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A Cost Benefit Analysis of Retention of K-2 Students in an Urban District

Debra Ann Davenport Yonke
Lindenwood University

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by

Debra Ann Davenport Yonke

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Dr. Sherry DeVore, Dissertation Chair — 03-28-12 Date

Dr. Patricia Conner, Dissertation Advisor — 03-28-12 Date

Dr. Terry Reid, Committee Member — 03-28-12 Date

Dr. Jay Anderson, Committee Member — 3-28-12 Date

Declaration of Originality

I do hereby declare and attest to the fact that this is an original study based solely upon my own scholarly work at Lindenwood University and that I have not submitted it for any other college or university degree or course.

Debra Ann Davenport Yonke

Signature: Debra Ann Davenport Yonke Date: 3-28-12

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Abstract

With increased educational accountability, the rate of student retention has risen in the United States. The purpose of this study was to analyze the costs and benefits of retaining primary (K-2) students in an urban district by using a methodological triangulation. Academic growth in reading was compared from the year prior to retention to the year retained to establish if there was a significant academic growth difference. Trends were also identified in regards to gender, ethnicity, socio-economic status (SES), and school type.

Elementary principals were surveyed to gain their perspective in regards to benefits and costs of retention. Principals reported they had seen benefits to retention in some cases, but also students who showed no gains due to retention. They expressed the need for more research regarding retention in order to make more informed decisions. The financial cost of retaining students for the three years studied in this urban district was calculated to give a financial perspective.

Statistical landmarks were used to show background for the academic growth portion of the study including mean, median, range, and standard deviation. Overall data analysis, using paired t-tests, showed both kindergarten boys and girls exhibited reading growth with White students who qualified for free meals at Title I schools having the greatest gains. All groups of first grade students showed negative reading growth during the year of retention with variables differing depending on the year studied.

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Key to Abbreviations and Symbols

$\rho = < \alpha. 01$	Alpha level for high statistical significant
$\rho = < \alpha. 05$	Alpha level for statistical significance
ACT	American College Testing
ADA	Average Daily Attendance
ARRA	American Recovery and Reinvestment Act
AYP	Annual Yearly Progress
BOY	Beginning of year
CAP	Concepts About Print
DRA	Developmental Reading Assessment
ELS	Emerging Literacy Survey
EOY	End of year
GED	General Educational Development
H_0	Null hypotheses
H_1	Alternative hypotheses
IBM	International Business Machines
LRS	Light's Retention Scale
MAP	Missouri Assessment Program
MODESE	Missouri Department of Elementary and Secondary Education
NASP	National Association of School Psychologists
NCLB	No Child Left Behind
SD	Standard deviation
SES	Socio-economic status

SPS	Springfield Public Schools
SPSS	Statistical Package for Social Sciences
TEA	Texas Education Association
UNESCO	United Nations Educational, Scientific, and Cultural Organization
USDOE	U.S. Department of Education
YP	Year prior to retention
YR	Year of retention

Chapter One: Introduction

Background of Study

American journalist, Henry Louis Mencken said, "Life is a constant oscillation between the sharp horns of dilemmas" (Mencken & Mencken, 1987, p. 190). In this age of educational accountability, both academically and fiscally, "sharp horns," or controversial dilemmas for educators, have become the need to choose between social promotion and grade retention. According to Parker (2001), "Typical of western thought is the habit of generating either/or choices. The issue of social promotion or retention is a perfect example" (para. 12).

The issues of social promotion and retention are not new to the American educational system and have existed since the inception of the graded school system in the mid-1850s (Harvey, 1994). Yet in recent years, the number of students retained has increased as schools have strived to meet state and federal guidelines and struggled with increasing financial pressures during economic recession (Penfield, 2010). The main themes by which this topic have been examined include a historical review of the debate between social promotion and retention, the rationale for choosing retention instead of social promotion, common characteristics of retained students, the costs and benefits of retention, and suggestions for alternatives to retention.

In his 1997 State of the Union Address, President Clinton encouraged wide-scale retention, or non-promotion of students as a way to "help us end social promotion. . . for no child should move from grade school to junior high to high school until he or she is ready" (Reynolds & Temple, 1997, para. 1). Then, in May 1999, the U.S. Department of

Education [USDOE] published, *Taking Responsibility for Ending Social Promotion: A Guide for Educators and State and Local Leaders*. Although education officials urged educators not to replace social promotion with retention, it became evident teachers and administrators felt they had little choice as state governments began making retention mandatory.

By 2000, 19 states were explicitly tying student promotion to performance on a state or district assessment (Jacob & Lefgren, 2002). Effective July 1, 2001, Missouri Senate Bill 319 specified retention is mandatory for fourth grade students who are still reading below the third-grade level by the end of summer school (Senate Bill 319, 2001). During this same period, the No Child Left Behind (NCLB) Act of 2001 was passed requiring all students to be at a proficient level in reading, math, and science by 2014. School district personnel and states were required to provide detailed report cards to the public about their progress toward this goal (NCLB, 2002). By 2002, "at least 17 percent of public school students nationwide" were affected by test-based promotion policies which resulted in retention (Greene & Winters, 2007, p. 319).

Conceptual Underpinnings

Even though it became mandatory in many states to begin retaining students at the end of either third or fourth grade, with pressure to perform and notify the public of student performance, educators felt they had to make decisions earlier in primary grades. Hughes, Chen, Thoemmes, and Kowk (2010) cited the pressure for students to do well on high stakes tests as resulting in even more retention at the primary level in order to allow students to receive an additional year of instruction. More accountability and pressure was being placed on students as young as kindergarten to meet specific competencies

before advancing to the next grade (Booher-Jennings, 2005; Hughes et al., 2010). According to Parker (2001), "although it appears logical to choose retention as an alternative to social promotion, we are perching ourselves on the horns of an either/or dilemma—where both horns have a history of doing damage" (para. 1). Though both choices resulted in high dropout rates, inadequate skills and knowledge for students, and did nothing to close the learning gap for low achieving students, retention became the option of choice (USDOE, 1999).

Retention, having a student repeat a grade, is an option chosen by educators for a variety of reasons. Researchers have conducted many studies to determine teachers' perceptions regarding retention which play a factor in their decision to retain (Bhattacharya, 2007; Range, Holt, & Pijanowski, 2009; Tanner & Combs, 1993; Xia & Glennie, 2005b). For some educators, retention is a method to reduce the skill variance between students (Xia & Glennie, 2005b). To others, it is an intervention or precursor to formal evaluation for special education services (Kinlaw, 2005). Still, others have seen retention as a means to increase academic performance (Witmer, Hoffman, & Nottis, 2004) or motivate parental involvement in academics (Range, 2009). Some teachers, as well as parents, have viewed it as a gift of another year to boost readiness and self-esteem (Anderson, Whipple, & Jimerson, 2002).

Opponents of retention, on the other hand, cite numerous research studies showing retention is ineffective and, in fact, damages students. McGrath (2006) stated:

> Over the last 75 years, a pool of research-based knowledge about the effects on students repeating a year level has been accumulating. It now overwhelmingly indicates that there are neither academic nor social

> advantages for the majority of students who repeat a year of their schooling. (p. 39)

In kindergarten, where retention is often highest, a study from Colorado revealed retention did nothing to boost academic achievement, but instead produced a social stigma and supported escalation of inappropriate academic demands in first grade (Shepard & Smith, 1988).

In addition to the lack of academic gains with retention, cost concerns have been raised. It is estimated retention costs schools $7,500 per pupil, per year (Xia & Glennie, 2005a). According to the National Association of School Psychologists (NASP) position statement, in 2003 as many as 15%, or more than 2.4 million, American students repeated a grade. If this number of students were multiplied by estimated retention costs, the cost of retention to educational systems would be more than $18 billion in 2003 alone. Current statistics show districts spending over $10,000 per pupil (USDOE, 2011). In addition to education costs, Xia and Glennie (2005a) also cited economic and crime costs as long-term impacts associated with retention.

The Institute of Education Sciences, in looking at elementary retained students, noted a high percentage were male, racial minorities, of low socioeconomic status, and had parents with low educational level and little involvement in schools (USDOE, 2006). Their report, The *Condition of Education 2006,* discovered retention was linked to increased dropout rates, lower employment opportunities, higher arrest records, and substance abuse. Overall, research has provided evidence that "retention is an ineffective and possibly harmful intervention" (Jimerson, Pletcher, & Kerr, 2005, p. 11).

Despite research indicating little effectiveness, the use of grade retention has increased over the past 25 years (NASP, 2003). One reason for increased retention rates may be the interpretation of effectiveness by educators because academic progress is made by some children during the year retained (Xia & Glennie, 2005b). However, according to Xia and Kirby (2009), initial gains made by retained students fade over time. Other reasons for continued high levels of retention may include teachers' limited knowledge regarding costs and benefits of retention (Xia & Kirby, 2009), and that in many school systems, teachers are not offered any other alternatives for students who need interventions or remediations (Fager & Richen, 1999). Denton (2001) suggested that since neither grade retention nor social promotion works, there must be alternatives existing between these two extremes. Educators need to explore what alternatives are available to end social promotion, while at the same time reduce retention rates (Denton, 2001).

Statement of the Problem

Since federal laws have minimum requirements for statewide accountability systems, and state laws require grade retention for students not meeting specific academic standards (Stauffer & Folks, 2006), retention is a common topic of discussion. Stauffer and Folks (2006) noted increased consideration of retention, and much earlier in the school year, especially at the kindergarten level. This observation would coincide with Black's (2004) research indicating that 25% of this age group of children is being retained.

The NASP (2011) cited the U.S. National Center for Education statistics as estimating almost 10% of students between the ages of 16-19 had been retained.

According to the National Research Council, 25% of six to eight-year olds have been retained (Black, 2004). More recently, David (2008) estimated "the number of students retained at least once in their school career range from 10 to 20 percent" (para. 4). Of the students being retained, Thompson and Cunningham (2000) noted the "retention rate for boys is about ten percentage points higher than for girls. In high school the retention rate is about 15% higher for African American and Hispanics than for Whites" (para. 7). In the NASP (2003) position statement on retention, researchers found one or more of the following characteristics were common among retained students: students tend to be young or immature for their grade, show attention or behavioral problems, are not proficient in English, have reading problems, change schools often, are from low-income families, live in single-parent families, or live with adults who are uninvolved in their education.

In light of research results showing so many students retained, it might be assumed the positive outcome of retention has increased student achievement, but this does not hold true (Hattie, 2008). According to Smith (2004), retention at all grade levels does not work and, in fact, may be harmful academically and emotionally.

In addition to academic concerns surrounding retention, educators are faced with competition for creating programs of educational innovation and reform (USDOE, 2009). The most recent reform, the American Recovery and Reinvestment Act (ARRA) was signed into law in February 2009 by President Barack Obama. As part of this legislation, $4.35 billion was set aside for states in the Race to the Top Fund. This fund was established to reward states for "achieving significant improvement in student outcomes, including making substantial gains in student achievement, closing achievement gaps,

improving high school graduation rates, and ensuring student preparation for success in college and careers" (USDOE, 2009, p. 2). According to Xia and Glennie (2005a), these criteria are impacted negatively by retention.

Financial factors are also considered when the dilemma of retention is addressed (Xia & Glennie, 2005a). In January 2010, ABC News reported additional financial strain will force public schools to "freeze salaries, expand classes, cut extracurricular activities or seek local tax increases to cope with a funding shortfall" (Lieb, 2010, para. 1). According to The People's Tribune, a newspaper in Missouri, Governor Jay Nixon planned to cut at least $650 million dollars from the state budget for the 2011 fiscal year. In August 2010, the Center on Budget and Policy Priorities cited "at least 46 states have imposed cuts that hurt vulnerable residents and the economy" (Johnson, Oliff, & Williams, 2010, p. 1). As educators deal with both short and long-range budget deficits, they continue to question if the cost of retaining students without considering the benefits is a practicable option (House, 1998; Xia & Glennie, 2005a).

Significance of the Study

Educators at all levels need to be aware of both the costs and benefits of retaining students in the primary grades. Range, Dougan, and Pijanowski (2011) identified three outcomes of retention which affect not only individual student performance but the educational system as a whole. These outcomes are: (a) academic gains or losses, (b) socio-emotional well-being, and (c) dropping out of school (Range et al., 2011). In the area of academic achievement gains, some studies show retained students do improve academically following the year of retention, but these gains actually decline over time (Jimerson, Woehr, & Kaufman, 2007). The majority of research on retention over the

past 40 years has shown retention is harmful to academic progress (Holmes, 1989; Jimerson & Kaufman, 2003; Peterson, DeGracie, & Ayabe, 1987) and adds to academic difficulties in upper grades (Griffith, Lloyd, Lane, & Tankersley, 2010; McCombs, Kirby, & Mariano, 2009). When looking at socio-emotional gains or losses due to retention, once again the vast majority of research has been negative (Allen, Chen, Wilson, & Hughes, 2009; Ascher, 1988; Black, 2004; Norton, 1990; Roberston, 1997). In addition to these two outcomes, retention is identified as a key risk factor of high school dropouts recognized by The National Dropout Prevention Center (Hammond, Linton, Smink, & Drew, 2007). Hattie (2009) considers the risk of dropping out of school due to retention, "one of the most frightening and costly effects" (p. 98).

Despite the large body of research indicating negative results, many states are establishing mandatory retention policies based on high stakes tests. This practice in itself raises concerns regarding fair and just use of testing procedures and also concerns regarding equity to students who are being retained. According to Hattie (2009), it is much more likely for students who are either African American or Hispanic to be retained while the same ability level White student is promoted.

In the midst of analyzing the costs and benefits of these three outcomes, educators are also being asked to view decisions through fiscal expenditures. Costs of retaining a student for one year, based on each district's average per pupil expenditure which is averaged nationally, has risen to $10,441 (USDOE, 2011). For each 100 students a district retains, the estimated cost is over one million dollars. Add to this equation many parents, teachers, and administrators do not have the current research regarding the long-term impact of retention and the inconsistent methods for deciding who will be retained

(Hattie, 2009) and the topic becomes even more vital to helping ensure student success. Often parents, teachers, and administrators, without the benefit of the current research regarding the costs and benefits of retention, employ inconsistent methods for deciding who will be retained (Hattie, 2009) without considering the impact to the student beyond the current school year.

