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The Effects of Teacher Stability on Third Grade Student Achievement as Measured by the North Carolina End-of-Grade Tests in Reading and Mathematics

Juddson W. Starling
Gardner-Webb University

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The Effects of Teacher Stability on Third Grade Student Achievement as Measured by
the North Carolina End-of-Grade Tests in Reading and Mathematics

By
Juddson W. Starling

A Dissertation Submitted to the
Gardner-Webb University School of Education
In Partial Fulfillment of the Requirements
For the Degree of Doctor of Education

Gardner-Webb University
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Approval Page

This dissertation was submitted by Juddson W. Starling under the direction of the persons listed below. It was submitted to the Gardner-Webb University School of Education and approved in partial fulfillment of the requirements for the degree of Doctor of Education at Gardner-Webb University.

Doug Eury, EdD
Committee Chair

Date

Ron Nanney, EdD
Committee Member

Date

John Williams, PhD
Committee Member

Date

Gayle Price, EdD
Associate Provost for Schools

Date

The Effects of Teacher Stability on Third Grade Student Achievement as Measured by the North Carolina End-of-Grade Tests in Reading and Mathematics. Starling, Juddson W., 2009: Dissertation, Gardner-Webb University, Teacher Stability/Student Achievement/Teacher Quality

This dissertation was designed to examine the effects of teacher stability on student achievement as measured by the North Carolina End-of-Grade tests in reading and mathematics for third grade students. The perceptions of third grade teachers and elementary school principals concerning issues with teacher stability were also examined. Accountability for public schools in North Carolina has driven educators to find ways to increase student achievement. Teacher stability is a variable that can be controlled by educators in an attempt to increase student achievement.

The writer gathered test data from a target school district and analyzed test scores by the number of years that a teacher had taught third grade in a school. The levels of stability were measured by the teaching of third grade in a school for 3 years, more than 3 years, or less than 3 years. Surveys were also given to third grade teachers and elementary school principals to measure their perceptions of the effects of teacher stability on student achievement and on the school as a whole.

An analysis of the data revealed that there was a positive difference in the mean scale scores on both the reading and mathematic End-of-Grade tests when teacher stability was considered. The analysis of the survey data showed that both third grade teachers and elementary school principals expressed that teacher stability was a factor in student achievement and had a positive impact on school culture and climate.

Table of Contents

	Page
Chapter 1: Introduction	1
Background	6
Purpose	8
Need for Research	9
Design	9
Research Questions	10
Delimitations and Limitations	11
Assumptions	12
Definitions of Key Terms	12
Organization of the Study	13
Chapter 2: Review of Literature	15
Chapter 3: Methodology	21
Research Questions	21
Student Achievement Levels	21
Design of Study	27
Participants and Setting	28
Data Collection Procedure	29
Procedures for Data Analysis	29
Summary	30
Chapter 4: Results	31
Summary	37
Chapter 5: Summary, Conclusions and Recommendations	38
Summary	38
Limitations	41
Conclusions	41
Recommendations for Improvement of Practice	42
Recommendations for Further Research	43
Summary and Perspective	44
References	46
Appendixes	
A Teacher Stability Survey – Teacher Survey	51
B Teacher Stability Survey – Principal Survey	53
Tables	
1 End-of-Grade Reading Mean Scale Scores	32
2 t-test for Equality of Means of Reading Scores	33
3 End-of-Grade Math Mean Scale Scores	33
4 t-test for Equality of Means of Mathematics Scores	34
5 Frequency of Teacher Responses to Stability Survey	35
6 Frequency of Principal Responses to Stability Survey	36

Chapter 1: Introduction

Accountability has become the catch phrase for education in North Carolina since the 1980's when the state adopted a testing and accountability model aimed at improving the quality of education for all students in the state. When this model was combined with the No Child Left Behind legislation, which requires that all students will have a highly-qualified teacher in the classroom and that all students be on grade level by 2013, it put a new sense of urgency on providing each student with the best possible instruction in the classroom each day.

Finding high-quality teachers is a difficult task as there is no consensus as to what makes a teacher high quality. Teacher quality can be measured in many areas: experience, teacher level of education, national board certification, and countless other variables. Defining teacher quality leaves many questions unanswered. As a result, most studies resort to measurable teacher qualifications such as certification, academic degrees, and years of experience. Some studies that have correlated the test scores of teachers on basic skills tests and college entrance exams with the standardized test scores generated by their students have produced data proving that high-scoring teachers are more likely to elicit significant gains in student achievement than their lower-scoring counterparts (Ferguson, 1998; Strauss & Sawyer, 1986). Teacher quality can not only be quantified by the test results of their students, but also appears to precipitate significantly greater learning gains in students. Effective teachers are capable of inspiring significantly greater learning gains in their students when compared with their weaker colleagues. Value-added assessment studies in Tennessee show that the difference in achievement between students who attended classes taught by high-quality teachers

versus those taught by low-quality teachers for 3 consecutive years is sizeable: approximately 50 percentile points on standardized tests (Sanders & River, 1996). All of these variables can be questioned or confirmed depending on the variables used to measure them.

As difficult as it is to measure teacher quality, it is equally difficult to measure student achievement. One might look at student achievement as being simple to measure by looking at scores on End-of-Grade and End-of-Course tests. Others might measure student achievement in increments of growth based on test scores. Both are used in calculating school-wide achievement in North Carolina and meeting the requirements of the No Child Left Behind legislation. Assessment based on testing, though certainly not foolproof, is necessary because teachers, administrators, legislators and others need objective ways to assess the effectiveness of the teacher and the growth of the student.

Accountability, under federal and state guidelines, has caused school systems to try and address the many factors that can influence student achievement. However, the accountability models do not give remedies for the factors that influence student achievement. Factors such as socioeconomic status, parental education levels, home languages, gender, race, and many others are not considered under the measurements of student achievement (Webb, 2001). Data from standardized tests may be broken down into sub-groups, but the accountability models only consider the sub-groups as a part of overall achievement.

A school system has some control of the factors that influence student achievement. Practices such as teaching a set curriculum, closely monitoring the instructional practices taking place in classrooms, and retaining high-quality teachers in

those classrooms are all within the control of the teachers and administrators (Webb, 2001). Although curriculum is set by the state and instructional practices can be controlled by district and building administrators, hiring and retaining high-quality teachers has become an issue that baffles many school systems in North Carolina. Building administrators can have some control over teacher stability by assigning teachers to the same subject and grade level for consecutive years.

Teachers are given the standard course of study for all courses tested under the North Carolina Accountability Model. The North Carolina Standard Course of Study provides every content area a set of competencies for each grade level or course. Its intent is to ensure rigorous academic performance standards for students across the state. According to the North Carolina Department of Public Instruction [NCDPI], it is based on a philosophy of teaching and learning that is consistent with current research, exemplary practices, and national standards (2005). The NCDPI has developed these set curriculums for all courses that align to End-of-Grade tests. It is reasonable to assume that teachers that are more acquainted with the standardized curriculum have students who achieve at higher levels on the End-of-Grade tests. Using the standard course of study as a curriculum guide can increase the possibility that students will experience higher levels of achievement on standardized tests. Teaching the same grade level for numerous years in the same building not only can familiarize a teacher with the content of the standard course of study, but also familiarize the teacher with the environment in which they work (Webb, 2001).

