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AN INVESTIGATION INTO THE USE OF GRADE RETENTION
AS AN INTERVENTION STRATEGY IN VOLUSIA COUNTY, FLORIDA

by

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A dissertation submitted in partial fulfillment of the requirements
for the degree of Doctor of Education
in the School of Teaching, Learning, and Leadership
in the College of Education and Human Performance
at the University of Central Florida
Orlando, Florida

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Major Professor: Barbara A. Murray

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ABSTRACT

This study was conducted to analyze the performance of 1,493 students in Volusia County from 2003 to 2010, comparing ethnic and socio-economic groups, who had been retained a minimum of one time while enrolled from third grade through 10th grade. This study utilized the Florida Comprehensive Assessment Test (FCAT) Reading and Mathematic Developmental Test Scale Scores to evaluate student improvement. The groups compared in this study include Black, White and Hispanic students. Higher and lower socio-economic (SES) rates of retention were investigated for the entire population of retained students in Volusia County from 2003-2010. The groups were compared to see if there was a significant difference between each group being retained once, twice, or three or more times.

Early identification of students at risk of being retained was a primary recommendation resulting from the data analysis. Additional recommendations include progress monitoring, increased parent involvement, differentiated instruction, alternative placements and interventions in place of retentions when available, intensive instruction in those areas where a Level 2 or lower on the FCAT was scored.

To my wife and friend, Becky.

The list of what you have done for me is too long to place in this short space.

Only know that you bring us great joy and fulfillment in our lives.

Our children, our home, our time with family are all due to your efforts.

We are all better people because you are in our lives.

ACKNOWLEDGMENTS

This degree is the culmination of the efforts of many people. Mrs. Beagley, my 6th grade teacher encouraged me to make a speech; I found I could speak in front of an audience. Coach Plemon Hill encouraged all of his students to use their time wisely. “You are wasting your time, my time and everybody’s time.” Use time wisely. My parents, David and Caroline taught me so many wonderful values, and I am forever grateful to them. To Patsy and Charlie, what can I say; sometimes the key to your future is actually a key. To Mitch, thanks for the advice; you saw my future, and what a life it has been.

Dr. Baldwin has been a great help to me during this process. He has shown patience and offered insight which has helped with accurate reporting and conclusions. Dr. Ken Murray helped to lay a foundation for my research and Dr. Doherty was helpful in guiding my studies and efforts from the beginning of my journey. Dr. Lindsley was gracious enough to be my outside advisor and offer suggestions which gave me an overall perspective to my research.

In all of my graduate classes there has been one outstanding presence, Dr. Barbara A. Murray. She has challenged me to live up to her high expectations on many occasions. Sometimes I met them, and sometimes I failed. The doctoral process offers a look into a person’s true character. Dr. Murray has helped me take a hard look at my flaws and turn my weaknesses into attributes.

To my wife, Becky, I don't know what you were thinking when you agreed to marry me. My life since meeting you has been wonderful. You have agreed to so many of my wild ideas and backed me 100%.

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CHAPTER 1 THE PROBLEM AND ITS CLARIFYING COMPONENTS

Background of the Study

Grade retention was defined by Jackson (1975), as “the practice of requiring a student who has been in a given grade level for a full year to remain at that level for a subsequent school year” (p. 613). Jimerson and Kaufman (2003), also used terms such as flunking, held back, and non-promotion. Research on grade retention and the effects on student outcomes have been conducted by Holmes (1989), Holmes and Matthews (1984), and Jimerson (2001). Each of the studies revealed that grade retention was not an effective strategy to remediate the academic skills of the retained students. Holmes (1989), suggested that retention leads to poor self-concept, attitude toward school in general reduced personal and social ambition in students (Jimerson, Carlson, Rotert, Egeland, & Sroufe, 1997) and jobs with lower pay for retained students in late adolescence (Jimerson, 1999).

Bowman (2005) reported that although retention rates declined from 1995 to 2004, the practice of retaining students was still widespread and an ineffective and damaging intervention strategy. Shepard and Smith (1985), reported the practice of retaining students continued to be prevalent even though the practice was tied to social and emotional issues, short and long term academic issues including low self-esteem, reduced social involvement, reduced academic involvement and poor personal adjustment issues.

Holmes (1989) conducted a meta-analysis procedure which brought together the results of 63 studies on retention effects. This meta-analysis generated 861 effect sizes, which resulted in a -.15 effect size overall for the practice of retention. An explanation of effect sizes places a year's worth of growth at .40. Hattie (1990) discusses several effect sizes. Feedback to students results in a .75 effect size, which translates to almost two years' worth of growth. Other influences result in high effect sizes such as parental involvement at .49 and quality of teaching at .48. Hattie (1990) reported that the practice of retaining students continued even though researchers had indicated that retaining students had a negative effect on educational outcomes.

In an examination of the published research of the 20th century, Jimerson (2001), found that retaining students did not provide any greater benefit than simply promoting them to the next grade. He concluded that students who were retained were far less likely to graduate with their peers or continue their education in postsecondary programs (Jimerson, 2001).

Brooks (2002) and Denton (2001) indicated in their respective studies that students who were retained did show yearly improvement as they advanced through school. However, retained students who did improve fell behind their peers within two years of retention. As a result, alternative programs have been supported by researchers as a positive alternative to retention (Kelly, 1999).

Rumberger (1995) suggested that numerous factors contribute to whether a student will eventually leave school before graduation, including overall family life, individual experiences while attending school, and financial circumstances. Jimerson,

Egeland, Sroufe, & Carlson (2000), suggested that when examining the educational development of a student, the decision to quit was not based entirely on one factor but on a series of events that developed over the course of a person's educational experience.

Tomchin and Impara (1992) suggested that individual school districts would benefit from examining how retained students and those who could potentially be retained are educated. Teachers and school leaders within each school need to be presented with data concerning student retention and with what impact the data have on students over the long term.

Bridgeland, DiIulio, and Morrison (2006) stated that approximately 30% of all high school students who were retained ultimately left school systems prior to graduation from that system. Bottoms and Anthony (2005) noted that among students who identified as African-American, Hispanic, or Native American, the rate rose to almost half of the students not completing high school.

Despite the No Child Left Behind Act of 2001 (NCLB), many students across the nation have been left behind due to non-promotion to the next grade level due to inadequate test scores (Jimerson et al., 2006). These researchers encouraged "an increased emphasis on 'closing the achievement gap' between minority and non-minority students and improving the performance of all children" (p. 86). President Reagan commissioned the report, *A Nation at Risk*, in 1983. This report began a movement to increase the standards for students. The National Commission on Excellence in Education (1983) examined the quality of education in the United States and produced

the report. Secretary of Education T. H. Bell expressed concerns about a widely held public perception that something is seriously remiss in our educational system.

President George H. W. Bush sought to raise student expectations through higher standards and standard tests for grade promotion and graduation (Larsen & Akmal, 2007). President William J. Clinton sought to end the practice of social promotion while campaigning, later signing Goals 2000: Educate America Act in 1993 (Larsen & Akmal, 2007). The National Association of School Psychologists (1998) observed that upwards of 15% of all American students were being retained each year in the U.S. and that 30-50% of students in the U.S. were retained at least once before ninth grade.

Problem Statement

At the time of the present study, there was little to no research conducted that investigated the effectiveness of retention as an intervention in Volusia County Schools, FL. The current legislation in the State of Florida, as of 2014, required schools to retain students who have not met necessary state and federal test scores. The Florida Comprehensive Assessment Test (FCAT) requires third grade students to receive at least a Level 3 on the reading portion of this test to be promoted to the fourth grade (Florida Department of Education [FDOE], 2007). This raises two questions addressing (a) whether grade retention is truly an effective intervention for future success and (b) what interventions are the best to implement if grade retention does not bring about a positive change in academic success.

In Florida, 35,319 Black students were retained in the 2011-12 school year. This number represented 5.8% of the Black population (FDOE, 2013). A similar number of White students were retained (35,866), but as a percentage of the total population, these retentions represented only 3.2% of the total racial segment.

The problem for school districts lies in the accurate monitoring of retained students based on race and SES and how well those students did on subsequent FCAT reading and mathematics tests. In Volusia County in the 2011-12 year, Black students comprised 16% of the total population. Of that total number, 4.3% were retained. This was almost double the 2.6% retained in the White segment of the population. As reported by the FDOE (2013), when race is taken into consideration, Blacks and Hispanics are retained at almost twice the rate of all other segments of the total population. These rates were comparable to percentages to those of other racial segments. Early warning systems may be considered to ensure the reduction to a proportional amount of retentions.

The FDOE 2015 Grade 3 Promotion Plan indicated that in June, 2015, the lower quintile (20% or below) of students scoring on the Florida Standards Assessment (FSA) English Language Arts (ELA) examination. Students who were in this group were not automatically retained. Rather, the decisions were locally based. The decision for retention was based on teacher recommendations with evidence of student performance for the entire year. After reviewing the information, the principal and teacher had the discretion to promote individual students for the 2015-2016 school years. This

information was added to the study to explain current procedures concerning retention in Volusia County, Florida.

Purpose of the Study

This quantitative study was conducted to determine the relationship between (a) grade retention and race, (b) grade retention and socio-economic status and (c) achievement on subsequent standardized tests for students who were retained in the third grade in 2003 in Volusia County, Florida.

Research Questions

Three research questions were used to guide this research. To respond to the questions, hypotheses for each question were tested.

1. What differences exist between the number of retentions (one, two, three or more) due to students failing the FCAT as third graders in 2003 and race (Black, White or Hispanic) through 2010?

H₁: There is no difference between the number of retentions (one, two, three or more) due to students failing the FCAT as third graders in 2003 and race (Black, White, and Hispanic) through 2010.

2. What differences exist between the number of retentions (one, two, three or more) due to students failing the FCAT as third graders in 2003 and socioeconomic status (free or reduced price lunch status) through 2010?

H2: There is no difference between the number of retentions (one, two, three or more) due to students failing the FCAT as third graders in 2003 and socioeconomic status (free or reduced price lunch status) through 2010.

3. What differences exist between subsequent FCAT Reading and Mathematics Developmental Scales Scores from 2003 to 2010 of students retained in 2003 as third graders due to failing the FCAT?

H3: There is no difference between subsequent FCAT Reading and Mathematics Developmental Scales Scores from 2003 to 2010 of students retained in 2003 as third graders due to failing the FCAT.

Definition of Terms

Operational definitions for this study were adapted from NCES, the Florida Department of Education (FDOE), and the United States Department of Education (U.S. DOE).

Academic success: As related to achievement levels, students who receive a Level 2 or higher on the FCAT are considered academically successful and are eligible for promotion from third grade (FDOE, 2007).

Dropout: An individual who was enrolled in a school during the previous year, did not graduate, and was not enrolled in a school at the beginning of the current year; a non-graduate who did not complete the required state or district approved requirements for graduation. This term also applies to a student who was out of school due to suspension or who was unaccounted for as of October 1 of the school year in question.

Flunking: Being retained due to low academic achievement.

Grade Retention: The practice of keeping a student in the same grade from one year to the next due to low performance, physical development, or parent and educator concerns.

Graduate: A student who completes high school with an approved Florida standard high school diploma.

High school completer: Any student who has completed state or district requirements for graduation within the programs of Occupational Diploma, GED, or Special Education Certificate of Completion.

Low Socio-Economic Status: Any student who receives free or reduced price lunch.

Non-promoted: Students who were retained in their current grade for another school year.

Promotion: Movement of a student to the next highest grade.

Risk factor: The traits exhibited by students which are thought to lead to being retained in school.

Social Promotion versus. Promotion: The practice of moving students to the next grade due to age as opposed to moving them for meeting the required benchmarks.

Theoretical Framework

This study sought to determine the impact of retention upon the educational outcomes of students who were retained. Vroom's expectancy theory (Vroom, 1964)

provided the theoretical framework for this study. Expectancy theory was based on the premise that when individuals put forth some amount of effort, they have an expectation of a certain amount of reward for that effort. Vroom sought to define this belief as the expectation that certain actions will result in the attainment of a desired goal. Applying this theory, one can speculate that if students are retained in a grade during their educational journey after making the effort they think will allow promotion, they may be discouraged in terms of academic progress toward the ultimate goal of graduating from high school.

Vroom (1964) based his theory on four assumptions. The first was that individuals join groups with the assumption that the position or work will satisfy their own individual motivators, individual requirements, and preexisting expectations. All of these tenets contribute to an individual's interactions with a new position in the organization. The second assumption is that people enter an organization and use their own expectancy calculations to determine how they will act or perform with different members of the organization. This concept gives people the free will to choose how they will perform based on their own expectations. The third assumption is that people expect different things from the organization. These expectations could include job security, advancing within the company, pay scales, and salaries. The final assumption is that individuals will choose among all options available within an organization to give the most valence, or value, to the effort put forth.

Vroom (1964) added to the discussion by noting that individuals determine the amount of effort they wish to give to complete a task. This effort has an expectancy

placed upon it by the individual and it should lead to an acceptable performance. The performance should produce what the individual expects (instrumentality), and the final outcome or value of the reward should be highly positive (valence). The three main elements of expectancy theory are, therefore, expectancy, instrumentality, and valence.