Purpose of the Study

The purpose of this study was to analyze the costs and benefits of retaining primary (K-2) students using a methodological triangulation. First, academic growth among one cohort of primary (K-2) students from an urban school setting was examined. Specifically, the academic growth of students in reading the year prior to retention was compared to the academic growth in reading during the year of retention to determine if there was a significant academic growth difference. This study also sought to identify retention trends for this urban district in regards to gender, ethnicity, socioeconomic status, and school type (Title I and Non-title). Next, the financial cost of retaining students for one year in an urban district was calculated. The calculations were based on the Average Current Expenditures per Average Daily Attendance (ADA) listed on the District Report Card from the Missouri Department of Elementary and Secondary Education (MODESE) for each year students were retained. Lastly, elementary principals were surveyed to gain their perspective on the costs and benefits of retention in grades K-2. Grades K-2 were selected because these grade levels have the most retainees over the past three years in the district studied and nationally.

Research Questions

The following research questions guided this study:

1. What was the academic growth in reading of K-2 retained students during the year prior to retention based on beginning of year (BOY) and end of year (EOY) data?

2. What was the academic growth in reading of K-2 retained students during the year of retention based on BOY and EOY data?

3. Is there a significant growth difference in students' reading between the year prior to retention and the year retained?

4. What is the relationship between students retained in kindergarten, first, or second grade and academic growth results based on the following variables:

    a. gender

    b. ethnicity

    c. socio-economic status (SES)

    d. school type (Title I or Non-title)

5. What are elementary principals' views regarding the benefits of retention, their knowledge of retention, and how the decision for a student to be retained is decided?

6. What is the monetary cost of retention for this cohort of K-2 retained students for the years retained (2006-2009)?

Hypotheses

Null hypotheses. This is designated by the symbol H_o.

1. The amount of reading growth from the year prior to retention to the year retained will remain statistically the same.
2. There is no statistically significant relationship between any one of the identified variables (gender, ethnicity, SES, and school type) and retained students' reading growth.

Alternative hypotheses. This is designated by the symbol H_1.

1. The amount of reading growth from the year prior to retention to the year retained will statistically differ.
2. There is a significant relationship between one or more of the identified variables (gender, ethnicity, SES, primary home language, and school type) and retained students' reading growth.

Limitations of the Study

The following are recognized as limitations of this study:

Factors beyond the scope of the study. Many variables were not controlled in this study, such as age of individual students retained, parental involvement in the decision to retain, implementation of academic interventions during either year studied, class size, curriculum, maturation, and teacher experience or training.

Historical references. The practice of grade-level retention has been embedded in the history of the American public schools system for the last 100 years (Beebe-Frankenberger, Bocian, MacMillan, & Gresham, 2004; Peterson & Hughes, 2011). According to NASP (2011), researchers have been studying the impact of retention on achievement for over three decades. For this reason, much of the recent research

regarding retention contains references to comparative historical research. Comparative historical research is considered to be the study of many different cases over many periods of time (Ragin & Amoroso, 2010), which is the case in the study of grade-level retention. As a result of this, many current research studies, those within the past 10 years, contain numerous references to historical works. In order to be thorough in documenting the process of retention and the results of retention over time, all of the historical references available have been included and cited. The review of literature will contain both the historical reference along with the most current research which aligns with each key facet of review. Every attempt has been made to include the most current data and resources without compromising the integrity of the historical sources.

Instrument reliability and validity. The Emerging Literacy Survey (ELS) administered at the beginning of the year (BOY) and end of year (EOY) within the district studied was used with the permission of the author, Dr. John Pikulski (Pikulski & Taylor, 1996). The staff who implemented this assessment are no longer working in the district to verify if the assessment was piloted and if so, to what extent, before implementation. It should also be noted, as of fall 2011, the use of the ELS was replaced with an updated version of kindergarten appropriate assessments, which included Concepts About Print (CAP), letter identification, and a writing proficiency. Appendix A contains a copy of the ELS Criteria for Intervention.

Sample selection. The sample selection was limited to retained students in grades kindergarten, first, and second during the 2006-2007, 2007-2008, and 2008-2009 school years in an urban setting. This is a sample of convenience rather than a sample of random selection, which therefore, restricts the generalization of results. A sample of convenience

is one in which "the researcher uses whatever subjects are available" (Steinberg, 2008, p. 141). The sample selection of elementary principals was also a sample of convenience and limited to only elementary principals within the district in which the study took place and those principals who were present at the district meeting on the date the survey was administered.

Systematic data collection. According to Hauser, Frederick, and Andrew (2005) and Hughes et al. (2010), no national data-collection agency for monitoring retention exists. In addition to this, the State of Missouri does not require retention data be reported as part of a school's Annual Yearly Performance (AYP) report and therefore, at the district level, it is difficult to determine the accuracy of data collected regarding retained students. No data are available at this point to determine to what extent, if any, academic tests are used as retention criteria.

Definitions of Key Terms

The following terms are included in this study:

At-risk. Students who are at risk of educational failure "due to lack of services, negative life events, or physical or mental challenges, among others" (North Central Regional Educational Laboratory [NCREL], 2002, p. 1).

Elementary principal. The educational leader in a school setting serving students in grades K-6th grade (Foy, 2007; Range, 2009). For the purpose of this study, this term will represent the administrator in schools serving either kindergarten through fourth or kindergarten through fifth grade students.

Retained student. A retained student is a student who has been in a given grade for one full year and is required to repeat the same grade the following year (Anderson, Whipple, & Jimerson, 2002; Range, 2009).

Retention or grade retention. Retention is the practice of having a student repeat a grade upon demonstration that a student lacks mastery of skills and knowledge of the materials. It is also known as non-promotion, flunking, being held back, and refers to the practice of requiring a student who has been in a given grade level for a full year to remain at that same grade level in the following year (Davis, Zimmerly, & Mudiwa, 2008).

Social promotion. The USDOE (1999) in its report, *Taking Responsibility for Ending Social Promotion: A Guide for Educators and State and Local Leaders*, defined social promotion as "allowing students who have failed to meet performance standards and academic requirements to pass on to the next grade with their peers instead of completing or satisfying the requirements. It is called social promotion because it is often carried out in the presumed interest of a student's social and psychological well-being" (p. 4). According to the Research Department of Education Week (2004), "social promotion is the practice of passing students along from grade to grade with their peers even if the students have not satisfied academic requirements or met performance standards at key grades" (para. 1).

Title I schools. The USDOE (2004) identifies Title I programs as those which provide "assistance to improve the teaching and learning of children in high-poverty schools to enable those children to meet challenging State academic content and performance standards" (para. 1). To qualify as a Title 1 site in the district in which the

study was conducted, 50% or more of the students in the school qualified for free or reduced meals.

Summary

The practice of retention has grown as state and federal policies, such as Missouri Senate Bill 319 (2001) and NCLB (2002), are pressuring schools to have every student attain minimum academic standards for proficiency. Yet, running parallel to this issue are financial struggles being faced by both states and local school districts. By use of a quantitative study, the relationship between the cost-benefits of retaining students during the primary grades was examined. The possible benefits were analyzed by comparing the reading growth of K-2 students prior to the year retained to their reading growth during the year of retention. Specially, comparing the growth in reading between the year prior to retention and the year retained served to identify how reading growth differs and to determine if growth may have remained constant without retention.

This study also examined different variables (gender, ethnicity, social economic status, and school type) to identify existing relationships between any of these variables and retention rates. Student data were analyzed for the school years 2006-2007 through 2009-2010 to assess growth in reading scores. Elementary principals were surveyed to determine their perspectives regarding costs and benefits of retention. A financial cost estimate of retention during this same period was also calculated using Average Current Expenditures based on ADA for each year examined. Identification of the specific costs and benefits could lead to new initiatives being put into place so teachers and schools are not left “oscillating between the sharp horns of dilemma” (Mencken & Mencken, 1987, p.

190). Rather than having to choose between retention and social promotion, alternatives can be offered to students the district serves.

In Chapter Two a review of related literature was presented. This review of literature on retention was divided into the following main divisions: educational and philosophical debate between social promotion and retention, accountability initiatives which influence decision-making, cost and benefits of retention which includes impact both academically and fiscally. The chapter concludes with alternatives to retention.

The methodology of the study, along with a description of how the data was collected, were detailed in Chapter Three. Descriptive information about the population, sample, and the instruments used to collect the data were discussed. Data analysis and ethical considerations of the study were also presented.

Chapter Four contains the data analysis for each of three areas of the methodological triangulation. Each of the research questions were analyzed according to the data using the Statistical Package for Social Sciences (SPSS Version 19.0 for Windows). Chapter Five summarized the study. The first portion shared the findings along with the conclusions. The last portion, gave recommendations for further research and action steps which might be taken based on the findings.

Chapter Two: Review of Literature

According to Fager and Richen (1999), "retention of students for academic failure has been a common practice in American schools since the beginning of public education" (p. 2). Steiner (1986) cited the beginning of retention back to the mid-19th century when graded schools began to replace the one-room schoolhouse. Kinlaw (2005) stated "schools have used retention in grade or 'holding back' students to deal with 'underperforming' students since graded schooling began in the 1850s in the United States" (p. 1).

Once the Industrial Revolution began, educators had to have a way to group the large number of children entering the public schools more efficiently and the graded system was created (Stone, 1996). Students who failed to show mastery in this system were retained (Kinlaw, 2005). As early as 1911, research was conducted to address academic achievement difficulties and the role of retention, which has been used historically to deal with failing students (Harvey, 1994). Allen, Chen, Wilson, and Hughes (2009) found retention "as an educational intervention for low achieving students has fluctuated since the early 1900s, reaching a peak in the 1970s before declining throughout the 1980s and then increasing rapidly in the early 1990s" (p. 480). Burkam, LoGerfo, Ready, and Lee (2007) summarized the history of retention in this way:

> In the early 19th century, grade repetition was popular, with at least 50% of students retained once during their first 8 years of school (Rose, Medway, Cantrell, & Marus, 1983). By the time of the Great Depression, however, retention was charged with harming children's social and emotional adjustment, thus instigating a 30-year crusade to reduce the number of retentions. The

> launching of Sputnik focused national attention on the poor academic performance of U.S. students, and calls for heightened standards included a push to end social promotion. (p. 104)

Educational and Philosophical Debate

According to Jacob and Lefgren (2002), "starting in the mid-1960s, educators became concerned that retention [i.e., the practice of requiring students to repeat a grade] adversely impacts the social, emotional, and cognitive development of children" (p. 1). During this time, social promotion was introduced (U.S. Department of Education [USDOE], 1999). Hennick (2008) stated social promotion was seen as a viable option because it was "in the best interest of a student's social and psychological well-being" (p. 56). What ensued from this time until the 1990s was a controversial debate over what was best for students and schools (Parker, 2001). Parker (2001) stated this debate is "typical of western thought in which it is habit to generate either or choices" (p. 2). Dong (2009) stated "the practice of having low-performing students repeat a grade has been hotly disputed and heavily studied by educators, psychologists, and sociologists" (p. 2). Decisions for educators at this time became a choice between the two opposing views, social promotion or retention (Thompson & Cunningham, 2000). Burkam et al. (2007) explained the perspective of both views in regards to retention:

> Proponents—notably teachers—contend that repeating kindergarten provides another year for socially and academically immature children to prepare for first grade. Conversely, detractors assert that holding kindergarteners back produces no academic benefits, and can even harm children socially and psychologically. (p. 104)

Opponents of social promotion began to view retention as a way to gain the high standards they desired (Penfield, 2010). At a time when educators were divided and options seemed limited, federal and state accountability even further narrowed options regarding consequences for not meeting academic proficiency standards (National Association of School Psychologists [NASP], 2003).

Accountability Initiatives

According to Allen et al. (2009), "the upsurge in grade retention rates from the 1980s to the mid-1990s has been attributed to the rise of the standards-based reform movement in education" (p. 480). Researchers Dong (2009), Hauser, Pager, and Simmons (2004), Jimerson and Kaufman (2003), and McCoy and Reynolds (1999) agreed retention has grown in its approval because of the focus placed on accountability and mandated testing in schools. President Clinton, in his 1997 State of the Union Address, called for the end of social promotion and promoted wide-scale retention or non-promotion of students who were not ready to progress to the next year in school (Reynolds & Temple, 1997). In his January 19, 1999 State of the Union Address, President Clinton once again challenged states and school districts to end social promotion (Thomas, 2000). Clinton called for "students to be exposed to academic rigor and for the appropriate use of tests and other indicators of academic performance to determine promotion" (Hauser, 2000, p. 4). In May 1999, the USDOE published *Taking Responsibility for Ending Social Promotion: A Guide for Educators and State and Local Leaders*. Although education officials, such as Secretary of Education Richard W. Riley, urged educators not to replace social promotion with retention, it became evident educators felt they had little choice as state governments began making retention

mandatory (No Child Left Behind [NCLB], 2002). According to Heubert and Hauser (1999), "Grade retention received increasing attention in the late 1990s, when Chicago adopted stringent retention practices that were based on test performance rather than teacher recommendations" (Burkam et al., 2007, p. 104).

Jacob and Lefgren (2002) found by 2000 many states were beginning to base student promotion to their performance on a state or district assessments. States, such as New York and Missouri, began implementing policies referred to as promotion gate policies. Stauffer and Folks (2006) explained:

> Promotion gates can be understood as a performance threshold that a student is expected to meet prior to grade promotion. For example, a state may decide to test 3rd grade students to determine proficiency in reading, and require students failing to meet the prescribed proficiency to be retained, or promoted contingent upon receiving remediation and demonstrating proficiency. (p. A-1)

Effective July 1, 2001 Missouri, the state in which this study was conducted, passed into law Senate Bill 319 making retention mandatory for fourth grade students who are still reading below third-grade level by the end of summer school (Senate Bill 319, 2001). According to Nagaoka and Roderick (2004), "virtually every major school system in the United States is wrestling with the question of how to motivate students to achieve while at the same time addressing the needs of students who persistently struggle" (para. 1).

During this same time, the No Child Left Behind (NCLB) Act of 2001 was passed requiring schools to bring all students to a proficient level in reading, math, and science by 2014 (NCLB, 2002). Cannon and Lipscomb (2011), cited NCLB as an important accountability measure for schools, which identified the need for educators to have a

better understanding of retention and its effect on students. School districts and states were also required to provide detailed report cards to the public about their progress toward this goal (NCLB, 2002). By 2002 it was estimated that over 15% of students nationally were affected by test-based promotion policies resulting in retention (Greene & Winters, 2007).

In February 2009, President Barack Obama signed into law the American Recovery and Reinvestment Act (ARRA). As part of this legislation, $4.35 billion was set aside for states in the Race to the Top Fund (USDOE, 2009). States awarded these funds were recognized for improving student achievement outcomes, reducing the achievement gap, increasing high school graduation rates, and successfully preparing students for success in college (USDOE, 2009). The issue of retention is specifically related to several of these goals.