Understanding the standard course of study may not be the only key to increasing student achievement. Understanding the climate and culture of a school community

could also be a factor in high student achievement. While the field of education lacks a clear definition of school culture, the term has been used with a variety of concepts, including climate, ethos, and saga (Deal, 1993). School culture can be defined as the historically transmitted patterns of meaning that include the norms, values, beliefs, ceremonies, rituals, traditions, and myths understood, maybe in varying degrees, by members of the school community. This system of meaning often shapes what people think and how they act (Stolp, 1994). Knowing the students, their families, and the community around the school can have an impact on successful instruction.

School administrators at the district and building levels can control the instruction that students receive pertaining to the End-of Grade tests in many ways. Administrators are charged with providing teachers with the tools needed to produce high-achieving students. Some ways administrators can provide the tools needed to produce high-achieving students are: the use of staff development funds, common planning time for teachers, and vertical and horizontal alignment of curriculum.

Teachers need to be familiar with the students and school community to be able to educate students successfully. This information can be provided to teachers by the administration through numerous avenues. Staff induction seminars and “meet the teacher nights” can help teachers become accustomed to the school and community. Knowing the culture of a school and the culture of the school community can lead to successful teaching practices in the classroom. Adopting a model of instruction to meet the needs of the students is another way that administrators can influence how the instruction in the classroom takes place.

Staff development that is geared toward continually improving student

performance is another way of controlling the instruction in the classroom (Webb, 2001). Teachers that are prepared and kept up to speed with the latest educational practices are more able to produce students that achieve at the highest levels. Staff development for teachers can also fill the holes not covered by many colleges and universities that prepare teachers for service in American schools. By continually training teachers in the best practices in education and constantly monitoring the methods used in the classroom, administrators can control the instruction that is taking place in schools (Webb).

The transient student populations of current American society cause difficulties for administrators when it comes to providing a high-quality education for students (Webb, 2001). School administrators only have control over the teaching in their own buildings. Students often come to schools lacking skills that should have been taught in previous grades at the schools from which they transferred. For this reason, transient student populations can have a negative effect on student test results.

The one area that might cause the most difficulties in today's schools is quality teacher retention. This was substantiated by the North Carolina School Board (2005) when they put into board policy that, during each renewal cycle, school administrators must earn at least five renewal credits that focus on the principal's role in teacher effectiveness, teacher evaluations, teacher support programs, teacher leadership, teacher empowerment, and teacher retention. This requirement applies to individuals renewing their licenses on or after July 1, 2007. With requirements now in place for administrators to learn about teacher retention, it is clearly a focus for the educational system in North Carolina.

Schools that have been able to retain teachers in the same building for a number

of years have encountered the benefits of having teachers that are more experienced in working with the standard course of study, planning effective lessons, and learning the culture of the school community they serve. Generally, teachers new to a building are not able to relate to the culture of the school or the community as quickly as teachers that have been in a particular school building for a number of years. Having experienced teachers can have a significant impact on student achievement. If teachers are not aware of the students that they serve or the challenges that they face, they can encounter great obstacles in serving their students' educational needs (Webb, 2001).

Little research has been conducted on the effect of teacher stability in a building on student achievement, but many studies have been done on the correlation between teachers' years of experience in education and teacher retention. Teacher retention is measured in two ways according to the North Carolina School Report Card. The school and districts report two different numbers. One statistic shows the percentage of classroom teachers who left their school staff from the start of the prior year to the start of the current year and another statistic reveals the percentage of teachers who left their school district from the start of the prior year to the start of the current year (NCDPI, 2008). There are no official numbers on teacher stability within a particular school with teacher stability being defined as a teacher teaching the same grade level in the same building for more than 3 years. This study will examine the relationship between teacher stability and student test scores by using data from third grade students' End-of-Grade test scores in reading and mathematics in a large school system in North Carolina.

Background

Testing accountability came to the forefront of education in the 1980's in North

Carolina when the NCDPI began a testing and accountability program aimed at improving education for all students in North Carolina (Webb, 2001). The Accountability Based Curriculum (ABC's) is designed to measure student performance on the goals and objectives and grade-level competencies in the North Carolina Standard Course of Study (NCSCS). The tests are designed to show student growth over consecutive years and measure progress against a set standard (NCDPI, 2005).

School and individual student growth are measured and held to accountability levels adopted by the North Carolina State Board of Education. Students are measured at levels I – IV. Level I is considerably below grade level, Level II is below grade level, Level III is at grade level, and Level IV is above grade level. Students scoring at Level III and above are considered to be performing at levels that show mastery of grade-level goals and objectives (Ashbaugh, 2000). Schools and school systems are rated by the percentage of students scoring at grade level or higher on standardized tests. These percentages and the growth variables predicted by previous test scores determine the Adequate Yearly Progress for growth as determined by state and federal governments.

The pressure to achieve growth each year coupled with the pressure to place high-quality teachers in classrooms is something that every school system deals with under the No Child Left Behind legislation. As test scores become more important, and as teacher retention and placing highly-qualified teachers in the classroom have become mandated by law and policy, it is imperative to look at the correlation between teacher experience in a building and individual student achievement.

The state of North Carolina reported 971 teacher vacancies in 2005. This was a 4% increase over the 2004 numbers (NCDPI, 2005). The 115 school systems of North

Carolina reported that 12,398 teachers of the 95,709 teachers employed during the 2004-2005 school year left their systems for an average system level turnover rate of 12.95%. Of the 12,398 teachers reported leaving, 3594, or 29%, had tenure. During the 2003-2004 school year, 31.5% of the teachers who left had tenure. The school system used for this study had a teacher turnover rate of 13% during the 2006-2007 school year. This figure represents the percentage of elementary school teachers who left their school district from the start of the prior year to the start of the current year. The elementary schools within the system lost 22% of their teachers. This figure represents the teachers who left their school staff from the start of the prior year to the start of the current school year (NCDPI, 2008). These statistics show that reported retention rates for a district do not address stability in the classroom as defined by this study.

With the teacher pool shrinking each year and fewer and fewer teachers coming out of North Carolina's teacher preparation colleges, maintaining an effective teaching staff becomes crucial. Finding ways to create a stable teaching force is an ongoing challenge in many of the nation's school systems (Webb, 2001).

Schools are trying to maintain a steady progression of improvement while the number of highly qualified and experienced teachers in the classrooms is shrinking. Along with the national trend, the targeted school system is faced with trying to provide a high-quality education for its students while dealing with a high teacher turnover rate and a growing student population.

Purpose

The purpose of this study is to expand the findings of a 2001 study done by Michael R. Webb which stated that there was a small positive relationship between

teacher retention and student achievement and test the hypotheses that teacher stability in a building has an effect on student achievement as measured by the North Carolina End-of-Grade tests in reading and mathematics for third grade students. The researcher analyzed the subject by tabulating survey, (see Appendices A & B), data and examining state End-of-Grade test data for trends in student performance related to years of teaching a particular grade level in a particular school building.

Need for Research

The pressure to find ways to improve student achievement under No Child Left Behind and the North Carolina Accountability Model is mounting on educational leaders throughout the state. This study supports the idea that educational leaders need to address issues that help retain high-quality teachers in the classrooms to aid in the improvement of student achievement on the North Carolina End-of-Grade tests in reading and mathematics. By substantiating previous research, school systems could be assisted in meeting the legislative accountability expectations by focusing efforts on creating teacher stability, not only in classrooms, but also in the school building as a whole. Previous research on this topic is limited. The study being used as a main reference is one of two that were discovered during extensive reviews of literature on the specific topic of the effects of teacher retention or stability on individual student achievement. Hence, the study will add to the body of knowledge and the literature on teacher effects on student achievement.