Expectancy is estimated by the individual and is roughly calculated by considering both how much effort is put forth and the level of performance. The range for expectancy is 0 to 1. If the effort given will not result in the desired outcome, the expectancy is 0. If the effort will always result in the expected level of performance, the expectancy is 1. Individuals seldom go to either extreme, or the calculation usually falls between the two extremes.

Instrumentality is how well the level of performance will lead to desired outcomes. As with expectancy, the range is from 0 to 1. If the level of performance is always followed by an increase in salary, the result is 1. If the level of performance never leads to the desired outcome, the result is 0.

Valence is measured in terms of how a reward is viewed or classified by the individual. A pay increase to one person may be more important than being recognized publicly by management. The scale for valence can vary from highly positive to highly negative. If the individual does not appreciate the reward, the rating will be negative. If the reward is highly appreciated, the rating will be positive. The scale for valence, which ranges from -1 to 1, differs from the 0 to 1 scale of expectancy and instrumentality.

Vroom (1964) placed the three factors into an equation in which motivation was calculated by simply multiplying expectancy, instrumentality, and valence. Due to the

fact that multiplication was present in the equation, any factor equaling zero would then result in motivation as a whole, also equaling zero.

Vroom (1964) emphasized that leaders should try to increase effort in performance, performance to reward, and valance expectancies. Additionally, leaders should select the proper individuals with the proper skills to complete tasks effectively and promptly. Vroom provided leaders with insight into how individuals assess an organization and put forth the effort they feel will result in a desired reward.

Parallels to Expectancy Theory can be seen in the field of education in regard to how students perform on standardized tests and why their level of performance contributes to retention. Schlechty (1997) discussed the importance of providing students with clear and compelling standards so they may know what is expected of them and how they can be successful. If students are not confident in what is expected of them, they often fail to put forth their best efforts on standardized tests. Rather, they will fill in random answers, not wanting to put forth any effort because they are confident they will fail. Kohn (1993) discussed how intrinsic and extrinsic motivators compel students to achieve. If the students see no value in achieving a proficient score on a standardized test, they will not put forth the effort to achieve the needed score. There is no immediate repercussion to poor performance. The long term result may be that the student is retained.

Strong, Silver, and Robinson (1995) indicated that it is important for students to be given the opportunity to complete work that allows them success in mastering tasks and concepts and provides them the chance to experience growing as students and as

human beings. The students must have the criteria specifically articulated with prompt feedback; skills must be modeled; and they must experience some level of success. In both models, the person or student must experience some level of success to feel the effort and commitment was worth it. (Strong et al., 1995, Vroom, 1964).

Strong et al. (1995), also looked at the work of Schlechty (1997) who discussed the 10 critical qualities of student work. These include:

1. Content and substance: all students should receive a quality education regardless of social or economic background.
2. Organization and knowledge: instruction should be used in ways to allow students to be successful in tasks and assignments that are useful and important to them.
3. Product focus: students complete a project, such as a portfolio, that is important, meaningful and useful to them.
4. Clear and compelling standards: student preference is to know exactly what is required to be successful and how those requirements relate to them.
5. Protection from adverse consequences for initial failures: freedom to try and complete tasks without fear of being punished or embarrassment.
6. Affirmation of the significance of performance: students achieve a higher level of motivation when they know significant others, such as friends and family, value their work and accomplishments.
7. Affiliation: work should support the idea of students working with others and independently.

8. Novelty and Variety: students should be given the chance to experience new and different ways of doing things.
9. Choice: students should be given some degree of control over what they feel allows for meaningful involvement and a higher degree of commitment.
10. Authenticity: engagement follows authentic activities and assignments.

Assumptions

An assumption has been defined by Vogt (2005) as “a statement that is presumed to be true, often only temporarily or for a specific purpose” (p. 15). The assumption of this researcher was that all information entered into the specific databases used by the Volusia County School Board are accurate. It was also assumed that the information provided to the researcher was free from any human error or bias.

Limitations and Delimitations

Limitations

The following factors limited the research validity:

1. Although the School District of Volusia County strives to maintain accurate data regarding all students, human error in data entry may lead to inaccuracies.
2. Student populations can change over the summer, leading to reduced cohorts for longitudinal analyses when students leave the district.

3. Some students benefit from retention, but school administrators are not necessarily allowed to repeatedly retain students.
4. Students are retained in the third grade in 2003 for a Level 2 or lower test score on the FCAT Reading test.

Delimitations

1. This study was delimited to students identified as third graders in 2003 who were retained for a Level 2 or lower and a score of Level 2 or lower on the FCAT Reading during 2010 who took the FCAT Reading test. These students would not have received a Level 3 (proficient) or higher score.
2. This study was delimited to a data analysis using only Chi-square and Paired Sample *t*-tests. The Chi-square was used to compare race and SES to number of years retained. The Paired Sample *t*-test compared FCAT Reading and Mathematics Developmental Scales Scores in the third grade in 2003 with subsequent FCAT Reading scores through the 10th grade in 2010.
3. This study was delimited to data obtained from FCAT Reading and Mathematics Developmental Scales Scores. Any other reason for retention other than a Level 2 or lower score on the FCAT Reading test was not be considered.
4. This study excluded gender considerations. Although research indicates gender contributes to retention rates, gender was not investigated in this study.

Organization of the Study

This chapter provided an introduction to the study. In it, the background of the study, a statement of the problem, and the purpose of the study were presented. The theoretical framework on which the study was based was briefly explained. The specific research questions and hypotheses were delineated, terms were defined, and limitations and delimitations were explained.

Chapter 2 was intended to form the foundation for the new research. It contains a review of the student retention literature and research. Chapter 3 contains the methodology used in the study, including the sample, population, research setting, and statistical methods that were used in data analysis.

The results of the data analysis for each of the three research questions are presented in Chapter 4. Chapter 5 contains a summary and discussion of the results of the study, linking findings to previously cited literature results. Implications of the study and recommendations for future research are also provided.

CHAPTER 2 LITERATURE REVIEW

Introduction

Grade retention of young students due to low academic achievement, social immaturity or mastery of grade level skills is common place in education (Abidin, Golladay, & Howerton, 1971). McCoy and Reynold (1999) indicated that although many research studies have established that retention has both long and short term educational and emotional negative effects on students who are retained, the practice continues. Brooks (2002) and Denton (2001) indicated, in their respective studies, that students who were retained did show yearly improvement as they advanced through school. However, students who improved fell behind their peers within two years of retention. As a result, alternative programs have been supported by researchers as a positive alternative to retention (Kelly, 1999).

In an examination of the published research of the 20th century, Jimerson (2001) found that retaining students did not provide any greater benefit than simply promoting them to the next grade. Furthermore, he concluded that students who were retained were far less likely to graduate with their peers or continue their education in postsecondary programs. Hong and Raudenbush (2005), emphasized that at-risk students who are promoted tend to have a better chance of experiencing growth.

Rumberger (1995) suggested that there were numerous factors that contribute to whether a student will eventually leave school before graduation, including overall family life, individual experiences while attending school, and financial circumstances.

Jimerson et al. (2000) suggested that when examining the educational development of a student, the decision to quit is not based entirely on one factor, but on a series of events that develop over the course of a person's educational experience.

Tomchin and Impara (1992) suggested that individual school districts would benefit from examining how retained students and those who could potentially be retained are educated. Teachers and school leaders within each school need to be presented with data concerning student retention and the impact this can have on students in the long term.

Grant (1997), suggested that most studies he reviewed recommended early retention of students. Early grade retention research produced across-the-board consistency which showed retention as an ineffective strategy for improving academic achievement in younger students (Gredler, 1894; Holmes & Matthews, 1984; Mantzicopoulos & Morrison, 1992; Shepard & Smith, 1986).

History of Retention in the United States

Holmes and Matthews (1984) reported that grade retention has been debated back to the mid 1800s, the time of the Civil War. Students at this time were grouped based on age, intellectual ability, and maturity. Students had to master certain skill levels to be moved to the next grade level.

Schools in the United States in the mid 1900s did not utilize the Kindergarten through 12th Grade model used in the 21st century. Students progressed based on their ability to master content rather than being promoted based on current grade level

standards (Ostrowski, 1987). Ostrowski reported that Henry Barnard sought to transform the multi-age classroom into the Prussian model. This involved a system of grades with educational elements for each grade that would determine whether a student proceeded or graduated to the next grade level. Furthermore, students from the United States studying in Europe in the 1860s sought to integrate the graded model of instruction upon their return to America (Ostrowski, 1987). John Pierce and Horace Mann both proposed a system which would classify students and divide primary school into grades 1 through 8 (Beck, Cook, & Kearney, 1960; Ostrowski, 1987). Horace Mann was also instrumental in establishing the first compulsory attendance laws for elementary schools in Massachusetts. At this time in United States history, about 60% of children were enrolled in school. Most of these were white children, and only 10% of the black population who were children at the time attending some type of school (Olson, 1999).

Reynolds (1992), reported that the practice of assigning students to specific grade levels was common by the 1870s. Grade level curriculums were proposed by the educators at the time, and promotion was based on mastery of the curriculum for each grade level. Reynolds explained that with the move toward grade levels came the realization that some students could master the curriculum quickly, but others performed poorly and could not master the requirements. When students were promoted without the necessary skills for the next level of curriculum, there was an increase in discipline issues and a decrease in academic performance (Reynolds, 1992). Educators sought to give students extra time to acquire the necessary skills and proposed retention as a strategy to

provide increased time for learning to improve academic skills (Reynolds, 1992; Schwager, Mitchell, Mitchell & Hecht, 1992).

From 1900 to 1910, statistics collected show that 20% of all students were being retained from year to year, with some years having as many as 50% of students being held back (Beck et al., 1960). Educators implemented quarter and semester retention policies, as well as retention by subject matter to stem the high levels of retention. The retention rates remained high even with these strategies in place (Beck et al., 1960). Owings and Magliara (1998) reported that the study on age-grade progress by Maxwell in 1904 was widely used by school systems to report on promotions, retentions, and student dropout rates. Rose, Medway, Cantrell & Marcus (1983), reported the most common method for dealing with issues presented by slow learners was grade retention. Stiles (1983) indicated statistics showed that by 1915, a state by state comparison revealed retention rates ranging from 2% to 80%.

Grade retention from 1920 to 1940 was based on the idea that each grade had its own curriculum, and it was necessary to master that grade's curriculum before moving on to the next grade (Reynolds, 1992). The thought process at the time was to promote students if they could work at or above grade level and show a good attitude toward school. Beck et al. (1960) noted that the following assumptions were made regarding this concept for it to be successful: (a) all students had equal abilities, (b) one curriculum fit all needs, (c) one grade was distinctly different from another and (d) students had to find a way to address their own educational deficiencies. Additionally, it was assumed the

student had the skills to master the curriculum if they were just given more time (Reynolds, 1992).

Beck et al. (1960) reported that grade retention was frequently used in the 1940s and 1950s even though researchers during that time could not draw a conclusion between increased academic performances or social and personal adjustment and retention. The thought process for non-promotion at the time was based on the concepts that (a) academic success would lead to increased intellectual development, (b) fear of failure would lead to reduced development, (c) the same set of standards meets the needs of all students, and (d) repeating a grade will contribute to subject mastery (Beck et al., 1960).

Goodlad (1954) analyzed research from 1924 to 1948, revealing that grade retention did not increase mastery of the curriculum or academic achievement in general. Otto (1951) reported grade retention showed no educational value. He also suggested the academic gains of retained students were not as significant as their peers who were not retained. In this same time period, Anderson (1950) reported that grade retention was a predictor for dropping out of school, contradicting the assumption that grade retention increased academic performance and that success with academics would keep students from dropping out of school.

Jackson (1975) reported that at least five research studies were conducted to investigate the negative effects of grade retention prior to 1930. These studies sought to determine if retention was beneficial for those students retained. Shepard and Smith (1989) suggested that although students who were retained gained some short term

benefits, those benefits were lost within two to three years of the children's having been retained.

The National Center for Educational Statistics (2006) reported that although there was a reduction in the number of students retained in the 10 years leading up to 2004, the No Child Left Behind Act [NCLB] (2002) increased the number of retained students by increasing the standards students must achieve before being promoted. The NCLB also sought to close the achievement gap between minority subgroups and non-minority students. Additionally, the law strived to raise the achievement levels of all students. This was referred to as grade-standard theory by Elsbree (1943). Elsbree suggested that students must meet predetermined academic achievement levels before they could be moved to the next grade level. An argument was made by Owings and Kaplan (2001) that these increased levels would disproportionately affect those students who were most at risk of being retained.

Owings and Kaplan (2001) suggested that many teachers agreed with increased standards due to more rigorous assessments which were associated with them. Grade promotion has been tied to how well students perform on specific standards within these standardized tests. As the implementation of increased standards occurs, the practice of social promotion and retention compares the effects of both on students. Owings and Kaplan (2001) suggested the practice of social promotion may move students to the next grade without the knowledge and skills to perform up to academic levels of their peers.