As a result of these accountability initiatives, more students were retained based on their performance on high-stakes tests (Penfield, 2010). Hughes et al. (2010) cited the pressure for students to do well on high stakes tests could have resulted in even more retention at the primary level in order to allow students to receive an additional year of instruction. Even though both choices--retention and social promotion-- result in high dropout rates, inadequate skills and knowledge for students, and neither did anything to close the learning gap for low achieving students, retention became the option of choice (USDOE, 1999). Beebe-Frankenberger, Bocian, MacMillan, and Gresham (2004) found if districts simply mandated the decision to be retained by cut scores on high stakes tests one of every four students would qualify for retention. Even as the mandated policy of retention is being questioned based on the costs and benefits to not only students, but also

to schools and public, another concern has been raised. Does the use of test-based grade retention meet professional standards for fair and appropriate test use? (Penfield, 2010). Heubert and Hauser (1999) and Penfield (2010) examined increased use of standardized tests in decision making to retain and questioned the soundness of making such an impactful decision based on one test score alone. Penfield (2010) further asserted:

> In light of evidence suggesting that test-based grade retention is in violation of accepted standards for fair and appropriate test use, one may ask whether there exists any institution with regulatory authority that can influence the use of test-based retention as an educational policy. (p. 115)

In the midst of this possible legal challenge to mandatory retention, Cannon and Lipscomb (2011) found "grade repetition continues across the country, indicating that some educators and parents feel that it has merit for certain students" (p. 3). Once again, educators find themselves returning to the choice between retention and social promotion. Parker (2001) stated that while it might be logical to select retention instead of social promotion, "we are perching ourselves on the horns of an either or dilemma—where both horns have a history of doing damage" (para. 14).

Renewed Emphasis on Retention

Prevalence. A concern addressed by Alexander, Entwisle, and Dauber (2003) and Thompson and Cunningham (2000) is few national statistics are kept on retention, and there is no monitoring source for data collection at the national level. In 2010, Hughes et al. stated this was still the case and found it made tracking the frequency of retention across time difficult. As a result, data gathered are most commonly collected from census information.

Although there is a variance in data among different researchers, retention is an intervention affecting many students. Kinlaw (2005) estimated around 2.4 million students per year were retained in U.S. schools in the late 1900s. Hennick (2008) reported two million K-12 students are retained in the United States each year. This number estimates 5-10% of all students were retained annually. By 2009, National Center for Education Statistics (NCES, 2009) "predicted that about 10% of students in kindergarten through eighth grade had been retained one time (Range et al., 2011). Contrary to these statistics in the United States, the United Nations Educational, Scientific, and Cultural Organization's (UNESCO) report of 2003-2004 indicated no elementary students were retained in Sweden, Norway, Denmark, the United Kingdom, or Japan (Hennick, 2008).

The National Association of School Psychologists (NASP, 2003) noted the use of grade retention has increased over the past 25 years, in spite of little indication of its effectiveness. The NASP estimated as many as 15 % of American students repeat a grade each year, and between 30%-50% of students are retained at least once before ninth grade (Hennick, 2008). David (2008) cited a similar statistic from the National Center for Education Statistics which in 2006 estimated "the number of students retained at least once in their school career range from 10 to 20 percent" (p. 83). Individual states are also beginning to record retention rates. Data from the Texas Education Association (TEA) shows 162,080 students grade K-12 were retained in Texas in 2009-2010 alone (TEA, 2011).

Retention is also most likely recommended by teachers in the primary grades. Dong (2009) collected data from state agencies indicating increased numbers of retention occurring in the early grades. Griffith et al. (2010) reported most students are retained

between kindergarten and third grade. The University of North Carolina found retention rates for children in grades K-3 have more than doubled since 1992 (Early et al., 2004). Black (2004) cited a study from the University of Wisconsin-Madison which found 25% of six to eight year olds had been retained at least once.

Studies by Dong (2009) and Hong and Yu (2008) focused specifically on retention at the kindergarten level. Zill, Loomis, and West (1997) as quoted by Hong and Yu (2008) stated the "kindergarten retention rate was about 6% in 1993 and 5% in 1995" (p. 407). Okpala (2007) indicated the rate of retention in kindergarten should be of great concern at all levels of education. Frederick and Hauser (2008) also verified growing rates of retention were due to an increase in retention at the kindergarten level. Although there is variance among data, it is evident retention is seen as an intervention which still affects many students both at a national and international levels. Brophy (2006) in examining the implementation and impact of retention for the International Academy of Education, reported retention affects many students, with most grade retention occurring in developing countries. He also concluded "underreporting of repetition is common in countries that have official policies of automatic promotion but do not enforce them systematically" (Brophy, 2006, p. 5). So even though most research focused on retention in the United States, its occurrence and impact have been analyzed at the international level.

Rationale. Using retention as an intervention occurs for several reasons. One common reason for retention is its use as a method to reduce the skill variance between students (Xia & Glennie, 2005b). Bonvin, Bless, and Schuepbach (2008) summarized this reason as follows:

> In many educational systems, grade retention is frequently applied as a measure dealing with poor academic achievement. Retainees are children who fail to meet the requirements of a specific grade. An additional year of school is intended to facilitate their reaching of curricular goals. (p. 1)

Bhattacharya (2007) stated, "Investing an additional year in the same grade is expected to help a child to acquire the academic skills she lacks" (p. 1). Advocates for retention believe it allows time for a child to catch up with peers. The extra year allows the child to build a basic skill foundation. They also feel promoting a child without necessary skills would leave children unprepared for the future (Fager & Richen, 1999). According to Tanner and Combs (1993), 58.8 % of teachers given a national survey believe "retention prepares a student for successful achievement in the following grade, gives an underachieving student a chance to catch up academically, and is an effective means of mastery of grade-level requirements" (p. 70). Based on this rationale, the State of Georgia became the first state to use a standardized test to review readiness in kindergarten and then decide who would be retained based on those results (Bowen, 1998). In 2009 this premise for retention had not changed. Range, Holt, and Pijanowski (2009) found 58.2% of teachers surveyed felt school academic performance was most important when considering retention. Overall, the main goal of retaining students was to give them an additional year of learning so they would be ready to enter the next grade level (Cannon & Lipscomb, 2011). Range et al. (2011) found the underlying belief in retention for most educators is that if students were allowed to re-learn the material for another year, they will show academic growth.

Anderson, Whipple, and Jimerson (2002) found an additional reason for retention is some parents and teachers view it as a gift of another year to boost self-esteem. According to Fager and Richen (1999), many people believe retention allows the child to mature, catch up, and build skills. In interviewing primary teachers, Black (2004) indicated teachers felt retention allowed students to gain more self-confidence and urged schools to retain students early to address this issue. Bowman (2005) discovered retention was widely used because of a child's social immaturity and the belief an extra year will result in positive gains in this area.

This is specifically true in kindergarten and first grade where "additional concerns about developmental preparedness—for example, behavioral skills—can be a factor in retention decisions" (Cannon & Lipscomb, 2011, p. 3). Dong (2009) and Mantzicopoulous and Morrison (1992) reported "the decision-making of holding children back in kindergarten is different from that in higher grades. Kindergarten retention targets children who are socially immature or have difficulty acquiring basic academic skills" (p. 5). Hong and Yu (2008) found at the kindergarten level, in particular, many children are retained for behavioral reasons instead of academic reasons. Carstens (1985) and Burkam et al. (2007) referred to this rationale as the Gesellian framework which basically looks at children's growth and maturation through genetics. It would be expected that children who behave as younger peers should be placed with those peers. Students who have not passed through the appropriate developmental stages should be retained (Burkam et al., 2007; Graue & DiPerna, 2000). Okpala (2007) in studying perceptions of kindergarten teachers regarding retention, found teachers, especially those with less than five years of experience, felt retention was a necessary intervention.

Still others see retention as a way to guarantee greater accountability. According to Thompson and Cunningham (2000), "advocates of retention have maintained that it sends a message to all students that weak effort and poor performance will not be tolerated, and that it gives lagging students an opportunity to get serious and get ready for the next grade" (p. 1). This mind-set was echoed by a Boston Charter school teacher who felt retention policies encouraged students to work harder and retention was viewed as a threat to the students (Hennick, 2008). John Eston, executive director of the Consortium on Chicago School Research, stated, "While it may seem harsh, research shows the threat does work" (Hennick, 2008, p. 56). Contrary to this view of using retention as a threat, Blazer (2008); McCollum (1998); Xia and Glennie (2005b) concluded "the threat of retention has not been found to motivate students to work harder. Most students view retention as a punishment for failing to learn, not as a positive action designed to help them achieve academic success" (Xia & Glennie, 2005b, p. 2).

An additional reason worth noting for some educators is that retention is seen as an intervention or preliminary step before referring a student for special education services (Kinlaw, 2005). According to McLeskey & Grizzle (1992) and Burkam et al. (2007), retention may be used as a remedial intervention before a student is considered for diagnosis of a learning disability. Nagaoka and Roderick (2004) also found "In Chicago, nearly 20% of retained third- and sixth-graders were eventually placed into special education, triple the rate for other low-achieving children" (Burkam et al, 2007, p. 105).

A rationale for retention not widely discussed, but which is found in several studies, is the idea that retention might help reduce the difference in ability levels in the classroom (Burkam et al., 2007; Rocher, 2008). Rocher (2008) contends retention is

necessary "for teachers because it would reduce the diversity of level of performance of the pupils and so would make teaching more manageable" (p. 61). Byrnes and Yamamoto (1986) concluded retention would help the graded structure of schools remain more constant (Burkam et al, 2007). Basically, it would be easier for teachers to have students in each grade who were all on similar levels of achievement.

Along with numerous reasons and rationale for retention come concerns. One concern is recommendation for retention, in most situations, is not a prescriptive process with set measures, but rather a very informal process based on teacher perceptions. Hattie (2009) concluded students are retained "in rather arbitrary and inconsistent ways" (p. 99). In many instances, the bulk of the decision whether or not to retain a student falls to the classroom teacher. Black (2004) interviewed both teachers and principals who viewed retention as a common intervention. Some teachers even indicated they could identify students who needed to be retained as early as fall of each school year.

Cannon and Lipscomb (2011) in interviewing principals regarding retention found "half the principals we spoke with said that they did not believe that retention was effective . . . the other half thought that retention could be effective in certain cases" (p. 15). They also found, "within schools, retentions are viewed case by case, and a general consensus seems to be that earlier retention is preferred to later" (Cannon & Lipscomb, 2011, p. 15). Schnurr, Kundert, and Nickerson (2009) surveyed school psychologists and discovered they did not support retention based on research they had available, but that they had not been included in the decision making process.

With concerns also comes the call for considerations. Researchers and educators alike are suggesting specific student characteristics be considered if retention is to be looked upon as an option. Ascher (1988) referred to Light's (1981) model of determining whether or not a student be retained. According to this model, variables which should be examined include: chronological age, present grade, knowledge of English, previous retentions, age/grade difference between siblings, estimate of intelligence, history of learning disabilities, and student attitudes toward retention (Ascher, 1988).

The 2006 edition of Light's Retention Scale (LRS) contained additional considerations to review when the decision to retain or promote a student is to be made. In addition to those mentioned in Ascher's (1988) research, Light (2006) took into consideration preschool attendance, student's physical size, parent's school participation, and a child's life experiences. In regards to recommending retention, most of the time the decision to retain is based on teachers' attitudes and beliefs regarding retention and the teachers' own assessment of the students. (Bonvin et al., 2008). Range (2009) concluded that when "a student is retained, the retention may impact the beliefs of teachers the student will encounter in his future educational career" (p. 6).

Characteristics of retained students. Although Light (2006) offered considerations for retention, some of these considerations are actually characteristics of retained students. According to *Indicator 25: Grade Retention from the Condition of Education 2006,* common characteristics of students retained included one or more of the following factors: male, black or racial minority, low socioeconomic status, parents with low educational level and little school involvement (USDOE, 2006). Thompson and Cunningham (2000) found the retention rate for boys was almost 10% higher than for

girls. In addition to retention affecting more males, Hattie (2009) expressed concern regarding issues of equity of retention given the fact "it is four times more likely that the student of color (African American, Hispanic) will be retained and the other (White) student promoted" (p. 98) even when the students had the same level of achievement. This coincides with the study of Thompson and Cunningham (2000) which identified retention rates in the younger grades as being similar among all ethnicities, but by high school found the rate to be approximately 15 percentage points higher for African Americans and Hispanics.

Research from the 1990s to 2011 found a variety of characteristics common to retained students. Reynolds (1992) reported the strongest characteristic or predictor of retained students was they did poorly in classroom performance or testing in first grade. Denton (2001) determined reading ability had a great impact on retention and Parker (2001) added students who were identified as having special needs or living in poverty were retained more often than other students. According to Anderson et al. (2002), retained students were more likely to display aggressiveness, have a history of suspension or expulsion, act out in the classroom, or display behaviors associated with Attention Deficit Hyperactivity Disorder and Conduct Disorder. Anderson et al. (2002) also found children with learning disabilities are more likely to be retained and "in fact are likely to be so diagnosed immediately following the retention" (para. 7). The National Association of School Psychologists (2011) also cited delayed development and student mobility as additional characteristics of students frequently retained. Range et al. (2011) included the additional characteristics of being born to a teenage mother and young for grade as those held by retained students.

Cannon and Lipscomb (2011) looked specifically at students retained in grades K-2 and found "students entering school at relatively young ages, boys, children from low-income families, English learners, and Latinos are significantly more likely to be retained" (p. 6). In regards to kindergarten retentions, Burkam et al. (2007) reported:

> Kindergarten repeaters are more likely to be enrolled in full day kindergarten, more likely to be receiving special education services, and less likely to have been enrolled in center-based (non-Head Start) preschool. Race/ethnicity is not consistently associated with repeating kindergarten; neither is the child's home language. (p. 116)

When examining various characteristics of retained students, Cannon and Lipscomb (2011) took into consideration age, gender, socioeconomic background, primary language, race, and ethnicity. They concluded students "although individual risk factors can affect the probability of retention, a combination of risk factors can increase it greatly" (p. 8) and "with several of these risk factors can face up to a one-in-nine chance of being retained" (p. 1).