Design

This study was designed to expand the research completed by Michael R. Webb in 2001. Webb's study used archival test data from Union County, North Carolina from

the 2000-2001 school year and regression equations to show a positive relationship between teacher retention and student achievement on the End-of-Grade tests in reading and mathematics beyond the effects of free and reduced lunch status, gender, and ethnicity. This study will use archival test data from another public school system in central North Carolina from the 2007-2008 school year. Test data will be analyzed according to the number of years each teacher has been teaching the third grade in the school building. By correlating test data and eliminating data according to the number of years of stable teaching in a building, the researcher will be able to determine the effects of teacher stability on student achievement. Data will be obtained from testing data, the human resources department of the subject school system, and survey data collected by the researcher from third grade teachers and elementary school principals in the district. Survey data concerning issues with teacher stability will also be gathered from third grade teachers and elementary school principals in the district.

Research Questions

1. What effect does teacher stability in a building have on individual student achievement as measured by the North Carolina End-of-Grade tests in reading and mathematics for third grade students?
2. What are common perceptions of third grade teachers concerning issues with teacher stability?
3. What are common perceptions of elementary school principals concerning issues with teacher stability?

The data used to answer the research questions were obtained from a central North Carolina school system. Individual student test data were separated into either

reading or math and then sorted according to teacher and number of years of stable teaching for that teacher. Teacher data were sorted by the number of years of teaching experience in a particular school building. Teacher survey data and principal survey data were tabulated to see if perceptions of stability were supportive of the data results.

Delimitations and Limitations

This study has the following delimitations:

1. The study focused on data and students from the 2007-2008 school year.
2. Student progress was determined by performance on the North Carolina End-of-Grade test scores in reading and mathematics at the third grade level for the 2007-2008 school year.
3. Twenty elementary schools that serve students kindergarten through third grade in the public school system in North Carolina were targeted. Two schools were eliminated from test score evaluation because they were not in existence for 3 years.
4. Only third grade teachers for the 2008-2009 school year were surveyed.

This study has the following limitations:

1. The generalizability of results was limited in that this study was designed to look at archival data and evaluate that data using a regression equation to look for a correlation. Subject randomization and assignment to treatment groups was not the intent of the research.
2. Academic growth measures in the study were influenced by student attrition and the inclusion of retained student scores.
3. Only archival data representing performance of individual student test scores

were available for analysis.

4. Information on the general ability of students was not utilized.
5. The study does not include information on parental support, instructional delivery or methodology utilized by the teacher, or transient students.

Assumptions

There were some assumptions that were made while conducting this study. It was assumed that previous research used for this study was accurate. It was also assumed that all data used for this study were entered into the district data base accurately and that all teachers participating in the study followed the North Carolina Standard Course of Study. While it is conceded that students learn in many different ways, it was assumed that individual student learning needs were met through a variety of instructional strategies that followed the North Carolina Standard Course of Study. Although the study was based on a previous study, it reinforced the need for continued efforts in teacher retention in a building.

Definitions of Key Terms

Teacher Stability - a teacher that teaches the same grade level in the same school building for at least 3 years.

Experienced Teacher - a teacher who has been retained in the same school for 3 or more years.

The ABC's Accountability Program – a program of educational reform initiated by the state of North Carolina to improve schools through an accountability-based curriculum with set standards of achievement to measure student growth and mastery in reading and mathematics in the elementary grades.

End-of-Grade Tests - criterion-referenced tests developed by the state and given to students in designated grade levels to measure mastery of grade-level objectives as prescribed by the North Carolina Standard Course of Study.

North Carolina Standard Course of Study - a mandate that sets content standards and describes the curriculum which should be made available to every child in North Carolina's public schools. It includes the philosophy and rationale underlying the curriculum frameworks and considerations for developing a thinking framework, aligning curriculum and assessment, and providing for the needs of exceptional children.

Academic Growth - the increase or decrease in a student's performance on End-of-Grade tests from one year to the next.

Student Achievement - a student's performance on North Carolina's criterion-referenced End-of-Grade tests in reading and mathematics.

Organization of the Study

The rest of this dissertation is divided into four chapters. Chapter 2 is a review of literature topics related to the study. There is little literature available that deals with this specific topic, therefore, many related articles were reviewed to gain a basis for this study. There is also a review of the dissertation completed by Michael R. Webb which was written in 2001. The literature addresses related topics such as teacher retention issues and state testing mandates.

Chapter 3 describes the methodology used in the study. It describes the participants, procedures, data collection, research design, and data analysis for this study. Chapter 4 provides an analysis of the data that was obtained from the schools that participated in the study. The test and survey data are analyzed and presented in respect

to the research questions. Chapter 5 summarizes the findings of this study. The answers to the research questions will be addressed in this summary. Recommendations for further research are also made in Chapter 5.

Chapter 2: Review of Literature

The impact of teacher stability on student achievement is a subject that has not been explored greatly in literature. The need to find any available variables that can possibly effect student achievement has become a focus of school systems throughout the nation.

Limited research exists on the effect of teacher experience on student achievement as measured by standardized testing. This study examined the relationship between teacher stability and individual student achievement as measured by the North Carolina End-of-Grade test scores in reading and mathematics for children in the third grade excluding the effects of free and reduced lunch, gender, and ethnicity in 20 elementary schools in a central North Carolina school system. The lack of research relating to teacher experience and teacher stability and their effects on individual student achievement on End-of-Course tests required the researcher to use literature from topics related to retention along with a previously written dissertation to support the study.

The literature review is divided into two sections: a review of closely related literature to support the study and a review of a dissertation published in 2001 by Michael R. Webb which specifically identifies the relationship between teacher experience and student achievement on third grade End-of-Grade tests. The relationship between teacher experience and student achievement is not the same as the effects of teacher stability on student achievement, but the topics are very similar.

High stakes testing and set academic standards for student achievement have swept the nation since the mid 1980's (Webb, 2001). States have established set academic standards for student achievement as a means of guaranteeing equity for all

students in education. State and federal governments have mandated minimal standards for student achievement and teacher quality. Teacher quality and effectiveness are seen as a vital link between a high-quality education and student achievement (Kaplan & Owings, 2001).

Beverly M. Klecker puts quality and effectiveness into perspective in a paper she presented to the Mid-South Educational Research Association in November of 2002.

According to Klecker:

Teaching is one of the few professions in which the professionals are assumed to be able to exhibit excellence the first year on the job. Public school teaching appears to be easy. Most American adults have spent long hours – as students – observing teachers teach. Yet, there is research evidence that experience counts. This evidence comes with the concomitant implication that effective teaching strategies are learned on the job. (p.3)

Beginning with the Coleman Report of 1966, educational leaders began to place greater emphasis on placing high-quality teachers in classrooms to raise student achievement (Coleman et al., 1966). Much of the research published since the Coleman Report has confirmed the finding that high-quality teachers raise student performance – in fact, studies confirm that teachers are the most important education factor influencing student outcomes (Ferguson, 1998; Goldhaber, 2002; Goldhaber, Brewer, & Anderson, 1999; Hanushek, Kain, & Rivkin, 1999; Wright, Horn, & Sanders, 1997).