Alexander, Entwisle, and Dauber (1994) suggested that keeping a student in the same grade for two years admits failure for both the school that retained the student for

not delivering the adequate instruction and for the student who was required to spend two years in the same grade level. These researchers also suggested that social promotion could lead to students being retained in grades later on in their educational years.

Characteristics and Perceptions of Retained Students

Elsbree (1943) reported that low achieving students exhibited chagrin, boredom and disappointment. Thomas (2000) focused on student demographics, characteristics and the overall effects of retention on students. The main focus looked at gender, race and socioeconomic status. Thomas reported that males were twice as likely as females to be retained and Hispanics and Blacks were retained at higher rates than Whites. Thomas suggested that strict enforcement of retention policies would increase the retention of males, Blacks, and Hispanics, adding to the stigma students with these characteristics already face.

Planty et al. (2009) agreed that in 2009 surveys showed that a greater percentage of male students than females were retained. Jimerson et al. (2006) noted that students of low socioeconomic status who were retained had a higher rate of absenteeism than those who were promoted. Planty et al. (2009) reported 23% of students from low socioeconomic households had been retained, students living in near low socioeconomic status homes had been retained, but only 5% of students from high socioeconomic status homes had been retained. Doyle (1989) summarized that retention was not independent of race, socioeconomic status, or gender. The opportunity to earn a quality education is

not a privilege but a right afforded to all students, so each child has the chance to acquire an education regardless of these characteristics.

Strong, Silver and Robinson (1995) conducted research that sought to determine what kind of work students liked and what kind of work they did not like. The work the researchers found students most liked was work that was engaging. Specifically, those students who were engaged in their work had four basic goals that motivated them: (a) success, mastering a task; (b) curiosity, need to feel understanding; (c) originality, expression of self-development; and (d) relationship, working with others in an organization (Strong et al., 1995). The research connects to retention in that students who like what they are doing rarely fail and are, therefore, not retained.

Martinez and Vandergrift (1991), researched surveys on retention and found most policies concerning retention were based on common sense rationale as opposed to empirical research findings. Retaining a student in Kindergarten or first grade was thought to be proactive in the long-term academic success of low achieving students. Based on survey results, these researchers determined that students gained more physical maturity, greater academic capability, and increased personal adjustment from the additional year of instruction. Furthermore, the extra year of Kindergarten or first grade was seen as an effective strategy to develop the critical basic skills necessary for continued academic and social success.

Teachers were surveyed by DiMaria (1999) who found that teachers perceived Kindergarten and first grade as fundamental years of development vital to future academic success. Retention in these early grades was also viewed by teachers to be

socially and emotionally beneficial. Natriello (1998) indicated educators experience external pressures in regard to state standards and standardized high-stakes testing to retain students who do not meet basic standards of achievement.

Robertson (1997) conducted research and concluded teachers perceived retention in Kindergarten and first grade as a positive academic strategy which would reduce negative stigma and stereotyping of retained students and promote academic success as students progressed through school. Faeber and VanDusseldorf (1984) conducted research which showed that parents and educational professionals shared a strong positive attitude towards using retention in Kindergarten and first grade as an effective strategy for future academic success. The researchers found that 97% of graduate students in educational programs at a large university viewed retention as having a positive impact on future academic success for low performing students.

Byrnes and Yamamoto (1986) conducted research in a single metropolitan area in the United States, surveying teachers, principals and parents. The surveys showed 63% of teachers, 74% of principals and 60% of parents thought students who fail to meet minimum grade level requirements should be retained. They concluded the primary rationale for early grade retention was students' inability to meet these minimum standards.

According to Hook and Schaeffer (1993), the educational system in the United States has been viewed globally as having a weak accountability, and most low performing students have been seen as coming from environments with little to no exposure to learning opportunities and limited life and travel experiences. Karweit

(1991) suggested the failure to learn is the fault of the student and not the fault of the educational system. Nason (1991) contradicted this philosophy in suggesting the student should not be forced to adapt to the curriculum, but that the curriculum should be modified to fit the learning needs of the student. This modification of the curriculum would reduce failure rates in early grades. Alexander, Entwistle, and Dauber (1994b) continued this line of reasoning, indicating educators viewed retention rates on the rise due to increased curriculum demands and high stakes standardized testing. Hook and Schaeffer (1993) argued that early grade classrooms were utilizing instructional strategies usually practiced in middle and high schools. These included class-wide instruction as opposed to individual instruction and class-wide paper and pencil assessments.

Ethnicity and Grade Retention

Kewal, Ramani, Gilbertso, Fox, and Provasnik (2007) reported that approximately 17% of Blacks and 10% of Hispanics had been retained between Kindergarten and 10th grade nationwide in the 2003 school year. Bali, Anagnostopoulos, and Roberts (2005) reported Hispanic and Black students were disproportionately retained as compared to the proportions of the general population. Alexander et al. (1994b) reported that minorities, specifically Black and Hispanic students and students from low income households, fell behind their White peers in terms of academic achievement. Alexander et al. (1994b) attributed this lower achievement level to the grouping of higher achieving students and lower achieving students which produces lower academic achievement levels for the lower performing students who were grouped together. Retention has been linked to

several contributing factors, including demographic, academic, environmental, and behavioral issues (George, 1993; Guttormsson, 1999; Robertson, 1997). A retained student is more likely to be a male from a lower socio-economic status (SES). Retained students are usually younger than their peers and either Hispanic or Black (Kelly, 1999; McCoy & Reynolds, 1999). Robertson (1997) supported this research, reporting that Hispanic and Black students were retained at higher rates than their White peers. This research is supported by Guttormsson (1999), noting low SES students, minority students and students from urban cultures scored lower on IQ tests and were retained at higher rates than their white, higher SES peers.

An examination of 66 studies by McCollum, Cortez, Maroney and Montes (1999) was conducted from 1990 to 1997. Conclusions in 65 of the 66 studies showed that early grade retention was either ineffective or caused harm. The research further showed Hispanic and Black males were retained at roughly twice the rate of their White peers. Brown, Dancy, and Davis (2007) reported under-achievement in reading and mathematics during the early years of education were more difficult to overcome in underfunded schools, with fewer opportunities for high level learning experiences. Currie (2005) suggested evidence exists that significant differences exist prior to entry into early education due to the family race, income status, parent's educational level, as well as the child's living accommodations.

Cosden, Zimmer and Tuss (1993) conducted research to determine if differences existed in enrollment age when compared to ethnicity and gender. Additionally, they compared enrollment age to retention and promotion rates. The highest rate of retention

between Hispanic and White students showed Hispanic males had the highest rate of retention, followed in order by White males, Hispanic females, and White females. All groups showed a higher level of retention for the students who were younger than their peers. Zepeda (1993) studied 478 retained students and found these students were more likely to be from a single parent household, the parents were rarely involved in school and were employed in low-skill jobs. This process was also reviewed as resulting in more minority students receiving special education services and could account for the disparity in representation of gifted and talented programs by minorities.

Natale (1991) indicated potential factors involving behaviors, low-academic performance, and inhibited social skills as contributing to at-risk students dropping out of high school. Grade retention was also a contributing factor. Cosden et al. (1993) reported students who were retained once were more likely to be retained multiple times. Natale (1991) reported that in some cases retained students were shown to have higher test scores than their non-retained peers.

Miesels and Liaw (1993) reported that students who had never been retained were likely to not have been minorities. Additionally, the parents of the retained students in the study reported high levels of negative socio-emotional behaviors, being less comfortable in the school setting involving academic outcomes, and an increase in special education placements of their students. Picklo and Christenson (2005) reported the most common reason for retention was academic failure. Bottoms and Anthony (2005) noted that among students who identified as African-American, Hispanic, or Native American, the rate rose to almost half of the students not completing high school.

Socioeconomic Status and Grade Retention

Bianchi (1984), reported that a positive relationship exists between the outcomes of an individual as an adult and the socioeconomic status that a person had as a child. According to Bianchi, poverty and the level of parental education contribute greatly to educational outcome, even more so than the compositional status of the family. Financial and educational status matter more than if the parents are married, separated, or divorced than the extent to which the child lives with any one member of the family. Bali et al. (2005) determined that the socioeconomic status of the student had a greater effect on the educational outcome of the student than race or ethnicity. They also reported that the socioeconomic status of the student would impact the level of cultural experiences to a negative degree for the student and further negatively affect educational outcomes and achievement.

Lorence and Dworkin (2006) determined low performing minority students were more likely to have a lower socioeconomic status than their non-Hispanic White peers. They also concluded that students receiving free and reduced price lunch were more likely to be retained than those students who did not qualify for subsidized lunches. Alexander et al. (1994) reported an advantage is gained from living in a higher socioeconomic household. Downey and English (2005) referred to this as cultural capital which can be defined as uneven distribution of cultural knowledge, including vocabulary and linguistic skills that classify individuals in society.

Banks (1988) reported that educators should understand the variety of motivational tactics, learning skills, and cognitive traits different students bring to the

educational environment. Certain traits may be associated with specific racial and ethnic characteristics, and this association may be seen throughout the entire student population. Teachers should recognize what assets and traits students possess and design lessons to emphasize students' strengths and plan lessons accordingly.

Scheurich and Skrla (2003) reported students' efforts are validated when teachers recognize the individual assets of the students. Teachers then focus on the assets as they move through the scope and sequence of instruction. The researchers emphasized the importance of high expectations while respecting the abilities and backgrounds of the students. They indicated this does not encourage teachers to lower the standards of academic achievement. Rather, it encourages teachers to look at the assets children bring to the classroom and offer students a challenging curriculum based on their abilities. Keeping in mind the abilities of the students will decrease the frequency of retention and, in turn, reduce the number of lower socioeconomic status and minority students who are retained (Scheurich & Skrla, 2003).

Table 1 displays the total number of students who receive free and reduced price lunches in Volusia County, FL. There are 26,860 students (43.1%) who receive free lunches and 5,618 (9%) who receive reduced price lunches. There are a total of 32,478 students who receive subsidized lunches in Volusia County Schools.

Table 1

Students Eligible for Free and Reduced Price Lunch

Eligible Students	N	% of Total Students
Free Lunch	26,860	43.1
Reduced Price Lunch	5,618	9.0

Gender and Grade Retention

Abidin et al. (1971) noted that gender plays a significant role in terms of grade retention. They reported that boys are twice as likely as girls to be retained. The researchers concluded that the chance of being retained was greatly increased for boys who were Black and poor. Marion, McCaul, and McIntire (1989) reported males were over-represented in their study of retained students. Males represented 55% of all students retained from Kindergarten to 12th grade. McCollum et al. (1999) found that males in Texas made up 60% of the retained population from 1993 to 1997. Marion et al. (1989) suggested that many students may be retained based on subjective retention policies. They reported that considerations may not only include academic achievement but emotional and physical characteristics. These include the ability to interact interpersonally and within a small or larger group.

Planty et al. (2009) agreed that in 2009 surveys showed that a greater percentage of male students than females were retained. They reported that nationally 8.9% of males were retained as compared to 6.1% of females being retained. Sable and Snyder (2000) found that when boys were compared to girls, boys had increased difficulties with

academics. These difficulties include achievement, completion of course work, and retention rates. Halpern (1997) observed that boys over-represented girls when speech progress, learning disabilities, reduced attention spans, and special education diagnoses were considered. Perkins, Kleiner, Roey, and Brown (2004) reported that girls get higher grades on tests and assignments in core classes throughout their entire educational process, including college. Wehmeyer and Schwartz (2001) noted that girls performed as well as boys on mathematic assessments and girls outperformed boys in language based curriculum. Planty et al. (2009) also reported girls doing better in overall literacy, beginning in early grades and continuing through to college.

An increased achievement gap has been noted as students grow older. Buchmann, Diprete, and McDaniels (2008) reported the achievement gap is even greater in terms of Black, Hispanic and lower socioeconomic males. Snyder and Dillow (2007) showed boys were more likely to drop out of high school than girls. Freeman (2005) reported girls were more likely to complete high school and college and go on to complete higher degrees.

Several studies have been conducted to determine why boys perform poorly in schools. Pollack (1998) found that schools were geared toward more feminine attitudes. Miesels and Liaw (1993) reported that boys were less inclined to seek financial success through academic avenues. Buchmann et al. (2008) attributed poor performance among males to differences in gender in terms of maturation and attitudes toward education.

Legal Aspects and Federal Implications of No Child Left Behind (NCLB)

The effects of short and long-term effects of grade retention have been the focus of many research studies. Researchers have identified effects on the academic achievement and the socioeconomic adjustments of retained students as well as how likely a retained student is to drop out of school.

Chapter 1008.25 of the Florida Statutes (2011) provides clear expectations for student progression, instructional remediation, and requirements for reporting student performance. In Sub-Section 1, the statute dictates that a student's progression from one grade to the next must be determined through the demonstration of proficiency in four areas: reading, writing, science, and mathematics. A school board is required to have policies in place to both ensure student proficiency in these areas and encourage parental involvement in the process.