Cost-Benefit Analysis

Looking at both historical and current research it is evident retention has its proponents and opponents, both citing different studies to support their analysis of the issue. Dong (2009) determined retention of struggling students is widely disputed and a topic of discussion and research by not only those in the field of education, but those in fields such as psychology and sociology which examine more than academic indicators. Burkam et al. (2007) found "proponents—notably teachers—contend that repeating kindergarten provides another year for socially and academically immature children to

prepare for first grade" (p. 104). On the other hand, opponents "assert that holding kindergarteners back produces no academic benefits, and can even harm children socially and psychologically" (Burkam et al., 2007, p. 104). McGrath (2006) stated:

> Over the last 75 years, a pool of research-based knowledge about the effects on students repeating a grade level has been accumulating. It now overwhelmingly indicates that there are neither academic nor social advantages for the majority of students who repeat a year of their schooling. (p. 39)

Range et al. (2011) asked educators to "consider grade retention's impact on three outcomes, namely academic, socio-emotional, and dropping out of school" (p. 8). This portion of the review of literature will specifically explore the impact of retention on students in these three areas as well as behavioral concerns, financial costs, and future implications.

Impact on achievement. Researchers have conducted many studies showing retention is ineffective in regards to increasing student achievement. The study results range from generalizations as to why retention does not work to specific cases regarding particular grade levels or groups of students in which retention did not produce the desired results. Along with these studies are less numerous studies in which positive gains were seen for retained students. Some studies (Burkam et al., 2007; Dong, 2009; Penfield, 2010) specifically look at achievement results in kindergarten. Researchers, such as, Hauser, Frederick, and Andrew (2005) and Pomplun (1988) followed academic results of retained students beyond the year retained. Others looked specifically at literacy or reading results (Burkam et al., 2007). Additionally, studies, such as those by Bonvin et al. (2008) and Brophy (2006) look at retention from an international view.

Thompson and Cunningham (2000) cited retention "discourages students whose motivation and confidence are already shaky, and that promoted students gain an opportunity to advance through next year's curriculum, while retained students go over the same ground and thus fall farther behind their advancing peers" (para. 9). They also found students retained in first grade do worse than expected, both academically and emotionally. Blazer (2008) concluded substantial academic gains were seldom seen in retained students. According to the NASP (2003) position statement on retention, students who have been retained do no better than their promoted peers and have actually been shown to perform more poorly than promoted peers in some instances. They also determined retention can negatively impact all academic areas, not just reading (NASP, 2003).

Holmes and Matthew (1984) analyzed 63 different studies conducted on retention and found 54 of 63 studies reported negative effects (Burkam et al., 2007). Jimerson (2001) compiled 20 different studies which explored "the efficacy of grade retention published between 1990-1999" (p. 420). In these 20 studies, four found favorable results regarding retention, while the remaining 16 studies did not. "Overall, the average effect size indicated that the retained groups were .31 standard deviation units below the matched comparison groups. The average effect size for academic achievement was -.39" (p. 431). More recently, Hattie (2009) agreed with the results of Jimerson (2001) in that very few studies had positive results, instead identified negative results for retained students. Dong (2009) reported "meta-analyses conclude that the cumulative evidence does not support the use of grade retention as an academic intervention" (p. 2).

Some positive results of retention have been cited in studies such as those conducted by Alexander et al. (2003), Karweit (1999), Peterson et al. (1987), and Pierson and Connell (1992). Cannon and Lipscomb (2011) concur that "retention is a severe step, but it can benefit struggling students. We find that students retained in the first or second grade can significantly improve their grade-level skills during their repeated year" (p. 1). Greene and Winters (2004; 2007) also found positive findings within the data collected by the state of Florida on retained students in grades three through ten.

In response to these findings, Smith (2004) documented positive results were short-lived and there were negative long-term effects of retention. Holmes (1989) found "when promoted and retained students were compared one to three years later, the retained students' average levels of academic achievement were at least 0.4 standard deviations below those of promoted students" (Hauser et al., 2005, p. 4). Bonvin et al. (2008) discovered "retainees achieve the most remarkable benefit during the year of retention, but in the course of time, their academic performances progressively decrease until they drop behind those of their regularly promoted peers again" (p. 4). Even Cannon and Lipscomb (2011) noted "that although all groups achieve educationally meaningful gains, students who repeat a grade do not catch up to their original peers' level of performance" (p. 10).

In kindergarten, where retention is often seen as an advantage, academic achievement results are mixed. A study by Shepard and Smith (1988) discovered retention does nothing to boost academic achievement, but instead produces a social stigma and supports escalation of inappropriate academic demands in first grade. According to Burkam et al. (2007), "on average, kindergarten repeaters continue to

perform below their peers . . . most children appear to receive little or no cognitive benefit from repeating kindergarten" (p. 103). In this same study, Burkam et al. (2007) concluded retention in kindergarten may benefit struggling students for a short time. The students in the study actually exhibited stronger reading and math skills when compared to their promoted peers during the second year of kindergarten. Dong's (2009) research showed "repeating kindergarten has positive effects on the retained children's later academic performance; i.e., the retained children would do worse in terms of the first and third grade test scores, were they socially promoted" (p. 28). Burkam et al. (2007) determined "in the second year of kindergarten, retained children show stronger reading skills" (p. 108) and repeating "kindergarten appears to have had somewhat different effects on literacy achievement for different children in different schools" (p. 122) inferring that retention benefits might be a school factor rather than just a student factor. Dong (2009) encouraged researchers and educators to be more optimistic when considering retention at the kindergarten level.

Contrary to these studies, Abbott et al. (2010) found kindergarten students did not benefit academically because when retained they were placed back in "the same academic environment that failed them in the first place" (p. 22) and actually received fewer interventions to help them succeed. Looking specifically at academic achievement in literacy or reading, Burkam et al. (2007) found students retained in kindergarten continued to underperform in the area of literacy skills in comparison to non-retained peers. Doyle (1989) concluded "the harmful effects of retention are most evident in reading, but the lack of reading skills is the most common reason for retaining kindergarteners" (Burkam et al, 2007, p. 107). Griffith et al. (2010) revealed results of

retention on reading followed students into middle and high school. By the time they reached 8th grade, retained students were lower in reading skills and by high school read at slower rates than promoted peers (Griffith et al., 2010).

Although a large amount of research conducted on retention focuses on the United States, similar studies have been conducted at the international level. In 2006 a study conducted by the International Academy of Education based in Brussels, Belgium showed "school-imposed grade retention improves achievement temporarily, but over time, grade repeaters fall further and further behind other low achievers who were promoted" (Brophy, 2006, p. 14). In a Swiss study conducted by Bonvin et al. (2008), "retainees achieve the most remarkable benefit during the year of retention, but in the course of time, their academic performances progressively decrease until they drop behind those of their regularly promoted peers again" (p. 4).

Socio-emotional impact. Since one of the reasons cited as to why students are retained is to allow them another year to mature and develop socially, it could be assumed retention allows younger children a year to catch up to their peers and, therefore, be more socially adept (Lange, 2004; Range et al., 2009). Once again, the research spans from the 1980s to present and results regarding social-emotional gains and development for retained students are mostly negative. (Allen et al., 2009). Studies by Ascher (1988), Norton (1990), Robertson (1997), and Black (2004) all find retention fails to develop students' social skills and can have a negative impact on students' self-concept. Sometimes a slight positive gain is seen in self-esteem or social development, as was noted in the impact of achievement (Fager & Richen, 1999). Pianta, Tietbohl, and Bennett (1997) discovered some children retained show social gains during and shortly

after retention, but "there was little evidence that social competencies were enhanced by retention itself" (Fager & Richen, 1999, p. 6). Anderson et al. (2002) replicated this study with the same results but also gained insight into longer lasting emotional impact. Blazer (2008) cited the following studies: Denton, 2001; McCollum, 1998; Picklo and Christenson, 2005; Reynolds, Barnhart, and Martin, 1999; and Robertson, 1997 as finding "retained students, on average, have been found to have lower attendance rates, more negative attitudes toward school, and perform lower on measures of social adjustment" (p. 2).

In the 1980s, a survey was given to children to rate the top twenty more stressful times in their lives. The results showed by the time they were in 6th grade, children feared retention most "after the loss of a parent and going blind" (Anderson et al., 2002, para. 8). Potter and Wall (1992) support this finding and show "serious psychological effects, particularly at the ninth grade level where a more profound effect on self-esteem is experienced than at any other grade" (Davis et al., 2008, p. 2). When the 1980s study was replicated in 2001, retention was at the top of the list even before the loss of a parent (Hennick, 2008). Parker (2001) stated "the only major difference between students who were retained vs. like students who were socially promoted is the emotional stigma carried by the former for the rest of their lives" (para. 15). According to Alexander et al. (1995) in Burkam et al. (2007), "Only one study has concluded that kindergarten retention increases children's chances for academic success without harming their self-esteem" (p. 109). Another troubling statistic was identified by Wu, West, and Hughes (2010) which found retained students experienced "short-term increase in peer-rated liking which was followed by a rapid decrease after the year repeated" (p. 149).

Once again studies were also identified which showed positive gains. Bonvin et al. (2008) gave a thorough overview in regards to self-concept. They cited 11 studies which looked specifically at self-concept to see if being retained would have a negative impact on self-concept and lead to both social and emotional problems. In five studies, levels of self-concept were comparable between retained students and promoted peers. Six studies showed positive effects of grade retention on retained students' self-concept (Bonvin et al., 2008).

Behavioral impact. Many retention studies focus on academic and social-emotional gains, but few have studied the behavioral consequences of retention. Bonvin et al. (2008) found research in the area of behavioral consequences of retention was scarce and hard to piece together. What follows is a synopsis of the limited studies specifically focused on the behavioral aspects of retention. In a study from the Department of Pediatrics at the University of Rochester School of Medicine, researchers studied students who were older than peers at their grade level to see if they had higher rates of behavior problems and if there was an association with being retained. In this study, Byrd, Weitzman, and Auinger (1997) found "grade retention is associated with increased rates of behavioral problems in children and adolescents" (p. 661). Pagani, Tremblay, Vitaro, Boulerice, and McDuff (2001) discovered in regards to behavior, "children's anxious, inattentive, and disruptive behavior persisted and, in some cases, worsened after grade retention" (p. 297). Edmonds (2002) also showed a correlation with results in "over-age students in late elementary" with students who had been retained and found "students in both of these groups were not significantly different in academic self-efficacy, self-handicapping, or disruptive behavior" (para 1). Jimerson and Ferguson (2007), in their

analysis of behavior, identified that during adolescent years retained students exhibited more aggression than promoted peers. Retention was also related to significant increases in behavioral problems which sometimes resulted in additional retention in upper grades (NASP, 2003). Hennick (2008) concluded that "by high school, retained students were more likely to . . . engage in violent behavior" (p. 58).

In addition to studies focusing on older students, Hong and Yu (2008) looked specifically at kindergarten children who were retained for behavioral rather than academic reasons. Two years after being retained, "students experienced a lower level of internalizing problem behaviors on average as a result of retention than they would have if promoted" (Hong & Yu, 2008, p. 417). Burkam et al. (2007) found first graders who had been retained in kindergarten were more disruptive, had difficulty taking turns, and had more trouble concentrating on tasks than promoted peers. Burkam et al. (2007) identified poor classroom behavior and negative attitudes toward school as even more detrimental than lack of academic gains in regards to retention.

Impact on high school persistence. In addition to retention having an impact on achievement, social-emotional, and behavioral issues, a link has been identified between retention and students' efforts to persist to high school graduation or not drop out of school prior to graduation. The National Dropout Prevention Center (2007) identified retention as a significant risk factor for students who drop out of school. Blazer (2008) stated "studies have found that retention is strongly associated with dropping out of school in later years, even after controlling for factors such as academic performance, ethnicity, gender, socioeconomic status, and family background" (p. 2). As with the other

areas of impact, research studies on this aspect of retention range from the late 1980s to present.

In 1994, Roderick reported students held back, or retained one year, had a 40% increased risk of dropping out of school and those students who were held back or retained two times had an increased risk of 90% of dropping out (Hennick, 2008). According to McGrath (2006) and Smith (2004), students who are retained have a 20-50% higher risk of dropping out of school. Jimerson, Ferguson, Whipple, Anderson and Dalton (2002) also agreed grade retention was a strong indicator of which students would not graduate from high school.

When evaluating the link between retention and the dropout rate, some studies look specifically at when retention occurred. There is a wide variance in the research findings and the particular grade levels identified as critical in regards to when the decision to retain is made. Looking particularly at K-6 retained students, Roderick (1994) discovered repeating a grade from "kindergarten to sixth grade was associated with a substantial increase in dropout rates even after controlling for differences in background, post retention grades, and attendance (p.729). Montes and Lehmann (2004) determined early predictors matter and found students who repeated 1st grade were at increased risk of dropping out of school by 300%. Stauffer and Folks (2006) found the impact of retention during grades 6-12 resulted in a greater number of dropouts than students who had been retained in grades K-5. Seventeen percent of students in grades 6-12 who were retained did not graduate while 10% of K-5 students dropped out. Jacob and Lefgren (2007) identified being retained in 8th grade increases a student's changes of dropping out by 14%. In surveying students who had dropped out of school and were taking the

General Educational Development (GED) test, George-Ezzelle and Song (2007) found 39.1% of the respondents stated that being too old for the grade they were in was one of their reasons for not completing high school.

Although these studies differ slightly in the actual grade level of retention which most impacts the dropout rate, it is clear retention is a common predictor in failure to graduate. Reynolds and Temple (1997) summarize the impact of retention on persistence to graduation in the following way:

> Grade retention is an unwise policy because it has the unintended effect of contributing to the school dropout problem. The well-documented link between being retained in a grade and dropping out of school has received an insufficient amount of attention. Many students (including those who do well in school) find that 13 years of school is long enough. For retained students, though, the finish line is much farther down the road. . . If a parallel negative side effect were found for a drug treatment or medical procedure, there would be an uproar of protest. Not in education. (para. 6)

Financial impact. Often when looking at the issue of retention, the focal point has been on the impact, either positively or negatively, on the student in terms of academic and socio-economic outcomes (Xia & Glennie, 2005a). More recent focus, in regards to retention, is the financial impact of retention for school districts. Along with Thompson and Cunningham (2000), Cannon and Lipscomb (2011) cite the minimum cost of retention as the cost of "one additional year of state education spending for each retained student" (p. 17). Hill and Weiss (2005) discovered "grade retention is one of the more expensive educational policies available" (para. 1). Xia and Glennie (2005a) conducted a

study for the Center for Child and Family Policy at Duke University in order to provide "a possible economic framework to quantitatively evaluate the costs and benefits to society of retaining on student in a grade level for an additional year" (p. 1). They estimated the average expenditure per pupil to be $7,524 for the 2001-2002 school year. Smith (2004) examined the consequences of retention for the state of Florida and estimated cost per pupil to be $7,500 per year. According to the Texas Education Agency (2006), "the state of Texas spent an estimated 1.7 billion dollars for the extra year of schooling for the 190,802 children retained in grades K-12 during the 2000-2001 academic year" (Allen et al., 2009. p.2). Florida and Texas are specifically identified due to the fact they are leading states in requiring mandatory retention.