With cited examples of the effect of high-quality teachers playing a significant role in student achievement, one must look at what a high quality teacher is. Teacher quality is a term that is often tossed about loosely in educational circles. Throughout the

years, teacher quality has been defined many different ways by many different organizations. Since teachers serve as role models for students, teacher quality has historically been linked to personal traits such as moral character and intellectual curiosity (Goldhaber & Anthony, 2003).

Presently, teacher quality tends to be defined by standards developed by two educational organizations, the Interstate New Teacher Assessment and Support Consortium [INTASC] and the National Board for Professional Teaching Standards [NBPTS]. INTASC has created a set of standards for the preparation and licensure of new teachers while NBPTS has defined a set of standards for what it believes experienced teachers should know and be able to do. These two organizations have goals that build upon one another. INTASC standards build the foundation that NBPTS uses to encompass the entire scope of training and maintaining high-quality teachers in our classrooms.

These two organizations have defined broad teaching standards designed to insure high-quality teaching in American schools. The National Council for the Accreditation of Teacher Education [NCATE] is commonly viewed as an institution responsible for defining teacher quality. It has created standards by which teacher education programs are evaluated (National Research Council, 2001).

INTASC, NBPTS, and NCATE have developed standards that share many common themes designed to cultivate, grow, and maintain teacher quality. According to a report by Goldhaber and Anthony (2003), all three organizations argue that teachers should:

1. Understand the process through which children learn and develop, and be

committed to furthering students' learning.

2. Have deep knowledge of the subject they teach and be able to convey this knowledge to students in a way that engages student inquiry.
3. Manage and monitor students' learning and reflect on teaching practices, making any needed adjustments to keep all students engaged in the learning process.
4. Forge relationships with members of the broader educational community in order to foster students' learning. (p.5)

There is considerable controversy over how teachers can actually achieve and demonstrate mastery of these standards. These standards can be interpreted differently from one educational institution or system to another. A teacher who is highly successful in one setting might not be as successful in another setting. For this reason, a teacher who is able to achieve high growth in one school might not be able to produce the same results in another setting.

Although many variables exist when considering a high-quality teacher, one variable that seems to always appear is teacher experience. Studies have shown a strong positive relationship between teacher experience and student outcome (Greenwald, Hedges, & Laine, 1996). In the Greenwald et al. review, teacher experience was found to have a statistically significant positive effect in 29% of the cases reviewed and a statistically negative effect on student achievement in only 3% of the cases. This imbalance suggests that experience is a strong predictor of teacher quality (Goldhaber & Anthony, 2000). A meta-analysis by Greenwald et al. concluded a positive link between teacher experience and student achievement.

Berliner (1993) reported that "academically more proficient teachers, who are

more experienced, who are better educated, and who work with smaller classes, are associated with students who demonstrate significantly higher achievement” (636).

Berliner (1993) states that teachers with more years of experience have students with higher test scores, lower dropout rates, and higher rates of taking the Scholastic Aptitude Test. Experience counts for about 10% of the variation in student tests scores.

Experienced teachers are more likely to provide us with higher-achieving and better motivated students (Berliner).

Felter (2001) found a positive relationship between teacher experience and preparation and student achievement despite the effects of student poverty. Chidolue (1996) found significant a positive relationship between teachers’ teaching experience and student achievement in high school biology classes. Bodenhausen (1988) found that students of teachers with more than 10 years of experience teaching advanced placement classes had higher scores on advanced placement tests.

With research stating that teacher experience has a positive effect on student achievement, one must look at how this poses a problem for American schools. The problem lies in teacher retention. Keeping teachers in schools until they have the experience needed to have a positive impact on student learning is a challenge that all states face.

In North Carolina, the average teacher attrition rate is more that 12%. Some school districts report the teacher attrition rate as being as high as 24%. Some schools face an annual turnover of half of their faculty in a given year. In 2004, the state needed to hire about 11,000 teachers annually to deal with student population growth, class size reduction, and teacher attrition. More than half of the teachers prepared in North

Carolina, through both traditional and lateral entry programs, are no longer in classrooms 5 years later (The Southeast Center for Teaching Quality, 2004).

The most comparable study to the one being conducted by this researcher was the 2001 study completed by Michael R. Webb. Webb used a multiple regression analysis which applied a multiple regression equation to known variables to independently predict the criterion he selected. He chose the predictor variables of teacher retention, free and reduced lunch, gender, and ethnicity. The dependent variables for his study were academic growth in reading and mathematics for individual students in the third grade during the 2000-2001 school year in a school system located in the Southern Piedmont of North Carolina. Academic growth was measured by the North Carolina End-of-Grade tests in reading and mathematics.

Webb (2001) found that there were significant differences in the achievement levels of students when comparisons were made solely on ethnicity. He also found a significant difference in achievement levels when comparing the test results of students who received free or reduced lunch against achievement levels of students who did not receive free or reduced lunch. Webb found small and insignificant differences in the achievement levels of third grade students when the subject group was analyzed by gender.

Webb's study (2001) showed that there was a statistically significant and small positive relationship between student scores on the North Carolina End-of-Grade test for mathematics and the experience level of the third grade teacher. There was a statistically significant and small positive relationship between student scores on the North Carolina End-of-Grade test for reading and the experience level of the third grade teacher.

Chapter 3: Methodology

This chapter discusses the research method selected and utilized for this study. This study was driven by the lack of research and literature on the topic of teacher stability and student achievement and by the researcher's interest of a school system located in the Central Piedmont of North Carolina.

This chapter details the study's research design and procedures. The hypotheses, null hypotheses, population, and procedures for data collection and analyses were all used to analyze data as they pertained to the effects of teacher stability.

Research Questions

This study used archival data analysis and survey data to address the following research questions:

1. What effect does teacher stability in a building have on individual student achievement as measured by the North Carolina End-of-Grade tests in reading and mathematics for third grade students?
2. What are common perceptions of third grade teachers concerning issues with teacher stability?
3. What are common perceptions of elementary school principals concerning issues with teacher stability?

Student Achievement Levels

Student achievement can be measured in many ways. Student achievement for this study was measured by individual scale scores on the North Carolina End-of-Grade tests in reading and mathematics for third grade students. Scale scores for individual students were converted by the state according to achievement level. The state of North

Carolina had identified students performing at Achievement Level I on the End-of-Grade test for mathematics as students that did not have sufficient mastery of knowledge and skills in this subject area to be successful at the next grade level. Level I students demonstrated a lack of development of number sense for whole numbers through 9,999 and lack of evidence of ability to perform multi-digit addition and subtraction. They rarely showed knowledge of multiplication facts. Students inconsistently compared, ordered, and represented rational numbers concretely and symbolically. They rarely used appropriate vocabulary to compare, describe, and classify two- and three-dimensional shapes. Students were not able to correctly measure length, capacity, weight, time, and temperature. They could sometimes identify and extend simple numeric or geometric patterns. Students showed minimal understanding of organizing and displaying data using a variety of graphs. They were rarely able to identify points on rectangular coordinate systems. Students seldom correctly used symbols to represent unknown quantities in number sentences and to solve simple equations. They rarely solved problems using a variety of strategies. Students with math scores between 311 and 328 on the North Carolina End-of-Grade test for mathematics were considered to be performing on Level I (NCDPI, 2007).

