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Effects of Early Grade Retention versus Social Promotion on Student Achievement

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EFFECTS OF EARLY GRADE RETENTION VERSUS SOCIAL PROMOTION ON STUDENT ACHIEVEMENT

by

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ABSTRACT

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Title: Effects of Early Grade Retention versus Social Promotion on Student Achievement
(Under the direction of Dr. Cheri Smith)

This quantitive, non-experimental study examined the effects of retention versus social promotion in the early grades on later academic achievement as measured by the Arkansas Augmented Benchmark Exam for 4th grade students in a large Central Arkansas school district. Student achievement was studied based on gender and socioeconomic status on both literacy and math achievement scores.

The independent variables were socioeconomic status (free/reduced lunch versus regular pay lunch) and gender (male versus female). The dependent variables were math and literacy achievememnt scale scores as measured on the Arkansas Augmented Benchmark Exam at the 4th grade level. The four hypotheses were each examined by using a 2 x 2 Factorial Analysis of Variance (ANOVA).

Pair-wise matching, sometimes called matched pairs, was used to match students from the retained group to students in the socially promoted group based on socioeconomic status, gender, ethnicity, proficiency level at the time of social promotion or retention, and the same elementary school the student was attending during their 4th grade school year. The findings of this study are consistant with previous research

findings which also concluded that neither retention in the same grade nor social promotion to the next grade result in long term academic improvement. This indicates that other forms of intervention and remediation should be initiated rather than reverting to the retention or social promotion options that have been frequently used. Simply repeating the same information presented in a similar fashion for a second year has failed to increase student achivement. Providing new and intensive strategies and interventions after students have encountered failure in a grade have also proven to be ineffective.

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CHAPTER 1

INTRODUCTION

With the increase of accountability spawned by the legislation of No Child Left Behind (NCLB, 2002), educators are increasingly scrutinized if students are not equipped to meet the academic challenges at each grade level. From the early onset of education in the United States, educators have sought out many avenues in which to pursue academic excellence for their students. By the end of the Civil War and for the subsequent years through the 1930s, retention became the answer for what to do with students who were not performing up to expectations of the current grade. Therefore, common sense would dictate that they also would not be able to perform at the next grade level (Setencich, 1994). According to Ferguson, Jimerson, and Dalton (2001), extra-year grade placements, used interchangeably with retention, have been utilized frequently over the years as an intervention strategy for students at risk of early school failure. They further state that even though this intervention has been used repeatedly, numerous years of educational research fails to support its use. It is feared that retention will continue to increase due to the increasing standards and accountability measures, such as NCLB, and the interpretation by many educators that this type of accountability is a directive to retain low achieving students (Jimerson, 2001b).

Educators and researchers have explored for decades the effects of grade retention as it relates to students' academic, social, and emotional well-being. After over 100 years

of research that does not always support the efficacy of student retention, educators continue to utilize retention as one of the most prevalent types of early intervention in the modern educational system (Slavin, 1989).

One defense used by the educational community is that retention provides students with the "gift of time" (Ferguson et al., 2001). Other authors, such as Brophy (2006), refer to the retention period as a time of "catching up" or maturing before encountering more difficult educational material.

Advocates of social promotion, the promoting of students to the next grade level when they have not attained the minimum competencies of their current grade level (Aldridge & Goldman, 2006b), staunchly state that retention in any form produces long term negative outcomes for students (Jimerson, Ferguson, Whipple, Anderson, & Dalton, 2002). Meta-analysis from both Holmes (1989) and Jimerson (2001b) report that retained students' academic achievement and socio-emotional adjustment fell significantly below that of their peers. Of Holmes' 63 studies, 54 netted negative results for the retained population. Jimerson (2001b) updated the Holmes meta-analysis with an additional 20 studies finding similar results and favoring social promotion as the best alternative.

Issued in a Presidential Directive to the Secretary of Education, former President Bill Clinton stressed the national need to eliminate social promotion (Clinton, 1998). Chicago and Cincinnati school systems were two school systems noted by Clinton as ending social promotion and implementing after school and summer programs, as well as basing promotion on a set of standards that students are required to meet. Clinton addressed this issue as an accountability measure to insure that schools, as well as

students, across the nation would stand accountable for the teaching and learning taking place within the schoolhouse walls.

With the onset of the No Child Left Behind legislation in 2001, there has been resurgence in the practice of retention as a common remediation tool and is highly favored in the public schools by the vast majority of educators (Thompson & Cunningham, 2001). This is in stark contrast to the research community who upholds social promotion over retention. Still, educators find themselves debating the same questions: Should they promote students regardless of their current academic achievement, or should they retain them in an effort to bolster future school success?

Statement of the Problem

The purpose of this study is fourfold. First, the purpose of this study was to determine by gender the effects of early grade retention versus social promotion on the literacy achievement as measured on the Arkansas Augmented Benchmark Exam for fourth grade students attending public school in Central Arkansas. Second, the purpose of this study was to determine by gender the effects of early grade retention versus social promotion on the math achievement as measured on the Arkansas Augmented Benchmark Exam for fourth grade students attending public school in Central Arkansas. Third, the purpose of this study was to determine by socioeconomic status the effects of early grade retention versus social promotion on the literacy achievement as measured on the Arkansas Augmented Benchmark Exam for fourth grade students attending public school in Central Arkansas. Fourth, the purpose of this study was to determine by socioeconomic status the effects of early grade retention versus social promotion on math

achievement as measured on the Arkansas Augmented Benchmark Exam for fourth grade students attending public school in Central Arkansas.

Background

The History of Retention and Social Promotion

Retention practices have been documented as early as the mid-1600s when Massachusetts first legislated that all children learn to read the Bible (Frey, 2005). A few communities in the 1800s issued mandates of compulsory attendance, but attendance was denied to African Americans and was rarely permitted for girls or any child over 10 years of age. As time passed, Frey noted that the onset of the Industrial Revolution required schools to produce an educated workforce that could supply the factories that began to spring up around the country. Schools began to have graded classrooms and now allowed African Americans, girls, and immigrants. Students were expected to master specific curricula to be passed to the next grade. Frey also pointed out the increased rate at which retention became the norm for students who did not master the material required at each grade level. At the beginning of the 21st century, retention rates had climbed as high as 50% with almost 20% of all students leaving school before the eighth grade.

Social promotion became popular during the 1970s as more evidence began to be collected regarding the possible negative effects of retention (Westchester Institute for Human Services Research, 1998). The era of the 1980s brought intense scrutiny of the social promotion policies of the 1970s due to increasing numbers of high school graduates with negligible skills, ill-prepared for the demanding labor market. Nationwide questioning of social promotion took on a more serious nature with the publication of *A Nation at Risk* in 1983. The effects of this book were so significant that numerous school

districts began the establishment of policies and standards required for promotion and graduation (Balitewicz, 1998). Retention once again became prominent in schools and was often tied to standardized testing. The shifts between social promotion and retention continued into the 1990s as many large school districts, which included New York, Philadelphia, Chicago, and Boston, began to rethink their strict retention policies in light of research studies that indicated strong relationships between retention and the high school dropout rate.

Legal and Policy Issues

The pendulum swing of the 1990s continued to gather momentum toward ending social promotion. This was encouraged by political leaders as well as school administrators. According to Brophy (2006), "Grade retention was ascendant in the 1990s and early 2000s, with U.S. Presidents Bill Clinton and George W. Bush, many state governors, and many state-and-district-level policymakers calling for eliminating social promotion as part of their plan for reforming schools" (p. 2431). The most profound legislation affecting the issue of retention and social promotion in the last century has unquestionably been the enactment of NCLB (2002). Penfield (2010) noted that the increased number of standardized tests associated with NCLB has created an easily traveled avenue for linking promotion and retention to these high stakes test scores. Penfield states that retention decisions based on test scores are a potential arena for legal challenges. He indicated that test-based retention challenges have been attempted. These would include *Bester v. Tuscaloosa City Board of Education* (1984); *Erik V. v. Causby* (1997); and *Sandlin v. Johnson* (1981). In all three cases, the attempts to challenge the test-based decisions failed.

Bester v. Tuscaloosa City Board of Education (1984) was a class action suit involving the validity of the Tuscaloosa, Alabama city schools to impose a promotion policy based on a student's reading level. During the period from 1970 until 1981, the Tuscaloosa School System was involved in litigation through the federal court system to desegregate its schools. In July of 1981, the district court entered a consent decree to allow three of the district's five all black elementary schools to remain all black. Prior to this ruling, all the elementary schools made their own promotion decisions based on the criteria established by each elementary school. The "primarily white" schools within the Tuscaloosa System had previously been retaining students who did not meet minimum reading levels. The all black schools had not retained students regardless of the reading level of the student.

On June 22, 1981, the school district Board of Education established a promotion policy as part of an overall program to improve the quality of the school system. This policy would be in effect for the coming school year of 1981-1982. In March 1982, the Superintendent of Schools sent letters to parent of students reading below grade level. The letter informed parents of the possibility of retention as stated in the board adopted policies. The plaintiffs (students and parents) sought an injunction in an attempt to delay the implementation of the board policies until the students had more time to prepare to meet these minimum standards. The plaintiffs held the position that the school system had been accepting unsatisfactory work as a basis for promotion and that the school should not be allowed to change to a policy that only accepts satisfactory work, if the policy change results in a larger proportion of black students being retained than white students. Interestingly, the plaintiffs did not contend that the remedial practices of the

schools were insufficient. The plaintiffs were also unable to supply the court with a remedy that they thought would be appropriate.

The court found that implementation of the policy did not violate due process in the fact that the students had no property right in an expectation of promotion. A property right, as defined in this case, must be more than a desire or expectation of a benefit. A person must have a legitimate claim of entitlement to it. Therefore, the court ruled that the district had not violated any law by adopting the retention policy.

Another federal court challenge dealing with student accountability resulting from retention issues is the case of *Erik V. v. Causby* (1997). The plaintiff (student) filed a complaint challenging the promotion policy of the Johnston County School District of North Carolina. The school district required students in grades three through eight to attain a designated score on a state mandated standardized test. If this designated level was not reached on this particular test, the student(s) would not be promoted to the next grade unless a special waiver was approved by the teacher and the principal. Other grades obtained during the school year on regular course work did not affect the promotion decision. In addition, students in grades 9-12 could be denied course credit if they failed to achieve a minimum score of 70 on a mandated final exam, regardless of receiving a passing score on course work during the school year (Marshall, 2004). Students failing the test were required to participate in remediation and then retake the test.

The plaintiff charged that during the first 2 years of this policy's implementation, minority students were failed at twice the rate of white students inclusive of all grade levels. The plaintiff further charged that this promotion policy violated student due

process and the Equal Protection Clause under the Fourteenth Amendment of the United States Constitution and Title VI of the Civil Rights Act of 1964 (Johansen, 1998).

The court denied the plaintiff's motion for an injunction and held that federal courts could not substitute their knowledge for the knowledge of the local school board in matters of grading and promoting students (Marshall, 2004). The issue was finally settled out of court in what was referred to as a "quiet settlement," which included an agreement to make substantial changes in the school board's promotion/retention policy. These changes ultimately resulted in fewer students being retained.

In the case of *Sandlin v. Johnson* (1981), four second grade students and their parents filed a class action suit for themselves and 18 classmates who attended Whitmell Elementary School in Pennsylvania. At the end of the 1977-1978 school year, only one student from the entire second grade class had been promoted to third grade. The promotion or retention decision was based on successful completion of the second grade level Ginn Reading series. The plaintiffs (students and their parents) did not contest the fact that they did not complete the series, only that they could read at the third grade level. The student's claim was based on denial of equal protection of the law because they had been denied the opportunity to attend third grade due to careless supervision of instruction and/or by negligent grading and classification. They argued that the third grade level would have been commensurate with their abilities.

The plaintiffs claimed damages for delaying the completion of their education and delay in entering the job market. The students and their families asked for $25,000 for each student and that the school district immediately implement a program of study to "catch them up" so that they could be placed in their age appropriate grade (fourth) at the

beginning of the 1979-1980 school year. The school responded that the district had provided equal opportunity and that it would be counter-productive to promote students that had not mastered the requisite reading skills prescribed by the school district. Prior to the trial date, the district court dismissed the suit stating that it was inappropriate for federal courts to involve themselves in settling controversies of state affairs or a subdivision of a state. The plaintiffs appealed.

There had been no allegation of discrimination based on race, religion, gender, or similar accusation. Neither was public education found to be a fundamental right, which would trigger a claim of denial of equal protection. The defendants (the school district personnel) classified students according to their attained reading levels to enable the school to provide instruction at the appropriate level and to further the education of the students. Therefore, the school had not infringed upon any constitutional right of the students by classifying them according to their reading level. The court stated that evaluation of academic performance as it relates to promotion is within the expertise of educators and was not appropriate for judicial review. The lower court's dismissal was upheld.

School and Societal Costs

Estimates derived from U.S. Census data reveal that 6 to 9% of students are retained annually (Aldridge & Goldman, 2006a). For the school year 1996-1997, almost 46 million children were retained at an approximate cost of $6,000 per student yielding a total dollar expenditure of approximately 2.8 billion dollars. This dollar figure represents only the monetary cost of reeducating retained students for only 1 year. In 10 years with similar retention rates, state governments would spend almost 3 trillion dollars, which

monies are taken from other school district programs, as well as other state supported programs such as law enforcement and higher education.

Of the studies examined, one of the most prevalent negative societal effects of grade retention was the strong association with high school dropout rate. As reported by Jimerson et al. (2002), students who have repeated a grade during their fifth through eighth grade years are almost 11 times more likely to be high school dropouts. They also found that students who repeated any elementary grade had reduced odds of pursuing a post-secondary degree by approximately 85%. Other long term effects that have been noted for retained students include receiving lower education/employment status ratings, receiving less pay per hour, receiving lower employment competence ratings, and receiving a diploma at a lower rate by age 20 (Jimerson, 2001a).

Another perspective on the cost of retention to individual schools comes from Brophy (2006). He states that for school districts to efficiently operate, students must be promoted from grade level to grade level on an annual basis. Retention creates a backlog of students requiring more physical classroom space, more desks, and eventually more teachers. In his terms, this would be a waste of schools' resources. Each student who repeats a grade has the economic effect of adding one new student for the next school year. Brophy also elaborates on other concerns for retained students, teachers, and parents. As grade levels increase, there can be increased concerns over students' relationships and age variance. Teachers and parents raise concerns about having 12 and 15-year-olds in the same classroom or 14 and 18-year-olds in the same classroom. This can present more serious student motivation and classroom management issues for the

teacher. The retained students were also noted to have lower social-emotional rankings and a higher rate of absenteeism (Silberglitt, Jimerson, Burns, & Appleton, 2006).