When looking at impact factor of retention at a national level, McCollum (1998), quoted by Hennick (2008), estimated the cost of retention at that time to be 10 billion dollars. If the estimated cost of $7,524 per pupil (Xia & Glennie, 2005a) is multiplied by the approximately 2 million children retained in the U.S. each year (Jimerson, 2001), the cost of retention would be more than $15 billion per school year. More recently, the USDOE, National Center for Education Statistics (2011) estimated the cost of yearly expenditures per student in the school year 207-2008 to be $10,441 which would substantially increase the national amount spent on retention. Regarding who is responsible for the cost of retention, Cannon and Lipscomb (2011) stated, "if a district or school cannot or does not provide adequate interventions to prevent retention, retention costs will fall largely on the state" (p. 2).

Norton (1990) as quoted by Harvey (1994) compared the cost of retaining students to the cost of offering remedial services. They estimated at the time of their study

retention would cost $3,000 per student while remedial services could be offered to students at a cost of only $800 (Harvey, 1994; Norton, 1990). If the same formula used by Norton (1990) was applied to the findings of Xia and Glennie (2005a), in which they found the cost of retaining a student was $7,524, the anticipated cost of remediation would be $2,006 per student per year.

Future impact. In addition to looking at the educational cost of retention, Xia and Glennie (2005a) explored two additional areas: costs associated with economic well-being and costs associated with crime. In the area of economic well-being, the connection is made between grade retention and employment later in life costing not only the individual but taxpayers (Xia & Glennie, 2005a). Looking from the retained student's perspective, loss of lifetime earnings can be calculated by "the average earning difference between those with high school diplomas and those having less than high school education using Census data" (Xia & Glennie, 2005a, p. 3). Some retained students did take the GED test, but it was found retainees did not score as high on the test as their non-retained peers even though they had spent more time preparing to take the test (George-Ezzelle & Song, 2007).

Jimerson and Ferguson (2007) conducted a longitudinal study which provides evidence retained students:

> Had lower levels of academic adjustment at the end of eleventh grade, were more likely to drop out of high school by age 19, were less likely to receive a diploma by age 20, were less likely to be enrolled in a post-secondary education program, received lower education/employment status ratings, were paid less per hour, and received poorer employment competence

> ratings at age 20 in comparison to a similar group of low-achieving, promoted students. (pp. 317-318)

In researching cost to taxpayers, Xia and Glennie (2005a) found retention policies, when looked through the lenses of tax revenues, would "lead to a proportional decrease in tax revenues to state and federal governments. Loss in government tax revenues can be calculated by loss of individual lifetime earnings times the estimated tax rate" (p. 3).

In the area of crime, Xia and Glennie (2005a) stated "conventional wisdom predicts that retention is associated with a higher rate of crime because old-for-grade students are more likely to engage in substance abuse and risky behaviors" (p. 3). In their position statement in 2003, the NASP found "retained students have increased risks of health-compromising behaviors such as emotional distress, cigarette use, alcohol use, drug abuse, driving while drinking, use of alcohol during sexual activity, early onset of sexual activity, suicidal intentions, and violent behaviors" (para. 12). This coincides with the data showing higher substance abuse by retained students compiled by the USDOE (2006).

Xia and Glennie (2005a) specifically examined two different areas of cost related to crime: cost to the taxpayers due to increased criminal justice costs for both juveniles and adults, and the costs from the crime victims' point of view. Xia and Glennie (2005a) cite costs from a study in Chicago which estimated that in 1998, $13,690 was spent per person for juveniles in the criminal justice system. (Reynolds, Temple, Robertson, & Mann, 2001; Xia & Glennie, 2005a). A study conducted in Washington, D.C. showed operating costs varying from $1,928 per juvenile for probation to $36,000 for residential treatment/rehabilitation based on 1995-1996 figures (Aos, Phipps, Barnoski, & Lieb,

2001). For adults, the costs were estimated to be $32,973 per person in the criminal justice system calculated by 1998 figures and included the cost of "arrest, judicial processing, and treatment" (Xia & Glennie, 2005a, p. 4). More recently, the Justice Policy Institute (2009) found states are spending about $5.7 billion annually to incarcerate nonviolent youth and are concerned not only about the cost of incarceration, but also the long-term impact economically on both these young people and society.

Overview of impact. As educators strive to meet the demands for increased accountability, both costs and benefits of retention are being examined. Although in regards to academics, retention may appear effective due to some progress being made the year retained, overall studies find retention has a negative impact on achievement (David, 2008; Jimerson, 2001). It is also evident retention has a negative effect on retainees socio-emotional (Anderson et al., 2002) and behavioral growth and development (Hong & Yu, 2008). In addition, retention impacts persistence to high school graduation and is personally expensive to retainees as well as school districts and taxpayers in general (Xia & Glennie, 2005a). Overwhelmingly, retention has not accomplished what it is often believed to do: help students who need to progress and catch up with peers, be successful in school, and lead productive adult lives (Anderson et al., 2002; Tanner & Combs, 1993).

At this point, educators may be wondering which choice to make in regards to helping struggling students succeed. "While most research points to retention's negative effects for students, there also has been research identifying some benefits" (Protheroe, 2007, p. 1). Brophy (2006) stated, "grade repetition represents inefficiency and wastage of resources for society, but its voluntary forms may be beneficial to students in certain

circumstances" (p. 3). Blazer (2008) found "retention may help some students more than others, but studies have not been able to accurately predict which retained children will benefit most from the experience" (p. 3). Based on these mixed findings, Alexander, Entwisle, and Kabbani (2000) suggested school systems come up with "'third way' alternatives to both grade retention and social promotion" (p. 18). Powell (2010) advised it is time to look at schooling from a different perspective and explore alternatives. These alternatives will require "teamwork, creativity, and ongoing education among all adults in a school community that work with children" (Davenport, Delgado, Meisels, & Moore, 1998, p. 2). Xia and Glennie (2005c) suggested the most important measure to be taken would be to close the gap between research and practice in our schools and offer alternatives to both retention and social promotion. Results could be both cost-effective and offer a means of success for our neediest students (Xia and Glennie, 2005c).

Alternatives

Along with the wide range of studies concerning retention, there are also a wide range of ideas on alternatives to retention. Davis et al. (2008) quotes a Houston teacher as asking, "Is there another alternative? Can't you intervene before retention, and can't you extend time periods so that you spend more time with these children? Does retention have to be your only option?" (p. 6). The following portion of literature review will attempt to give a synopsis of suggestions based on both historical recommendations from the late 1990s to current recommendations from the latest research. According to Fager and Richen (1999):

> It is encouraging to note that there are many alternatives to traditional practices of grade retention and promotion. None are as cut-and-dried as saying to a

> student "you pass" or "you fail." Instead, these alternatives require the ongoing commitment of educators, parents, and students. (p. 15)

Davenport et al. (1998) in a resource guide entitled *Rethinking Retention to Help All Students Succeed* outlined eight strategies to retention. These strategies include "basic school restructuring: Changing what happens in school between 9 a.m. and 3 p.m." (p. 4), "immediate intensive help for students who do not master critical skills and knowledge the first time" (p. 5), "high quality early childhood education" (p. 5), "effective reading instruction in all grades" (p. 7), "smaller learning communities that use effective educational practices" (p. 8), "family and community involvement focused on educational improvement" (p. 9), "connecting students with real futures" (p. 9), and "promotion with extra help" (p. 10). In 1999, the U.S. Department of Education published *Taking Responsibility for Ending Social Promotion: A Guide for Educators and State and Local Leaders*. This report recommended comprehensive approaches which included: "Taking Responsibility, Starting Early, Strengthening Learning Opportunities in the Classroom, Extending Learning Time, Helping Students Who Still Do Not Meet Standards, and Holding Schools Accountable for Performance and Helping Them Improve" (as quoted by Stauffer & Folks, 2006, p. B-1).

Denton's (2001) diagram illustrated keys to preventing failure. As seen in Figure 1, Denton (2001) proposed only extra time with key targeted interventions allows students to be successful and complete high school.

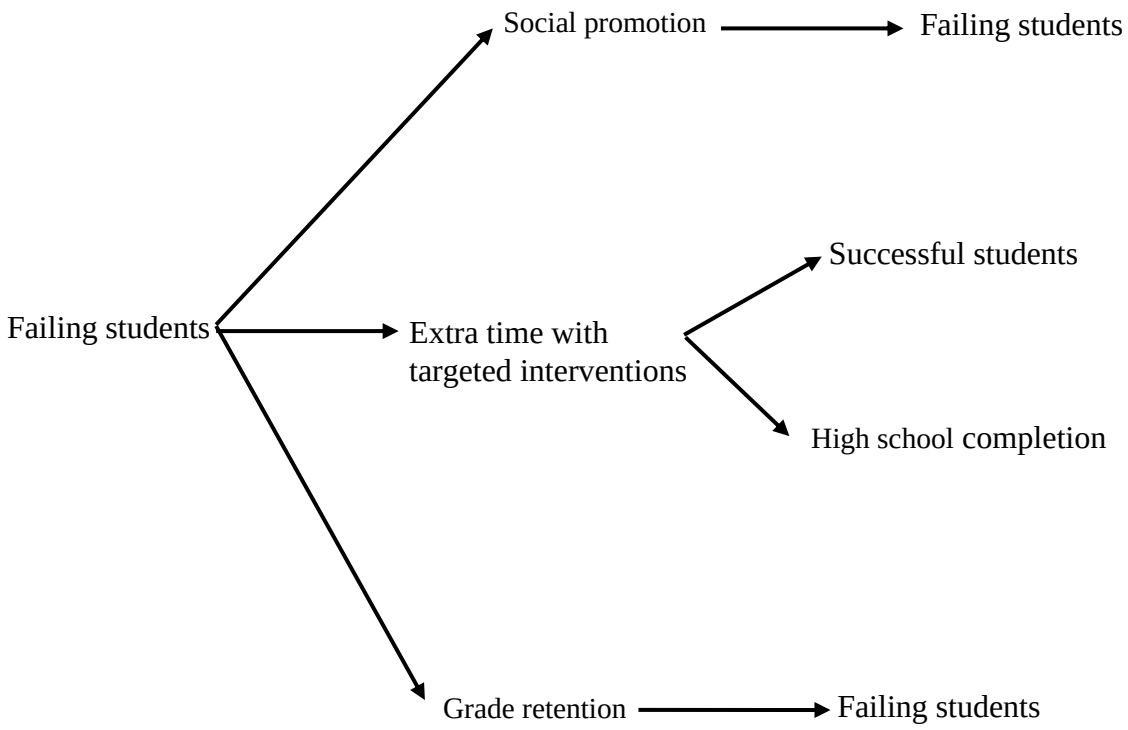


Figure 1. Keys to preventing failure (Denton, 2001, p. 6).

In 2003, the National Association of School Psychologists released a position statement on grade retention and listed more than a dozen alternative interventions to replace the need for both social promotion and retention (Penfield, 2010). In 2008, Davis et al. provided a list of specific interventions that would make a difference for failing students (see Table 1).

Table 1

Interventions for Failing Students

Intervention	Explanation
Teacher Quality	Teachers who have a wide range of skills and knowledge are better equipped to design more effective interventions for struggling students. This skill is critical both at elementary and secondary school levels.
Reading Specialists	Schools should employ reading specialist to specifically focus on reading needs of failing students.
Flexible Scheduling	Schools should allow for flexible scheduling opportunities which allow more time for learning and can be implemented as part of before or after school programs.
Summer School	Summer school is effective only if high quality, well-planned, and very focused on struggling students' needs.
High Expectations Early Identification Timely and Effective Instruction	All three of these strategies are necessary to have in place if schools wish to alleviate both social promotion and retention.
Standardized Tests	Along with identification of students' strengths and weaknesses, standardized tests results should be included in the consideration of retention.
Assessments	Assessments should occur early in the school year in order to effectively provide help to students.

Note. Synopsis of recommendations by Davis, Zimmerly, and Mudiwa (2008, p. 9).

Blazer (2008), as part of Research Services for the Miami-Dade County Public Schools in Florida, provided an extensive report on alternatives to retention including a review of research for each of the recommended alternatives. An overview of Blazer's review of alternative programs which could improve academic performance for struggling students and reduce the need for retention can be seen in Table 2. In addition to the strategies listed in this table, Blazer (2008) cited additional strategies for school districts to consider for secondary level students, provided ideas for alternative methods of assessment which would benefit students, and looked specifically at kindergarten students.

In regards to kindergarten, Blazer (2008) suggested providing pre-kindergarten or early childhood education to all children and look at providing transition classrooms for struggling students. Okpala (2007), in studying kindergarten specifically, recommended schools examine both "the distribution of quality elementary school kindergarten teachers" and "the allocation and distribution of professional development resources . . . on topics of retention and developmentally appropriate teaching" (p. 3).

Cannon and Lipscomb (2011) offered specific options mentioned by principals interviewed in their research. Principals specifically mentioned the following:

> Trained instructional aides to work with students in small groups on specific skills within classrooms; Designed intervention teachers to work with individuals or small groups of students, either within the regular classroom or in "pulled-out" sessions; Learning centers and resource specialist assistance for individuals and small groups of students; After-school tutoring and Saturday

classes led by trained school staff or volunteers; Summer school or intersession classes. (p. 15)

A concern raised by Peterson and Hughes (2011) is retained students did not receive the same educational services during the year of retention as their promoted peers. They suggested schools re-evaluate how they support struggling students. Jimerson et al. (2007) stated “when faced with a recommendation to retain a child, the real task is not to decide to retain or not to retain but, rather, to identify specific intervention strategies to enhance the cognitive and social development of the child and promote his or her learning and success at school” (p. 1).