Students that performed at Achievement Level II demonstrated inconsistent mastery of knowledge and skills in this subject and were minimally prepared to be successful at the next grade level. Students performing at Level II typically showed some evidence of understanding and computational accuracy. The students sometimes responded with appropriate answers or procedures. They demonstrated limited use of problem-solving strategies. Level II students showed some evidence of number sense of

whole numbers through 9,999 and some evidence of multi-digit subtraction. They inconsistently applied multiplication facts in single-digit multiplication and division. Using fractions, they often incorrectly compared, ordered, and occasionally misrepresented. Students sometimes used appropriate vocabulary to compare, describe, and classify two- and three-dimensional shapes. They were inconsistent in measurement of length, capacity, weight, time, and temperature. Students showed limited understanding of the concept of probability. They were inconsistent when they identified and extended numeric and geometric patterns. Students were sometimes successful at organizing and displaying data using a variety of graphs. They sometimes correctly identified points on the rectangular coordinate system. Students occasionally correctly solved problems where symbols were used to represent unknown quantities in number sentences and to solve simple equations. They sometimes solved problems using a limited variety of strategies. Students with math scores between 329 and 338 on the North Carolina End-of-Grade test for mathematics were considered to be performing on Level II (NCDPI, 2007).

Students performing at Achievement Level III consistently demonstrated mastery of grade level subject matter and skills and were well prepared for the next grade level. Students performing at this level consistently showed understanding, computed accurately. The students consistently responded with appropriate answers or procedures. They used a variety of problem solving strategies. Level III students demonstrated number sense for whole numbers through 9,999 and showed consistent evidence of ability with multi-digit subtraction. They knew multiplication facts and were fluent with single-digit multiplication and division. They regularly were successful at comparing,

ordering, and representing rational numbers. Students consistently used appropriate vocabulary to compare, describe, and classify two- and three-dimensional shapes. They frequently measured length, capacity, weight, time, and temperature accurately. Almost always, students identified and extended numeric or geometric patterns correctly. They correctly organized and displayed data using a variety of graphs. Students appropriately used the rectangular coordinate system to graph and identify points. They understood and used simple probability concepts. Students with math scores between 339 and 351 on the North Carolina End-of-Grade test for mathematics were considered to be performing on Level III (NCDPI, 2007).

Students performing at Achievement Level IV consistently performed in a superior manner clearly beyond that required to be proficient at grade level work. Student performing at Level IV commonly showed a high level of understanding, computed accurately. The students were very consistent responding with appropriate answers or procedures. They demonstrated flexibility by using a variety of problem-solving strategies. Level IV students demonstrated a high level of success with regard to number sense for whole numbers through 9,999. They showed mastery of multi-digit subtraction and applied multiplication facts fluently with single-digit multiplication and division. They consistently correctly compared, ordered, and represented rational numbers. Students consistently used appropriate vocabulary to compare, describe, and classify two- and three-dimensional shapes. They accurately measured length, capacity, weight, time, and temperature. Students successfully identified and extended complex numeric or geometric patterns. They successfully organized, displayed, and interpreted data using a variety of graphs. Student used the rectangular coordinate system to graph,

identify, and mentally manipulate points. They accurately applied simple probability concepts. Students correctly used symbols to represent unknown quantities in number sentences and to solve equations. They solved high level thinking problems using a wide variety of strategies. Students with math scores between 352 and 370 on the North Carolina End-of-Grade test for mathematics were considered to be performing at Level IV (NCDPI, 2007).

The North Carolina End-of-Grade test for reading comprehension for third graders were scaled and scored in a manner similar to the test for math. There were four levels of achievement measured by increment scoring on the test. Level I students did not have sufficient mastery of knowledge and skills in this subject to be successful at the next grade level. Students performing at Level I typically showed minimal use of decoding and comprehension skills required in the North Carolina Standard Course of Study at grade 3. Students could identify characters and setting. These students read a variety of short and repetitive texts. Students at this level had limited vocabulary. Students that scored at or below 330 on the North Carolina End-of-Grade test for reading comprehension were considered to be performing at Level I (NCDPI, 2008).

Students performing at Level II demonstrated inconsistent mastery of knowledge and skills that are fundamental in this subject area and that were minimally sufficient to be successful at the next grade level. Students performing at Level II could apply limited enabling strategies and skills to read and comprehend some texts, including fiction, nonfiction, poetry, and drama as required in the North Carolina Standard Course of Study at grade three. Students read and demonstrated literal comprehension of some third grade genres. Students were able to identify literary elements, such as characters, setting,

problem, and main events. They used basic word identification strategies. They could draw simple conclusions and identify sequence of events in a variety of texts. They were developing the ability to use story structure and text organization. Students that scored between 331 and 337 on the North Carolina End-of-Grade test for reading comprehension are considered to be performing at Level II (NCDPI, 2008).

Students performing at Level III on the reading comprehension test consistently demonstrated mastery of grade-level subject matter and skills and were well prepared for the next grade level. Students performing at Level III demonstrated grade-level reading comprehension skills as required in the North Carolina Standard Course of Study at grade three. Students were developing fluency as they read and comprehended a variety of third-grade genres, such as fiction, nonfiction, poetry, and drama. Students interpreted and analyzed text by utilizing skills and strategies such as summarizing, making inferences and predictions, drawing conclusions, determining main idea, and making connections. They also used text features and text structures to comprehend. Students analyzed characters, identified problems, determined the meaning of unfamiliar words, and developed an expanded vocabulary. Students that scored between 338 and 349 on the North Carolina End-of-Grade test for reading comprehension were considered to be performing at Level III (NCDPI, 2008).

Students performing at Level IV on the reading comprehension test consistently performed in a superior manner clearly beyond that required to be proficient at grade-level work. Students performing at Level IV demonstrated an independent application of the reading comprehension skills required in the North Carolina Standard Course of Study at grade three. Students at this level read with fluency and comprehended a variety

of third-grade genres, such as fiction, nonfiction, poetry, and drama. Students analyzed and integrated information that allowed them to infer, draw conclusions, determine author's purpose, and generalize. Students independently compared and contrasted elements within and between texts. They also analyzed the effect of figurative language, author's craft, and literary elements. Students that scored above 350 on the North Carolina End-of-Grade test for reading comprehension were considered to be performing at Level IV (NCDPI, 2008).

Design of Study

The design of the study resulted from an analysis of test data collected by the school system and cross referenced with the human resource data detailing the number of years that a teacher had taught that grade level in that school building. Student test data were separated into two groups, those students who had a teacher with 3 or more years experience teaching the same grade level in the same school building and students who had teachers with less than 3 years experience teaching the same grade level in the same building. This data was used along with teacher and principal responses to survey questions about teacher stability to analyze perceived and statistical evidences of the effects of teacher stability on student achievement. Survey data were analyzed by sorting teachers as stable, non-stable, and all teachers surveyed. The teacher survey data was entered in SPSS and frequency tabulations were made that identified the percentage of positive responses to each statement. Survey data was also gathered from elementary school principals in the district. This data was used to establish principals' perceptions of teacher stability. Using this design allowed the researcher to suggest the following directional hypothesis: There will be a positive relationship between teacher stability in a

grade level and building and student performance on individual North Carolina End-of-Grade test scores for reading and mathematics.

There were three sets of data used in this study: student test score data collected by the school system, responses to a survey administered to elementary school principals, and teacher responses to survey questions asked by the researcher.

The survey data were collected from all of the third grade teachers in the building for the 2008-2009 school year. There was also a survey data set from the principals of each of the twenty elementary schools in the school district.