Sub-Section 2 of Chapter 1008.25 (Florida Statutes, 2011) requires school districts to have a comprehensive program in place to facilitate a student's progress. School districts must enact an evaluation system, complete with performance and proficiency levels determined by the Education Commissioner. If the student does not achieve a sufficient score in a certain grade, the student will either receive remediation or be retained. If the student is retained, an intensive program of remediation must be set in place. This remediation is designed to be differentiated from the previous year of instruction and take into account the learning style of the specific student. If the student has been retained for two or more years, an alternative placement for that student will be considered.

Sub-Section 3 of Chapter 1008.25 (Florida Statutes, 2011) instructs school districts to allocate resources primarily to student remediation programs for students who are deficient in reading at the end of their third grade year. Additional resources are to be allocated to student remediation programs for students who do not achieve the required scores on statewide assessments in reading, writing, science and mathematics. More details surrounding assessment and remediation are included in Sub-Section 4 which dictates that a student must achieve a score at Level 3 or higher on all sections of the FCAT. Students who fail to meet this requirement must be given additional diagnostic tests to identify the reason for the difficulty in the identified area. The school and parent must develop a progress monitoring plan, such as (a) the use of an individualized educational plan (IEP), (b) placement in a school-wide student monitoring plan, or (c) the writing of a student-specific progress monitoring plan. Students who receive a score below Level 3 may be required to attend remediation programs. In Volusia County, FL., all students who perform at Level 1 or 2 are placed in a remedial reading class, taught by instructors with reading certifications. Students will remain in these classes until they are able to achieve a Level 3 or above on the FCAT; however, the statute does allow the school district to retain the student who will continue to be given additional instruction and support until graduation or reaching the age of no longer being subjected to compulsory school attendance requirements.

Sub-Section 5 of Chapter 1008.25 (Florida Statutes, 2011) places prioritization on having every student read at grade level or above. Therefore, schools are required to assess students in every grade between kindergarten and third grade. Students

determined to possess substantial deficiencies in reading, as determined by a statewide assessment (scoring below Level 2 on the third grade reading FCAT) or teacher observation, must receive immediate intensive remediation.

When the child is retained under this stipulation, several actions must be taken. First, the parent of the child must be notified of the deficiency, including a full description of the services available to remediate the deficiency as well as the specific services that are currently being provided for the child. Second, the parent must be notified that if the child is not remediated by the end of third grade, he or she will be retained as previously indicated. Schools must provide parents with any strategies that they can use at home to help with the remediation process. Third, parents will be informed that the FCAT is not the only determining factor in whether or not their student is promoted; portfolios, alternative assessments, and other evaluations can factor into this determination. Finally, the parent must be notified as to the school district's policies for mid-year promotions, as they may be granted at any time during the school year when the student demonstrates proficiency with the ability to read at or above grade level.

Sub-Section 6 of Chapter 1008.25 (Florida Statutes, 2011) addresses the elimination of social promotion, otherwise known as the practice of promoting students based on age. Some situations exist in which social promotion is still deemed successful, known as promotion by "good cause," and are defined in this sub-section as the following:

- Limited English Proficient (LEP) students who have had less than two years of instruction in English Speakers of Other Languages (ESOL) programs,
- students who have IEPs which have been found to be inappropriate and not in compliance with the State Board of Education's rules,
- students who achieve an appropriate score on a State Board of Education-approved alternative assessment,
- students who have a portfolio which demonstrates a Level 2 proficiency in reading,
- students with an IEP or 504 Plan who was retained between kindergarten and third grade and has had remediation for two years, and
- students who were retained between kindergarten and third grade have received intensive reading remediation for two years.

With these definitions in mind, the teacher must submit the appropriate recommendations to the school principal, who will review the material and submit the request to the superintendent of the district. The superintendent must accept or reject the request in writing.

Sub-Section 7 of Chapter 1008.25 (Florida Statutes, 2011) instructs schools as to what must be provided for retained readers in the third grade. Each student must be given 90 minutes of “daily, uninterrupted, scientifically research-based reading instruction” (p. 54). Other strategies may include (a) small group instruction; (b) small teacher/student ratios; (c) frequent progress monitoring; (d) access to tutors and mentors; (e) classes to transition from third to fourth grade; (f) an extension of the school day, week, or year; and (g) summer reading programs. Parents must be notified as to why their student is not being promoted due to good cause. The school is charged with developing and implementing a plan for the student to be promoted during the next

school year, keeping the parent informed of the plan. A high-performing teacher will be provided to oversee the student's remediation.

Academic Achievement after Grade Retention

Mantizicopulos (1997) reported students who were retained in Kindergarten and Grade 1 did not show any long term benefits from the year of retention. Shepard and Smith (1989) also indicated, in their research involving 21 studies, that retention in early grades was no more beneficial in the long term for students as compared to being retained in later grades. Hong and Raudenbush (2005) reported students retained in Kindergarten were further behind than their rising peers. Additionally, students who were promoted had an increased chance of academic acceleration.

Thomas (2000) found students who were categorized as low socioeconomic and minority status received instruction with less rigor and diminished expectations of performance. Silberglitt, Appleton, Burns, and Jimerson (2006) determined, in their longitudinal study, that the practice of retaining a student did not lead to students achieving the same level of growth as their peers. Rothstein (2008) added that students of low socioeconomic status, minority, and special needs have often been tracked and given less rigorous instruction by novice teachers.

Roderick (1995) asserted that retaining a student was not an effective remediation strategy. The practice leaves students even further behind their promoted peers. This can continue to be measured even as the student progresses to high school. Hong and Raudenbush (2005) agreed with Roderick, contending that retention impedes growth over

the year the student was retained and that students promoted had increased growth through the next year. Dobbs and Neville (1967) reported that retention is a practice often used in lower performing schools to reconfigure instructional practices. They contended that retained students would continue to have academic difficulty if promoted and the method and content of instruction were not modified.

Holmes (1989) conducted a meta-analysis of 63 research studies addressing student retention as an instructional strategy. The analysis resulted in positive results in nine of the studies as opposed to 54 with negative results. The studies that indicated a positive result after the initial retention also showed the benefits of retention diminished within a few years of the students being retained. Shepard and Smith (1990) reported similar results in their findings, indicating that students had less academic success compared to those students who had been promoted. Jimerson (2001) conducted a meta-analysis of research completed between 1990 and 1999 and used variables including intelligence, gender, academic achievement levels and social development scores to compare the effectiveness of each category. Of the 20 studies the authors evaluated, four were judged effective strategies, and 16 were determined to be ineffective.

Holmes and Matthews (1984) reported that despite the overwhelming evidence that retaining students was not effective as an instructional strategy, schools continued the practice. They also noted that the practice not only impeded long term academic progress. It also produced long and short term socio-emotional development.

The FDOE (2013) provided statistics regarding the overall reduction of non-promotions from 2002-03 to 2012-13. The number of students retained in 2002-03 was

over 208,000 students, but this number fell to 102,775 students by the 2010-11 school years. The high number of retained students in the 2002-03 school years coincides with the new requirements for minimum achievement levels instituted by legislation. Yearly calculations, which capture both the number of non-promotions and the percentage change in the total over the previous year, are presented in Figure 1. As indicated, reductions occurred every year between 2002-03 and 2010-11 but increased by 2.2% in 2011-12 to 105,022.

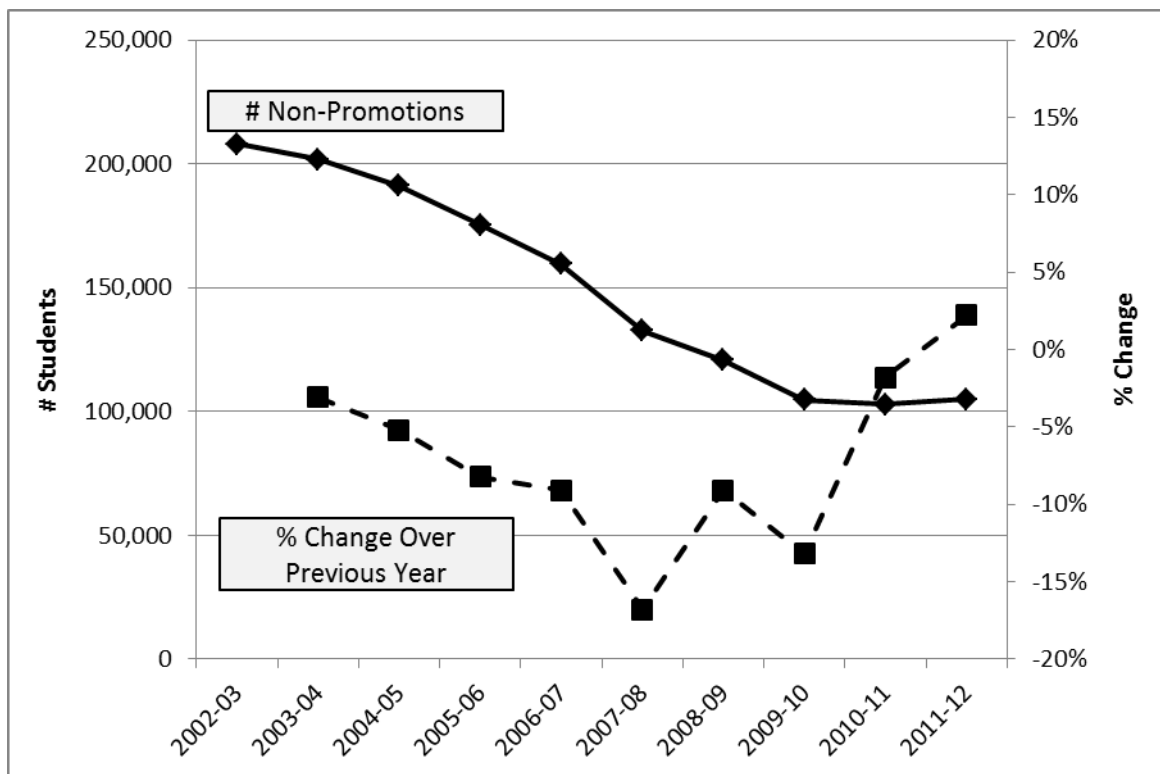


Figure 1. K-12 Non-promotions in Florida, 2002-03 through 2011-12

Figure 2 demonstrates the higher number of retained students in Grades K-3, again directly related to minimum reading scores (FDOE, 2013). Relatively fewer

students were retained in Grades 4-8, but the trend sharply increased in Grade 9. FDOE (2013) reported difficult course loads and insufficient scores on the FCAT as the main reasons why higher numbers of high school students were not promoted to the next grade. As with Figure 1, Figure 2 demonstrates the overall decreases in numbers of students being retained between 2002-03 and 2011-12, with the exception of Grade 12.

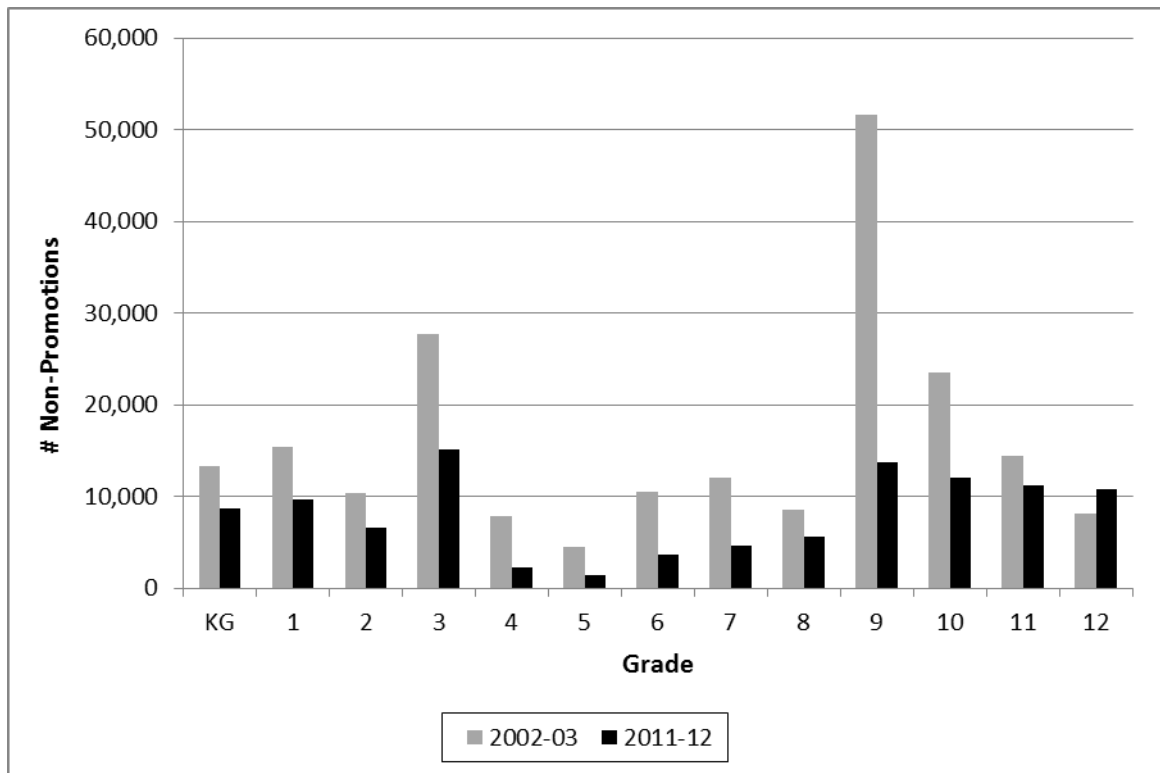


Figure 2. Total Students not Promoted by Grade in Florida, 2002-03 to 2011-12

Parental Involvement of Retained Students

Jimerson et al. (1997) indicated the best method to determine if a child should be permitted to progress or be retained is to consider the attitude of the parent toward the school the child attends and the parent's level of educational involvement. Jimerson,

Woehr, Kaufman, and Anderson (2004) suggested that parents should have on-going contact with teachers to help improve the academic outcomes of their children.