Comparative and Meta-Analysis Studies

Even though research can be easily found to support social promotion, there is some compelling evidence that student retention, especially in the early grades, can produce positive benefits (Alexander, Entwisle, & Dauber, 1994). Alexander and Entwisle (2010) conducted a study known as the Beginning School Study. The study investigated the effects of retention on over 700 Baltimore students in grades 1 through 3 using multiple comparison groups. The data collection for this study spanned a 20-year period from 1982-2002 and consisted primarily of interviews and questionnaires completed by students, teachers, and the participating students' parents. Their findings revealed that even though the retained students performed slightly lower than the non-retained students, the gap of disparity between the groups had closed significantly.

In a similar study, Peterson, DeGracie, and Ayabe (1987) studied the effects of retention on same-age comparison groups of first through third grade students over a 3-year period. The authors examined over 100 students, both retained and promoted, matched on the California Achievement Test. This study found significant improvements in reading and math achievement for the retained students during their retained year, but the improvement slowly diminished over the next 3 years. They also found that children retained later, in second and third grades, maintained their increased achievement levels through fourth and fifth grades, respectively.

Another study by Pierson and Connell (1992) of similar groups and time span yielded similar results. The researchers matched 97 pairs of retained and promoted first

grade students in two different cohorts beginning in 2001 and 2002. The students were selected from three school districts in Texas (one urban and two small cities). These groups were compared on the Woodcock Johnson Broad Reading and Woodcock Johnson Broad Math Tests. The students were compared over a 3-year period with the results yielding no statistical significance in the comparison of the retained and the promoted students.

Meta-analyses by Jimerson (2001b) discovered some mixed results concerning the practice of grade retention. These were basically attributed to the wide variance in research methods in some of the studies where data were collected 30 to 40 years ago. In his review of 20 studies conducted between 1990 and 1999, a total of 175 statistical analyses were completed. Of these analyses, 91 revealed statistically significant differences with 9 of the analyses favoring the retained students and 82 of the analyses favoring the promoted students.

Hypotheses

The initial review of literature suggests both positive and negative outcomes from both social promotion and retention of students, many of which over time have yielded the same ultimate outcome of no significant differences. Therefore, the researcher generated the following null hypotheses.

1. No significant difference will exist by gender between fourth grade students attending public school in Central Arkansas who are retained compared to those students who are socially promoted on literacy achievement as measured on the Arkansas Augmented Benchmark Exam.

2. No significant difference will exist by gender between fourth grade students attending public school in Central Arkansas who are retained compared to those students who are socially promoted on math achievement as measured on the Arkansas Augmented Benchmark Exam.
3. No significant difference will exist by socioeconomic status between fourth grade students attending public school in Central Arkansas who are retained compared to those students who are socially promoted on literacy achievement as measured on the Arkansas Augmented Benchmark Exam.
4. No significant difference will exist by socioeconomic status between fourth grade students attending public school in Central Arkansas who are retained compared to those students who are socially promoted on math achievement as measured on the Arkansas Augmented Benchmark Exam.

Description of Terms

At risk. Students are identified as *at risk* if they are in danger of failing to complete their education with an adequate level of skills (Slavin & Madden, 1989). Risk factors may include previous retention, low performance at the current grade level, behavior problems, low socio-economic status, and frequent absenteeism (Slavin, 1989).

High risk students. The National Association of School Psychologists (2003) reported that some groups of children are more likely to be retained than others. These children would be considered "high risk students" if they belong to one or more of the following categories: (a) male, (b) African American or Hispanic, (c) has a late birthday (one that closely approaches the cutoff date for school attendance eligibility), (d) displays delayed development or attention problems, (e) lives in poverty or in a single family

household, (f) has parents with low educational attainment, (g) has parents that are less involved in their child's education, and h) has changed schools frequently.

Intervention. School based supports that have been proven to be effective for students struggling in the educational setting are known as interventions (Slavin & Madden, 1989). Types of interventions that may be found frequently in schools include reading programs such as Reading Recovery, summer school or after school programs with reduced student-teacher ratios, tutoring, and types of direct instruction.

Promotion plus. Jimerson, Pletcher, and Kerr (2005) noted that promoting a student who has not yet acquired the necessary skills or knowledge to be successful at the next grade level, then providing carefully selected interventions to accelerate and remediate learning would be considered "promotion plus." The authors stressed that the interventions must be effective, evidence-based interventions to make the promotion a success. These types of interventions would include cooperative learning, peer tutoring, after-school programs, individualized instructional programs within the regular classroom, and increased parental involvement in remedial instruction (Setencich, 1994).

Retention. Brophy (2006) explained that retention occurs when students are held back in the same grade for an extra year, rather than being promoted to a higher grade along with their same-age peers. Other terms synonymous with retention are grade retention, non-promotion, flunking, failing, being held back, and giving the gift of time.

School readiness. School readiness is a term most often referred to as simply, *readiness*. According to Carlton and Winsler (1999), readiness has historically been viewed as two separate concepts: readiness to learn and readiness to be successful in the school setting. Readiness to learn focuses on the developmental level of the child. Are

they capable of learning material presented in this manner at this level? Readiness for school encompasses the ability or maturity level to function in the typical school setting filled with rules, transitions, expectations, and consequences for inappropriate behavior. In essence, school readiness includes all the qualities that allow the child to be able to participate successfully in the regular public school curriculum.

Social promotion. Aldridge and Goldman (2006b) define social promotion as the practice of promoting students to the next grade level even though they have not acquired the minimum competencies expected of their current grade level. In the state of Arkansas, minimum competencies would equate to students scoring at the Proficient and Advanced level on the Arkansas Augmented Benchmark Exam, whereas students who score at the Basic and Below Basic levels would not be classified as reaching these minimum competency levels. Hong and Raudenbush (2005) extended this definition by stating that all students are promoted as a group to maintain homogeneity of age within classrooms regardless of academic achievement levels.

Two-year transition classrooms. Two-year transition classrooms are just variations of the same principle of retention. This occurs most often in the year preceding kindergarten or the year between kindergarten and first grade (Carlton & Winsler, 1999). The purpose of the transition classroom is to strengthen skills that enable learning rather than receiving direct instruction in core curriculum areas.

Significance

Research Gaps

Research studies conducted between the early 1900s and 1989 have indicated mixed results concerning the effectiveness of grade retention (Jimerson, 2001b).

Concerns have also surfaced regarding the quality of many past studies focusing on grade retention (Holmes, 1989; Jackson, 1975; Niklason, 1984, 1987) and more recently questioned by Alexander et al. (1994) and Jimerson, Carlson, Rotert, Egeland, and Sroufe (1997).

With the increasing pressures of accountability for public school systems (Clinton, 1998), mixed messages from previous research (Alexander et al., 1994), and questions concerning the validity, reliability, and methodological quality of previous studies, in this study I desired to collect and report data pertinent to the local school systems in Central Arkansas using valid and reliable statistical measures. Many of the previous research studies appear to be skewed negatively toward retention and positively toward social promotion (Holmes, 1989; Jimerson, 2001b; Jimerson, Anderson, & Whipple, 2002; Jimerson et al., 1997; Jimerson et al., 2002; Jimerson, Pletcher, & Graydon, 2006). It should be noted that the majority of this research has been conducted by relatively few researchers, many of whom have collaborated together on many different studies, who all seem to advocate for the same point of view. This study seeks to produce an unbiased viewpoint to aid the educational community in making research based decisions concerning promotion and retention of students.

Possible Implications for Practice

The decision to promote or retain a student is a life altering decision. It has the potential to change friendships, color students' feelings and attitudes toward the school setting, and postpone graduation and/or the timing of entering the workforce. It influences schools and administrators in providing adequate personnel and supplemental programs. Teachers are influenced by the struggle they face to make the best decisions

for future student success. Most importantly, students and their families are influenced because this decision can possibly change the course of a student's life.

Taxpayers are influenced by the estimated $6,000 in costs associated with the retention of one child at one grade level. At the other end of the spectrum, taxpayers may be required to help support the high school graduate who has inadequate skills to be successful in the job market. Having valid and reliable research on which to base this important decision is paramount for families, educators, and society as a whole.

Process to Accomplish

Design

A quantitative causal comparative design was used for this study. The independent variables for the first two hypotheses were grade placement (retained versus social promotion) and gender (male versus female). The dependent variables for Hypotheses 1 and 2 were literacy achievement and math achievement, respectively, as measured on the Arkansas Augmented Benchmark Exam. The independent variables for the second two hypotheses were grade placement (retained versus social promotion) and socioeconomic status (free/reduced lunch versus regular lunch). The dependent variables for Hypotheses 3 and 4 were literacy achievement and math achievement, respectively, as measured on the Arkansas Augmented Benchmark Exam.

Sample

The schools providing students for the sample are all Kindergarten through fifth grade multicultural, elementary schools of varying sizes (student population) and varying socioeconomic make-up. Ten of the 13 elementary schools were Title I schools with

free/reduced lunch rates ranging from 70% to 97%. The remaining three elementary schools had a free/reduced lunch rate of less than 50%.

The study used the sampling of fourth grade students from the 13 elementary schools in an urban school district in Central Arkansas. From these fourth grade classrooms, any students who were retained in first grade or kindergarten were placed in the retention group. Any students who scored below grade level on their annual state assessment for kindergarten or first grade, yet were still promoted to the next grade, were placed in the social promotion group. Students in these groups were compared on literacy and math achievement on the Arkansas Augmented Benchmark Exam at the fourth grade level in terms of male versus female, retained versus socially promoted, and free/reduced lunch versus regular lunch.

Instrumentation

In the Spring of 2010, all fourth grade Arkansas students were administered the Arkansas Augmented Benchmark Exam, which combines both criterion and norm-referenced testing items. According to the *Standards for Educational and Psychological Testing* (Eignor, 2001), the most important consideration when evaluating a testing instrument is the validity of the instrument. Test validity is actually the accumulation of evidence to support the intended use of test scores. The Arkansas Curriculum Frameworks, which are the basis for the test, and the National Technical Advisory Committee ensures content validity. Reliability was established by the Stratified Alpha method developed by Qualls (1995). To determine the reliability using this method, the reliability of each item type was determined. The reliabilities of the different item types were then combined, thus yielding a more accurate estimate of the overall reliability. The

accuracy and consistency scores for the fourth grade mathematics Benchmark were .96 and .94, respectively, and the fourth grade literacy Benchmark were .96 and .95, respectively (James, 2006).

All questions on the exam were scored and given a relative point value including multiple choice and constructed response items. James (2006) noted that from this point value, a scale score is derived. The four levels of rating are Below Basic, Basic, Proficient, and Advanced. Students should perform at the proficient level to be considered on grade level as reflected on the cut score table (see Table 1).

Table 1

Arkansas Augmented Benchmark Exam Cut Score

Proficient Scale Score Standards			Growth Expectations		
Grade Level	Literacy	Mathematics	Grade Shift	Literacy	Mathematics
3	500	500	3 to 4	59 points	59 points
4	559	559	4 to 5	45 points	45 points
5	604	604	5 to 6	37 points	37 points
6	641	641	6 to 7	32 points	32 points
7	673	673	7 to 8	27points	27 points
8	700	700	3 to 8	200 points	200 points

Data Analysis

The results of the Arkansas Augmented Benchmark Exam achievement test were compiled, and appropriate statistical test were conducted to accept or reject the hypotheses that were formulated. To address Hypotheses 1 and 2, two 2 x 2 factorial analysis of variances (ANOVAs) were conducted using grade placement (retained versus social promotion) and gender (male versus female) as independent variables and literacy achievement and math achievement as dependent variables, respectively. To address Hypotheses 3 and 4, two 2 x 2 factorial ANOVAs were conducted using grade placement (retained versus social promotion) and socioeconomic status (free/reduced lunch versus regular lunch) as independent variables and literacy achievement and math achievement as dependent variables, respectively. To test the null hypotheses, a Bonferonni adjustment was used to modify the alpha level to correct for alpha inflation and help

control for Type 1 errors. Effect size calculations will be examined using Eta Squared values.

CHAPTER II

REVIEW OF RELATED LITERATURE

The decision to retain students or to promote them with their same age peers when they have not mastered the current grade level curriculum has been a hotly debated topic for decades. It is difficult to accurately measure the frequency of social promotion since very few, if any, records are kept by school districts pertaining to this particular practice. Likewise, there is no national database for tracking retained students, only estimates that are obtained from national census data (Thompson & Cunningham, 2000). Supporters of promotion advocate that retention will only serve to further discourage those students who already lack confidence and that they will only be subjected to a year of identical work that they were not able to master originally. Supporters of retention maintain that retention sends the message that inadequate effort and a lack of performance will not be accepted. Educational professionals, parents, and policy makers have still found no common ground to solve this dilemma (Jimerson, Pletcher, & Graydon, 2006).

Retention and Social Promotion from a Historical Perspective

Student retention, as an intervention, has been steadily increasing over the past three decades (Jimerson et al., 2002). Issues regarding grade retention have been noted as early in U.S. history as the 1840s (Balitewicz, 1998). During the 1800s and early 1900s, retention rates were as high as 70% in some geographic regions. For example, in 1909 the grade retention rate for a particular Massachusetts school district was 7.5%,

while during the same time period the rate for a similar sized school in Tennessee was 75.8%.

Studies commissioned around the turn of the century by the Russell Sage Foundation began a more intense look at these 'backward children' (Frey, 2005). This terminology referred to any students who were past the normal age for their grade level. This was followed by *Laggards in Our Schools,* a work by Leonard Porter Ayres (1909), a statistician and former superintendent, who had taken the lead in the Russell Sage Foundation research concerning the high retention in the New York School System. His research into the numbers of students retained enabled him to expose corrupted school success numbers and unreported retention and dropout rates. In his work, Ayres argues in favor of differentiated instruction within classrooms in order for more students to be successful, which eventually resulted in homogeneous grouping of students within the classroom (Frey, 2005).

The Russell Sage Foundation studies offer some evidence that the declining rate of retention could be directly connected to the practice of homogeneous grouping within classrooms (Frey, 2005). This period of education beginning just after 1900 until 1930 saw dramatic increases in the use of multi-levels of instructional materials to accommodate student's learning needs.

During the era of the 1930s, Balitewicz (1998) noted that concern arose concerning the emotional and social development of students and that retention appeared to be harmful in that it stifled the students' development. This remained a primary concern until the 1970s, as shown in the fact that retention rates saw a slow, but steady decline from the 1930s to the 1970s. This prevailing school of thought continued through

the 1970s, but the 1980s brought a sharp contrast as the social promotion phenomenon came under fire due to the high numbers of students performing at low levels academically and the number of high school graduates lacking the necessary skills to enter the workforce or continue their education (Westchester Institute for Human Services Research, 1998). Yet another shift occurred during the 1990s when research studies being conducted strongly linked grade retention to high school dropout rate. Larger districts including Chicago, New York, and Boston began to relax their strict promotion policies and use retention as an intervention less frequently (Jimerson et al., 2006).