The third data sets were the individual student achievement scores from third grade students during the 2007-2008 school year for students taking the state's End-of-Grade tests in reading and mathematics in 18 of the 20 elementary schools in the school district. These data were analyzed by classifying teachers as either stable or non-stable.

Participants and Setting

Participants included in this study were individual teachers and principals at 20 elementary schools within a school system located in the Central Piedmont area of North Carolina and third grade students from 18 schools who took the North Carolina End-of-Grade tests in reading and mathematics for third grade students at one of the schools during the 2007-2008 school year. Two of the schools had not been in existence at the time of the study and therefore the test scores from these schools were not included in the study. Survey responses from the principals and teachers at those schools were included in the study. These schools served 9677 students in grades kindergarten through fifth during the 2007-2008 school year. The ethnic distribution of students according to the school system was 66.68 percent Caucasian, 19.76 percent African American, 8.93

percent Hispanic, 1.28 percent Asian, 0.25 percent American Indian and 3.10 percent Multiracial.

Data Collection Procedure

The use of archival data for this study allowed the researcher to access all test data directly from the school system. The data were analyzed using the SAS EVAAS, Education Value-Added Assessment System, which provides diagnostic reports to school districts. EVAAS tools provide a precise measurement of student progress over a time (NCDPI, 2008). The data were analyzed with the assistance of the school district's testing coordinator.

The survey data were collected by delivering the surveys to the school principal at each school and having the surveys mailed back to the researcher. Teacher stability rates were also cross referenced with information gathered from the district's Human Resources Department.

Procedures for Data Analysis

The researcher divided the tested students into two groups, those who had a teacher that had taught third grade in that school for 3 or more years and those students that had a teacher who had taught third grade in that school for less than 3 years. The test data sets were then sorted using the Education Value-Added Assessment System, EVAAS, to determine if students experience higher achievement rates on End-of Grade tests depending on the stability level of the teacher. EVAAS provided spreadsheets that allowed data to be tabulated in table format. This data included allowing for the standard error deviation of the state tests. The EVASS program also allowed the researcher to run a t-test analysis on the data. The data were used to depict student achievement on both

the reading comprehension and mathematics portions of the end-of-grade tests. The individual student's achievement is the dependent variable and the stability of the teacher is the predictor variable in all of the data analysis.

The survey data were collected and frequencies were tabulated using Statistical Package for the Social Sciences, SPSS, software. The survey data were used to determine teacher and principal perceptions of the effects of teacher stability on student achievement on End-of-Grade tests.

Summary

The study was designed to measure the effect of teacher stability on individual student achievement as measured by the North Carolina End-of-Grade tests in reading and mathematics for students in the third grade in the 20 elementary schools in the case study district. Data for this study were obtained from the participating school district. The data were analyzed independently based on the subject tested and teacher teaching the classes. The data were evaluated using statistical software to see if significant findings were present to support the hypothesis presented by the researcher. Survey data were used to determine if the perceptions of stability by teachers and administrators in the district supported the findings of the study.

Chapter 4: Results

In this chapter, the researcher presented the results of the data collected concerning the effects of teacher stability on student achievement on the North Carolina End-of-Grade tests for reading and mathematics given to third grade students each year. Data were also presented from surveys given to elementary school principals and third grade teachers to analyze their perceptions of stability and its effects on student achievement.

Test data were received from the subject school district and test scores were separated by designating teachers as either stable or non-stable according to the number of years of third grade teaching experience each had in the same school building. Teachers with 3 or more years of teaching experience in the third grade in the same school were designated as stable, and teachers with less than 3 years experience in the third grade in the same school were designated as non-stable. The researcher sought to determine if there was a positive relationship between teacher stability and student achievement on the North Carolina End-of-Grade tests for reading and mathematics. Survey data were also obtained from third grade teachers and elementary school principals to gather information as to the perceptions of teachers and principals concerning issues with teacher stability.

All test and survey data were used to address the three research questions posed in this study. The following data addresses Research Question 1: What effect does teacher stability in a building have on individual student achievement as measured by the North Carolina End-of-Grade tests in reading and mathematics for third grade students? Test data statistics for third grade students from the school district during the 2007-2008

school year that were administered the North Carolina End-of-Grade test for reading are presented in Table 1.

Table 1

End-of-Grade Reading Mean Scale Scores

Teacher	Number of Classes	Mean Scale Score	Standard Deviation
Stable	38	337.74	3.45
Non-Stable	31	337.22	4.27
System Wide	69	337.51	3.82

There were 69 teachers responsible for administering the North Carolina End-of-Grade tests in the 18 schools used for this survey. Of the 69 teachers, 38 were designated as stable and 31 were designated as non-stable. The mean End-of-Grade test score in reading for all students was 337.74 with a standard deviation of 3.82. The mean End-of-Grade test score for students with a stable teacher was 337.74 with a standard deviation of 3.45. The mean End-of-Grade test score for students with a non-stable teacher was 337.22 with a standard deviation of 4.27. The t-test for equality of means between stable and non-stable teachers was .559. This shows a small positive but insignificant difference between teacher stability and third grade student achievement on the North Carolina End-of-Grade test for reading.

Table 2

t-test for Equality of Means of Reading Scores

Equal Variances	t	Mean Difference	Standard Error Difference
Assumed	.559	.5196	.9291
Not Assumed	.547	.5196	.9493

Table 2 shows the t-test for equality of means between stable and non-stable teachers was .559. This showed a small positive but insignificant difference between third grade student achievement on the North Carolina End-of-Grade test for reading and teacher stability.

Table 3

End-of-Grade Math Mean Scale Scores

Teacher	# of Classes	Mean Scale Score	Standard Deviation
Stable	38	343.57	3.65
Non-Stable	31	342.69	3.72
System Wide	69	343.17	3.68

Test data statistics for third grade students who took the End-of-Grade test for mathematics from the school district during the 2007-2008 school year are presented in Table 3. The mean End-of-Grade test score in mathematics for all students was 343.17 with a standard deviation of 3.68. The mean End-of-Grade test score for students with a stable teacher was 343.57 with a standard deviation of 3.65. The mean End-of-Grade test score for students with a non-stable teacher was 342.69 with a standard deviation of 3.72.

Table 4

t-test for Equality of Means of Mathematics Scores

Equal Variances	t	Mean Difference	Standard Error Difference
Assumed	.987	.8797	.8913
Not Assumed	.985	.8797	.8932

Table 4 shows the t-test for equality of means between stable and non-stable teachers was .987. This shows a small positive but insignificant difference between third grade student achievement on the North Carolina End-of-Grade test for mathematics and teacher stability.

The results for third grade teacher responses to the stability surveys are presented in Table 5 in response to Research Question 2: What are common perceptions of third grade teachers concerning issues with teacher stability? Sixty-three teachers responded to the survey with 28 teachers being designated as non-stable and 35 teachers being designated as stable teachers.

Table 5

Frequency of Teacher Responses to Stability Survey

Survey Question	Stable Teachers	Non-Stable Teachers	All Teachers
I was a master teacher my first year teaching.	0	15	7
Student test scores have improved as I have gained experience as a teacher at the same grade level.	86	50	70
Stability has increased my understanding of school climate and culture.	86	72	80
Understanding school climate and culture has helped me be a more successful teacher.	92	90	92
I had a better understanding of the Standard Course of Study as I increased my experience at the same grade level.	98	75	88
I feel that teachers should change grade levels every couple of years.	6	8	7
Teacher stability can have a major impact on student achievement.	92	93	92
I plan on teaching the same grade level for more than one year.	80	79	80
My skills as a teacher have improved by teaching the same grade level for more than one year.	92	72	83
Having stability in all grade levels enhances the climate and culture of the building.	83	86	85

Note. The values represent percentages of positive responses.