Ferguson, Jimerson and Dalton (2001) also reported that parent involvement, through interaction with the teacher and school, contributes to a student's success over time.

Owings and Kaplan (2001) discussed the importance of interaction between parents and teachers when addressing cultural differences between the families of at-risk students and the schools they attend.

Epstein and Dauber (1991) suggested that the involvement of adults and caregivers in the home was vital in terms of assistance with homework and constant communication with educators and administrators. Grolnick and Showiak (1994) found parental involvement in school had a profound impact when the child came from a lower socio-economic setting. Izzo, Weisberg, Kaspro, and Friedrich (1999) reported that parents from lower socio-economic backgrounds had fewer interactions with educators than higher socio-economic parents. Schulting, Malone, and Dodge (2005) later observed that fewer interactions between educators and parents of low performing students adversely affected attitudes toward school. Christenson (2004) suggested better policies and practices to assist parents of low performing students to be more involved in the education of their students. Eccles and Harold (1996) discussed parents of low performing and retained students in terms of the problems they often had with school. These problems included low academic performance, attendance issues, behavioral concerns, poor social skills and inability to self-advocate their academic needs to educators and administrators. Grusec (2002) expressed the belief that parents generally

want their children to do well in school and that parents will seek to help their children when a request is made from an educator when it is clear the student is in need of some support. Shuman and Miller (2001) found that excessive help with homework in Grades 1 and 2 actually had a negative effect by the fourth grade. Izzo et al. (1999) suggested that parents helping with homework may add to positive and productive ways for students to interact with educators and increase success in all areas of schooling through modeling appropriate behaviors in those situations.

Social and Emotional Adjustments and Grade Retention

Roderick (1995) reported that retained students viewed being retained as punishment. Jimerson et al. (1997) observed that students retained in Kindergarten were on the same level of socio-emotional development as their peers but that by the sixth grade, the retained students had decreased social skills and less ability to adapt academically than their peers. Jimerson et al. (1997) also reported sixth-grade retained students rated being retained on the same level as other tragic events in their lives such as divorce or a family member dying.

Holmes and Matthews (1984) studied the effects of retention during the later elementary school years as well as the middle school years. They determined that there were negative impacts in regard to student self-worth, attitudes toward academic progression and the students who had not been retained. The authors reported that many of the retained students were likely to engage in antisocial behaviors such as binge drinking, illegal drug use, unsafe sex and crime. Students who were retained viewed

education negatively and exhibited behavioral disruptions while in school. Also, retained students viewed teachers as having a negative impression of them, and this stigma of failure influenced their decisions to leave school early.

Jimerson et al. (1997) reported that being retained was often a consequence of a student's poor behavior. They indicated that when students were retained due to behavior, they often exhibited persistent and increased poor behavior in the years after retention. Increased levels of anxiety were also reported in the study for students who had been retained in kindergarten, first and second grades.

Dropout Rates and Grade Retention

Grissom and Shepard (1989) noted that the most common reason for student retention, lack of achievement, was also the major cause of students dropping out. Jimerson (1999) commented that retained students were more likely to drop out of school than those students who were not retained. Jimerson, Anderson, and Whipple (2002) addressed the relationship between retention and failure to graduate as one of the most important factors in predicting if a student will drop out or complete high school. Additionally, they observed that retained students were likely to develop antisocial and negative behaviors such as the use of alcohol, smoking, sexual activity, and decreased self-esteem. They found that students who exhibited self-destructive behaviors often did so due to the use of drugs. All of these behaviors contribute to feeling of hopelessness which is a reason for dropping out of school (Jimerson et al., 2002).

Jimerson and Kaufman (2003) commented that the findings of researches did not support retention as an effective strategy for student success. They suggested that research needs to be conducted on those strategies which do offer positive results. Meisels and Liaw (1993) reported that retention represents an example of a disconnect between research and implementation. The strategy of retention needs to be addressed in totality (Thomas, 2000). Thomas commented on the complexity of the problem and that all aspects of the student's situation should be evaluated and considered in determining what should be done for that individual student.

In an examination of the published research of the last century, Jimerson (2001) found that retaining students does not provide any greater benefit than simply promoting them to the next grade. Furthermore, he concluded that students who are retained are far less likely to graduate with their peers or continue their education in postsecondary programs (Jimerson, 2001).

Rumberger (1995) suggested that numerous factors that contribute to whether a student will eventually leave school before graduation, including overall family life, individual experiences while attending school, and financial circumstances. Jimerson et al. (2000) suggested that when examining the educational development of a student, the decision to quit is not based entirely on one factor but on a series of events that develop over the course of a person's educational experience.

Tomchin and Impara (1992) suggested that individual school districts would benefit from examining how retained students and those who could potentially be retained are educated. Teachers and school leaders within each school need to be

presented with data concerning student retention and the impact this has on students over the long term.

Bridgeland et al. (2006) stated that around 30% of all high school students leave the school system prior to graduation. Among students who identify as African-American, Hispanic, or Native American, the rate rises to almost half of these students not completing high school (Bottoms & Anthony, 2005). It is important to determine what causes students to become discouraged as well as explore what programs are in place to reverse this trend (Bottoms & Anthony, 2005).

Orfield, Losen, Wald, and Swanson (2004) indicated that male students generally leave school due to similar backgrounds and traits. They suggested that low socioeconomic or minority students were not as likely to complete high school as are their peers. This is more readily referred to as “dropping out.” The National Dropout Prevention Center (NDPC) found that small towns and areas not experiencing high levels of poverty boasted the highest graduation and lowest retention rates (Wright, 2006). Bottoms and Anthony (2005) found that while overall graduation rates were approximately 70%, the rate was over 80% among White students, 57% among Black students, and 63% among Hispanic students. Orfield and Yun (1999) stated that similar trends and rates were present among these groups at the national level. In 2001, the National Center on Secondary Education and Transition at the University of Minnesota identified graduation rates by race similar to those found in the Bottoms and Anthony study but additionally suggested that males were more likely to drop out than females.

According to Lehr, Johnson, Bremer, Cosio, and Thompson (2004), larger high schools were also a contributing factor in the dropout rates.

Balfanz and Legters (2004) at the Center for Research on the Education of Students Placed at Risk (CRESPAR) found that schools with the weakest promotion power, defined as moving up through all grades to graduation, were the schools with the most severe levels of poverty and the least amount of resources. Balfanz and Legters stated in their report, *Locating the Dropout Crisis*, “Majority minority schools with more resources successfully promote students to senior status at the same rate as majority White schools” (p. 45).

Grade Retention Alternatives

Jimerson (1999) determined that retention is used frequently as an intervention for low performing students. He suggested that students should receive better evaluation to address the academic shortcomings of the student before the student is retained. Denton (2001) suggested the needs of the student should be assessed to determine if a student has a learning disability. His contention was that the earlier a problem was identified, the more likely the problem could be addressed early in the year and not waste a year of instruction before an intervention is put in place.

Denton (2001) asked the question of what does work when a child is retained. He indicated that the answer lies somewhere between the options of social promotion and mandatory retention. The author purported that regardless of the problem (i.e., social promotion or retention) school personnel should attempt to identify problems as quickly

as possible during the school year and not wait until the school year is over to accurately assess and place the student. Goals should be to (a) provide the identified students who are experiencing difficulties with the extra assistance and time they need for success; (b) develop an individualized plan avoiding common strategies, such as placement with the same teacher, which seldom work; and (c) ensure the strategies are in place to properly monitor student progress and effectiveness of the strategies implemented.

Jimerson (2001) encouraged educators to avoid the use of retention and use strategies that have proved to be successful. Thomas (2000) indicated that racial minorities benefit greatly from feeling safe and appreciated while in school and that the practice of retention may lead to feelings of resentment toward school in general.

Strategies for Retained and At-Risk Students

Thomas (2000) encouraged educators to first address the student and not the strategies when assessing the needs of students, believing that there was no one strategy that would address the needs of the individual student. Shepard and Smith (1986) similarly reported that children come to school with many different needs and abilities and not all children can adapt to the curriculum that may be taught to the population in general.

Barnett and Clarizio (1996) determined that effective strategies may consist of classrooms with non-graded assignments and mixed grade classes. They also reported that allowing students to work together and having behavioral strategies in place was effective. Students paired with conventional peers showed growth in socio-cognitive

skills. Picklo and Christenson (2005) discovered that teachers at all levels limited the instructional strategies used to help struggling students. These include small group instruction, small class sizes, family support system, tutoring in a one-on-one situation, multi-age instructional groups, reading based on student interests, and looping. Shepard and Smith (1990) indicated that low performing students should be taught with a wide range of strategies to promote better student engagement, and teachers should seek to eliminate simple strategies which require students to memorize and repeat simple facts. Rose and Schimke (2012) report three main elements in addressing third grade reading deficiencies: (a) early identification of reading difficulties, (b) interventions that occur as close to the point of need as possible, and (c) retention.

Early identification focuses on several issues (Barnett & Clarizio, 1996). (a) whether students should be tested in Pre-Kindergarten through third grade or only in first, second and third grades as well; (b) what assessments should be used to determine if only state tests or a mix of state tests and end of course examinations should be used; and finally, (c) who will pay for the tests to determine skill level. Denton (2001) reported that there are three decisions related to early intervention. They include: (a) adding instructional time after school or in summer school programs, (b) implementing evidence based high effect size interventions, and (c) assigning highly effective teachers to low performing students.

Owings and Kaplan (2001) indicated the importance of a student/teacher relationship. They suggested the better a teacher knows the needs of an individual

student, the better the teacher can adjust and develop specific instruction to help that student be successful.

Summary

Larsen and Akmal (2007) remarked that student retention has its roots in the symptoms as opposed to the causes. Often, minority and low socio-economic status students who are at risk of underperforming are placed at a higher risk of being retained than their White peers. The negative effects of retention must be made available to educators when determinations are made for student retention. Jimerson (1997) commented that retention has been shown to have more negative effects than positive outcomes in the long-term development of students when those outcomes are compared to those of their promoted peers.

This study sought to add to the existing research on student retention and how retention impacted students in proportion to race, socio-economic status, and long term academic improvement. This study may serve to offer additional information concerning district and state decisions in regards to student retention.

CHAPTER 3 METHODOLOGY

Introduction

The goal of this study was to evaluate the research questions related to retention in Volusia County, Florida. The questions were posed to evaluate the relationship between race, socioeconomic status, and instances of student retention. Additionally, the researcher sought to evaluate how retained students performed on FCAT Reading and Mathematics tests in subsequent years after retention in the third grade in 2003. SPSS and Fourmilab statistical programs were used to measure the variables. The methodology used to test the research questions is discussed in the following sections of this chapter: (a) research questions, (b) population and sample, (c) instrumentation, (d) sources of data, (e) data collection, and (d) data analysis along with a summary of the statistical tests used to answer the research questions.

Research Questions

Three research questions were used to guide this research. To respond to the questions, hypotheses for each question were tested.

1. What differences exist between the number of retentions (one, two, three or more) due to students failing the FCAT as third graders in 2003 and race (Black, White or Hispanic) through 2010?

H₁: There is no difference between the number of retentions (one, two, three or more) due to students failing the FCAT as third graders in 2003 and race (Black, White, and Hispanic) through 2010.

2. What differences exist between the number of retentions (one, two, three or more) due to students failing the FCAT as third graders in 2003 and socioeconomic status (free or reduced price lunch status) through 2010?

H₂: There is no difference between the number of retentions (one, two, three or more) due to students failing the FCAT as third graders in 2003 and socioeconomic status (free or reduced price lunch status) through 2010.

3. What differences exist between subsequent FCAT Reading and Mathematics Developmental Scales Scores from 2003 to 2010 of students retained in 2003 as third graders due to failing the FCAT?

H₃: There is no difference between subsequent FCAT Reading and Mathematics Developmental Scales Scores from 2003 to 2010 of students retained in 2003 as third graders due to failing the FCAT.