The Impact of NCLB

The passage of No Child Left Behind (NCLB) in 2001 sparked a resurgence of thought among educators that retention is the most logical alternative for students that are not achieving. Policies and legislation regarding the debate between retention and social promotion can now be found at the national, state, and district levels. Even though surveys have shown that the majority of educators favor retention over social promotion, the majority of researchers and research findings support social promotion as being the most favorable (Anderson, Whipple, & Jimmerson, 2003). President Bill Clinton charged the United States in his 1999 State of the Union Address with the following:

> My Education Accountability Act will require every school district receiving federal help to take the following five steps. First, all schools must end social promotion. No child should graduate from high school with a diploma he or she can't read. We do our children no favors when we allow them to pass from grade to grade without mastering the material. But we can't just hold students back

> because the system fails them. So my balanced budget triples the funding for summer school and after-school programs, to keep a million children learning. Now, if you doubt this will work, just look at Chicago, which ended social promotion and made summer school mandatory for those who don't master the basics. Math and reading scores are up three years running—with some of the biggest gains in some of the poorest neighborhoods. It will work, and we should do it. (Stevens, Tuck, & Zimmerman, 1999, p. 1).

These statements from President Clinton ushered in the *Age of Accountability* by way of the infamous No Child Left Behind (NCLB) legislation (Houser, Frederick, & Andrew, 2006). Shortly thereafter, a majority of states began adopting high stakes testing instruments that would be administered at various levels throughout the K-12 progression. Many educators, according to Houser et al. (2006), agree that this added layer of assessment has infringed upon teacher autonomy and narrowed the curriculum to the single purpose of student proficiency on the specified test.

Since its passage, NCLB has drawn the focus across the country to "closing the achievement gap" between minority and nonminority students, while increasing the achievement levels of all students (Jimerson et al., 2006). According to Jimerson (2006), "It is paradoxical that more children have been 'left behind' since NCLB was passed than before" **(**p. 85). This statement mirrors the exact sentiments of Powell (2010) when she states, "If children are not 'ready'… they are at risk for being held back. They may be left behind" (p. 191). Powell continues to say that NCLB has assisted in holding many students back, especially "children of color or those living in poverty. The mandate with

such great hopes of leaving no child behind may have succeeded in doing just the opposite" (p. 191).

NCLB may, in part, be responsible for the increasing number of retention decisions that rely heavily upon standardized testing results. There are no requirements in the NCLB document pertaining to test based retention, but it does require that a state-based assessment system be in place (Penfield, 2010). The availability of these test results to school districts, in addition to the question of the appropriate practice of retention, can create a dilemma for educators trying to arrive at a decision of the most educationally beneficial placement for a struggling student.

Prior to the passage of NCLB, many states including Michigan, Kentucky, Texas, Florida, Georgia, Tennessee, Wisconsin, and Massachusetts had held students accountable by retaining those who did not meet minimum levels of achievement (Stevens, Tuck, & Zimmerman, 1999). In 1994, approximately four million students were retained across the United States. NCLB and other state initiatives have caused this number to remain steady and in some instances surpass previous totals. In the year 2000, President Clinton rewarded rural and inner-city schools who discouraged the practice of social promotion with funding for 21st Century Community Learning Center programs and for mandatory summer school programs (Stevens et al., 1999).

Longitudinal Studies of Retained Students

Retention research examines the impact on students in both the short and long term (Range, Pijanowski, & Holt, 2009). Short term results often include academic achievement, self-esteem, and behavioral issues. Long term results may include

academic growth trajectories and completion to graduation. Ultimately, research on retention is filled with differing conclusions.

The Minnesota Mother-Child Interaction Project, a 21-year longitudinal study of students that were determined to be at risk for failure, was a study conducted by Jimerson (1999) to determine the effects of early grade retention as students progressed through adolescence. Academic achievements as well as eventual drop-out rates were studied. Student groups were composed of kindergarten, first, second, and third grade students that had been retained once, and a second group of low-achieving, but promoted students of the same grade levels. A third control group was randomly assigned and displayed higher academic achievement. Data were collected through teacher interviews, student interviews and testing, and mother interviews and testing. During the adolescent years, students completed additional interviews and school counselor reports were collected. In relation to short-term outcomes, Jimerson reported that the retained group of children displayed significantly lower academic adjustment than both the low-achieving but promoted group and the control group. In regards to long-term outcomes, Jimerson stated that a greater percentage of retained students dropped out of high school (69%) in contrast to the low-achieving but promoted students (46%).

A later analysis of Jimerson's work by Lorence (2006) noted that the research study findings were flawed due to the retained students and the promoted students not being similar. He further states that Jimerson made no effort to determine any difference in academic level or intelligence when assigning groups.

Range, Pijanowski, and Holt (2009) cited the National Educational Longitudinal Studies of 1988 (NELS: 88 Studies) as the most comprehensive study ever completed by

the U.S. government regarding student achievement. The data from this study has been used in several different analyses by different researchers. A same-grade study using the NELS data studied the effects of retention in kindergarten through eighth grades (Miesels & Liaw, 1998). A total of 16,623 students made up the following catagories of 2,075 kindergarten through third grade students who had been retained, 1,128 students retained in Grades 4 through 8, and 13, 420 who were never retained. Upon the completion of this study, the researchers concluded that the students who were retained early had significantly higher grades than did the later retainees.

Fine and Davis (2003) studied the same data with a focus on post-secondary enrollment for students who had been retained at some point in their educational career. The authors found that if a student had been retained in kindergarten through second grade, the probability of them enrolling in a higher education institution was half (50%) that of promoted peers. This was approximately the same percentage for students retained in third through fifth grade.

Predictors of School Readiness and Retention

Throughout the review of literature, predictors of school readiness and predictors of retention have remained relatively constant. According to the National Association of School Psychologists (2003), some children are more prone to retention and delayed school entry than others. Students with the highest probability include

- males;
- African American or Hispanic;
- have late birthdays in relation to the starting date of school;
- delayed in development or have attention problems;

- students living in poverty;
- parents who did not complete a high school education;
- parents who are not involved in their child's education;
- those students who have changed schools frequently;
- English Language Learners; and
- students who display aggression or immaturity.

Mantzicopoulos and Morrison (1990) observed that retention tended to be the predominant intervention for kindergarten students deemed too immature to move forward to first grade. These students were also recognized as less popular and less well-adjusted behaviorally. Children that achieve well below their peers and those with learning difficulties are also at high risk for retention (Alexander et al., 1994). According to Hauser (1999), the most common factor found among all retainees is that of gender, boys being more likely to be subject to retention than girls.

Family variables have also been associated with the retention of kindergarten and first grade students. The mothers of retained students presented lower cognitive functioning, lower family income, and less education. Parents of retained students, in general, are less involved with their child's education, have lower expectations for their child's scholastic success, and are less likely to seek additional tutoring for their child (Willson & Hughes, 2009). In the book, *Generation to Generation: Realizing the Promise of Family Literacy*, Brizius and Foster (1993) submited that a childhood lived in poverty is the strongest predictor that a child will not be successful in the school setting and will ultimately fail. In a more recent report, Douglas-Hall and Chau (2008) of the National Center for Children in Poverty stated that 43% of the students across the United

States live at the poverty level or below. Approximately half of the first grade students within this population begin first grade functioning up to 2 years academically below their peers.

In the book, *The Literacy Crisis: False Claims, Real Solutions,* McQuillan asserted that a child from an average middle class family has been exposed to 1,000 to 1,700 hours of one-on-one picture book reading. The average child growing up in a low-income family, in contrast has only been exposed to 25 hours of one-on-one reading. This may be strongly influenced by the lack of print available in lower socioeconomic neighborhoods, according to Susan Neuman (2006) author of *Handbook of Early Literacy Research*. In Neuman's studies, it was found that in middle class neighborhoods there was an average of 13 book titles for every child as compared to the lower socioeconomic neighborhoods where there was only one book title for every 300 children. The lack of available print may be a combination of limited library hours on Saturdays and evenings, small numbers of books available in public libraries at the needed reading levels, and sometimes even the lack of libraries (Neuman, "Changing the odds," 2009).

According to Bowman (2005), regardless of school policies, teacher beliefs about retention play a primary role in the final retention decision. Many school districts lack detailed academic retention policies, thus teacher recommendations are the most frequently used source of information when deciding to promote or retain elementary students as opposed to middle and high school students where most retention decisions are based upon grades.

Another way of looking at retention comes from Powell (2010) who stated that education be approached from a different perspective. This author's suggestions included the following:

- children are always ready to learn;
- ready children need to paired with ready schools;
- instead of comparing children to children, compare the child to the child;
- all children have assets; and
- schools should seek to build upon these assets by meeting the individual needs of the student.

Academic Improvement and Retention

Few studies report positive academic outcomes in math and literacy achievement resulting from the retention of students. Conversely, in the book *On the Success of Failure,* Alexander et al. (2003) argued that retention does provide positive results in that retention slows the downward academic slide that some students find themselves on and allows them an opportunity to succeed in later grades.

In a Chicago Public School study by Jacob and Lefgren (2004), retention was found to increase achievement in reading and math. These findings were based on a large sample of over 74,000 third and sixth grade students who were primarily minority and low in socioeconomic status. However, in the 2 years following the retained year, the increased achievement levels gradually diminished until no improvement could be noted at the end of the 2 year period. During the year of retention, the retained students received after school tutoring beginning approximately one-third of the way through the

study until completion of the study. Therefore, the results may be more a reflection of the tutoring component rather than the effects of being retained.

Early retention studies of kindergarten and first grade students have yielded evidence that retention at this level does not increase academic achievement (Range et al., 2009). In Early Childhood Longitudinal Studies - Kindergarten Class (ECLS-K), Hong and Raudenbush (2005) sampled 471 retained and 10,255 promoted kindergarten students. The researchers found evidence that the retained students' achievement would have been higher had they been promoted. They concluded that most kindergarten retention decisions leave students farther behind and may impede the cognitive development of the student during their year of retention.

In another related study, Hong and Yu (2007) compared math and reading scores using the ECLS-K data to examine both retained and promoted students in kindergarten and first grade. The sample of 21,409 students included 471 students retained in kindergarten and 201 students retained in first grade. Comparisons were made during their baseline retention year and the third and fifth years following. The researchers concluded that no long term positive effects were present in their results based on the students' reading and math scores at all levels.

The ECLS-K data was also used in a sample of 12,780 students in 915 different schools (Burkam, LeGerfo, Ready, & Lee, 2007). The researchers conducted both same-age and same-grade comparisons. The results indicated that the retained students lagged increasingly behind their grade level peers who did not repeat kindergarten. They further concluded that the academic achievement of students who repeat kindergarten or first grade does not increase in following years.

In contrast to these studies, other researchers found that students who were retained perform at a higher level during the years following retention than those who were promoted to the next grade without mastering the current grade level material. Peterson et al. (1987) examined matched groups of over 100 students on the basis of gender, race, age, and scores on the California Achievement Test (CAT). The students consisted of 65 first grade, 26 second grade, and 15 third grade students. At all three grade levels, the researchers found that the retained students performed higher in math and reading when compared to the promoted students.

Positive results were also reported by Rust and Wallace (1993) when they examined the achievement of 120 students in a large, southern metropolitan school district. Students were divided into two groups and matched on race, gender, socioeconomic status, and grade previous to the retention year. The retained students were in fifth grade and the promoted students were in sixth grade at the time of the study. Data were collected over a 4-year period that included demographic information, math and reading scores on the California Achievement Test and numerous forms of the Stanford Achievement Test. The results of this study indicated that achievement of the retained group of students was higher during the retained year, but the group's achievement leveled out during the third and fourth years of the study.

In a Texas study, Neblett (2007) also reported positive effects on achievement. The researcher used a sample of 33 third grade and 49 fifth grade students, which included both Hispanic and African American students, to examine the impact of reading scores on achievement 1 and 2 years after the actual retention. Neblett concluded that both age groups showed a statistically significant improvement in

reading and math scores the year following retention. Neblett also discovered that students who had been retained in third grade scored above the proficiency level in math at the fifth grade level.

In another Texas study, two groups were compared based on data from the Texas Education Agency. One group had low reading scores and had been retained while the second group had low reading scores, but had been promoted (Lorence, Dworkin, Toenjes, & Hill, 2002). The researchers concluded that low-performing students who repeated a grade did not suffer any ill effects from the retention, and that the additional year in school gave the low-performers more time to acquire the necessary skills to be successful later in school.

Lorence and Dwrokin (2006) followed a large sample of 38,445 Texas public school students, of which 1,244 had been retained at least 1 time. The students were monitored through their tenth grade school year. The reading scores of the retained students were compared to the reading scores of the low-performing, but promoted students. The researchers found that when comparing the adjusted same-grade reading scores after retention, the socially promoted students lagged behind the reading level of the retained students, significantly.

The majority of researchers have concluded that retention does not promote higher academic achievement for retained students than for their low performing counterparts that are socially promoted to the next grade level (Hong & Raudenbush, 2005; Hong & Yu, 2007). Other researchers maintain that much of the past research is flawed and that retention can be beneficial for low performing students (Lorence, 2006). Several studies resulting in positive outcomes for retained students have reported gains in

academic performance of the retainees (Lorence, et al., 2002; Neblett, 2007; Peterson et al., 1987; Rust & Wallace, 1993). If educators can not agree that retention may be benficial for some students, then appropriate interventions to support stuggling learners must be implemented (Range et al., 2009).

Timing of Retention

Although retention is a frequently used yet controversial intervention, the research community has not offered positive support for this practice and in many instances has suggested that retention adversely affects students (Silberglitt et al., 2006). Proponents of grade retention propose that retention of student in the early grades (e.g., kindergarten, first, or second grade) minimizes any negative effects that could be seen in retention of students in later grades. Thus, retention is viewed as an early intervention (one initiated prior to third grade), in order to prevent future school failure. Early grade retention also appeals to common sense. It would seem logical that an extra year of studying the same material would increase the amount of the material learned by the student. Jimerson (2001) referred to this train of thought as "nonsense," and stated further that "neither retention nor social promotion will adequately address the needs of students" (p. 63), as many research studies postulate.

Silberglitt et al. (2006) studied 49 students; 27 were retained in kindergarten through second grade, and 22 were retained in third through fifth grades. This study followed the learning trajectories in literacy on all students through the eighth grade. Previous studies had only compared early retention to delayed entry into kindergarten, but not a comparison of retention at different age and grade levels. This study specifically addressed the following research question: Is retention in the early grades

(kindergarten through second grade) linked to better short-and long-term outcomes relative to retention in later grades (third through fifth)? The results found that even though there were slight differences that favored the early retained group, no differences were significant in the statistical analyses, so the results of this study failed to support retention, earlier or later.