The results for the elementary school principal stability survey are presented in Table 6 in response to Research Question 3: What are common perceptions of elementary school principals concerning issues with teacher stability? Twenty elementary school principals were presented with a 10 question survey concerning issues with teacher stability. Fourteen elementary school principals from the district responded to the survey

Table 6

Frequency of Principal Responses to Stability Survey

Question	Positive Response Percentage
Teacher stability is important to student learning.	100
Teachers acquire better knowledge of the standard course of study by teaching the same grade level for multiple years.	86
Students benefit from having an experienced teacher in the classroom opposed to a beginning teacher.	65
Teacher quality is impacted by the number of years a subject has been taught by the same teacher.	72
Teacher stability plays a major role in teacher assignments.	79
Teachers grow in content knowledge by teaching the same grade level for numerous years.	86
It is priority of mine to insure that teaching staff is assigned to the same grade level year after year.	65
There is a positive effect on school climate by having stability in teaching assignments in my school.	72
Having a stable teaching staff is important to school climate.	86
Teacher stability has a greater impact on student achievement than any other factor.	8

The principals were also asked to express other reasons why or why not teacher stability was important to school climate. Some of the themes expressed by the principals were that stability allows teachers to develop a team mentality that develops by working with the same people over a period of time, and that there is a degree of comfort that is established when stability is present. Consistency in staff was also seen as a means of building relationships within the staff that will benefit student learning. One principal response simply stated that “If staff is stable, all else is stable.”

Principals were also asked to list any other factors that had great impact on student achievement. Student teacher rapport and relationships were common among the principal responses. Teacher quality and teacher effectiveness were also noted as important factors in student achievement. One principal stated, “The stability of an effective teacher has an even greater impact.” Teaching styles and student engagement were stated as having an impact on student achievement. Other factors that were noted by the principals included parental support, parental educational backgrounds, knowledge of content, and school attendance.

Summary

In summary, the analysis of test data showed a small positive but statistically insignificant relationship between teacher stability and student achievement on the North Carolina End-of-Grade tests for reading and mathematics. The survey responses showed that both teachers and principals felt that stability issues were important to student achievement and school climate and culture.

Chapter 5: Summary, Conclusions, and Recommendations

Summary

The relationship between teacher stability and student achievement on the North Carolina End-of-Grade tests for reading and mathematics for third grade students, along with third grade teacher and elementary school principal perceptions about teacher stability, were examined in this study. For the purpose of this study, teacher stability was defined as a teacher teaching the same grade level in the same school building for 3 or more years. The basis of the study revolved around the question: Is there an actual difference in student achievement that can be related to teacher stability, and what are common perceptions of third grade teachers and elementary school principals concerning issues with stability?

The purpose of this study was to aid school systems in dealing with stability in an unstable personnel environment. With large numbers of teachers leaving the profession every year and fewer and fewer teachers to fill those vacancies coupled with higher testing standards in the state and nation, this study could shed light on an unaddressed issue (Webb, 2001). With little literature available on teacher stability, teacher retention and teacher quality were considered as closely related subjects by the researcher and included in the study.

The study was divided into three areas of concentration with research questions developed to meet each concentration. The first research question was: What effect does teacher stability in a building have on individual student achievement as measured by the North Carolina End-of-Grade test in reading and mathematics for third grade students?

Based on the data collected in the study, there was a small positive but

statistically insignificant difference between teacher stability and student achievement. The mean score for a third grade student in the targeted district for reading was 337.51. For students with a teacher considered stable by the study, the mean reading score was 337.74 and the mean score for students with a teacher considered non-stable by the study was 337.22. While there is a small positive difference between teacher stability and student achievement, the difference of 0.52 was not statistically significant when the t-test for equality of means was administered to the findings.

The 2001 study by Webb had similar findings and suggested that extraneous factors that could improve student achievement outcomes. Webb sighted classroom variables such as instructional delivery, actively involving the learner, school climate, and teacher efficacy as possibly having positive effects on student achievement (Webb, 2001).

The second research question was: What are common perceptions of third grade teachers concerning issues with teacher stability? Third grade teachers were given a 10-statement survey concerning issues with teacher stability and responses were analyzed by the percentage of teachers that responded to each statement positively. Teacher responses were analyzed by dividing teachers into two groups, stable and non-stable teachers. Teachers were designated as either stable or non-stable according to the number of years they had taught third grade in the same school building. Teachers with 3 or more years experience in the same grade level in the same school were designated as stable, and teachers with less than 3 years experience in the same grade level in the same school were designated as non-stable. Data was also tabulated by all teachers that responded to the survey.

Based on the survey data collected from third grade teacher surveys, the researcher has drawn the following conclusions. Teachers feel that stability in teaching positions has a positive impact on student achievement and school climate and culture. Teachers also expressed that their skills as a teacher and knowledge of the standard course of study were positively impacted as they gained experience. This could be a strong indicator to decision-makers when dealing with issues, such as teacher assignments, that can be impacted by stability.

Though there is no data from this study to substantiate the teacher perceptions, the overwhelmingly positive responses to stability issues show that stability is a concern for teachers. The teachers' views of their own capabilities being constantly improved as a result of years of stable teaching could be a driving force for teacher assignments.

The third research question was: What are common perceptions of elementary school principals concerning issues with teacher stability? Elementary school principals were given a 10-statement survey concerning issues with teacher stability and responses were analyzed by the percentage of principals responding positively to each statement.

Based on the survey data collected from the elementary school principals, the researcher has drawn the following conclusions. Elementary school principals view stability as being important to student learning. Stability is a factor in student achievement but not the most important factor in the perceptions of elementary school principals. Research has proven that school climate and culture are affected greatly by having a stable teaching staff. Anthropologist Clifford Geertz (1973) defined culture as a historically transmitted pattern of meaning. These patterns of meaning are only learned through experience in a particular environment. Teachers that spend a period of time in a

school environment learn the culture of the school community and are more prepared to meet the needs of the school community.

The research in this study shows that there is a strong perception as to the effects of teacher stability on student achievement. The research also shows that there is a small positive difference between teacher stability and student achievement on the North Carolina End-of-Grade tests for reading and mathematics. Teacher and principal perceptions of issues concerning teacher stability were much stronger than the tested results of the effects of teacher stability and student achievement. If the perceptions of teachers and principals are so strongly expressed in the surveys, there must be the consideration that other internal factors have led to the perceptions that stability influences achievement. The details of these internal factors could be found in an extended survey or interviews of teachers and principals about teacher stability.

Limitations

The findings of this research were limited by several factors. First, the study was limited to a specific school system in the Central Piedmont of North Carolina which could affect external validity. Only students and teachers from that district were used in analyses of test data. Secondly, survey responses were gathered from the teachers and principals from the district that participated in completing a survey. Finally, the findings may be limited by using only one year of test data and one set of survey data to complete the study.