Population and Sample

The population for this study consisted of all students enrolled in Volusia County Schools in the 2010-11 school years. A total of 61,124 students were enrolled in the district's 46 elementary schools, 13 middle schools and 10 high schools. Because access to records for all students in the population were available, no sampling was necessary.

However, because the three research questions focused only on the outcomes of students who were retained in third grade, only the pertinent subsets of students from the total population were addressed. Table 2 contains descriptive statistics for the total population of students in the Volusia County Schools (Data Base 1) and the pertinent subsets of students who were retained in third grade (Data Base 2). Data Base 2 represents the population at the end of the 2009-2010 school year. Students who were retained that year constituted the population used in the study. Database 2 was also used to answer the each of the three research questions.

Table 2

Volusia County Public Schools Student Population

Demographic Variables	Total Students		Retained Students	
	N	%	N	%
Race/Ethnicity				
White	40,953	67.0	911	60.6
Black	9,779	16.0	487	32.4
Hispanic	7,334	12.0	105	7.0
Mixed	1,224	2.0	na	
(Other)	1,833	3.0	na	
Socioeconomic Status				
Non-Free Reduced	22,615	37.0		
Free	19,559	32.0		
Reduced	18,949	31.0		

Instrumentation and Sources of Data

FCAT scores were used as the source of data in this study. All FCAT scores from Grades 3 through Grades 10 were collected and analyzed as secondary data. Philips and

Stawarski (2008) discussed the secondary data collection method in which previously acquired data were used to investigate the problem. They indicated that items such as case studies, articles, and related documentation may be used to gather the data necessary to evaluate the research questions and hypotheses. The data used for analysis in this study was gathered from data bases in the Volusia County Public Schools in Florida. These scores consisted of the Developmental Scale Scores of those students who were retained in 2003 in the third grade. Subsequent scores through the 10th grade were analyzed to determine if any learning gains were achieved by retaining the student in the third grade and for how long those gains continued.

Each grade of FCAT brings forth a different set of cut points for scale scores--for instance, a scale score of 350 in fourth grade does not imply the same level of within-grade-level achievement as a scale score of 350 in fifth grade. Therefore, it was difficult to examine the scores longitudinally. As a result, separate independent *t*-tests were run for each grade (Grades 4-10), to determine whether differences existed in any of the grades among students who were once retained in third grade.

Data Collection

Included in this study was the entire student enrollment in Volusia County Schools from the 2003-2004 school years and each subsequent year through the 2009-2010 school years. Two data bases, Cross Pointe and Eduphoria, both available in Volusia County, were used in the analyses to respond to the three research questions that guided the study.

After receiving permission to conduct the study from the University of Central Florida's Institutional Review Board (Appendix A) and the Volusia County School Board (Appendix B), a data request was forwarded to the Volusia County School Board Management Information Services Department for review. Data requested included students who were retained in 2003 in the third grade, and all FCAT scores for this group through 2010. In the primary request, the data received were inconsistent with the percentage of retentions reported to The Florida Department of Education. The results of the analysis were not deemed to be adequate, and the researcher requested additional data (i.e., Developmental Scale scores for all students retained in 2003 in the third grade, and subsequent FCAT Reading and Mathematics scores through 2010). The researcher was able to determine how many times a student had been retained as well as all subsequent FCAT Reading and Mathematics Developmental Scale scores. Data obtained yielded the information required to answer the three research questions with satisfactory results.

Data Analysis

Research Questions 1 and 2 focused on the proportions of students who were retained to differing extents as compared to a demographic factor and were analyzed in similar fashions using the database of students. For both questions, the categorical dependent variable of retentions was defined by categorizing each student as having one retention, two retentions, or three or more retentions. In Research Question 1, the independent variable, nominal in nature, reflected the student's race. Categories included Black, White, and Hispanic. Likewise, in Research Question 2, receipt of free or reduced

price lunch categorized a student as being of low SES; not receiving these services categorized a student as being of high SES. The independent variables in each research question were compared using Chi-square tests of independence which determined if the respective proportions of retentions differed between each category of the demographic independent variable (Warner, 2008). Tests were conducted at the $\alpha = .05$ level of significance.

A Chi-square test is used primarily as a test of independence. Warner (2008) indicated the Chi-square computation may be generalized as one table with two or more rows and columns. This study used three rows for Research Question 1: Black, White and Hispanic and three columns which indicated being retained once, twice or three or more times. For Research Question 2, there were two rows indicating SES: Lower and Higher SES, Lower being those retained students who received free or reduced lunches and Higher being those retained students who did not receive free or reduced lunches, and three columns which indicated being retained once, twice or three times. This structure provided for a basic comparison of frequencies of theoretical expectations to the actual frequency. Each cell has an expected frequency, E , and is calculated by multiplying corresponding similar rows by the column totals, then dividing the outcome of this product by the total N . (Warner, 2008). When two nominal variables are being calculated, each of which have two or more values, it is appropriate to use the Chi-squared test of independence. A null hypothesis consists of the relative proportions where one variable is independent in relationship to the second variable. In this study,

the students from 2003 who were retained in the third grade were examined year to year through the 10th grade.

Research Question 3, addressed differences in FCAT Reading and Mathematics Developmental Scales Score performance between students who were retained in third grade and subsequent FCAT scores followed a uniform analytical procedure. For this research question, the dependent variable consisted of students' subsequent FCAT Reading and Mathematics Developmental Scales Scores. The independent variable for retention (once, twice or three times) was defined as in the prior research questions. Each grade of FCAT brings forth a different set of cut points for scale scores--for instance, a scale score of 350 in the fourth grade does not imply the same level of within-grade-level achievement as a scale score of 350 in the fifth grade. Therefore, it was difficult to examine the scores longitudinally. As a result, separate paired samples t-tests were run for each grade (Grades 4-10) to determine whether differences existed in any of the grades among students who were once retained in third grade.

A paired samples *t*-test is a comparison of means between two sets of individual measurements. This test is used to measure if two sets of measurements are significantly different. A paired sample *t*-test is generally used when the same subjects, in this case the retained students, are given subsequent instruction and evaluations. The averages of the test scores from year to year are compared. If the difference between the *p* values is less than .05, there is a significant difference between the achievement from year to year. Tests were conducted at an $\alpha = .05$ level of significance (Warner, 2008). Table 3

contains a summary of the hypotheses, variables, and statistical analyses used to respond to each of the three guiding research questions.

Table 3

Hypotheses, Variables, and Statistical Analyses

Hypothesis	Variables		Statistical Analysis
	Independent	Dependent	
H ₁ : There is no difference between the number of retentions (one, two, three or more) due to students failing the FCAT as third graders in 2003 and race (Black, White, and Hispanic) through 2010.	Race	Years retained	Chi-square test
H ₂ : There is no difference between the number of retentions (one, two, three or more) due to students failing the FCAT as third graders in 2003 and socioeconomic status (free or reduced price lunch status) through 2010.	SES Status	Years retained	Chi-square test
H ₃ : There is no difference between subsequent FCAT Reading and Mathematics Developmental Scales Scores (DSS) from 2003 to 2010 of students retained in 2003 as third graders due to failing the FCAT.	Grade 3 students retained in 2003	Subsequent FCAT scores	Paired samples <i>t</i> -test

Validity

In a discussion of internal validity, Warner (2008) explained that a causal inference may not be assumed due to two variables being significantly different. The author also explained that if a significant difference is found between two variables, other rival explanations may not be ruled out. Warner (2006) discussed external validity in non-experimental research that is completed in the field as an effective way to examine events and behaviors that occur naturally. The relationship to this study is not as strong as it would be in an experimental study implemented in Volusia County Schools for the students who were retained.

Summary

This chapter has provided a discussion of the methods and procedures used to conduct the research. The methods used to select participants, determine the instrumentation and sources of data were explained, and the procedures used in data collection and analysis were presented. The participants were chosen based on socio-economic status, race and retention in the third grade in 2003. Instrumentation was discussed in terms of how the data would be collected using secondary data collection. The data analysis section detailed how Chi-square and *t*-test calculations were used to determine the relationship between years of retention and race or socio-economic status and scores on subsequent FCAT Reading and Mathematics Developmental Scales Scores tests.

CHAPTER 4 DATA ANALYSIS

Introduction

The practice of retaining students in the early years of elementary education has been a common practice for schools who deem students to be academically unprepared to be promoted or for those students who are not as mature as their peers (Jackson, 1975; Jimerson, 1999). This research was conducted with the purpose of determining, through a quantitative research study, if significant differences existed between race and socio-economic status and being retained once, twice, or three times for third graders from 2003 to 2010. Additionally, students' FCAT Reading and Mathematics Developmental Scale Scores were analyzed from 2003 to 2010, for students retained in Volusia County Schools in the third grade, to determine what progress, if any, was made on subsequent FCAT Reading and Mathematics tests.

Statistical Analysis

A Chi-square test is used primarily as a test of independence. This is a basic comparison of frequencies of theoretical expectations to one nominal variable. Chi-square is also used to compare frequencies of a single nominal variable to different values in a secondary nominal variable. The calculations vary as to how the expected values are calculated; otherwise the mathematic functions of the test are identical. When two nominal variables are being calculated, each of which have two or more values, it is appropriate to use the Chi-square test of independence. A null hypothesis consists of the

relative proportions where one variable is independent in relationship to the second variable. In this study, the students in the study remained the same and were compared at different grade levels.

The population included 1,493 students who had been retained once. Of those 1,493 students, 478 were Black, 910 were White, and 105 were Hispanic. There were 866 students of the original 1,493 who had been retained twice. Of that population, there were 355 Black students, 459 White students, and 52 Hispanic students. There were 360 of the original 1,493 students who had been retained three times or more. Of that population there were 155 Blacks, 176 Whites and 29 Hispanics. Table 4 displays the students who were retained once, twice, or three times by the predictor variable, race/ethnicity.

Table 4

*Students Retained Once, Twice, Three or More Times by Predictor Variable:
Race/Ethnicity*

Predictor Variable	<i>f</i>	%
Retained once (<i>N</i> = 1,493)		
Black	478	32.0
White	910	61.0
Hispanic	105	7.0
Retained twice (<i>N</i> = 866)		
Black	355	41.0
White	459	53.0
Hispanic	52	6.0
Retained three or more times (<i>N</i> = 360)		
Black	155	43.1
White	176	48.9
Hispanic	29	8.1

Note. Percentages may not equal 100% due to rounding.

Testing the Research Questions

The presentation of the data analysis has been organized around the three research questions that guided the study. To respond to Research Questions 1 and 2, the data were entered in Social Science Statistical online Chi-square Calculator to determine the Chi-square statistic, and the P-value. For Research Question 3, separate independent *t*-tests were run for each grade, Grades 4-10) to determine whether differences existed in any of the grades among students' FCAT scale scores who were retained once, twice or three times.

Research Question 1

What differences exist between the number of retentions (one, two, three or more) due to students failing the FCAT as third graders in 2003 and race (Black, White or Hispanic) through 2010?

H₁: There is no difference between the number of retentions (one, two, three or more) due to students failing the FCAT as third graders in 2003 and race (Black, White, and Hispanic) through 2010.

The first research question examined the differences between years of retention in third grade in 2003 and race. Table 5 shows the observed totals of the categories of Black, White and Hispanic and years of retention, (one, two, three or more).

Table 5

Chi-square Test of Independence Based on Race

Times Retained	Race			Totals
	Black	White	Hispanic	
One	487	910	105	1,493
Two	355	459	52	866
Three or more	155	176	29	360
Total	988	1,563	186	2,719
Chi-Square				99.72
P Value				.00001

The Chi-square statistic was 99.72, with a p value of < 0.00001. A significant difference was found to exist between years of retention and race with the p value at less

than .05. The null hypothesis should be rejected. The minimum expected count in each cell was 49.

An interpretation of this table and findings involves considering the reduction in each category as each category is compared to the number of years retained. Each category should have a similar reduction according to its total observed frequencies. For instance, Whites made up 61% of the population for one-time retention. Whites should then account for a similar percentage of the retentions for being retained once, twice and three or more times. For example, if Whites have a much lower occurrence of retention in these categories, the Chi-square Statistic will be high, which will result in a low p value. In this analysis, the p value was less than .05, which was significant. The actual value was less than .00001. This means there was less than one chance in 10,000 that the retention rates were due to mere chance. Therefore, as shown in Figure 3, Blacks and Hispanics have been disproportionately retained as compared to White students.

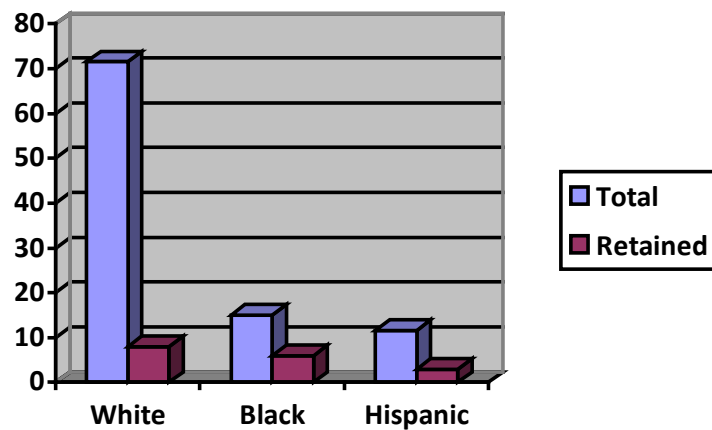


Figure 3. Total Student Population and Percentages Retained in Volusia County Schools

Research Question 2

What differences exist between the number of retentions (one, two, three or more) due to students failing the FCAT as third graders in 2003 and socioeconomic status (free or reduced price lunch status) through 2010?