Table 2
Possible Alternative Programs and Strategies to Reduce Incidence of Retention

Alternative	Researchers
Identify Learning Problems Early	Holmes, 2006; McMurrer, 2006; Jimerson et al., 2005; Picklo & Christenson, 2005; Denton, 2001; Johnson & Rudolph, 2001; Owings & Kaplan, 2001; Fager & Richen, 1999; McCollum, Cortez, Maroney, & Montes, 1999; U.S. Department of Education, 1999
Intensify Learning	Jimerson et al., 2005; National Association of School Psychologists, 2003; Denton, 2001; Owings & Kaplan, 2001; Davenport et al., 1998
Provide Students with Individualized Support Services	Jimerson, Pletcher, Graydon, Schnurr, Nickerson & Kundertl, 2006; Davenport et al., 1998
Create a Positive School Culture	Denton, 2001; Owings & Kaplan, 2001; Wheelock, 1998; Darling-Hammond, 1998; Cawelti, 1999; National Dropout Prevention Center, 2000; Banicky & Foss, 1999
Extended Learning Time	National Association of School Psychologists, 2003; Denton, 2001; Banicky & Foss, 1999; U.S. Department of Education, 1999; Westchester Institute for Human Services Research, 1999; Wheelock, 1998; McMurrer, 2006;
Summer School	Jimerson et al., 2006; Owings & Kaplan, 2001; Banicky & Foss, 1999; Kelly, 1999; U.S. Department of Education, 1999
After-School Programs	Jimerson et al., 2006; McMurrer, 2006; Denton, 2001; Owings & Kaplan, 2001; Phi Delta Kappa International, 2000; Banicky & Foss, 1999; Kelly, 1999; Robertson, 1997
Tutoring	Jimerson et al., 2005; National Association of School Psychologists, 2003; Johnson & Rudolph, 2001; Owings & Kaplan, 2001; Phi Delta Kappa International, 2000; Fager & Richen, 1999; Kelly, 1999; U.S. Department of Education, 1999; Robertson, 1997
Double-Dosing	McMurrer, 2006; Johnson & Rudolph, 2001
Year-Round Schooling	Owings & Kaplan, 2001; Banicky & Foss, 1999; U.S. Department of Education, 1999
Innovative Grouping Strategies	Owings & Kaplan, 2001; National Dropout Prevention Center, 2000; Banicky & Foss, 1999; McCollum et al., 1999; Westchester Institute for Human Services Research, 1999; Davenport et al., 1998
Looping	Owings & Kaplan, 2001; Reynolds et al., 1999; U.S. Department of Education, 1999
Multi-Age Classrooms	Jimerson et al., 2006; McMurrer, 2006; Johnson & Rudolph, 2001; Banicky & Foss, 1999; U.S. Department of Education, 1999; Robertson, 1997
Cooperative Learning Groups	Owings & Kaplan, 2001; U.S. Department of Education, 1999
Smaller Class Sizes	Banicky & Foss, 1999; U.S. Department of Education, 1999; Robertson, 1997
Smaller Learning Communities	Banicky & Foss, 1999; Fine & Somerville, 1998; Davenport et al. 1998, U.S. Department of Education, 1999

Note. Synopsis of research compiled by Blazer (2008, pp. 3-11).

Summary

Research regarding retention has been amassed over the past 30 years. Studies range from the use of retention as an intervention "to deal with 'underperforming' students since graded schooling began in the 1850s in the United States" (Kinlaw, 2005, p. 204) to the use of retention as the "logical alternative to social promotion" (Parker, 2001, para. 1). The amount of research regarding the prevalence and rationale for retention continues to grow along with the different areas of impact of retention. In the past 10 years, the research regarding retention has shifted to include a look into the costs and benefits of retention. Eide and Goldhaber (2005) "present broad estimates of what the benefits of grade retention would have to be in order to make it a cost-effective practice" (p. 195). According to Fager and Richen (1999), many alternatives are now available to educators and the goal of "prevention, not retention is the best answer of all" (p. 21). Denton (2001) asserted "the No. 1 job of every school is to help ALL children succeed" (p.19).

The methodology of the study, along with a description of how the data was collected, were detailed in Chapter Three. Descriptive information about the population, sample, and the instruments used to collect the data were discussed. Data analysis and ethical considerations of the study were also presented.

Chapter Four contains the data analysis for each of three areas of the methodological triangulation. Each of the research questions were analyzed according to the data using the Statistical Package for Social Sciences (SPSS Version 19.0 for Windows). Chapter Five summarized the study. The first section shared the findings along with the conclusions. The last portion, gave recommendations for further research and action steps which might be taken based on the findings.

Chapter Three: Methodology

As the number of retained students increases (NASP, 2003) and financial pressures put strain on already struggling public schools (Lieb, 2010), analyzing the relationship between these two issues is imperative. The purpose of this study was to analyze financial costs and academic benefits of retaining primary students in an urban district. A methodological triangulation was implemented by looking at costs and benefits from three different data sources and perspectives.

Academic growth in reading of these K-2 students during the year prior to retention and the year of retention was compared. The students' level of reading growth was determined by comparing their beginning of year (BOY) and end of year (EOY) reading scores during the year prior to retention and then again during the year retained. These two growth scores were then analyzed determining if significant growth occurred the second year in grade. Many studies of retention look at academic achievement differences between retained students and a control group of peers who were not retained in grade (George-Ezzelle & Song, 2007; Holmes, 2006; Jimerson, 2001). Other studies have looked at the long-range academic achievement outcomes to determine if benefits of retention are sustained over a period of several years (Blazer, 2008; Jimerson, 2001). This study is unique in that it analyzed what might be considered typical reading growth for each student during the year prior to retention and then compared that growth to the reading growth the following year, during the year retained for each student. This method helped establish a rate of learning for each student retained and determined if grade retention affected the rate of learning.

In addition to growth data, the fiscal cost of retention was calculated by using the Average Current Expenditures per Average Daily Attendance (ADA) listed on the District Report Card from the Missouri Department of Elementary and Secondary Education (MODESE) for the district studied and for the three years included in the study. Elementary principals were surveyed to determine their perceptions as to costs and benefits of retention in grades K-2. Grades K-2 were selected because these grade levels have the most retainees over the past three years in the district studied and also in national data. According to Ascher (1988), this coincides with Light's (1981) recommendation that retention take place when children are younger and the lower the grade level retained the more success.

Research Questions

The following research questions guided the study:

1. What was the academic growth in reading of K-2 retained students during the year prior to retention based on beginning of year (BOY) and end of year (EOY) data?

2. What was the academic growth in reading of K-2 retained students during the year of retention based on BOY and EOY data?

3. Is there a significant growth difference in students' reading between the year prior to retention and the year retained?

4. What is the relationship between students retained in kindergarten, first, or second grade and their academic growth results based on the following variables:

a. gender

b. ethnicity

c. socioeconomic status (SES)

d. School type (Title I and Non-title)

5. What are elementary principals' views regarding the benefits of retention, knowledge of retention, and how the decision for a student to be retained is decided?

6. What is the monetary cost of retention for a group of primary (K-2) students for years retained (2006-2009)?

Hypotheses

Null hypotheses. This is designated by the symbol $H_{o.}$

1. The amount of reading growth from the year prior to the retention to the year retained will remain statistically the same.

2. There is no statistically significant relationship between any one of the identified variables (gender, ethnicity, SES, and school type) and retained students' reading growth.

Alternative hypotheses. This is designated by the symbol H_1.

1. The amount of reading growth from the year prior to retention to the year retained will statistically differ.

2. There is a significant relationship between one or more of the identified variables (gender, ethnicity, SES, primary home language, and school type) and retained students' reading growth.

Population

Subjects for the study were taken from one urban Missouri public school district. Based on information gathered for the year 2009 from MODESE, this district consists of 36 elementary schools and is the largest fully accredited district in the state of Missouri. District students consistently score above state and national averages based on the Missouri Assessment Program (MAP) and American College Testing (ACT) composite scores. An overall 46.4% of students qualify for free or reduced (F/R) meals with the range at the elementary level being from a low of 21.5% to a high of 89.4% within one building. The ethnicity of both the city and the schools is predominately White (86.1%). Individuals living in the city having a high school degree or higher is 82% which closely aligns with the district's current graduation rate of 82.7%.

Sample

The participants in the study were 221 primary (K-2) students who have been retained during the 2006-2007, 2007-2008, or 2008-2009 school years. Kindergarten students participating in the study were administered the Emerging Literacy Survey (ELS). First and second grade students were assessed using the Developmental Reading Assessment (DRA). See Appendix B for Data Collection Chart information.

The study is a mixed-methods study and includes methodological triangulation through the use of data collection of academic scores in the area of reading, a perceptual survey administered to elementary principals, and financial cost calculations based on ADA reports from school district and state educational agencies. Thirty-four elementary principals in the district were surveyed to determine their perceptions regarding the benefits and costs related to retaining primary students. Data of students' scores on

reading assessments both during the year prior to retention and the year retained were collected and compared. Actual financial cost calculations for the same sample of students for the same time period were also calculated.

Instrument

The data collection instruments used in the study consisted of the ELS used in kindergarten to determine reading readiness and the DRA used in first and second grade to determine reading level. The ELS was used by the district with the permission of the author, Dr. John Pikulski (Pikulski & Taylor, 1996). The ELS criterion sheet has been included as Appendix A. The reliability and validity of the DRA is discussed in detail in the technical manual published in 2003 by Pearson Learning Group. The DRA was extensively field-tested to provide both reliability and validity for both retesting and scoring reliability (Pearson Learning Group, 2003).

The test data were collected and stored in a computerized district warehouse which is accessible to district staff at various levels. Data from this warehouse can be generated into a variety of reports based on school, grade levels, socioeconomic factors, individual students, or other query reports requested by warehouse user. Access to this data was granted once IRB approval from both the university and cooperating district was received.

Performance levels for the ELS for both BOY and EOY were proficient, nearing proficiency, progressing, and Step 1. However, these levels did not have the same meaning or level of proficiency for both the BOY and EOY testing. Due to this, a coding system was developed for this study based on the mastery of different subtests within the ELS assessment. Coding was determined by averaging the number of subsets that could

be mastered under each criterion. The original criteria mastery, along with the data coding, can be seen in Table 3.

Proficiency levels for the DRA were already established by the district the students attended. The proficiency levels were Below Basic, Basic, Proficient, and Advanced and were coded as 1, 2, 3, or 4. Table 4 shows the actual DRA reading level within each of these proficiency levels.

Table 3

Emerging Literacy Survey Criteria and Coding for BOY and EOY

	Step 1	Progressing	Nearing Proficiency	Proficient
BOY				
Criteria Mastery	0-1 subsets	2 subsets	3 subsets	4 or more subsets (up to 11)
Data Coding	0.5	2	3	7.5
EOY				
Criteria Mastery	0-2 subsets	3-6 subsets	7-8 subsets	9 or more
Data Coding	1	4.5	7.5	10

Table 4

DRA BOY and EOY Proficiency Levels

	Below Basic	Basic	Proficient	Advanced
First Grade BOY				
Criteria Level	Below 1	1-2	3	Above 3
Data Coding	1	2	3	4
First Grade EOY				
Criteria	1-10	12-14	16	18
Data Coding	1	2	3	4
Second Grade BOY				
Criteria Level	1-10	12-14	16	18
Data Coding	1	2	3	4
Second Grade EOY				
Criteria	20	24	28	30
Data Coding	1	2	3	4

Note. The criteria are district BOY and EOY proficiency levels which were revised February 2010.

Survey questions were framed to garner perceptions of principals surrounding both the benefits and costs of retaining students in their buildings. The survey consisted of four sections divided as follows: responses to statements regarding retention, factors considered when the decision to retain was made, open-ended questions regarding retention, and demographics of principals. See Appendix C for Principal Survey.

Data Collection

A proposal to conduct research was submitted to Lindenwood's Institutional Review Board and permission to conduct the study was received on May 20, 2011. (See Appendix D). The Institutional Review Board Disposition Report is included in Appendix E. In addition, the district in which the student data was collected required a request to conduct research. Once approval was received, the district data warehouse was accessed by district personnel, data was collected for the specific time periods and grade-level groups as listed in Appendix B, and emailed to the researcher through a secured server. A coding system for student demographics, shown in Table 5, was developed in order to input the data into the SPSS program.

Table 5

Data Coding for Student Demographics

Variable	Coding
Gender	Male=0 Female=1
Meal Status	Free=0 Reduced=1 Full pay=2
Ethnicity	White=1 Hispanic=2 Black=3 Asian/Pacific=4 Native American=5
School Type	Non-title=0 Title I=1

Surveys were administered to 34 principals present at a district meeting and all 34 principals completed and returned the survey the same day. All participants were notified participation in the survey was optional. The results of the survey were confidential and a coding system was designated to assure individual responses to the survey questions were anonymous.

The financial cost of retaining these 221 students was calculated based on the Average Current Expenditures per Average Daily Attendance (ADA) listed on the District Report Card from MODESE for each of the years students in the study were retained.

Data Analysis

Student achievement data were received in an Excel document from the participating district's data warehouse and transferred into IBM SPSS Statistics 19 program. Coding was designated in order for data analysis to be completed. Dependent sample t-tests were used to determine if there was a relationship between academic growth made in reading during the year prior to retention and growth made in reading during the year of retention. Paired t-tests were used to determine if there was a relationship between the different variables (gender, ethnicity, SES, and school type) and reading growth rate. A written description of the data findings are articulated in Chapter Four. Survey data were also coded and entered into SPSS for analysis. Frequency tables were created to show principal's responses.

Descriptive statistics.

Statistical landmarks. Statistical landmarks were used to show background for the study including mean, median, range, and standard deviation. (Olson & Olson, 2000.)

Inferential statistics.

t-test. Dependent samples t-tests were used to determine if there was significant growth on the ELS or DRA reading assessments during the year prior to retention and the year retained. A t-test was also used to determine if there was a significant growth difference between the two years researched. The alpha level for significance was $p=<\alpha .05$ and the alpha level for highly significant was $p=<\alpha .01$ (Freund and Perles, 2007). The null hypotheses will be rejected if alpha levels show a significant or highly significant *p*-value.

Ethical Considerations

A coding system was assigned to all students by the participating district ensuring all scores were confidential. Each principal was also assigned a numerical code to ensure anonymity and respect confidentiality. Permission was given by the school district for both test data to be used and for surveys to be administered to principals. Information will be kept in a secure location for three years and then destroyed.

Summary

Student test data were collected from years 2006-2007 to 2009-2010 for primary students who had been retained. Student test data were obtained from the district warehouse which consists of reliable and valid sources as identified through each testing company's research and analysis. Data were placed in the IBM SPSS Statistics 19 program for analysis. Variables were identified using the same data software to identify if correlation existed between retention and any specific variable(s). Surveys added relevance to the data by providing a human perspective and analysis of retention which

cannot always be accessed through core data. In addition, actual financial costs were calculated using Average Daily Attendance (ADA) amounts for each of the years studied. The end result is the ability to contrast the academic growth of students retained not only from the year prior to retention and the year retained, but also with the actual monetary cost of retention, and the added perspective of 34 elementary principals within the participating district.

Chapter Four contains data analysis for each of three areas of the methodological triangulation. Each of the research questions were analyzed according to the data using the Statistical Package for Social Sciences (SPSS Version 19.0 for Windows). Chapter Five summarized the study. The first portion shared the findings along with the conclusions. The last portion, gave recommendations for further research and action steps which might be taken based on the findings.