Conclusions

School districts are pressed to continually improve student achievement to meet state and federal requirements for accountability. School systems are constantly looking

for ways to improve student achievement and maintain highly qualified teachers in classrooms. This study indicates that teachers and principals view stability as a major factor in student achievement and enhancing school climate and culture. While there was only a small relationship between teacher stability and student achievement, the perceptions of the effects of teacher stability on student achievement reflected in the surveys of principals and teachers suggest that stability is a topic of interest in the district.

The research concluded that there is a small positive relationship between teacher stability and student achievement on the North Carolina End-of-Grade tests for reading and mathematics at the third grade level. Although the relationship was not statistically significant, in the age of school accountability, any variable that shows a positive relationship to student achievement should be pursued. The targeted school system will be given the results of this research which may be useful to principals in teacher assignments for the future.

Recommendations for Improvement of Practice

Based on the findings of this study, it appears that a small positive relationship exists between teacher stability and individual student achievement on the North Carolina End-of-Grade tests for reading and mathematics for third grade students. This finding, along with the responses from third grade teachers and elementary school principals surveyed concerning issues with teacher stability in the given district, may be applicable to other similar school districts. Therefore, the following recommendations for improvement are presented:

1. It is recommended that the selected school system review the survey data from the teachers and principals and use the information in assigning teachers for

future years. Trends of stability in individual schools may lead to increased student achievement in those schools.

2. It is recommended that principals review the teacher surveys to see trends for teacher assignments. Teacher perceptions of stability issues could have an effect on the culture and climate of the school. Stability could also lend itself to the development of professional learning communities.
3. It is recommended that principals analyze test data from their individual school to see if teacher stability has an effect in their building. Analyzing the data for one school could determine the effects of teacher stability in one setting.

Recommendations for Further Research

Based on the findings regarding the relationship between teacher stability and student achievement on the North Carolina End-of-Grade tests for reading and mathematics for third grade students, the following are recommendations for further research:

1. Multi-year research should be conducted to see if there is validity between teacher stability and student achievement and to see if trends or patterns exist in student achievement levels in relationship to teacher stability.
2. Research should be conducted to determine stakeholder perceptions concerning stability issues.
3. Further research should be conducted by selecting other districts to participate in the test data analyses and survey analysis to establish significance.
4. Further research should be conducted on the relationship between teacher

stability and student achievement to include indirect variables such as race, gender, and socioeconomic status that influence student achievement on high-stakes tests.

5. Research should be conducted to determine what is needed to maintain teacher stability in schools if stability is viewed as an important factor in student achievement.
6. Test data should be divided and analyzed by schools instead of district-wide to gain more insight into stability in individual settings. District-wide data analysis may not be effective in portraying stability issues in individual schools.

Summary and Perspective

Student achievement on high-stakes tests and accountability are major educational issues facing school districts. Maintaining highly qualified teachers in the classroom is another issue facing school districts. Schools must look for ways to constantly improve student achievement and maintain quality teachers in the classroom at the same time. Having stability in the classroom has a positive effect due to teacher perceptions regarding the benefits of stability. Schools must look for methods to increase student achievement and increase the stability of the teaching staff.

Teacher stability needs to be considered as a factor in increasing student achievement. It may also be a means of retaining teachers in the work force. The need for this study came from the fact that literature is extremely limited concerning the effect of teacher stability on student achievement on the North Carolina End-of-Grade tests for reading and mathematics. A clearer understanding of the relationship between teacher

stability and student achievement on the tests could help districts implement changes to insure greater student achievement in the future. An understanding of the relationship between teacher stability and student achievement can also aid principals and districts in implementing policies and practices that increase stability and retention.

Evaluating teacher and principal responses to surveys concerning issues with teacher stability can provide insight into each group's perceptions of teacher stability and its effects on student achievement, school culture, and climate. These perceptions can lead to valuable dialogue between all parties involved in the education of the children in a school district.

The data generated by this study has provided some insight into the relationship between stable teachers in the classroom and student performance on the North Carolina End-of-Grade tests for reading and mathematics for third grade students. While the research showed only a small difference between teacher stability and student achievement, a cumulative effect from the scores of the student population could produce great results for the school district. It is reasonable to conclude that a stable teacher in the classroom will improve student achievement.

The survey data generated by this study provides some insight into the perceptions of teachers and principals concerning issues with teacher stability. While the test data was not statistically significant, perceptions are often viewed as reality. By understanding the views of teachers and principals concerning teacher stability, school systems can continue to improve.

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Appendix A

Teacher Stability Survey – Teacher Survey

Teacher Stability Survey – Third Grade Teacher Survey

Teacher Stability – **for the purpose of this survey, teacher stability will be defined as a teacher teaching the same grade level in the same building for three or more years.**

Please answer the following questions by circling SA (strongly agree), A (agree), N (neutral), D (disagree) or SD (strongly disagree).

- | | | | | | |
|--|----|---|---|---|----|
| 1. I was a master teacher my first year teaching. | SA | A | N | D | SD |
| 2. Student test scores have improved as I have gained experience as a teacher. | SA | A | N | D | SD |
| 3. Stability has increased my understanding of of school climate and culture. | SA | A | N | D | SD |
| 4. Understanding school climate and culture has helped me be a more successful teacher. | SA | A | N | D | SD |
| 5. I had a better understanding of the standard course of study as I increased my experience. | SA | A | N | D | SD |
| 6. I feel that teachers should change grade levels every couple of years. | SA | A | N | D | SD |
| 7. The teacher stability can have a major impact on student achievement. | SA | A | N | D | SD |
| 8. I plan on teaching the same grade level for more than three years. | SA | A | N | D | SD |
| 9. My skills as a teacher have improved by teaching the same grade level for more than one year. | SA | A | N | D | SD |
| 10. Having stability at all grade levels enhances the climate and culture of the building. | SA | A | N | D | SD |

Number of years as a classroom teacher _____

Number of years as a fifth grade teacher _____

Number of years teaching fifth grade in this school _____

Appendix B

Teacher Stability Survey – Principal Survey

Teacher Stability Survey – Principal Survey

Teacher Stability – **for the purpose of this survey, teacher stability will be defined as a teacher teaching the same grade level in the same building for three or more years.**

Please answer the following questions by circling SA (strongly agree), A (agree), N (neutral), D (disagree) or SD (strongly disagree).

- | | | | | | |
|---|----|---|---|---|----|
| 1. Teacher stability is important to student learning. | SA | A | N | D | SD |
| 2. Teachers acquire better knowledge of the standard course of study by teaching the same grade level for multiple years. | SA | A | N | D | SD |
| 3. Students benefit from having an experienced teacher in the classroom as opposed to a beginning teacher. | SA | A | N | D | SD |
| 4. Teacher quality is impacted by the number of years a subject has been taught by the same teacher. | SA | A | N | D | SD |
| 5. Teacher stability plays a major role in teacher assignments. | SA | A | N | D | SD |
| 6. Teachers grow in content knowledge by teaching the same grade level for numerous years. | SA | A | N | D | SD |
| 7. It is a priority of mine to insure that teaching staff is assigned to the same grade level year after year. | SA | A | N | D | SD |
| 8. There is a positive effect on school climate by having stability in teaching assignments in my school. | SA | A | N | D | SD |
| 9. Having a stable teaching staff is important to school climate. | SA | A | N | D | SD |

Please list reasons why or why not: _____

- | | | | | | |
|--|----|---|---|---|----|
| 10. Teacher stability has a greater impact on student achievement than any other factor. | SA | A | N | D | SD |
|--|----|---|---|---|----|

Please list any other factors: _____