H2: There is no difference between the number of retentions (one, two, three or more) due to students failing the FCAT as third graders in 2003 and socioeconomic status (free or reduced price lunch status) through 2010.

The second research question examined the differences between years of retention in third grade in 2003 and SES status. Table 6 shows the observed totals and the chi square statistic for the categories of low and higher socioeconomic status and years of retention (one, two, three or more).

Table 6

Chi-square Test of Independence Based on Socio-Economic Status

Times Retained	Socio-Economic Status (SES)		Totals
	Low SES	High SES	
One	1,283	210	1,493
Two	684	182	866
Three or more	328	32	360
Total	2,295	424	2,719
Chi-Square			34.2896
P value			.00001

The Chi-square statistic was 34.2896, with a p value of .00001 $X^2(3, n= 2,719) = 34.2896, p \leq .00001$. A significant difference was found to exist between years of retention and SES status with the p value less than .05. The null hypothesis should be rejected.

Each category should have a similar reduction according to its total observed frequencies. For instance, low SES made up 52% of the population for one time retentions. Low SES should then account for a similar percentage of the retentions for students being retained twice and three or more times. Thus, if low SES had a much lower occurrence of retention than high SES, the Chi-square statistic will be high and will result in a low p value. In this analysis, the p value was less than .05, which was significant. The actual value was .00001

Research Question 3

What differences exist between subsequent FCAT Reading and Mathematics Developmental Scales Scores from 2003 to 2010 of students retained in 2003 as third graders due to failing the FCAT?

H3: There is no difference between subsequent FCAT Reading and Mathematics Developmental Scales Scores from 2003 to 2010 of students retained in 2003 as third graders due to failing the FCAT.

Research Question 3 addressed differences in FCAT Developmental Scale Scores between students who were retained in third grade in 2003, once, twice or three times, and subsequent FCAT Reading and Mathematics Developmental Scale Scores through

2010. For this research question, the independent variable was the FCAT Reading and Mathematical Scale Score from the year tested. The other independent variable consisted of students' subsequent FCAT Reading and Mathematical Developmental Scale Scores. Separate Paired Sample *t*-tests were run for each grade, Grades 4-10, to determine whether differences existed in any of the grades of students' FCAT Reading and Mathematical Developmental Scale Scores who were retained once, twice or three times.

A paired samples *t*-test is a comparison of means between two sets of related measurements. This test is used to measure if two sets of measurements are significantly different. A paired samples *t*-test, for example, is used when the same subjects, in this case the retained students, are given subsequent instruction and retested. The averages of the test scores from year to year are compared. Tests were conducted at an $\alpha = .05$ level of significance (Warner, 2008). Tables 7 and 8 contain the results of the analysis. Table 7 shows the retained students' FCAT Reading Developmental Scale Scores from 2003-2010. Table 8 shows the paired samples *t*-tests for retained students' FCAT Reading Developmental Scale Scores from 2003-2010.

Table 7

Retained Students' FCAT Reading Developmental Scale Scores 2003-2010

Grades Retained	N	M	SD
3rd	1,439	533.00	313.77
4th	1,439	1291.08	217.96
5th	1,439	1509.04	161.24
6th	1,439	1518.15	267.70
7th	1,439	1523.85	495.20
8th	1,424	1542.20	228.37
9th	1,410	2084.59	426.31
10th	1,326	2294.28	357.24

Table 8

Paired Samples t-Tests: Retained Students' FCAT Reading Developmental Scale Scores 2003-2010

Grades Retained	N	M	SD	<i>t</i>	<i>p</i>
3rd - 4th	1,493	758.08	412.748	71.49	.000
4th - 5th	1,493	217.96	317.609	26.76	.000
5th - 6th	1,493	9.11	312.129	1.12	.260
6th - 7th	1,475	5.70	577.109	.362	.717
7th - 8th	1,466	18.35	547.636	1.219	.223
8th - 9th	1,410	542.59	523.480	38.807	.000
9th - 10th	1,393	209.69	584.959	13.455	.000

As shown in Tables 7 and 8, reading scores showed significant gains in Grades 3, 4 and 5. The mean score increased from 1291.08 in 4th grade to 1509.04 in the 5th Grade.

The p value for each was less than .05, meaning there was less than a 5% chance the increase in scores was a product of mere chance.

The p value for Grades 6, 7, and 8 were more than the .05 alpha level of confidence. These scores were not significant and could not be ruled out as happening by chance. The scores for Grades 9 and 10 were once again less than the .05 alpha level of significance. This showed the scores for each grade level had less than one chance in 1,000 that the increase was due to chance.

Tables 9 and 10 contain the results of the analysis for Mathematics Developmental Scale Scores. Table 9 shows the retained students' FCAT Mathematics Developmental Scale Scores from 2003-2010. Table 10 shows the paired samples t-tests for retained students' FCAT Mathematics Developmental Scale Scores, 2003-2010.

As shown in Tables 9 and 10, mathematic scores showed significant gains in Grades 4, 5, 6, and 7. The p value for each was less than .05, meaning there was less than a 5% chance the increase in scores was a product of mere chance.

The p value for Grades 8 and 9 were more than the .05 alpha level of significance. These scores were not significant and could not be ruled out as happening by chance. The Grade 10 scores were once again less than the .05 alpha level of significance. This showed the scores for each grade level had less than one chance in 1,000 that the increase was due to chance. The increase from Grade 3 to Grade 4 is attributed to two years of remediation as opposed to one year of remediation for other grades.

Table 9

Retained Students' FCAT Mathematical Developmental Scale Scores 2003-2010

Grades Retained	N	M	SD
3rd	1,439	1012.01	227.27
4th	1,439	1270.05	115.13
5th	1,439	1538.54	230.79
6th	1,439	1674.40	275.12
7th	1,432	1765.03	235.15
8th	1,424	1771.49	223.81
9th	1,410	1798.79	485.08
10th	1,362	1943.00	210.35

Table 10

Paired Samples t-Tests: Retained Students' FCAT Mathematical Developmental Scale Scores 2003-2010

Grades Retained	N	M	SD	<i>t</i>	<i>p</i>
3rd - 4th	1,493	461.45	517.851	68.522	.000
4th - 5th	1,493	268.55	550.510	39.970	.000
5th - 6th	1,493	135.85	261.868	14.405	.000
6th - 7th	1,475	79.23	157.322	11.879	.000
7th - 8th	1,466	.30	194.682	.053	.957
8th - 9th	1,410	3.66	167.100	.276	.783
9th - 10th	1,393	147.62	145.742	10.15	.000

Summary

Chapter 4 provided a presentation and explanation of the statistical analysis and tests that were used to respond to the research questions. The demographic characteristics of the population were presented and the analysis related to each of the three research questions was presented in tables accompanied by narrative explanations.

Analysis of the data to respond to the first research question showed a significant difference in the statistical differences between race when compared to being retained once, twice, or three or more times. Blacks were retained at a higher rate as compared to Whites and Hispanics.

The data analysis for the second research question revealed a significant difference in the statistical differences between socio-economic status and being retained once, twice, or three or more times. Low socio-economic status students were retained at a disproportionately higher rate than high socio-economic status students.

The third research question was concerned with mathematics and reading scores. Analysis of the data indicated a significant difference in the Reading Developmental Scale Scores for Grades 3, 4 and 5. It is important to note that in this analysis, the increase, or gain in scores, were analyzed from year to year. There was, however, no significant difference in Reading Developmental Scale Scores between Grades 5 and 6, 6 and 7, and 7 and 8. There was a significant difference in the Reading Developmental Scale Scores for Grades 9 and 10. Mathematics scores showed a significant difference in the Grades 4, 5, 6, and 7, but there were no significant differences for Grades 8 and 9.

Grade 10 did, however, show a significant difference in Mathematics Developmental Scale Scores.

A hypothesis was formulated for each research question. Table 11 contains a summary of the variables, statistical analyses, and acceptance/rejection decisions made for the three hypotheses.

Table 11

Summary: Hypotheses, Variables, Statistical Analyses, and Acceptance/Rejection Decisions

Hypothesis	Variable	Statistical Analysis	Accept/Reject
H ₁ : There is no difference between the number of retentions (one, two, three or more) due to students failing the FCAT as third graders in 2003 and race (Black, White, and Hispanic) through 2010.	African American (I) White/Hispanic (I) Years retained (D)	Chi-square Test	Reject
H ₂ : There is no difference between the number of retentions (one, two, three or more) due to students failing the FCAT as third graders in 2003 and socioeconomic status (free or reduced price lunch status) through 2010.	Low SES (I) Higher SES (I) Years retained (D)	Chi-square Test	Reject
H ₃ : There is no difference between subsequent FCAT Reading and Mathematics Developmental Scales Scores (DSS) from 2003 to 2010 of students retained in 2003 as third graders due to failing the FCAT.	Reading/Math FCAT DSS (I) Subsequent FCAT Scores (D)	Paired Samples <i>t</i> -test	Reading Reject: Grades 4, 5, 9, 10 Mathematics Reject: Grades 4, 5, 6 7, 10

Note. I = independent variable; D = dependent variable.

CHAPTER 5 SUMMARY, DISCUSSION, AND RECOMMENDATIONS

Introduction

This study was conducted to expand on the current knowledge base and enable future researchers to establish a more in-depth comprehension for educators making decisions concerning retention. In Chapter 4, the data were presented and analyzed. This chapter contains a summary of the study, a discussion of the findings, implications for practice and recommendations for further research.

Summary of the Study

To date, there has been little to no research into the effectiveness of retention as an intervention strategy in the School District of Volusia County, Florida. The Florida Comprehensive Assessment Test (FCAT) requires third grade students to receive at least a Level 3 on the reading portion of this test to be promoted to the fourth grade (FDOE, 2007). This raises two issues: (a) whether grade retention is truly an effective intervention for future success and (b) what interventions are the best to implement if grade retention does not bring about a positive change in academic success (Grissom & Shepard 1989).

The problem for school districts lies in the accurate monitoring of retained students based on race and socio-economic status (SES). Research on grade retention has been focused on student demographics, alternatives to retention, social/emotional effects, short and long term effects of academic performance, and dropout rates (Grissom &

Shepard, 1989; Jimerson et al., 1997, U.S. Department of Education, 2006). Black students and those students who receive free or reduced price lunch, low socio-economic status (SES) have been retained at higher rates than their white, upper class peers. Planty et al. (2009) commented that a greater percentage of Black students than either White or Hispanic students had been retained in 2007. Planty et al. (2009) reported that in 2007, 16% of the students who were retained were Black, 8% were White and 11% were Hispanic. A continued discussion of SES and retention by Planty included indications regarding the percentage of K-8 students who had ever been retained was greater among students from poor families than among students from higher income families.

The purpose of this study was to determine if a significant difference exists between the academic performance of students retained in the third grade in 2003 through 2010, who were retained once, twice, or three or more times in terms of race and socio-economic status. The researcher also sought to determine if the students who were retained continued to show improvement on their FCAT Reading and Mathematics Developmental Scale Scores through the 2010 school year.

The sample for this study was drawn from the entire student enrollment in Volusia County Schools from the 2003-2004 school years and each subsequent year through the 2009-2010 school years. The information was gathered from two data bases, Cross Pointe and Eduphoria, available in Volusia County. Both were used to answer the three research questions. A University of Central Florida Institutional Review Board application was submitted to the researcher's academic advisor for approval and was then presented to the Volusia County School Board Management Information Services

Department for review. After approval, the data requested were analyzed. The information was not deemed to be adequate. The researcher requested the subsequent test scores for all students retained in 2003 in the third grade and received that information. That data yielded the information required to answer the following three research questions with robust results.

Research Questions

1. What differences exist between the number of retentions (one, two, three or more) due to students failing the FCAT as third graders in 2003 and race (Black, White or Hispanic) through 2010?

H₁: There is no difference between the number of retentions (one, two, three or more) due to students failing the FCAT as third graders in 2003 and race (Black, White, and Hispanic) through 2010.

2. What differences exist between the number of retentions (one, two, three or more) due to students failing the FCAT as third graders in 2003 and socioeconomic status (free or reduced price lunch status) through 2010?

H₂: There is no difference between the number of retentions (one, two, three or more) due to students failing the FCAT as third graders in 2003 and socioeconomic status (free or reduced price lunch status) through 2010.

3. What differences exist between subsequent FCAT Reading and Mathematics Developmental Scales Scores from 2003 to 2010 of students retained in 2003 as third graders due to failing the FCAT?