Chapter Four: Findings and Analysis of Data

The purpose of this study was to analyze costs and benefits of retaining primary (K-2) students. Academic growth among one cohort of primary (K-2) students from an urban school setting was examined. Specifically, the academic growth of students in reading the year prior to retention was compared to the academic growth in reading during the year of retention to determine if there was a significant academic growth difference. Many studies on retention compare retained students to promoted students to measure whether or not retention is effective, such as Jimerson (2001) and Lorence (2006). In comparison, this study examined the reading growth of retained students prior to the year of retention to establish a baseline for their expected growth. Growth was then compared to the reading growth during the year of retention to see if there was any significant difference. Reading growth for the year prior to retention was based on beginning of the year (BOY) and end of the year (EOY) reading scores and then compared reading growth the year retained using the same assessments BOY and EOY. The reading assessment tool for kindergarten students was the Emerging Literacy Survey (ELS) and in first grade, the Developmental Reading Assessment (DRA) was used. Only students who were administered the BOY and EOY assessment for both the year prior and the year retained were included in the data results.

The financial cost of retaining students for one year in an urban district was calculated based on the Average Current Expenditures per Average Daily Attendance (ADA) listed on the District Report Card from the Missouri Department of Elementary and Secondary Education (MODESE) for each year students were retained. Elementary

principals were surveyed to gain their perspective on the costs and benefits of retention in grades K-2.

Grades K-2 were intentionally selected because this grade configuration has had the most retainees over the past three years in the district studied. The study sought to identify retention trends for this urban district in regards to gender, ethnicity, social economic status, and school type (Title 1 and non-title) and determine if any of these demographic groups showed significant growth in reading scores from year prior to retention to the year retained.

Research Questions

The following research questions were asked to provide information regarding retention:

1. What was the academic growth in reading of K-2 retained students during the year prior to retention based on beginning of year (BOY) and end of year (EOY) data?

2. What was the academic growth in reading of K-2 retained students during the year of retention based on BOY and EOY data?

3. Is there a significant growth difference in students' reading between the year prior to retention and the year retained?

4. What is the relationship between students retained in kindergarten, first, or second grade and academic growth results based on the following variables:

a. gender

b. ethnicity

c. socio-economic status (SES)

d. school type (Title I or Non-title)

5. What are viewed as costs and benefits of retention to elementary principals?

6. What is the monetary cost of retention for this cohort of K-2 retained students for the years retained (2006-2009)?

Descriptive Statistics

The participants in the quantitative portion of the study were 221 primary (K-2) students who were retained during the 2006-2007, 2007-2008, or 2008-2009 school years. Demographic variables for all 221 students are shown in Table 6. A majority of the retained students were kindergarten (66.1%) and White (81.4%). A majority of students were boys (62.4%), receiving free meals (59.7%) and attending Title I schools (61.5%).

This data coincides with several components of historical research. Harvey (1994) found that average students retained in kindergarten and first grade were socio-economically disadvantaged, White, male, and attended a rural school. However, Harvey (1994) did not distinguish between Title I and Non-title students. Thompson and Cunningham (2000) identified common characteristics of retained students as male and of socioeconomically disadvantaged. Studies supporting a greater number of retained students from Title I schools include Parker (2001) which identified children living in poverty and U.S. Department of Education's Indicator 25 (2006) which found low socioeconomic status to be common characteristic of retained students. In addition, Reynolds and Temple (1997) cited poor test performance as a characteristic of retained students, supporting the focus of this study on reading growth and achievement.

Table 6

Demographic Variables for Retained Students All Three Years of Study

Item	Frequency	Valid Percent
Grade		
Kindergarten	146	66.1
First Grade	51	23.1
Second Grade	24	10.9
Gender		
Female	83	37.6
Male	138	62.4
Ethnicity		
White	180	81.4
Black	24	10.9
Hispanic	13	5.9
Asian/Island Pacific	4	1.8
Native American	0	.0
Socioeconomic Status (SES)		
Free Meals	132	59.7
Reduced Meals	16	7.2
Full-pay Meals	73	33.0
School Type		
Title I	136	61.5
Non-title	85	38.5

The participants in the second portion of the study were 34 elementary principals in the same urban district. Surveys were administered during a district meeting with a 100% return rate. Demographic information was gathered on the following variables: gender, years of administrative experience, age, and highest degree earned. Table 7 provides the demographic variable results for the elementary principals.

A majority of the elementary principals were female (70.6%). The majority of principals were in the median age ranges of 30-50 years of age (70.6%). The highest degree was distributed among the specialist degree (41.2%), while those with masters (32.4%) and those with doctorates (26.5%) were similar in numbers. The majority of principals had 10 or less years of administrative experience (67.6%). These demographics have not changed significantly from Range's similar study of 2009. At the time 69.2% of the principals were female, 69.2 were within the 30-50 age group and 46.2% held a specialist degree (Range, 2009).

Table 7

Elementary Principal Demographics

Item	Frequency	Valid Percent
Gender		
Male	10	29.4
Female	24	70.6
Years of Experience		
0-5 years	10	29.4
6-10 years	13	38.2
11-15 years	7	20.6
16-20 years	3	8.8
20 or more years	1	2.9
Age Group		
20-29	2	5.9
30-39	9	26.5
40-49	15	44.1
50-59	8	23.5
60 and older	0	0.0
Highest Degree		
Masters	11	32.4
Specialist	14	41.2
Doctorate	9	26.5

Inferential Statistics

Quantitative data were coded and analyzed using IBM's Statistical Package for the Social Sciences (SPSS) version 19.0. Means and standard deviations were calculated for all student data. Frequencies and percentages were calculated for both demographics and survey statements. Survey questions were coded and categorized into themes.

Table 8 displays the academic growth in reading of K-2 students during the year prior to retention based on the BOY and EOY data. Growth was calculated using SPSS along with data collected from the participating school district's data warehouse. The data collection instrument used in this portion of the study consisted of the Emerging Literacy Survey (ELS) used in kindergarten and the Development Reading Assessment (DRA) used in first and second grade. Data entered and analyzed for kindergarten were the BOY and EOY ELS results. Data entered and analyzed for first and second grade were the BOY and EOY DRA results. These means were used to establish a baseline of reading growth for the retained students the year prior to retention. These means were then compared to the reading growth means during the year of retention to examine for any significant differences.

Dependent samples t-tests were utilized to determine growth in reading for the year prior to retention and the year of retention in same grade. Paired sample t-tests were used to determine if there was a significant growth difference between the two years. The alpha level for significance was: $\rho = <.05$ and for high significance was $\rho = <.01$ (Freund & Perles, 2007). If the results of the paired sample t-tests resulted in either a significant or highly significant *p*-value, the null hypotheses was rejected. The number of valid pairs varied from the original sample due to an absence of one or more of the BOY

or EOY reading scores for individual students. No results were obtained for second grade due to the lack of valid pairs of reported data. Not enough second grade students had BOY and EOY scores for both the year prior to retention and the year retained. For this reason, subsequent findings were limited to kindergarten and first grade data.

Table 8 reveals the average reading growth for kindergarten and first grade students the year prior to retention. To calculate growth, a 10 point coding scale was developed for the ELS for the three years studied. This coding system is outlined and explained in Chapter Three. Both kindergarten and first grade students showed growth in reading during this year, although first grade students progressed at a much slower rate. Each of these grade level's results are broken down in Figures 2 and 3.

Table 8

Academic Growth in Reading Prior to Retention

Item	Mean	SD	n
Kindergarten (ELS)			
2006-2007 school year	2.4268	2.54598	41
2007-2008 school year	1.7692	1.80128	26
2008-2009 school year	2.3871	2.89744	31
First Grade (DRA)			
2006-2007 school year	.7500	.77460	16
2007-2008 school year	.3333	.65134	12
2008-2009 school year	.0667	.96115	15

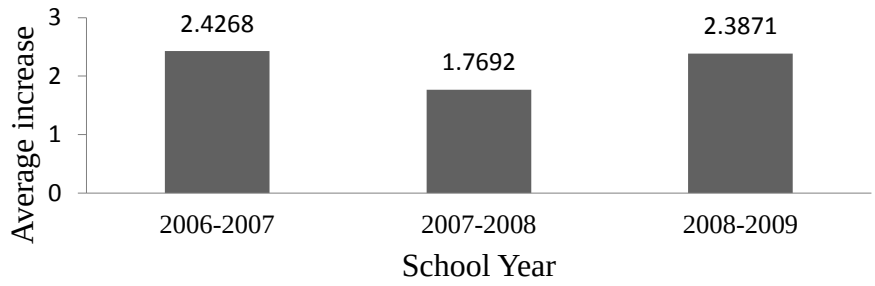


Figure 2. Average reading growth for kindergarten students year prior to retention based on ELS BOY and EOY results

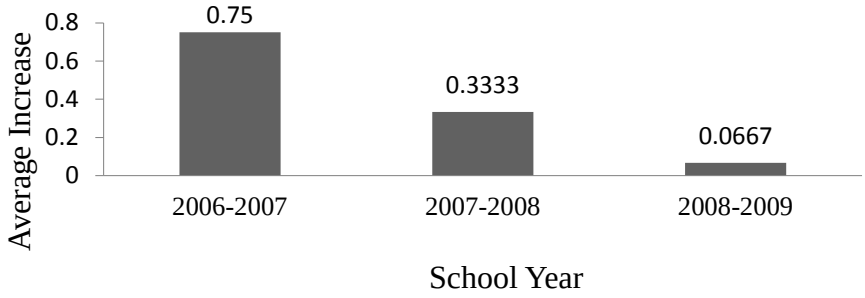


Figure 3. Average reading growth for first grade students year prior to retention based on DRA BOY and EOY results

Table 9 displays academic growth in reading of K-1 students during the year retained using the same criteria of BOY and EOY scores on both the ELS and DRA for the same group of students as the previous year. All kindergarten students made positive gains in reading during the year of retention, while first grade retainees showed no positive gains, but actually exhibited negative growth.

Table 9

Academic Growth in Reading Year of Retention

Item	Mean	SD	n
Kindergarten (ELS)			
2007-2008 school year	5.1220	2.89349	41
2008-2009 school year	5.6346	3.14184	26
2009-2010 school year	5.5000	3.05232	31
First Grade (DRA)			
2007-2008 school year	-.4375	.81394	16
2008-2009 school year	-.5000	.67420	12
2009-2010 school year	-.4667	.91548	15

The average increase in student scores during the year retained on a 10 point scale on the Emerging Literacy Survey for the three school years can be seen in Figure 4. These findings align with those of Burkam et al. (2007) which found "in the second year of kindergarten, retained children show stronger reading and mathematics skills compared to similar-ability peers who are promoted" (p. 108). Dong's (2009) research also showed retention in kindergarten as having positive impact on later performance versus if the students had been promoted.

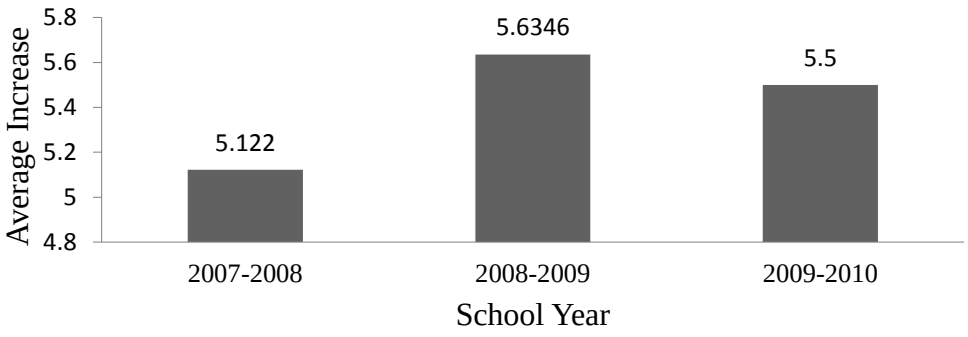


Figure 4. Average reading growth for kindergarten students during year of retention

As noted previously, all three years of first grade student sample showed negative reading growth based on DRA BOY and EOY scores. These findings align with those of Bhattacharya (2007) which showed that "retention does not add any value in terms of improved. . . reading test scores for the repeaters" (p. 15). Thompson and Cunningham (2000) found students retained in first grade were negatively impacted both academically and emotionally. The negative reading growth for first graders during the year of retention can be seen in Figure 5.

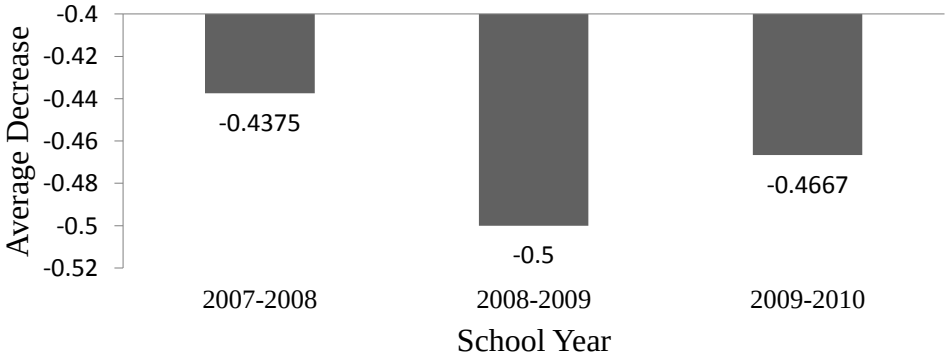


Figure 5. Average reading growth for first grade students during year of retention

The SPSS program was then used to conduct paired t-tests to determine if there was a significant growth difference in students' reading between the year prior to retention and the year retained. The growth scores from both the year prior to retention and the year retained were to determine if significant growth occurred the second year in grade. Many studies of retention look at academic achievement differences between retained students and a control group of peers who were not retained in grade (George-Ezzelle & Song, 2007; Holmes, 2006; Jimerson, 2001). Other studies have looked at the long-range academic achievement outcomes to see if benefits of retention are sustained over a period of several years (Blazer, 2008; Jimerson, 2001). This study is unique in that it analyzed typical reading growth for each student during the year prior to retention and then compared that growth to the reading growth the following year, during the year retained for each student. This method helped establish a rate of learning for each student retained and determined if grade retention affected the rate of learning. The confidence interval of the difference was 95%. Statistical significance was set at $\rho = < .05$. Statistical high significance was set at $\rho = < .01$. Table 10 shows the paired sample statistics for students at each grade level.