The Social Promotion Alternative

The practice of social promotion involves promoting students to the next grade level even though they have not mastered all the expected learning expectations of their current grade level (Aldridge & Goldman, "Current Issues," 2006b). The most prevalent reasons for this practice are a fear by staff members that failing high numbers of students would reflect poorly on the school and/or personnel, pressure on staff from principals and parents to promote students that are not ready for the next grade, knowledge that retention hasn't worked in the past, and the absence of any other effective alternative.

Stevens et al. (1999) also found that both teachers and parents supported the ending of social promotion. A 1998 poll of Texas citizens revealed that 92% of the citizens surveyed supported the idea that no student should leave third grade without being able to read, and 78% recognized social promotion within school systems as a serious issue to be dealt with.

Today's colleges and universities now find it necessary to offer remedial courses to entering freshman to adequately prepare them for college level courses. Feldman (1997) contended that students are socially driven through the public school system and are thus, ill prepared for college or the workplace.

Social promotion fell into the spotlight when prominent politicians such as past Presidents George Bush and Bill Clinton openly criticized social promotion during their political terms and vowed that it would come to an end across the nation (Stevens et al., 1999). During this same time period, the Superintendent of the second largest school district in the U.S., the Los Angeles Unified School District (LAUSD), also initiated an end to social promotion within his district. In January 2000, the LAUSD reported that if all students who were not on grade level were retained, two-thirds of all eighth grade students and 40-60 % of all second to eighth grades students would be retained (Aldridge & Goldman, 2006). The policies for LAUSD were modified so that only 6,000 second graders and 4,000 eighth graders would be retained and receive a special curriculum and support the following year. This resulted in other district problems such as finding adequate space to house the retained students and qualified staff to teach the specialized curriculum.

According to Aldridge and Goldman (2006b), social promotion is problematic for students, teachers, and parents. Students develop a false sense of security that they have adequate skills for the next grade level, only to be met with more difficult curricula and a lack of prerequisite skills. Teachers must plan to address a wider range of skills, not only for the students who are on grade level or advanced, but also for the struggling learners who are not equipped with enough skills to address the current content. When students are promoted, parents receive the message that their child is prepared for the next level, whether it be academic or the workforce.

Brain Research and Child Development

The consensus in the scientific community is that from birth to 5, a child's brain grows and develops the most rapidly (Shonkoff & Phillips, 2000). Brain capacity triples in the first year of life and is almost completely formed when a child enters kindergarten (Eliot, 1999). Reading to children during this time, especially from ages 3 to 5, is essential to promote optimal brain development and function (Berk, 2009). Reading to young children during this developmental period is so crucial that the American Academy of Pediatrics advise pediatricians to prescribe reading activities when parents bring their children in for regular check-ups (Klass, 1998). At present, it is estimated that approximately 37 % of students beginning kindergarten do not possess the essential skills necessary to become a successful student and a lifelong learner (Landry, 2005).

Causes for the disparities in school related performance are rooted in children's early experiences prior to reaching school age. Exposure to adequate language is essential to literacy development and all other areas of thinking and learning (Hart & Risley, 1995, 1999). By the time a child reaches age three, basic vocabulary knowledge disparities already exist based on socioeconomic status (Farkas & Beron, 2004). Lee and Burkam (2002) found that beginning kindergarten students in the lowest socioeconomic group have average cognitive scores that are 60% below those of the most affluent group. Regarding ethnicity, African American children ranked 21% lower in math achievement than white children and Hispanic children ranked 19% lower than non-Hispanic white children in the same category.

Powell (2010) stated that child development is not the same for all children; children do not develop across all domains in a neat, timely, and organized fashion. She

continued with the statement, "At all grade levels…children are at different places. This is the nature of child development" (p. 194).

According to the National Assessment of Adult Literacy (1993), students are 3 to 4 more times likely to drop out of school if they have not acquired some basic literacy knowledge upon entering kindergarten. A study conducted by the Center on the Developing Child at Harvard University revealed that out of every 50 children experiencing difficulty learning to read in kindergarten, 44 of them will still experience difficulty in third grade (National Scientific Council, 2007). The researchers of the National Scientific Council continue to say that the majority of students who begin kindergarten behind, stay behind.

Researchers at the University of California, Berkeley, revealed that the brains of students from low socioeconomic backgrounds function differently than the students coming from middle to high socioeconomic backgrounds (Kishiyama, Boyce, & Knight, 2008). The researchers sampled a group of nine and 10-year old children from an ongoing research program on the Berkeley campus called Wellness in Kids (WINKS) that examined how low socioeconomic living environments affected the neural development in children during the first few years of life. The sample of children selected for the EEG Brain Differences Study consisted of 26 children, ages nine and 10, from a group of the children in the WINKS Study. Half of the children had high socioeconomic backgrounds, and half had low socioeconomic backgrounds. The children selected were similar in every way other than socioeconomic status in that they were known to have no neural damage, no prenatal exposure to alcohol or drugs, and no neurological damage. The researchers measured the brain activity of each child while

they were engaged in various tasks, from simple to more complex. The researchers were interested in exploring the response time to the various visual stimuli that the students were exposed to such as a series triangles with one image in the sequence skewed, then a series of familiar pictures of puppies, cartoon characters, and other objects. The EEGs revealed a marked difference in the brain's response time in the prefrontal cortex, the area of the brain that is essential for problem solving and creativity. The brains of the more impoverished children had much slower response to the stimuli, very similar to adult brains that have had a portion of their frontal lobe damaged or destroyed by a stroke.

The researchers from the EEG Brain Study offered some relatively simple tasks that can help repair this damage. One of the researchers, Boyce, said, "…it really looks like something as simple and easily done as talking to your kids can boost prefrontal cortex performance" (Kishiyama et al., 2008, p. 3). Also, the research indicatedthat students with poor problem solving and reasoning abilities can improve their academic performance through dramatic play and games.

In research by Rosenberg-Lee and Menon (2011), students who were just completing second grade were compared to recent third grade completers in how their brains functioned when completing varied mathematical tasks. In the research completed at Stanford University School of Medicine, 90 children were recruited, ages 7 to 9, who had just completed second or third grade. Students were asked to find solutions to simple problems (3 + 1 = 4) or more complex (8 + 5 = 13) while the student's brain was being scanned using MRI techniques. The third graders brains behaved very differently than the second graders brains. The second graders approached the easy and hard problems in

the same manner using the same parts of the brain. On the other hand, the third graders had heightened brain activity in the part of the brain important for working memory. This area stores relevant information in a *handy* location. Parts of the brain involved in vision also showed more activity as they worked on the numerical solutions. Menon commented, "At this point, what's clear is that the brain and brain function is undergoing major changes" (Rosenberg-Lee & Menon, 2011, p. 796). The research was not clear if the changes were a result of instruction, normal development, or a combination. The researchers were in hopes that this type of research will help educators figure out the best kinds of math instruction that is age appropriate and brain compatible.

Consequences of Retention and Social Promotion

Regardless of the ultimate decisions made for struggling learners, there are always consequences associated with the final decision. Annually, approximately 2.5 million students are retained at an estimated cost of 14 billion dollars (Jimerson et al., 2002). Jimerson et al. indicated that retention is the single most powerful predictor of dropping out of high school which is also a tremendous burden upon society.

In light of NCLB, Powell (2010) asked an important question, "With large scale grade retention efforts being initiated in multiple states since the inception of NCLB, what will the dropout statistics look like a decade from now" (p. 193)? She continued with the questions of how this will impact the individual, the community, and our nation if current research holds true.

While still in the school setting, retention has been shown to be related to a negative achievement trajectory, behavior problems, and low self-esteem (Richman, Stevenson, & Graham, 1982). Behavior problems were correlated negatively with verbal

ability and reading readiness. Furthermore, retained students with reading problems exhibited some anti-social behaviors (Hinshaw, 1992)

Lifelong issues are also influenced by retention such as decreased lifetime earnings, poorer employment outcomes, and decreased government tax revenues due to the decreased earnings of individuals that have been retained (Xia & Glennie, 2005) . Social promotion research yields similar results in that the promotion increases drop-out rates, does not increase student achievement, and creates a workforce without necessary skills to obtain or retain employment (Johnson & Rudolph, 2001).

Conclusion

The debate over the efficacy of student retention versus socially promoting students has a lengthy history in the United States with documentation as early as the 1840s (Balitewicz, 1998). Educators and researchers often seem to be on opposing sides as much of the scientific research identifies student retention as the least profitable for increased academic achievement, yet it is the most common intervention chosen by both educators and parents (Jimerson et al., 2005; Stevens et al., 1999). This debate has shifted from liberal to stringent school policies regarding promotion spanning several decades depending on local, state, and national political arenas (*Bester v. Tuscaloosa City Board of Education*, 1984; *Erik V. v. Causby*, 1997; *Sandlin v. Johnson*, 1981; Clinton, 1998). The passage of No Child Left Behind in 2001 has perpetuated the controversy of retention and promotion compounded by the factors of accountability and high stakes testing (Jimerson et al., 2006; Stevens et al., 1999).

The review of literature illustrating that scientific research supporting each side of this debate is available (Brophy, 2006; Holmes, 1989). There have been longitudinal,

urban, and isolated school district studies, many with compeling evidence, but still no definitive answers to this perplexing problem.

Numerous issues can impact whether retention or promotion decisions are successful. Children's developmental levels, early learning activities, environment, socioeconomic status, gender, exposure to books, instructional methods, and even teacher attitudes can greatly impact the learning of children (Berk, 2009; Eliot, 1999; Ferguson et al., 2001; Kishiyama et al., 2008; Rosenberg-Lee & Menon, 2011).

In this study I gathered more information within a southern public school setting, offering another perspective on retention and promotion of students to enable the student to attain the highest academic level possible. Many factors were considered when making this decision, as noted previously, and many additional factors were considered after the decision was made to scaffold the students appropriately for their ultimate success.

CHAPTER III

METHODOLOGY

Evidence presented in the review of literature included studies yielding positive and negative results for both retention of students and social promotion of students. Concerns also emerged regarding the validity and reliability of many past studies focusing on grade retention (Holmes, 1989; Jackson, 1975; Niklason, 1984, 1987). Related concerns were more recently questioned by Alexander et al. (1994) and Jimerson et al. (1997). Lorence (2006) also noted that the research study findings presented by Jimerson (1999) were flawed due to the retained students and the promoted students not being similar. With the increasing pressures of accountability for public school systems (Clinton, 1998), mixed messages from previous research (Alexander et al., 1994), and questions concerning the validity, reliability, and methodological quality of previous studies, in this study I collected and reported data pertinent to the local school systems in Central Arkansas using valid and reliable statistical measures in an effort to determine if retention or social promotion for students in the district studied best served the students learning outcomes as measured by their fourth grade achievement according to the state mandated Arkansas Augmented Benchmark Exam.

The purpose of this study was to examine the effects of early grade retention versus social promotion on literacy and math achievement as measured on the

Arkansas Augmented Benchmark Exam for fourth grade students attending public school in Central Arkansas. I generated the following hypotheses:

1. No significant difference will exist by gender between fourth grade students attending public school in Central Arkansas who are retained compared to those students who are socially promoted on literacy achievement as measured on the Arkansas Augmented Benchmark Exam.
2. No significant difference will exist by gender between fourth grade students attending public school in Central Arkansas who are retained compared to those students who are socially promoted on math achievement as measured on the Arkansas Augmented Benchmark Exam.
3. No significant difference will exist by socioeconomic status between fourth grade students attending public school in Central Arkansas who are retained compared to those students who are socially promoted on literacy achievement as measured on the Arkansas Augmented Benchmark Exam.
4. No significant difference will exist by socioeconomic status between fourth grade students attending public school in Central Arkansas who are retained compared to those students who are socially promoted on math achievement as measured on the Arkansas Augmented Benchmark Exam.

In this chapter I described the research design, the subjects, sample selection, and the type of instrumentation. I also provided details of the statistical analysis and discussed the limitations involved in the study.

Research Design

In this study, a non-experimental method was necessary since there was no random assignment to groups. Participants belonged to one of the study groups prior to the beginning of the study; students were either retained or socially promoted.

A quantitative causal comparative design was chosen for this study because the cause and effect were examined ex post facto, meaning that the cause and effect have already occurred and are being examined after the fact. Gay (1987) stated that causal-comparative research attempts to identify a cause-effect relationship between two or more groups. This study examined the results of early grade retention (the cause) on the achievement of groups of students in literacy and math (the effect) by gender and by socioeconomic status. In this study, it would not have been appropriate or ethical to manipulate the independent variables (retention or social promotion); therefore it was necessary to choose the causal comparative design over a correlational design since the variables were not being manipulated and the study examined more than one specific group (Gay, Mills, & Arasian, 2009).

To address Hypotheses 1 and 2, two 2 x 2 factorial analysis of variances (ANOVAs) were conducted using grade placement (retained versus social promotion) and gender (male versus female) as independent variables and literacy achievement and math achievement as dependent variables, respectively. To address Hypotheses 3 and 4, two 2 x 2 factorial ANOVAs were conducted using grade placement (retained versus social promotion) and socioeconomic status (free/reduced lunch versus regular lunch) as independent variables and literacy achievement and math achievement as dependent variables, respectively. To test the null hypotheses, a Bonferonni adjustment was used to

modify the alpha level to correct for alpha inflation and help control for Type 1 errors. Effect size calculations were examined using Eta Squared values.

Sample

This study was conducted in an urban school district in the Central Arkansas area consisting of approximately 9,100 students in Grades K through 12 with an additional pre-kindergarten population of approximately 300 students. The individual school configurations consisted of one pre-kindergarten (Pre-K) center, six Pre-K to Grade 5 schools, three K to Grade 5 schools, one Grade 6 complex, three Grade 7-8 schools, one Grade 9-10 school, one Grade 11-12 school, and one alternative learning complex composed of various grade levels. Based on the Arkansas School Report Card posted on the ADE website, the school district had a free and reduced lunch population of 65% and was meeting school improvement standards at the district level.

Existing retention data were collected from the Arkansas Public School Computer Network (APSCN) for the school years 2005-06, 2006-07, and 2007-08 for all kindergarten and first grade students. Students were assigned to the retained group if they were retained in kindergarten or first grade in the Spring of 2006, 2007, or 2008. Students were assigned to the socially promoted group if, in the Spring of 2006, 2007, or 2008, they were not assessed at the proficient level or above on the appropriate grade level assessment of the Stanford Achievement Test series as administered to all kindergarten and first grade students within the district.