H₃: There is no difference between subsequent FCAT Reading and Mathematics Developmental Scales Scores from 2003 to 2010 of students retained in 2003 as third graders due to failing the FCAT.

To respond to Research Questions 1 and 2, a Chi-square test was performed. A Chi-square test is used primarily as a test of independence. Chi-square is also used to compare frequencies of a single nominal variable to different values in a secondary nominal variable. When two nominal variables are being calculated, each of which have two or more values, it is appropriate to use the Chi-square test of independence. A null hypothesis consists of the relative proportions where one variable is independent in relationship to the second variable. In this study, the students in the study remained the same and were compared by race and socio-economic status.

For Research Question 3, a paired sample *t*-test was completed. For this research question, the dependent variable consisted of students' subsequent FCAT scores. The independent variable for each year were the Developmental Scale Scores. As a result, separate paired samples *t*-tests were run for each grade (Grades 4-10) to determine whether differences existed in any of the grades among students who were once retained in third grade.

Discussion of the Findings

This study sought to determine if a difference existed between the number of students retained when race and socio-economic status were considered. Also the study sought to determine if a student maintained any learning gains after retention.

When race was considered in the study, a Chi-square test showed there was a significant difference between the retention rates of Blacks compared to Whites. When a Chi-Square analysis was completed comparing race and number of years retained, Blacks accounted for a smaller proportion of the entire group retained. Blacks should, therefore, account for a proportional amount of the retained population. The actual frequency and that proportion proved to be higher than expected. Jimerson et al. (1993) reported that minority students were more likely to be retained than White students. This finding coincides with existing research that minority students have been disproportionately retained.

When socio-economic status was considered in the study, a Chi-square test showed there was a significant difference between the retention rates of low SES compared to high SES. When a frequency analysis was completed comparing socio-economic status and number of years retained, low SES accounted for a large proportion of the entire group retained. Low SES should, therefore, account for a proportional amount of the population. The actual frequency and that proportion proved to be dissimilar. Planty et al. (2009) reported that low socio-economic students were more likely to be retained than high SES students. The findings in the present study did agree with findings of other researchers that low-socio-economic students were disproportionately retained.

When subsequent test scores for years after retention in Grade 3 in 2003 were considered, there were significant increases from year to year on the FCAT Reading and Mathematics Developmental Scale Scores for two years in reading and four years in

mathematics. After the initial gains in reading, there were significant increases in scores for Grades 9 and 10. This increase was possibly due to remediation efforts in Volusia County Schools at the time. Also, the students were tested up to three times during their 10th grade school year, which could account for the increase. Brooks (2002) and Denton (2001) indicated in their respective studies that students who were retained did show yearly improvement as they advanced through school. However, students who did improve fell behind their peers within two years of retention. The research results of Brooks (2002) and Denton (2001) coincided with the findings of this study, as the gains were only prevalent for four years on the FCAT Reading test and for five years on the FCAT Mathematics test. In general, initial gains in Reading and Mathematics Developmental Scale Scores were observed, followed by declines in the middle years and an increase at the 9th and 10th grades which may, in part, be attributed to the emphasis on remediation by the school district. In disagreement with the findings of Brooks (2002) and Denton (2001), the reading scores increased significantly for students later in the study. This may have been due to remediation efforts of Volusia County Schools at the time. An interpretation of all reading scores showed a significant increase in Grades 3, 4, and 5. Grades 6,7 and 8 showed no significant increases. The reading scores for Grades 9 and 10 once again showed significant gains.

Implications and Recommendations for Practice

The Volusia County Schools district has been aware of the issues facing students who are of minority status and/or low SES and has put in place a range of strategies to

provide additional and targeted assistance for students. These strategies must be acknowledged as providing numerous options which can be accessed for individual students, and implications based on this research must be considered in light of them.

The decision to retain a student should be based on the totality of evidence including standardized test scores, input from parents, teachers, administrators, and the students to be retained. This could be the student's academic success plan. A handbook outlining the process involved when a student is retained or a change of placement takes place would be very helpful in ensuring that the totality of evidence is considered prior to students' being retained.

The expectations for students should be determined, along with monitoring strategies, to help ensure student success. If students begin to experience failure, strategies should be in place for immediate remediation and added support in addition to those already outlined. Strategies for assuring student success would include appointing a case manager to monitor student progress. This monitoring should continue until students are capable of completing all or most of the skills outlined in their academic success plans.

Hong and Raudenbush (2005) emphasized that at-risk students who are promoted tend to have a better chance of experiencing growth, meaning a student would be identified as being at-risk for failure and retention and interventions should be implemented prior to the student being retained. Thomas (2000) commented that retention is a strategy that returns students to the same instructional strategies they failed to perform the prior year. Successful strategies for retained students would more

appropriately require that students experience different instructional strategies from those experienced in the previous years.

Brown, Dancy, and Davis (2007) reported that under-achievement in reading and mathematics during the early years of education were more difficult to overcome in underfunded schools where there were fewer opportunities for high level learning experiences. Currie (2005) suggested that significant differences exist prior to entry into early education due to the family race, income status, parent's educational level, as well as the child's living accommodations. In this study, early intervention programs accounted for continued gains for four years on FCAT mathematics scores and interventions in later grades accounted for significant gains in the 10th grade for mathematics and the 9th and 10th grades for reading. The researcher suggests that students who do not experience early success should receive early interventions. These interventions could include a one to one tutor, a student based reading program addressing the interests of the individual student, ongoing assessments to closely monitor student progress, and pairing with a peer to improve social-cognitive skills.

There has been a concerted effort since 1995 to provide equitable technology for all schools in Volusia county so as to equip students with 21st century knowledge and skills. Still, limited access the Internet and computers in some schools has been a persistent barrier. Students should be provided with any and all materials and technology that would contribute to their overall success. Internet access at home, access to school laptops for use at home should be high priorities. Remedial and enrichment materials

should be provided for students along with incentives for students to use them, and the time spent on these provisions should be closely monitored by a program facilitator.

Mickelson (1990) conducted research concerning perceptions of trust among Black students and their teachers. The findings showed students of color had little to no trust in their teachers being concerned about their academic success. Mickelson also found that in the abstract, Black students thought an education would help them, but in concrete terms the students felt there was no connection between an education and success in the real world.

According to numerous researchers, many factors in a minority's or poor student's life contribute to academic struggles (Mickelson, 1990). Family history, school experiences, and life in general are all factors which lead to academic failure and eventual non-graduation. Issues at school include ability to properly participate, harmoniously interact with others, and a tendency to take less challenging courses. Life issues include a lack of connection between education and long-term financial benefits. Minority and poor students often feel out of place in classrooms which are mostly white and affluent. In this study, over one-third of the school district's student population was comprised of minority students. Almost two-thirds of the student population received free or reduced price lunch. These numbers require that the district look carefully at the numerous factors that may lead to minority and poor students' lack of academic success and be proactive in alleviating conditions that present barriers for them.

Given the high percentages of minority and poor students, there is a need for the school district to be persistent in attempting to increase the number of minority staff

members, particularly Black teachers, who can serve as role models for their students. The experiences of a minority teacher will relate to the concerns of the minority student. Even with the best intentions, a non-minority teacher simply does not have the life experiences to relate to minority students in the same way a minority teacher would.

Students need to be able to participate in all activities while participating in challenging coursework. If students choose less challenging coursework, they will be ill prepared for college and less likely to attend college. Students and teachers should be trained on how minority and poor students interact with each other. Teachers need to be more tolerant of inappropriate responses from students, and students need to learn how to have more appropriate interactions with teachers when in an academically challenging situation. Administrators should consider alternatives to out-of-class suspensions as time in the instructional environment is crucial to academic success.

There is a need to find curriculum that is relevant and interesting to minority and poor students. Students must be moved incrementally from immediate rewards to long term goals. Many students do not understand the importance of a long-term commitment, and efforts should be focused on helping students to understand and value the concept of delayed gratification and are encouraged to put forth the initial effort to succeed.

Recommendations for Further Research

Hong and Raudenbush (2005) reported that students are more likely to be retained by teachers who believe they are not working up to their fullest potential. A teacher survey should be conducted with a focus on race and socio-economic status. This survey

would seek to determine teachers' perceptions about retained students. Parents should also be surveyed to determine their perceptions of the retention process and how their child has responded to being retained.

An additional recommendation would be to survey retained students from year to year to assess how being retained has affected them in terms of socio-emotional development. Whether the strategy of retention benefited them or negatively impacted them academically as they continued through school should be the focus of the survey.

This study was conducted in Volusia County, Florida. Further research should be completed in every county in Florida, and those studies should be compiled and an analysis completed. This would give the state legislature a complete picture of how student retention impacts Florida financially in the long term.

Summary

In this study, retention did not emerge as an effective strategy for improving student success when either race or socioeconomic status were considered. The researcher also sought to determine if the students who were retained continued to show improvement on their FCAT Reading and Mathematics Developmental Scale Scores through the 2010 school year. In general, initial gains in Reading and Mathematics Developmental Scale Scores were observed, followed by declines in the middle years and an increase at the 9th and 10th grades which may, in part, be attributed to the emphasis on remediation by the school district. The focus of improvement efforts would be better concentrated on early initiatives in students' lives. The potential impact of factors such

as economic status, gender, race, and birthweight should be considered when students are enrolled in Kindergarten or Grade 1, and school districts should take steps to even the playing field for students early in their lives.

With the best of intentions, retention has far reaching impacts on students and their families. The decision to retain a student should be based on the totality of evidence including standardized test scores, input from parents, teachers, administrators, and the students to be retained. Early identification of potential problems requires vigilance but may be invaluable in working with students at-risk who show signs of not meeting standards. Viable alternatives to assist 21st century students should continually be explored. As one example, minority students who show signs of not meeting standards should be assigned a case manager, and strategies should be developed and implemented prior to students' retention. Similarly, students of low socio-economic status who show signs of not meeting standards should also be monitored, and strategies should be developed and implemented prior to a student's retention.

With the advent of on-line instruction, students have at their disposal another source of remediation, and minimal levels for promotion should be more easily attained within a school year if students are properly assessed and given the chance to raise their performance levels. Student retention should be a rare practice, as it has been shown to have negative effects on long-term student success.

APPENDIX A
INSTITUTIONAL REVIEW BOARD APPROVAL



University of Central Florida Institutional Review Board
Office of Research & Commercialization
12201 Research Parkway, Suite 501
Orlando, Florida 32816-3246
Telephone: 407-823-2901, 407-882-2012 or 407-882-2276
www.research.ucf.edu/compliance/irb.html

NOT HUMAN RESEARCH DETERMINATION

From : UCF Institutional Review Board #1
FWA0000351, IRB0001138
To : Wesley H. Porter
Date : October 13, 2014

Dear Researcher:

On 10/13/2014 the IRB determined that the following proposed activity is not human research as defined by DHHS regulations at 45 CFR 46 or FDA regulations at 21 CFR 312.56:

Type of Review: Not Human Research Determination
Project Title: AN INVESTIGATION INTO THE USE OF GRADE
RETENTION AS AN INTERVENTION STRATEGY IN
VOLUSIA COUNTY
Investigator: Wesley H. Porter
IRB ID: SHE-14-10509
Funding Agency:
Grant Title:
Research ID: NA

University of Central Florida IRB review and approval is not required. This determination applies only to the activities described in the IRB submission and does not apply should any changes be made. If changes are to be made and there are questions about whether these activities are research involving human subjects, please contact the IRB office to discuss the proposed changes.

On behalf of Sophia Dziugalewski, Ph.D., I.C.S.W., UCF IRB Chair, this letter is signed by:

Signature applied by Patricia Davis on 10/13/2014 12:15:00 PM EDT

IRB Coordinator

APPENDIX B
VOLUSIA COUNTY SCHOOL BOARD APPROVAL



Dr. Margaret A. Smith
Superintendent of Schools

January 20, 2015

Wesley H. Porter
291 North Glencoe Road
New Smyrna Beach, FL 32168

Mr. Porter,

I have received your request to conduct research using Volusia schools data on the topic of "An investigation into the use of grade retention as an effective intervention strategy in Volusia County Schools." I have approved this request.

Please find attached your requested data of students retained in 3rd grade in 2001 who were still enrolled in Volusia County Schools in 2010. All students who were retained and received free or reduced lunch in 2001. All African American and Hispanic students who were retained in 2001.

If you have any questions regarding the data provided please feel free to contact Eric Holland.

I would appreciate receiving a copy of your finding upon completion of the student.

Sincerely,

Alicia Parker, Ed.D.
Assistant Director, Program Accountability & Evaluation

AKP/mc

P.O. Box 2118 • 200 North Clara Avenue • DeLand, Florida 32721-2118
DeLand (386) 734-7190 Daytona Beach (386) 255-6475 New Smyrna Beach (386) 427-5223 Osteen (386) 860-3322

School Board of Volusia County

Ms. Candace Lankford, Chairman
Mr. Stan Schmidt, Vice-Chairman
Mrs. Diane Smith
Mrs. Linda Costello
Mrs. Ida D. Wright

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