapter 1*. Retrieved December 24, 2006 from http://www.nsf.gov/statistics/seind04/c1/c1s6.htm

Orange County Public Schools. (2003-2004). *Alternative certification program guidelines.* Retrieved March 14, 2007 from http://www.ocps.k12.fl.us/~humanresources/acp/acpguidelines.htm

Pullin, D. (2004, April 28). Teacher quality: More reasons it deserves attention. *Education Week.* Retrieved September 9, 2004 from http://www.edweek.org/ew/ew_printstory.cfm?slug-33pullin.h23

Renard, L. (2003, May). Setting new teachers up for failure…or success. . *Educational Leadership, 60* (8), 62-64.

Richards, J. (2004, January/February). What new teachers value most in principals. *Principal, 83* (3), 42-44.

Roukema, L. (2004, August). Keeping new teachers: The revolving door of the teaching profession. *Today's School, 5* (1), 18-23.

Sargent, B. (2003, May). Finding good teachers- And keeping them. *Educational Leadership, 60* (8), 44-47.

Shea, G. (2002). *Mentoring (3rd Ed).* Menlo Park, CA: Crisp Learning Publications.

Stansbury, K. (2001, Jan/Feb). What new teachers need. *Leadership, 30* (3), 18.

Stuart, L. (2002, March). What new teachers need: A principal's perspective. *Principal, 81* (4), 18-21.

The University of the State of New York.(2004). *Keeping quality teachers: The art of retaining general and special education teachers.* Retrieved August 29, 2006 from http://www.vesid.nysed.gov/specialed/publications /persprep/qualityteachers/intro.pdf

The Teaching Commission. (2004). *Teaching at risk: A call to action.* (ECS Document number 4993). Retrieved on March 14, 2007 from http://www.ecs.org/html/Document.asp?chouseid=4993

Trussell, Tait. (2002). School teachers don't want higher pay. *Orlando Sentinel. (n.d.)*

U.S. Department of Education, National Center for Education Statistics. (2003). *The condition of education 2003: Beginning teachers.* (NCES2003-067). Washington, DC: U.S. Government Printing Office.

U.S. Department of Education, National Center for Education Statistics. (2005). The condition of education 2005: Mobility in the teacher workforce. (NCES2005-094). Washington, DC: U.S. Government Printing Office.

U.S. Department of Education (1998, September). *Promising practices: New ways to improve teacher quality.* Washington, DC: Author. Retrieved December 24, 2006 from http://www.ed.gov/pubs/PromPractice.html

U.S. Department of Education (2002, July 11). *The No Child Left Behind Act of 2001: Executive Summary.* Washington, DC: Author. Retrieved September 26, 2006 from http://www.ed.gov/offices/OESE/esea/exec-summ.html

Utah State Board of Education, Educator Quality Task Force. (2005, November 4). *Educator quality: Attracting, training, evaluating, compensating, and retaining quality educators in the state of Utah*. Retrieved August 29, 2006 from http://www.usoe.k12.ut.us/board/summary/EducatorQuality TaskForceReportNov42005.pdf

Wadsworth, D. (2001, May). Why new teachers choose to teach. *Educational Leadership, 58* (8), 24-28.

Wayne, A., Youngs, P., & Fleischman, S. (2005, May). Research matters / improving teacher induction. *Educational Leadership, 62* (8), 76-78.

Weasmer, J., & Woods, A. (2000, January/February). Preventing baptism by fire: Fostering growth in new teachers. *The Clearing House, 73* (3), 171-173.

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

Wenders, J. (2003, Winter). The latest bogeyman: Teacher retention. *Texas Education Review.* Retrieved May 18, 2004, from http://www.texaseducationreview.com

Wirt, J., Choy, S., Rooney, P., Provasnik, S., Sen, A., & Tobin, R. (2004). *The condition of education 2004: Characteristics of school principals*. (NCES 2004-077). U.S. Department of Education, National Center for Education Statistics. Washington, DC: U.S. Government Printing Office.

Wong, H., & Britton, T. (2005, January). What the world can teach us about new teacher induction. *Phi Delta Kappan, 86* (5), 379-384.

Wong, H., & Wong, R. (2001, March). What successful new teachers are taught. *Teachers.Net Gazette.* Retrieved December 24, 2006 from http://teachers.net/gazette/MAR01/wong.html