Corresponding achievement data were collected from Triand student transcripts based on the state mandated Augmented Benchmark Exam administered in the Spring of 2009, 2010, or 2011 in the fourth grade school year for the same students identified in the

retained and socially promoted study groups. Triand is a web-based data service supported by the ADE that provides official student transcripts for Arkansas Schools (Triand Support, 2012).

Pair-wise matching, sometimes called *matched pairs*, was used to match students from the retained group to students in the socially promoted group based on socioeconomic status, gender, ethnicity, proficiency level at the time of social promotion or retention, and the same elementary school the student was attending during their fourth grade school year. These data were collected from a district software program called D2SC which details student demographic information as well as grade transcripts, Triand archives, and Arkansas Department of Education (ADE) cycle reporting. If a student could not be matched with a similar student, the student was eliminated from the study. Students were also eliminated from the study if fourth grade Benchmark scores were unavailable or they did not complete both the math and literacy sections of the Augmented Benchmark Exam.

An spreadsheet was created from the data collected for 59 matched pairs of students. Each pair of students was randomly assigned a number ranging from 1 to 59 for identification purposes. The initial sample of matched pairs included two matched pairs that were eliminated because fourth grade Benchmark scores were unavailable for these two pairs. The 57 remaining pairs displayed complete data sets and were used in the analysis.

Instrumentation

The Student Assessment and Educational Accountability Act (Act 35 of the Second Extraordinary Session of the Arkansas 84th General Assembly) requires annual

assessment of kindergarten, first grade, and second grade with a developmentally appropriate testing instrument in the areas of reading (literacy) and math. The instruments used to measure achievement at these grades were grade level versions of the Iowa Tests of Basic Skills (ITBS) administered in April of 2006, 2007, and 2008. The ITBS is a norm-referenced test developed by the University of Iowa which provides an in-depth assessment of students' achievement of objectives in reading, language arts, and mathematics (ADE, 2006). The results are reported as percentile points, indicating students' performance equal to or greater than the performance of a certain percentage of other students across the nation. These percentile levels are then converted into proficiency levels.

This battery of assessment instruments was developed by the faculty and professional staff at Iowa Testing Programs at the University of Iowa. This department has an 80 year history of research and development in educational testing. Research in the areas of curriculum practices, test development, technical measurement procedures, and test use and interpretation form the basis for testing instruments designed by the University of Iowa. Questions used on the ITBS are reviewed for curricular relevance and fairness by a core team of individuals representing diversity in race/ethnicity, gender, geographic residence, and rural/urban experience (The University of Iowa, 2001, 2008). Internal consistency is monitored as new test items are added and equivalent forms of the various levels of the tests are used. There is a composite reliability score of .98 for the entirety of the test battery. Periodic research is conducted to maintain content validity for new test items.

It should be noted at this point that the proficiency level on the ITBS was used as a single factor in the determination of promotion and retention. The school district policy stated that when a student was identified as being at risk for retention, every effort was made to assist the student in overcoming his/her academic difficulties including remedial instruction and assistance from parents as partners in educating their child (Local School District, 2010). Factors considered in the promotion/retention decision included current skill level, age and maturity, attendance, any previous retention, evaluative data (including Arkansas Benchmark or ITBS proficiency levels), possible benefits, special services available for the student, and the rate of the student's learning.

The Arkansas Augmented Benchmark Exam was the instrument used to obtain the proficiency levels of students at the completion of their fourth grade school year. The Arkansas Augmented Benchmark Exam is a state mandated assessment administered annually to all Arkansas public school students in Grades 3 through 8. Beginning with the 2007-08 school year, the norm referenced test (NRT) and criterion referenced test (CRT) were combined to form the Arkansas Augmented Benchmark Exam for Grades 3 through 9. The NRT component focuses on performance based national norms in the subject areas of reading comprehension, math problem solving, and language. The CRT portion measures student performance based on the Arkansas Mathematics and English Language Arts Curriculum Frameworks.

Performance levels for the Arkansas Augmented Benchmark Exam and the ITBS are as follows:

- *Advanced*: Students who are advanced perform well beyond grade level expectations. They are able to use their knowledge to solve complex, multi-step

problems on their own. They are insightful and make connections between abstract and concrete ideas and provide explanations and arguments that they can support with evidence.

- *Proficient*: Students who are proficient demonstrate a thorough understanding of grade level material and are academically prepared for the curriculum at the next grade level. They are able to problem solve and complete tasks on their own.
- *Basic*: Students who are basic possess many skills in reading, writing, and methematics, but do not demonstrate the ability to fully apply these skills. They exhibit a need for further assistance to reach the proficient level.
- *Below Basic*: Students who are below basic are deficient in many skills in reading, writing, and mathematics. They may require intensive interventions before reaching proficiency. (ADE, 2006)

A specified range of scale scores correspond to each proficiency level for each test administration. Scale scores are intended to make scores more meaningful by defining a scale of measurement that is not tied to a particular form of a test(ADE, 2006).

According to the ADE (2006), the Arkansas Augmented Benchmark Exam exhibits sound and professionally acceptable levels of reliability, validity, and fairness. This has been established through extensive research with the CRT and the NRT items. The ADE documentation further stated that the reliability of the Augmented Benchmark Assessment has been determined by use of the Stratified Alpha Method. This method estimates the reliability of each test item separately, then combines these reliability factors to establish an overall reliability. Establishing validity is a series of ongoing practices which investigate the appropriate use or interpretation of test scores from a

particular measurement procedure. In the case of the Arkansas Augmented Benchmark, content-related evidence, evidence of internal structure, and evidence of fairness were collected and evaluated.

Data Collection

After IRB approval and permission (Appendix A) from the Superintendent of Schools and the Director of Elementary Education of the participating school district, I physically gathered the data pertinent to this study. These data included names, gender, ethnicity, retention records, proficiency levels of retained and socially promoted kindergarten and first grade students within the study groups, socio-ecoonomic status, and proficiency levels of the study groups of students upon completion of the fourth grade Benchmark Assessment. Names of retainees were collected from archived state mandated cycle reports submitted in the fall of each school year through the Arkansas Public School Computer Network (APSCN). These names were then used to locate individual student information in the local district's testing database called D2SC and the state student information database called Triand. These sources provided student transcripts and socio-economic information for each student. Scale scores as reported by ADE for each student were listed within the student transcripts in D2SC and Triand.

Students who had been retained in kindergarten and first grade were matched with students who had the same proficiency level, but were socially promoted. Students were also matched based on ethnicity, socio-economic status, and attendence at the same elementary school. If a similar student could not be matched from the same elementary school, a similar student from a similar elementary school was utilized. This precaution

was taken to insure that the students within the study groups had received the most closely matched curriculum possible.

This set of data yielded 59 matched pairs of students. Two pairs of students were eleminated from the study because of missing scale scores within their school records. This left 57 matched pairs of students participating in the study.

Analytical Methods

First, data were coded and entered into the SPSS Stastistics software. Coding systems were used for group participation, gender, socio-economic status, and ethnicity. Coding systems were as follows: group participation (0 = retained group, 1 = socially promoted group), gender (0 = male, 1 = female), socio-economic status (0 = free/reduced lunch participant, 1 = regular paid lunch participant), ethnicity (0 = African American, 1 = White, 2 = Asian, 3 = Hispanic).

Next, screening was done visually to look for missing data and to verify the counts for each group. Additional analyses were performed to identify potential outliers and to check homogeneity of variance as determined by Levene's statistic.

Lastly, the four hypotheses were examined individually by the following stastical methods:

- Hypothesis 1 was examined by using a 2 x 2 factorial ANOVA with grade status (retained versus social promotion) and gender (male versus female) as the independent variables and literacy achievement as the dependent variable.
- Hypothesis 2 was examined by the same method as Hypothesis 1 using the same independent variables. The dependent variable used was math achievement.

- Hypothesis 3 was examined by using a 2 x 2 factorial ANOVA with grade status (retained versus social promotion) and socioeconomic status (free/reduced lunch versus regular lunch) as the independent variables and literacy achievement as the dependent variable.
- Hypothesis 4 was examined by the the same method as Hypothesis 3 using the same independent variables. The dependent variable used was math achievement.

A two-tailed test with a significance level of .05 was used to test the null hypotheses.

Limitations

This study investigated the effects of early grade retention on the Benchmark achievement of students from an urban, Central Arkansas school district, completing the fourth grade in literacy and math. Achievement was evaluated by gender and socioeconomic status of the students within the study.

Careful consideration was given to matching students by school attended, gender, year of retention or social promotion, ethnicity, proficiency levels at the time of retention or social promotion, and socioeconomic status in an effort to maintain similarity of the groups. Even with these precautions, every research endeavor will be impacted by a variety of problems or weaknesses which are limitations to the internal validity of the study (Leedy & Ormrod, 2005).

One limitation of this study was that the nonexperimental design of this study does not allow the researcher to have control over the independent variables (IV) (Mertler & Vannatta, 2005). Students could not be randomly assigned, but were assigned due to membership in a particular group. In this study they were either retained or socially promoted. Thus, the number of students involved represent only a small segment of the

total population within the school district and may not be generalizable to the population at large.

Another limitation was tht although each student was matched to a student from the same school setting or an identical school setting, there was no assurance that they received identical instruction because the socially promoted group was drawn from a variety of classrooms within each school. Consequently, the students were exposed to a variety of classroom teachers with varying methods of instruction, knowledge, and levels of ability.

A third limitation to consider was that at some point between the retention/social promotion event and the students' fourth grade Augmented Benchmark exam, some or all of the students may have received supplemental classroom instruction, tutoring, or some other type of remedial services. This could have resulted in an altered Benchmark score, as opposed to the score they would have received if the retention or social promotion event had been the only impact on their achievement.

As a result of the study limitations, evidence is less conclusive. Other study limitations not identified by this researcher may also have affected the outcomes of this study.

CHAPTER IV

RESULTS

This quantitive, non-experimental study examined the effects of retention versus social promotion in the early grades on later academic achievement as measured by the Arkansas Augmented Benchmark Exam for fourth grade students in a large Central Arkansas school district. Student achievement was studied based on gender and socioeconomic status on both literacy and math achievement scores.

The independent variables were socioeconomic status (free/reduced lunch versus regular pay lunch) and gender (male versus female). The dependent variables were math and literacy achievememnt scale scores as measured on the Arkansas Augmented Benchmark Exam at the fourth grade level. The four hypotheses were examined by using a Factorial Analysis of Variance (ANOVA). The Kolmogorov-Smirnov test of normality yielded a significance of .200 for each of the four hypotheses which indicates that the sample of students was derived from a normally distributed population. Outliers were examined, and no extreme outliers were found. A Bonferonni adjustment was used to reduce the alpha level making it more difficult to claim a false significant result or a Type 1 error.

Hypothesis 1

Hypothesis 1 stated that no significant difference will exist by gender between fourth grade students attending public school in Central Arkansas who were retained

compared to those students who were socially promoted on literacy achievement as measured on the Arkansas Augmented Benchmark Exam. Group means and standard deviations are presented in Figure 1.

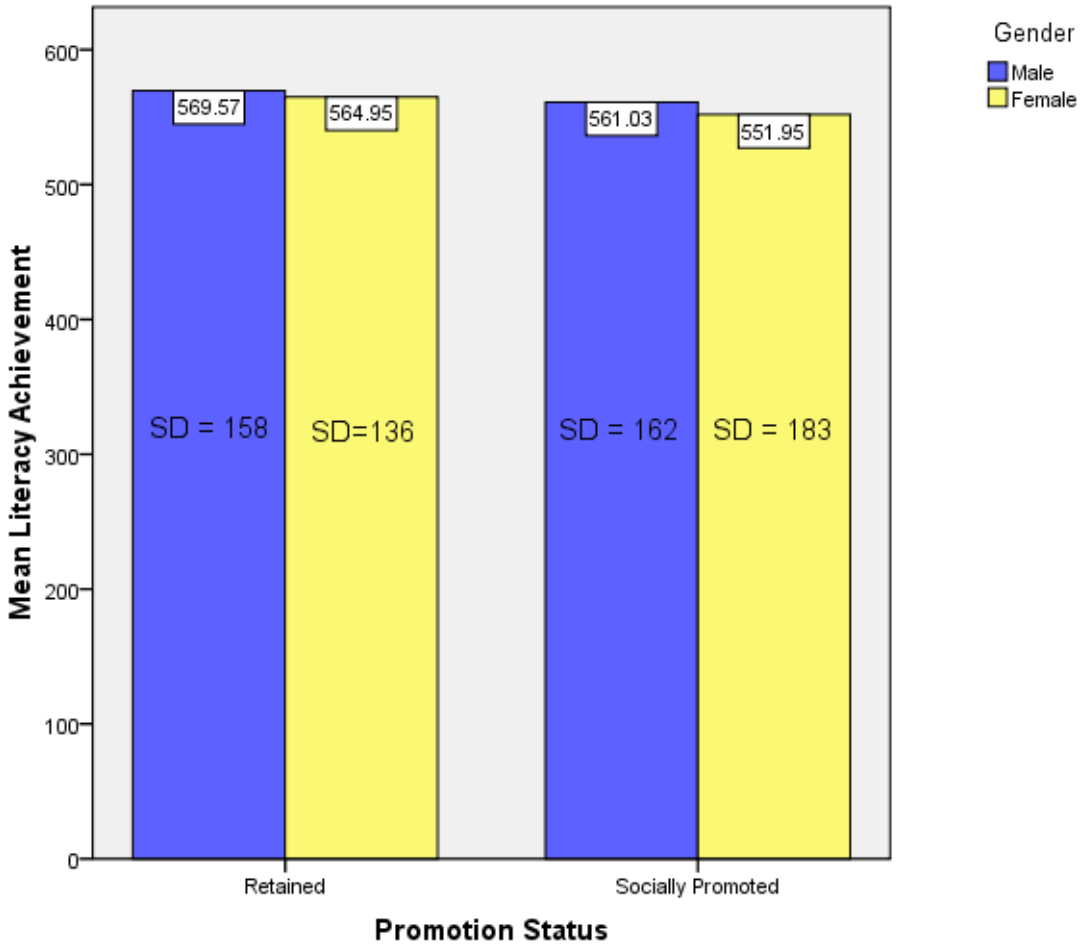

Figure 1. Fourth grade literacy means and standard deviations by gender.

Levene's Test of Equality of Error Variances was conducted within ANOVA and confirmed homogeneity of variance across groups F (3, 110) = .376, p = .770. Significance was established at a level of $p \leq .05$.

A Univariate ANOVA was conducted to explore the interaction of gender (male versus female) and grade placement (retained versus socially promoted) on literacy achievement as measured by scaled scores from the Arkansas Augmented Benchmark Exam. The results of the ANOVA are displayed in Table 2.

Table 2

Fourth Grade Literacy Achievement ANOVA Results for Promotion Status and Gender

Source	*SS*	*df*	*MS*	*F*	*p*	*ES*
Promotion*Gender	134.18	1	134.18	0.01	0.943	0.000
Promotion Status	3134.66	1	3134.68	0.12	0.728	0.001
Gender	1266.05	1	1266.05	0.05	0.825	0.000
Error	2835033.45	110	2577.03			

The interaction effect between gender and promotion status was not statistically significant, F (3, 110) = .005, p = .943 with a partial eta squared effect size equal to .000. The main effects of each variable were then examined separately. The main effect for gender was not statistically significant, F (1, 110) = .049, p = .825, ES = .000. The main effect for promotion status was also not a statistically significant, F (1, 110) = .122, p = .728, ES = .001. The null hypothesis was accepted.

Hypothesis 2

Hypothesis 2 stated that no significant differences will exist by gender between fourth grade students attending public schools in Central Arkansas who were retained

compared to those that were socially promoted on math achievement as measured on the Arkansas Benchmark Exam. Group means and standard deviations are presented in Figure 2.

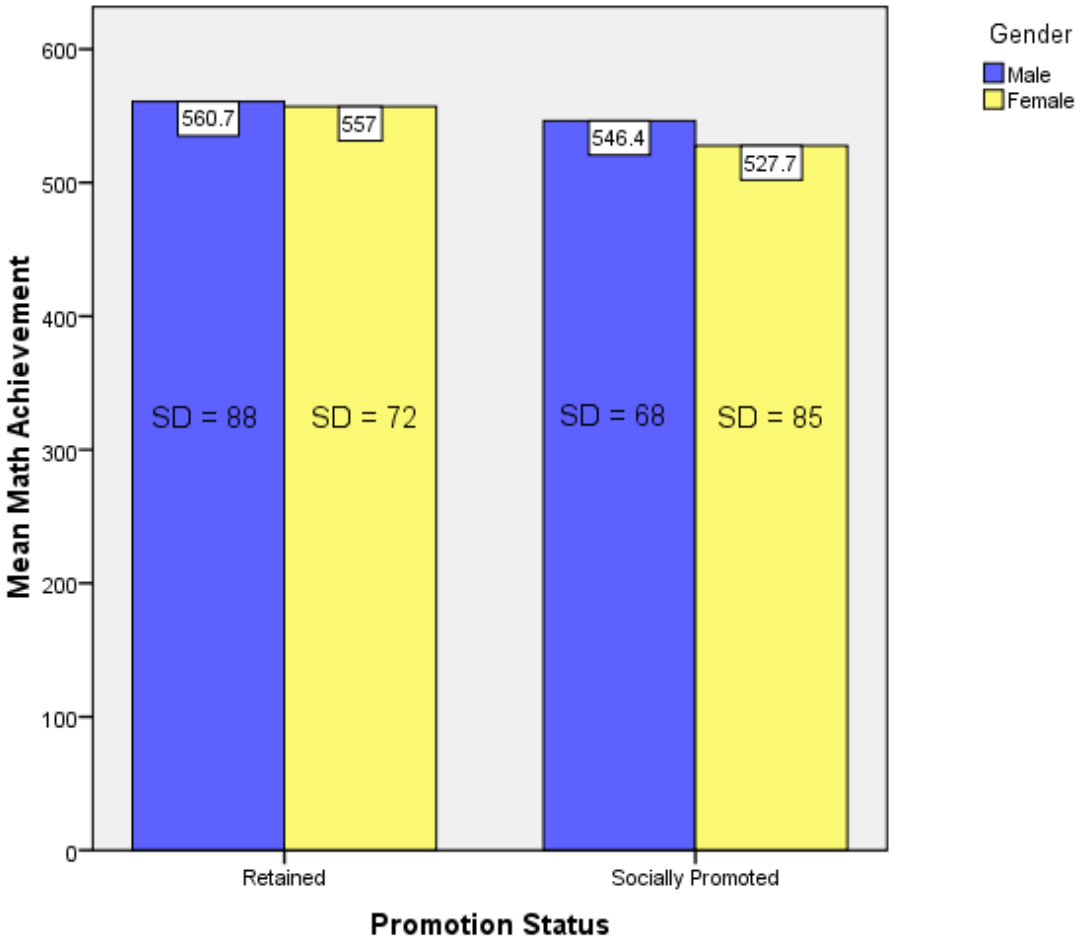

Figure 2. Fourth grade math means and standard deviations by gender.

Levene's Test of Equality of Error Variances was conducted within ANOVA and confirmed homogeneity of variance across groups F (3, 110) = .194, p = .900. Significance was established at a level of $p \leq .05$.

A Univariate ANOVA was conducted to explore the interaction of gender (male versus female) and grade placement (retained versus socially promoted) on math achievement as measured by scaled scores from the Arkansas Augmented Benchmark Exam. The results of the ANOVA are displayed in Table 3.

Table 3

Fourth Grade Math Achievement ANOVA Results for Promotion Status and Gender

Source	*SS*	*df*	*MS*	*F*	*p*	*ES*
Promotion*Gender	1523.95	1	1523.95	0.25	0.620	0.002
Promotion Status	12902.62	1	12902.62	2.10	0.150	0.019
Gender	3376.52	1	3376.52	0.55	0.460	0.005
Error	676991.04	110	6154.46			

The interaction effect between gender and promotion status was not statistically significant, F (1, 110) = .248, p = .620 with a partial eta squared effect size equal to .002. The main effects of each variable were then examined separately. The main effect for gender was not statistically significant, F (1, 110) = .549, p = .460, ES = .005. The main effect for promotion status was also not a statistically significant, F (1, 110) = 2.096, p = .150, ES = .019. The null hypothesis could not be rejected.

Hypothesis 3

Hypothesis 3 stated that no significant difference will exist by socioeconomic status between fourth grade students attending public school in Central Arkansas who

were retained compared to those students who were socially promoted on literacy achievement as measured on the Arkansas Augmented Benchmark Exam. Group means and standard deviations are presented in Figure 3.

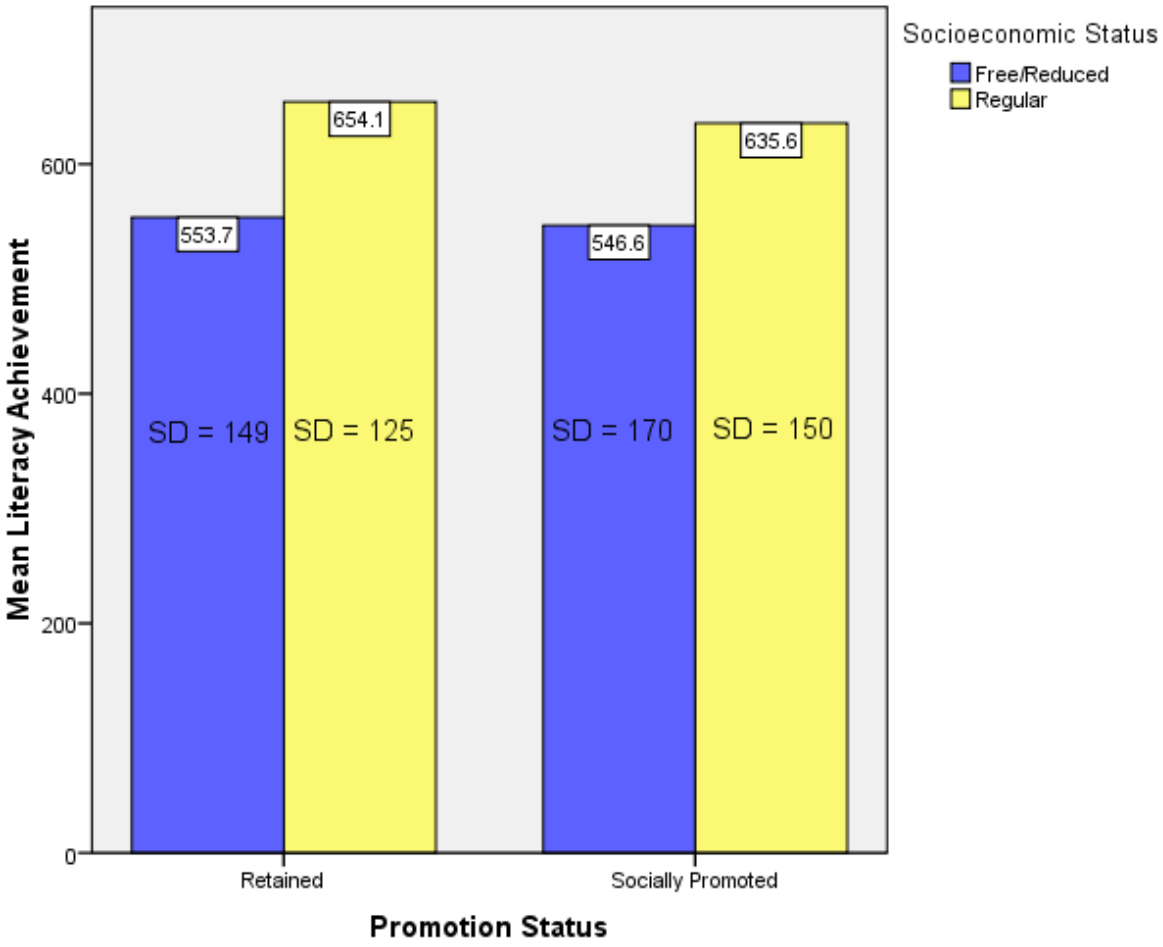

Figure 3. Fourth grade literacy means and standard deviations by socioeconomic status.

Levene's Test of Equality of Error Variances was conducted within ANOVA and confirmed homogenity of variance across groups F (3, 110) = .233, p =.873. Significance was established at a level of $p \leq .05$.

A Univariate ANOVA was conducted to explore the interaction of socioeconomic status (free/reduced lunch versus regular lunch) and grade placement (retained versus socially promoted) on literacy achievement as measured by scaled scores on the Arkansas Augmented Benchmark Exam. The results of the ANOVA are displayed in Table 4.

Table 4

Fourth Grade Literacy Achievement ANOVA Results for Promotion and Socioeconomic Status

Source	*SS*	*df*	*MS*	*F*	*p*	*ES*
Promotion*Socio	426.01	1		0.02	0.896	0.000
Promotion Status	2133.85	1	2133.85	0.09	0.769	0.001
Socio	116371.60	1	116371.60	4.71	0.032	0.041
Error	2718461.00	110	24713.82			

The interaction effect between promotion status and socioeconomic status was not statistically significant, F (1, 110) = .017, p = .896 with a partial eta squared effect size equal to .000. The main effects of each variable were then examined separately. The main effect for promotion status was not statistically significant, F (1, 110) = .086, p = .769, ES = .001. The main effect for socioeconomic status was also not a statistically significant, F (1, 110) = 4.709, p = .032, ES = .041. The null hypothesis was accepted.

Hypothesis 4

Hypothesis 4 stated that no significant difference will exist by socioeconomic status between fourth grade students attending public school in Central Arkansas who

were retained compared to those students who were socially promoted on math achievement as measured on the Arkansas Augmented Benchmark Exam. Group means and standard deviations are presented in Figure 4.

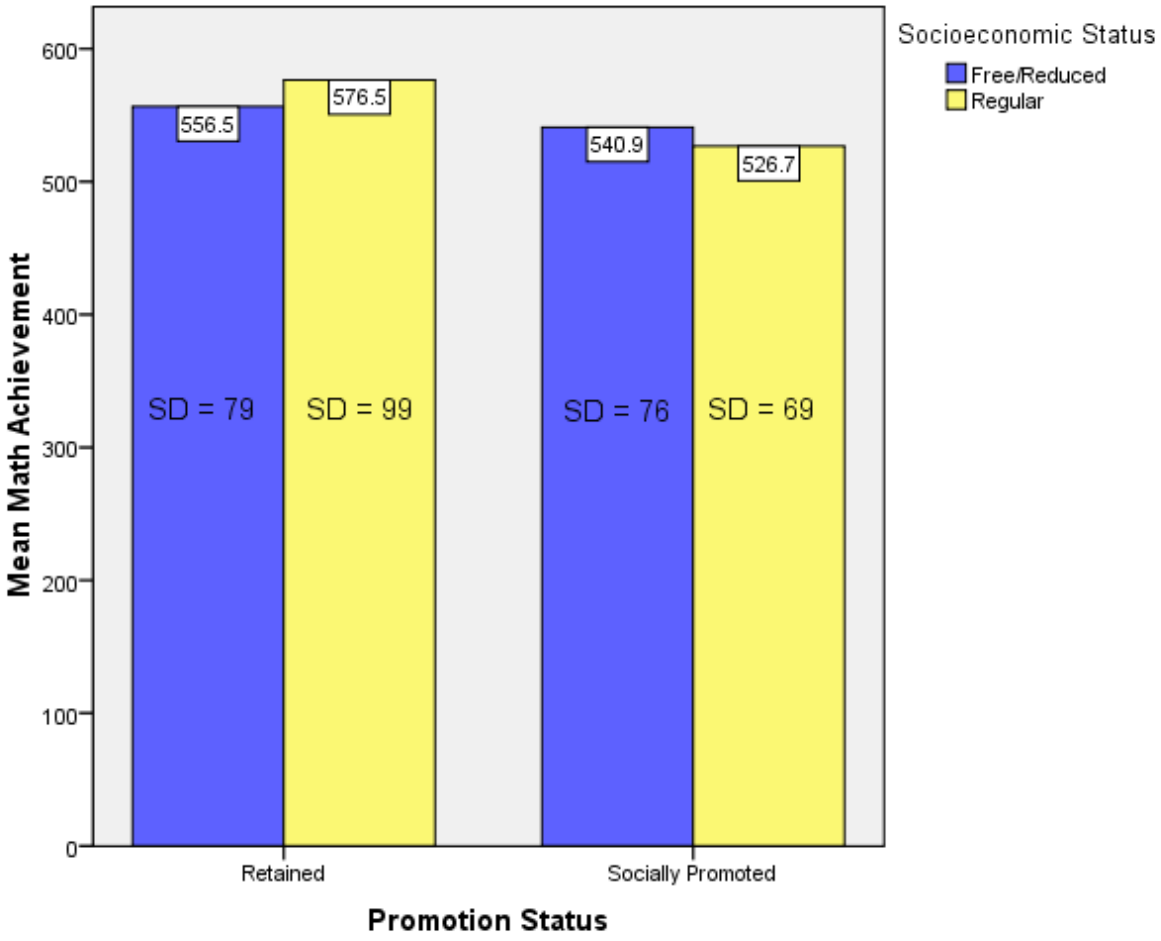

Figure 4. Fourth grade math means and standard deviations by socioeconomic status.

Levene's Test of Equality of Error Variances was conducted within ANOVA and confirmed honogenity of variance across groups, F (3, 110) = .680, p = .566. Significance was established at a level of $p \leq .05$.

A Univariate ANOVA was conducted to explore the interaction of socioeconomic status (free/reduced lunch versus regular lunch) and grade placement (retained versus socially promoted) on math achievement as measured on the Arkansas Augmented Benchmark Exam. The results of the ANOVA are displayed in Table 5.

Table 5

Fourth Grade Math Achievement ANOVA Results for Promotion and Socioeconomic Status

Source	*SS*	*df*	*MS*	*F*	*p*	*ES*
Promotion*Socio	3793.36	1	3793.36	0.62	0.434	0.006
Promotion Status	13864.54	1	13864.54	2.25	0.137	0.020
Socio	110.05	1	110.05	0.02	0.894	0.000
Error	677902.17	110	6162.75			

The interaction effect between promotion status and socioeconomic status was not statistically significant, F (1, 110) = .616, p = .434 with a partial eta squared effect size equal to .006. The main effects of each variable were then examined separately. The main effect for promotion status was not statistically significant, F (1, 110) = 2.250, p = .137 ES = .020. The main effect for socioeconomic status was also not statistically significant, F (1, 110) = .018, p = .894, ES = .000. The null hypothesis was accepted.

Based on the statistical results, this study is consistent with findings of previous research projects which have investigated the benefits and pitfalls of retention and social promotion. In each of the four hypotheses presented in this study, only slight variations in the numerical representations of the subjects existed, but none of the differences reached a level of statistical significance as determined by the ANOVA procedures.

CHAPTER V

DISCUSSION

Educators across the nation are often asked to make decisions concerning the promotion or retention of students who have not met academic proficiency levels within a particular grade level based on a wide range of criteria (Slavin, 1989). Standardized test scores have become a predominant criteria used to set proficiency levels and substantiate decisions made by school districts (Balitewicz, 1998). After these decisions have been made, educators still question whether the decisions will increase student achievement.

The focus of this study was to examine the effects of retention versus social promotion on literacy and math achievement of fourth grade students in a large Central Arkansas School District. This quantitative causal-comparative study explored these effects in relation to gender and socioeconomic status. Samples were obtained by matching subjects based on ethnicity, socioeconomic status, gender, proficiency level, and elementary school attended. The independent variables were grade status (retained versus socially promoted), socioeconomic status (free/reduced lunch versus regular lunch), and gender (male versus female). The dependent variables were literacy and math achievement as measured on the Arkansas Augmented Benchmark Exam.

First, in this chapter I reviewed the data collected and analyzed in this study. Secondly, recommendations based on the conclusions of the study were included for

school personnel involved in making promotion and retention decisions. Third, the implications for future research and significance of this study are presented.

Conclusions

To address the four hypotheses, the following statistical tests were used. Hypothesis 1 was analyzed using a 2 x 2 factorial analysis of variance (ANOVA) with gender (male versus female) and grade placement (retained versus socially promoted) as the between subjects independent variables and literacy achievement as the dependent variable. Hypothesis 2 was analyzed using a 2 x 2 factorial ANOVA with gender (male versus female) and grade placement (retained versus socially promoted) as the between subjects independent variables and math achievement as the dependent variable. Hypothesis 3 was analyzed using a 2 x 2 factorial ANOVA with socioeconomic status (free/reduced lunch versus regular lunch) and grade placement (retained versus socially promoted) as the between subjects independent variables and literacy achievement as the dependent variable. Finally, hypothesis 4 was analyzed using a 2 x 2 factorial ANOVA with socioeconomic status (free/reduced lunch versus regular lunch) and grade placement (retained versus socially promoted) as the between subjects independent variables and math achievement as the dependent variable. To test the null hypothesis, I used a two-tailed test with a .05 level of significance. Main effects and interaction effects were examined, each hypothesis was evaluated, and conclusions were drawn.

Hypothesis 1

Hypothesis 1 stated that no significant difference will exist by gender between fourth grade students attending public school in Central Arkansas who were retained compared to those students who were socially promoted on literacy achievement as

measured on the Arkansas Augmented Benchmark Exam. There was no significant interaction between the independent variables of gender and grade status and the dependent variable of literacy achievement as measured by the fourth grade literacy scale score from the Arkansas Augmented Benchmark Exam. The variables of gender and the event of being retained or socially promoted did not work together in a significant manner to influence the outcome of literacy achievement. The main effect for gender did not yield any significant difference in fourth grade literacy achievement for males or females. Likewise, the main effect for grade status did not yield any significant difference in fourth grade literacy achievement for those students who were retained in first grade or kindergarten and for those students who were not proficient at the same grade levels, but were socially promoted. Therefore, there was insufficient evidence from the data analysis to reject the null hypothesis.

Hypothesis 2

Hypothesis 2 stated that no significant differences will exist by gender between fourth grade students attending public schools in Central Arkansas who were retained compared to those that were socially promoted on math achievement as measured on the Arkansas Augmented Benchmark Exam. There was no significant interaction between the independent variables of gender and grade status and the dependent variable of math achievement as measured by the fourth grade math scale score from the Arkansas Augmented Benchmark Exam. The variables of gender and the event of being retained or socially promoted did not work together in a significant manner to influence the outcome of math achievement. The main effect for gender did not yield any significant difference in fourth grade math achievement for males or females. Likewise, the main

effect for grade status did not yield any significant difference in fourth grade math achievement for those students who were retained in first grade or kindergarten and for those students who were not proficient at the same grade levels, but were socially promoted. Therefore, there was insufficient evidence from the data analysis to reject the null hypothesis.

Hypothesis 3

Hypothesis 3 stated that no significant difference will exist by socioeconomic status between fourth grade students attending public school in Central Arkansas who were retained compared to those students who were socially promoted on literacy achievement as measured on the Arkansas Augmented Benchmark Exam. There was no significant interaction between the independent variables of socioeconomic status and grade status and the dependent variable of literacy achievement as measured by the fourth grade literacy scale score from the Arkansas Augmented Benchmark Exam. The variables of socioeconomic status and the event of being retained or socially promoted did not work together in a significant manner to influence the outcome of literacy achievement. The main effect for socioeconomic status did not yield any significant difference in fourth grade literacy achievement for males or females. Likewise, the main effect for socioeconomic status did not yield any significant difference in fourth grade literacy achievement for those students who were retained in first grade or kindergarten and for those students who were not proficient at the same grade levels, but were socially promoted. Therefore, there was insufficient evidence from the data analysis to reject the null hypothesis.

Hypothesis 4

Hypothesis 4 stated that no significant difference will exist by socioeconomic status between fourth grade students attending public school in Central Arkansas who were retained compared to those students who were socially promoted on math achievement as measured on the Arkansas Augmented Benchmark Exam. There was no significant interaction between the independent variables of socioeconomic status and grade status and the dependent variable of math achievement as measured by the fourth grade math scale score from the Arkansas Augmented Benchmark Exam. The variables of socioeconomic status and the event of being retained or socially promoted did not work together in a significant manner to influence the outcome of math achievement. The main effect for socioeconomic status did not yield any significant difference in fourth grade literacy achievement for males or females. Likewise, the main effect for socioeconomic status did not yield any significant difference in fourth grade math achievement for those students who were retained in first grade or kindergarten and for those students who were not proficient at the same grade levels, but were socially promoted. Therefore, there was insufficient evidence from the data analysis to reject the null hypothesis.

Recommendations

The findings of this study are consistent with some previous research studies (Frey, 2005; Holmes, 1989; Jimmerson, Pletcher, & Graydon, 2006). Similarly, these studies found that there was no statistically significant difference between retention in the same grade nor social promotion to the next grade in relation to long term academic

improvement in literacy or math. Therefore, the following recommendations are forwarded.

First, information should be provided to state departments of education, school administrators, and classroom teachers of current research findings relating to the retention versus social promotion debate. More collaboration between the educational and research communities needs to occur in the development of research based strategies that actually improve academic achievement. With the mounting evidence indicating that neither retention nor social promotion successfully remediate students, educators need to use this information to make informed decisions on the future academic programs of countless students nationwide. Across the state of Arkansas, research information is distributed, but the manner of distribution needs to continually improve to provide the most current research available.

Second, opportunities for research data to be shared should exist in higher education at the teacher and administrator preparation levels. Because many colleges and universities have helped to produce these research findings, they would provide a rich resource in sharing the results of retention and social promotion studies. In addition, because the Arkansas Department of Higher Education works in collaboration with the ADE, conversations between these two entities should produce information that could filter down through state organizations and to the local school district level.

Third, because neither retention or social promotion seem to provide a foolproof option for increasing academic achievement, the focus of Slavin and Madden's (1989) work should be highlighted. Slavin and Madden emphasized that research proven strategies and methods for assisting students who have not yet reached grade level

proficiency should take center stage in schools. A more proactive, corrective educational program with appropriate formative assessments and interventions, in contrast to an after the fact reactive stance, should be developed within schools. They noted that simply repeating the same information presented in a similar fashion for a second year has failed to increase student achievement. In addition, promoting students to the next grade without the appropriate skills to master the next level has also failed to increase literacy and math performance. They summarized that providing new and intensive strategies and interventions after students have encountered failure in a grade has not proven to be an effective means of remediation.

Fourth, teachers and administrators should be provided with research based alternatives and intensive training from the state and district levels to incorporate stratagies into the daily classroom curriculum for students who are failing or are in danger of failure. Particular attention should be given to students who have been identified as at risk. These would include students who have poor math and reading scores prior to retention, are from ethnic minority groups, exhibit poor classroom conduct, come from lower socioeconomic families, have parents who are educationally disadvantaged, and have a history of high mobility (McCoy & Reynolds, 1998). Strategies to be recommended should be research-based and have been proven successful with struggling students (Jimerson, Pletcher, & Kerr, 2005). Because accurate predictors of retention have remained constant over time according to the National Association of School Psychologists (2003), educators should seek out research-based early interventions to support students who share these recognized predictors. Some of these programs and strategies include parental involvement programs, systematic assessments,

direct instruction reading programs such as Reading Recovery, extended year or extended day programs, tutoring, and mentoring. However, continued research is vital. When these types of programs and strategies are implemented, educators should constantly examine achievement results of students. The effectiveness of specific interventions would then be included in planning for future curricular and staffing needs of the school system.

Implications

Significance and Expansion of Knowledge Base

Although Jimerson et al. (2005) noted that students in their study displayed some increase in student achievement during the first year of retention, over time the retained and socially promoted students displayed comparable proficiency levels. One strength in this study was that it covered a 7 year period dating from the first group of students being retained or socially promoted to the last group being assessed at the fourth grade level. This current research project has provided an additional snapshot into the achievement outcomes for students who are retained and those who are socially promoted. Because neither strategy was determined to improve scores compared to the other, and because neither strategy seemed to improve achievement to the level needed, the final determination was that alternative interventions should be examined to determine their usefulness in an educational arena. This conclusion supported some of the research findings that retention and social promotion are not effective methods for increasing student achievement (Brophy, 2006; Ferguson et at., 2001; Frey, 2005; Jimerson et al., 2006; Lorence et al., 2002; Peterson et al., 1987). In studies by Hong and Raudenbush (2005), Jacob and Lefgren (2004), and Rust and Wallace (1993), positive results of

retention were noted for the school year immediately following the retention, but the positive effects diminished over the next two years, resulting in no gain in achievement. Conclusions that support retention as a viable remediation strategy are vastly in the minority.

The accumulated findings of the past several years of data should encourage educators to look for interventions that have shown statistical significance in improving the long term achievement of all students. This type of strategy would be one that has been replicated multiple times in similar academic settings and has shown positive increases in student achievement outcomes.

One strength of this study included matched pairs of retained and socially promoted students. An additional strength was that all participants in the study were from the same school district where teachers had been given identical professional development and students followed the same curriculum. The results of this research adds to the growing body of knowledge about retention and social promotion and may serve as a catalyst for future studies.

Future Research Considerations

First, this study focused on grade placement based on student achivement following retention or social promotion at the end of kindergarten or first grade. Each student's achievement was then assessed at the completion of the fourth grade school year. Future studies might build on this study by including periodic testing throughout the school year (also known as interim testing) as a diagnostic tool to determine student weaknesses and scaffold those areas before students drop far below the proficiency level expected. With this scaffolding taking place throughout the school year, researchers

could then examine the resulting proficiency scores of students over time in a repeated measures format and also include the ending fourth grade achievement scores.

Second, using this research study and the current body of existing research on retention and social promotion, future researchers might expand this type of research study to include social promotion plus interventions and retention plus specific interventions. These studies could utilize a multiplicity of interventions and remediation strategies such as Response to Intervention (RTI), Cognitively Guided Instruction (CGI), summer school, use of certified and non-certified interventionists and tutors within the school day, after school tutoring, computer assisted instruction, and many other interventions and strategies. Research could also examine scaffolding programs for retained students; according to Jimerson et al. (2005), in the year immediately following retention, student scores increased but declined in the subsequent years. A possible study topic could include additional follow-up interventions during the second and third years following retention to assist the student in maintaining higher levels of achievement. These interventions should also be research based and could be replicated for before-, during-, or after-school settings.

Third, because the current study examined a sample extracted from a single, large school district in Arkansas, future research on retention and social promotion might include a larger statewide sampling of students, thus causing the results to represent a greater population of students.

Potential Policy Implication

Educators have an obligation to act in the best interest of student of all ages. Many take into consideration various criteria before making retention or social promotion

decisions. Yet, the educational community should continue to strive to examine all the evidence available when making decisions for students that have such a pronounced impact upon their futures. This examination should be inclusive of the advantages and disadvantages of retention and social promotion, research based evidence of such decisions, and the lasting social, emotional, financial, and academic consequences that may follow a student throughout their lifetime based upon the decisions that are made.

References

Aldridge, J., & Goldman, R. (2006a). *Social promotion.* Retrieved from http://www.education.com/print/social-promotion-education

Aldridge, J., & Goldman, R. (2006b). *Current issues and trends in education.* New York, NY: Pearson Allyn Bacon Prentice Hall.

Alexander, K., & Entwisle, D. (2010, August 25). The beginning school study 1982-2002. Baltimore, MD: United States Deparment of Education.

Alexander, K., Entwisle, D. R., & Dauber, S. L. (1994). *On the success of school failure: A reassessment of the effects of retention in the primary grades.* New York, NY: Cambridge University Press.

Anderson, G., Whipple, A., & Jimmerson, S. (2003). *Grade retention: Achievement and mental health outcomes* (National Association of School Psychologists). Retrieved from http://www.cdl.org/resource-library/articles/grade_retention.php

Arkansas Department of Education. (2006). Retrieved from http://www.education.com/print/Ref_Get_Educated_About/

Ayres, L. (1909). *Laggards in our schools.* New York, NY: Charities Publication Committee.

Balitewicz, T. (1998). *The long-term effects of grade retention.* Washington, DC: U.S. Department of Education.

Barnett, W. S., Hustedt, J. T., Friedman, A. H., Stevenson Boyd, J. & Ainsworth, P. (2007). *The state of preschool 2007: State preschool yearbook.* New Brunswick, NJ: National for Early Education Research. Retrieved from http://www.neirr.org

Berk, L. (2009). *Child Development* (8th ed.). Upper Saddle River, NJ: Pearson Education.

Bester v. Tuscaloosa City Board of Education, 82-7349 (United States Court of Appeals, Eleventh Circuit January 16, 1984).

Bowman, L. (2005). Grade retention: Is it a help or hindrance to student academic success? *Preventing School Failure*, 42-46.

Brizius, J., & Foster, S. (1993). *Generation to generation: Realizing the promise of family literacy.* Ypsilanti, MI: High/Scope Press.

Brophy, J. (2006). *Social promotion - In comparison to grade retention, advantages and disadvantages, different perspectives.* Retrieved from http://education.stateuniversity.com/pages2431/Social-Promotion.html

Burkam, D., LeGerfo, L., Ready, D., & Lee, V. (2007). The differentials effects of repeating kindergarten. *Journal of Education for Student Placed at Risk, 12*(2), 103-136.

Carlton, M. P., & Winsler, A. (1999). School readiness: The need for a paradigm shift. *School Psychology Review, 28*(3), 338-352.

Clinton, W. (1998, February 23). *The White House archives.* Retrieved from http://www2ed.gov/pubs/socialpromotion/directive.html

Douglas-Hall, A., & Chau, H. (2008). *Basic facts about low income children: Birth to age 6.* New York, NY: Columbia University, Mailman School of Public Health.

Eliot, L. (1999). *What's going on in there?: How the brain and mind develop in the first five years of life.* New York, NY: Bantam Books.

Erik V. v. Causby, 5:97-CV-587-BO (Federal Court for the Eastern District of North Carolina August 1997).

Farkas, G., & Beron, K. (2004). The detailed age trajectory of oral vocabulary kinowledge: Differences by class and race. *Social Science Research, 33*, 464-497.

Feldman, C. (1997, May 17). *UFT President Sandara Feldman takes a tough stand on social promotions.* Retrieved from http://www.uft.org/issues/oi970517.html

Ferguson, P., Jimerson, S. R., & Dalton, M. J. (2001). Sorting out successful failures: Exploratory analyses of factors associated with academic and behavioral outcomes of retained students. *Psychology in the Schools, 38(4),* 327-341.

Fine, J., & Davis, J. M. (2003). Grade retention and enrollment in post-secondary education. *Journal of School Psychology, 41*(6), 401-411.

Frey, N. (2005, November 1). *Retention, social promotion, and academic redshirting: what do we know and need to know?* Retrieved from Access my Library.

Gay, L. (1987). *Educational research: Comptencies for analysis and application.* New York, NY: Merrill.

Gay, L., Mills, G., & Arasian, P. (2009). *Educational research: Competencies for analysis and applications*. New York, NY: Pearson.

Hart, B., & Risley, T. (1995). *Meaningful differences in everyday experience of young American children.* Baltimore, MD: Paul H. Brooks.

Hart, B., & Risley, T. (1999). *The social world of children learning to talk.* Baltimore, MD: Paul H. Brooks.

Hauser, R. (1999). *Should we end social promotion? Truth and consequences.* Center for Demography and Ecology. Madison, WI: University of Wisconsin-Madison.

Hinshaw, S. (1992). Externalizing behavior problems and academic underachievement in shildhood and adolescence: Causal relationships and underlying mechanisms. *Psychological Bulletin, 111,* 127-155.

Holmes, C. (1989). *Grade level retention effects: A meta-analysis of research studies.* London, England: The Falmer Press.

Hong, G., & Raudenbush, S. (2005). Early-grade retention and children's reading and math learning in elementay years. *Educational Evaluation and Policy Analysis, 27*(3), 205-224.

Hong, G., & Yu, B. (2007). Early-grade retention and children's reading and math learning in elementary years. *Educational Evaluation and Policy Analysis, 29*(4), 239-261.

Houser, R., Frederick, C., & Andrew, M. (2006). Grade retention in ther age of accountability. *European Comparative Studies: Quality and Inequality in Education.* Prague, Czech Republic.

Jackson, G. (1975). The research evidence on the effects of grade retention. *Review of Educational Research, 45(4),* 613-635.

Jacob, B., & Lefgren, L. (2004). Remedial education and student achievement: A regression-discontinuity analysis. *The Review of Economics and Statistics, 86*(1), 226-44.

James, T. K. (2006). *Arkansas growth model proposal.* Retrieved from Arkansas Department of Education website.

Jimerson, S. R. (1999). On the failure of failure: Examining the association between early grade retention and education and employment outcomes during late adolescence. *Journal of School Psychology, 37*(3), 243-272.

Jimerson, S. R. (2001a). Meta-analysis of grade retention research: Implications for practice in the 21st century. *School Psychology Review*, *30(3)*, 420-437.

Jimerson, S. R. (2001b). A synthesis of grade retention research: Looking backward and moving forward. *The California School Psychologist, 6*, 47-59.

Jimerson, S. R., Anderson, G. E., & Whipple, A. (2002). Winning the battle and losing the war: Examining the relation between grade retention and dropping out of high school. *Psychology in the Schools, 39(4),* 441-457.

Jimerson, S. R., Carlson, E., Rotert, M., Egeland, B., & Sroufe, L. (1997). A prospective, longitudinal study of the correlates and consequences of early grade retention. *Journal of School Psychology*, *35*, 3-25.

Jimerson, S. R., Ferguson, P., Whipple, A. D., Anderson, G. E., & Dalton, M. J. (2002). Exploring the association between grade retention and dropout: A longitudinal study examining socio-emotional, behavioral, and achievement characteristics of retained students. *The California School Psychologist, 7,* 51-62.

Jimmerson, S., Pletcher, M. W., & Graydon, K. (2006). Beyond grade retention and social promotion: Promoting the social and academic competence of students. *Psychology in the Schools*, *43*(1), 85-97.

Jimerson, S. R., Pletcher, S., & Kerr, M. (2005, February). Alternatives to grade retention. *Counseling, 101*, 11-15.

Johansen, I. M. (1998, Winter). Federal court refuses to halt the implementation of a school board's policy of retain students in grade bvased on standardized test scores. *Clearinghouse of North Carolina School Law*, p. n.a.

Johnson, D., & Rudolph, A. (2001). *Critical Issue: Beyond social promotion and retention - Five strategies to help students succeed.* North Central Regional Educational Laboratory. Chicago, IL: Learning Point Associates.

Kishiyama, M., Boyce, W., & Knight, R. (2008, December 02). *EEGs show brain differences between poor and rich kids* (University of California, Wills Neuroscience Institute and the School of Public Health). Berkley, CA: University of California—Berkley. Retrieved from http://www.berkley.edu

Klass, P. (1998, November 29). Sense and dispensability: My patients want more than a medical diagnosis - and so do I. *The Washington Post*. Washington, DC.

Landry, S. (2005). *Effective early childhood programs: Turning knowledge into action.* Houston, TX: University of Texas, Health Science Center.

Lee, V., & Burkam, D. (2002). *Inequiality at the starting gate: Social background differences in achievement as children begin school.* New York, NY: Economic Policy Institute.

Leedy, P., & Ormrod, J. (2005). *Practical research: Planning and design* (8th ed.). Upper Saddle River, NJ: Prentice Hall.

Literacy, N. A. (1993). National adult literacy survey. Washington, DC.

Local School District. (2010, August 1). *Local school district student handbook.* Retrieved from Local School District.

Lorence, J. (2006). Retention and academic achievement research revisited from a United States perspective. *International Educational Journal, 7*(5), 731-777.

Lorence, J., & Dworkin, A. (2006). Elementary grade retention in Texas and reading achievement among racial groups: 1994-2002. *Review of Policy Research, 23*(5), 999-1033.

Lorence, J., Dworkin, A., Toenjes, L., & Hill, A. (2002). *Grade retention and social promotion in Texas, 1994-99:Academic achievement among elementary school students.* Washington, DC: Brookings Institution Press.

Mantzicopoulos, P., & Morrison, D. (1990). Characteristics of at-risk children in transitional and regular kindergarten programs. *Psychology in the Schools, 27*, 325-332.

Marshall, M. M. (2004, March). *Assessment manual.* Retrieved fom www.education.pearsonassessments.com

McCoy, A. R., & Reynolds, A. J. (1998). *Grade retention and school performance: An extended Investigation.* Madison, WI: Department of Research and Accountability. doi:10.1016/S0022-4405(99)00012-6

Mertler, C., & Vannatta, R. (2005). *Advanced and multivariate statistical methods* (3rd ed.). Glendale, CA: Pyrczak Publishing.

Miesels, S., & Liaw, F. (1998). Failure in grade: Do retained students really catch up? *Journal of Educational Research, 87*(2), 69-77.

National Association of School Psychologists. (2003, April). Position statement on grade retention. Bethesda, MD, United States: National Association of School Psychologists.

National Scientific Council. (2007). *The science of early childhood development: Closing the gap between what we know and what we do.* Cambridge, MA: Harvard University.

Neblett, P. (2007). *An analysis of the benefits of the student success initiative in the 3rd and 5th grades in a district in Texas.* Retrieved from University of North Texas Digital Library.

Neuman, S. (2006). *Handbook of early literacy research* (Vol. 2). New York, NY: The Guilford Press.

Neuman, S. (2009). *Changing the odds for children at risk: Seven essential principles of educational programs that break the cycle of poverty.* Westport, CT: Preger Publishers.

Niklason, L. B. (1984). Nonpromotion: A pseudoscientific solution. *Psychology in the Schools, 21,* 485-499.

Niklason, L. B. (1987). Do certain groups of children profit from a grade retention? *Psychology in the Schools, 24,* 339-345.

Penfield, R. (2010). Test-based grade retention: Does it stand up to professsional standards for fair and appropriate test use? *Educational Researcher*, *39*(2), 110-119.

Peterson, S., DeGracie, J. S., & Ayabe, C. R. (1987). A longitudinal study of the effects of retention/promotion on academic achievement. *American Educational Research Journal*, *24*(1), 107-118.

Pierson, L., & Connell, J. P. (1992). Effects of grade retention on self-system processes, school engagement, and academic performance. *Journal of Educational Psychology, 84*, 300-307.

Powell, P. (2010). *A perilous policy path: Grade retention in the age of NCLB.* Retrieved from eJournal of Education Policy.

Range, B., Pijanowski, J., & Holt, C. (2009). *Longitudinal literature review on grade retention*. Retrieved from Connexions.

Richman, N., Stevenson, J., & Graham, P. (1982). *Preschool to school: A behavioral study.* San Diego, CA: Academic Press.

Rosenberg-Lee, M., & Menon, V. (2011). What difference does a year of schooling make? Maturation of brain response and connectivity between 2nd and 3rd grades during arithmetic problemsolving. *Science News, 16*. doi:10.1016/jneuroimage.2011.05.13

Rust, J., & Wallace, K. (1993). Effects of retention for four years. *Journal of Instructional Psychology, 20,* 162-167.

Sandlin v. Johnson, 80-1213 (United States Court of Appeals, Fourth Circuit March 11, 1981).

Setencich, J. (1994, March 3). *The impact of early grade retention on the academic achievement and self-esteem of seventh and eighth grade students*. Seattle, WA: National Association of School Psychologists.

Shonkoff, J., & Phillips, D. (2000). *From neurons to neighborhoods. The science of early child development.* Washington, DC: National Academy of Sciences.

Silberglitt, B., Jimerson, S. R., Burns, M., & Appleton, J. (2006). Does the timing of grade retention make a difference? Examining the effects of early versus later retention. *School Psychology Review, 35*, 134-141.

Slavin, R. (1989). *Effective programs for students at risk.* Boston, MA: Allyn & Bacon.

Slavin, R. E., & Madden, N. A. (1989, February). What works for students at risk: A research synthesis. *Educational Research, 46*, 4-13.

Stevens, J., Tuck, L., & Zimmerman, F. (1999, February 15). One more time: The social promotion debate. *Education Week*. Retrieved from http://www.edweek.org

The University of Iowa. (2001, 2008). Guide to research and development for the ITBS. Rolling Meadows, IL: Riverside Publishing.

Thompson, C. L., & Cunningham, E. K. (2000, December). Retention and social promotion: Research and implicatons for policy. *ERIC 161*. New York, NY. Retrieved from http://www.ericdigests.org/2001-3/policy.htm

Thompson, C. L., & Cunningham, E. K. (2001, March). *Retention and social promotion:Research and implications for policy.* Retrieved from ERIC Clearinghouse.

Triand Support. (2012, March 12). Retrieved from Arkansas Department of Education.

Westchester Institute for Human Services Research. (1998). The balanced view: Social promotion & retention. White Plains, NY: Author.

Willson, V., & Hughes, J. (2009). Who is retained in first grade? A psychosocial perspective. *The Elementary School Journal, 109*(3), 251-266.

Xia, N., & Glennie, E. (2005, January). Grade retention: A flawed education strategy. *Policy Brief*. Durham, NC: Terry Sanford Inttitute of Public Policy.

APPENDIX

Appendix A

IRB Approval Form

HARDING UNIVERSITY
INSTITUTIONAL REVIEW BOARD

Status of Request for Exemption from IRB Review

(For Board Use Only)

Date: 6/23/11

Proposal Number: 2011-01

Title of Project: Effects of Early Grade Retention Versus Social Promotion on Student Achievement

Principal Investigator(s) and Co-Investigator(s): Rena' Taylor staylor6@harding.edu

■ Research exempted from IRB review.

☐ Research requires IRB review.

☐ More information is needed before a determination can be made. (See attachment.)

I have reviewed the proposal referenced above and have rendered the decision noted above. This study has been found to fall under the following exemption(s):

1 ☐ 2 ☐ 3 ☐ 4 ■ 5 ☐ 6 ☐

In the event that, after this exemption is granted, this research proposal is changed, it may require a review by the full IRB. In such case, a ***Request for Amendment to Approved Research*** form must be completed and submitted.

This exemption is granted for one year from the date of this letter. Renewals will need to be reviewed and granted before expiration.

The IRB reserves the right to observe, review and evaluate this study and its procedures during the course of the study.

Michael Brooks

Representative Member, Harding University Institutional Review Board