Table 10

Reading Growth Difference from Year Prior to Retention to Year Retained

Growth Difference	Mean	SD	Sig.
Kindergarten			
2006-2007 and 2007-2008	-2.69512	4.37590	.000
2007-2008 and 2008-2009	-3.86538	3.19549	.000
2008-2009 and 2009-2010	-3.11290	3.67131	.000
First Grade			
2006-2007 and 2007-2008	1.18750	.98107	.000
2007-2008 and 2008-2009	.83333	1.02986	.017
2008-2009 and 2009-2010	.53333	1.35576	.150

Note: When paired t-tests were ran, negative differences occurred when the means from the second year were subtracted from the first year.

The increase in reading growth for kindergarten students was highly significant for all of the three years retained. The negative reading growth for first grade students was highly significant (.000) for the years 2006-2007 and 2007-2008. There was also significant negative growth (.017) from 2007-2008 and 2008-2009.

The relationship between retained students reading growth from the year prior to retention and the year retained was analyzed through the following demographic variables: gender, ethnicity, SES, and school type to determine if any subgroups academically benefited more or less from retention than others. Tables 11-20 show paired sample statistics for kindergarten demographic variables. Overall data analysis showed both kindergarten boys and girls exhibited reading growth. White students who qualified for free meals at Title 1 sites had the greatest average gains. Both kindergarten boys and

girls for all three years studied showed either significant or highly significant growth in reading. With the significance ranging from boys in school year 2007-2008 (.001) to boys in school year 2008-2009 (.000).

Table 11

Kindergarten Reading Growth Comparisons by Gender

Year	Boys(n)	Mean	Sig.	Girls(n)	Mean	Sig.
2006-2007 YP	26	2.4808		15	2.3333	
2007-2008 YR	26	5.2115	.011*	15	4.9667	.005**
2007-2008 YP	20	1.9750		6	1.0833	
2008-2009 YR	20	5.3500	.00**	6	6.5833	.003**
2008-2009 YP	22	2.7045		9	1.6111	
2009-2010 YR	22	5.6136	.003**	9	5.2222	.004**

Note. YP = year prior to retention. YR = year retained. *ρ=<.05. **ρ=<.01

White kindergarten students showed highly significant reading growth all three years whereas, Black kindergarten students showed highly significant growth only the first year of the study and the following two years could not be computed because there were no valid pairs. No students had BOY and EOY scores for both years studied. Hispanic kindergarten students showed no significant reading growth the first two years studied and did not have enough valid pairs for data to be calculated for the third year. The case weights for the Asian/Pacific Kindergarten students were not high enough (less than or equal to 1) to be calculated the last two years of the study and no valid pairs were found for year one.

Table 12

Kindergarten Reading Growth by Ethnicity (White)

	2006-2007 YP	2007-2008 YR	2007-2008 YP	2008-2009 YR	2008-2009 YP	2009-2010 YR
White (n)	31	31	22	22	30	30
Mean	2.2742	5.3065	1.8409	5.4091	2.3333	5.3667
Sig.	.001**		.009**		.000**	

Note: ** $\rho =< .01$ indicates highly significant correlation.

Table 13

Kindergarten Reading Growth by Ethnicity (Black)

	2006-2007 YP	2007-2008 YR	2007-2008 YP	2008-2009 YR	2008-2009 YP	2009-2010 YR
Black (n)	7	7	0[a]	0[a]	0[a]	0[a]
Mean	2.0000	4.6429				
Sig.	.009**		0[a]		0[a]	

Note: [a] no growth correlation could be calculated because there were no valid pairs. ** $\rho =< .01$ indicates highly significant correlation.

Table 14

Kindergarten Reading Growth by Ethnicity (Hispanic)

	2006-2007 YP	2007-2008 YR	2007-2008 YP	2008-2009 YR	2008-2009 YP	2009-2010 YR
Hispanic (n)	3	3	3	3	1[b]	1[b]
Mean	5.0000	4.3333	1.6667	6.000	4.000	9.5000
Sig.	.814				0[b]	

Note: [a] no growth correlation could be calculated because there were no valid pairs. $**\rho \leq .01$ indicates highly significant correlation. [b]growth correlation cannot be calculated because the sum of the case weights is less than or equal to 1.

Table 15

Kindergarten Reading Growth by Ethnicity (Asian/Pacific)

	2006-2007 YP	2007-2008 YR	2007-2008 YP	2008-2009 YR	2008-2009 YP	2009-2010 YR
Asian/Pacific (n)	0[a]	0[a]	1[b]	1[b]	0[a]	0[a]
Mean	0[a]	0[a]	.5000	9.5000	0[a]	0[a]
Sig.	0[a]		0[b]		0[a]	

Note: [a] no growth correlation could be calculated because there were no valid pairs. [b]growth correlation cannot be calculated because the sum of the case weights is less than or equal to 1.

Kindergarten students receiving free meals showed highly significant reading growth for all three years of the study. Kindergarteners on reduced meals showed no significant growth for two years and for the school years 2007-2008 and 2008-2009 the case weights were less than or equal to 1. Kindergarteners on full pay meals did not show

significant growth the first and last year, but did show highly significant growth the second year.

Table 16

Kindergarten Reading Growth by SES (Free Meals)

	2006-2007 YP	2007-2008 YR	2007-2008 YP	2008-2009 YR	2008-2009 YP	2009-2010 YR
Free Lunch (n)	22	22	16	16	20	20
Mean	1.8864	5.2045	1.1563	4.5938	2.4750	5.1250
Sig.	.001**		.001**		.001**	

Note: $**\rho=<.01$ indicates highly significant correlation in reading growth.

Table 17

Kindergarten Reading Growth by SES (Reduced Meals)

	2006-2007 YP	2007-2008 YR	2007-2008 YP	2008-2009 YR	2008-2009 YP	2009-2010 YR
Reduced Lunch (n)	3	3	1[a]	1[a]	3	3
Mean	5.000	4.8333	4.000	8.000	.5000	4.5000
Sig.	.952		1[a]		..094	

Note: [a]no growth could be calculated because the sum of the case weights is less than or equal to l.

Table 18

Kindergarten Reading Growth by SES (Full Pay Meals)

	2006-2007 YP	2007-2008 YR	2007-2008 YP	2008-2009 YR	2008-2009 YP	2009-2010 YR
Full Pay (n)	16	16	9	9	8	8
Mean	2.6875	5.0635	2.6111	7.2222	2.8750	6.8125
Sig.	.074		.001**		.076	

Note: ** $\rho =< .01$ indicates highly significant correlation in reading growth.

For two of the three years studied, both Title I and Non-title kindergarten students showed either significant or highly significant reading growth. The only sub group that did not show reading growth were the kindergarten students retained in Non-title schools during the 2007-2008 school year. Tables 19 and 20 show results by school type.

Table 19

Kindergarten Reading Growth by School Type (Title I)

	2006-2007 YP	2007-2008 YR	2007-2008 YP	2008-2009 YR	2008-2009 YP	2009-2010 YR
Title 1 (n)	25	25	14	14	16	16
Mean	2.0200	5.2000	1.0000	4.2857	2.5313	5.8750
Sig.	.000**		.004**		.002**	

Note: ** $\rho =< .01$ indicates highly significant correlation in reading growth.

Table 20

Kindergarten Reading Growth by School Type (Non-title)

	2006-2007 YP	2007-2008 YR	2007-2008 YP	2008-2009 YR	2008-2009 YP	2009-2010 YR
Non-Title (n)	16	16	12	12	15	15
Mean	3.0625	5.0000	2.6667	7.2083	2.2333	5.1000
Sig.	.177		.000**		.012*	

Note: $**\rho=<.01$ indicates highly significant correlation in reading growth. $*\rho=<.05$ indicates a significant correlation in reading growth.

Although first grade boys and girls had negative reading growth the year of retention the data shows that only one year in particular showed highly significant negative growth (.006). This was for first grade boys for the school year 2007-2008. First grade girls showed no growth difference at all for the 2009-2010 school year. Tables 21-30 show the paired sample statistics for first grade demographic variables. The confidence interval of the difference was 95%. Statistical significance was set at $\rho = <.05.$ Statistical high significance was set at $\rho =<.01.$

Table 21

First Grade Reading Growth Comparisons by Gender

Year	Boys (n)	Average Growth Mean	Sig.	Girls (n)	Average Growth (Mean)	Sig.
2006-2007 YP	11	.6364		5	1.000	
2007-2008 YR	11	-.4545	.006**	5	-.4000	.025
2007-2008 YP	6	.5000		6	.1667[a]	
2008-2009 YR	6	-.1667	.328	6	-.8333[a]	[a]
2008-2009 YP	8	.5000		7	-.4286	
2009-2010 YR	8	-.5000	.104	7	-.4286	1.000*

Note. *no growth difference. **highly significant negative growth. [a]correlation and t cannot be computed because the standard error of the difference is 0. YP = year prior; YR = year retained.

All first grade students showed either no growth or negative academic growth the year retained, but white students in particular showed a highly significant negative growth in the first two sets of years compared and no growth at all the third year.

Table 22

First Grade Reading Growth by Ethnicity (White)

	2006-2007 YP	2007-2008 YR	2007-2008 YP	2008-2009 YR	2008-2009 YP	2009-2010 YR
White (n)	14	14	6	6	8	8
Mean	.7143	-.3571	.6667	-.6667	-.3750	-.3750
Sig.	.001**		.001**		1.000*	

Note: *indicates no growth difference. **$\rho=<.01$ indicates highly significant negative correlation.

Table 23

First Grade Reading Growth by Ethnicity (Black)

	2006-2007 YP	2007-2008 YR	2007-2008 YP	2008-2009 YR	2008-2009 YP	2009-2010 YR
Black (n)	1[a]	1[a]	2	2	2	2
Mean	1.0000	-1.0000	.0000[b]	-1.0000[b]	1.0000	.0000
Sig.		--[a]		--[b]		.500

Note: [a]indicates reading growth could not be calculated because the sum of the case weights is less than or equal to 1. [b]reading growth could not be calculated because the standard error of the difference is 0.

Table 24

First Grade Reading Growth by Ethnicity (Hispanic)

	2006-2007 YP	2007-2008 YR	2007-2008 YP	2008-2009 YR	2008-2009 YP	2009-2010 YR
Hispanic (n)	1[a]	1[a]	2	2	5	5
Mean	1.0000	-1.0000	-.5000	.0000	.5000	-1.000
Sig.		--[a]		.795		.215

Note: [a]indicates reading growth could not be calculated because the sum of the case weights is less than or equal to 1.

Table 25

First Grade Reading Growth by Ethnicity (Asian/Pacific)

	2006-2007 YP	2007-2008 YR	2007-2008 YP	2008-2009 YR	2008-2009 YP	2009-2010 YR
Asian/Pacific(n)	0	0	2	2	1[a]	1[a]
Mean			.5000	.0000	.0000	.0000
Sig.	no valid pairs		.500		--[a]	

Note: [a]indicates reading growth could not be calculated because the sum of the case weights is less than or equal to 1.

All first grade students showed either no growth or negative growth in all SES areas for the year retained. First grade students who received free meals and were retained during 2007-2008 showed a highly significant (.001) negative gain in reading growth. Although they did continue to decrease in reading growth, the data were not significant for the following two years. The number of students on reduced meals was not large enough to compute any of the years and there was no significant growth increase or decrease for students on full pay meals.

Table 26

First Grade Reading Growth by SES (Free Meals)

	2006-2007 YP	2007-2008 YR	2007-2008 YP	2008-2009 YR	2008-2009 YP	2009-2010 YR
Free Lunch (n)	10	10	9	9	11	11
Mean	1.0000	-.4000	.2222	-.3333	.2727	-.3636
Sig.	.001**		.139		.172	

Note: $**\rho=<.01$ indicates highly significant correlation in reading growth.

Table 27

First Grade Reading Growth by SES (Reduced Meals)

	2006-2007 YP	2007-2008 YR	2007-2008 YP	2008-2009 YR	2008-2009 YP	2009-2010 YR
Reduced Lunch (n)	1[a]	1[a]	1[a]	1[a]	1[a]	1[a]
Mean	.0000	-1.0000	1.0000	-1.0000	-1.000	.0000
Sig.	--[a]		--[a]		--[a]	

Note: [a]no growth could be calculated because the sum of the case weights is less than or equal to l.

Table 28

First Grade Reading Growth by SES (Full Pay Meals)

	2006-2007 YP	2007-2008 YR	2007-2008 YP	2008-2009 YR	2008-2009 YP	2009-2010 YR
Full Pay (n)	5	5	2	2	3	3
Mean	.4000	-.4000	.5000	-1.0000	.3333	-1.000
Sig.	.242		.205		.423	

When looking at reading growth at Title I vs. Non-title students, the results were mixed. One year of Title 1 students (school year 2007-2008) showed highly significant (.000) negative academic growth while one year of Non-title students (school year 2008-2009) showed significant (.034) negative growth. Other years no significance was found.

Table 29

First Grade Reading Growth by School Type (Title I)

	2006-2007 YP	2007-2008 YR	2007-2008 YP	2008-2009 YR	2008-2009 YP	2009-2010 YR
Title 1 (n)	12	12	7	7	10	10
Mean	.8333	-.4167	.4286	-.2857	.4000	-.5000
Sig.	.000**		.182		.054	

Note: $**\rho=<.01$ indicates highly significant correlation in reading growth.

Table 30

First Grade Reading Growth by School Type (Non-title)

	2006-2007 YP	2007-2008 YR	2007-2008 YP	2008-2009 YR	2008-2009 YP	2009-2010 YR
Non-Title (n)	4	4	5	5	5	5
Mean	.5000	-.5000	.2000	-.8000	-.6000	-.4000
Sig.	.252		.034*		.749	

Note: $*\rho = <.05$ indicates a significant correlation in reading growth.

Overall first grade students showed negative reading growth the year retained. The groups showing the highest negative growth included: boys in school year 2007-2008, White students, students on free meals for the 2007-2008 school year, and those in a Title I school during the 2007-2008 school year.

Survey Results

Thirty-four elementary principals were administered a paper survey during a district meeting. The cover letter explained the survey was optional and all information would be confidential. The purpose of the study was discussed and a participant handed out and gathered all surveys. All 34 principals completed and returned the surveys during that time. The survey consisted of four sections.

The first section asked participants to respond to statements regarding retention. Figures 6 and 7 show overall response data. Responses ranged from 1-strongly disagree to 5-strongly agree. These statements were created based on rationale for retention gained from studies by Bhattacharya (2007), Range et al. (2009), Tanner and Combs (1993), and Xia and Glennie (2005b). Responses are given in percentage of participants responding to each possible response. The five statements which showed the strongest agreement, indicated by principals marking either agree or strongly agree are shown in Figure 6. The five statements which showed the strongest disagreement, indicated by the principals marking either disagree or strongly disagree are shown in Figure 7.

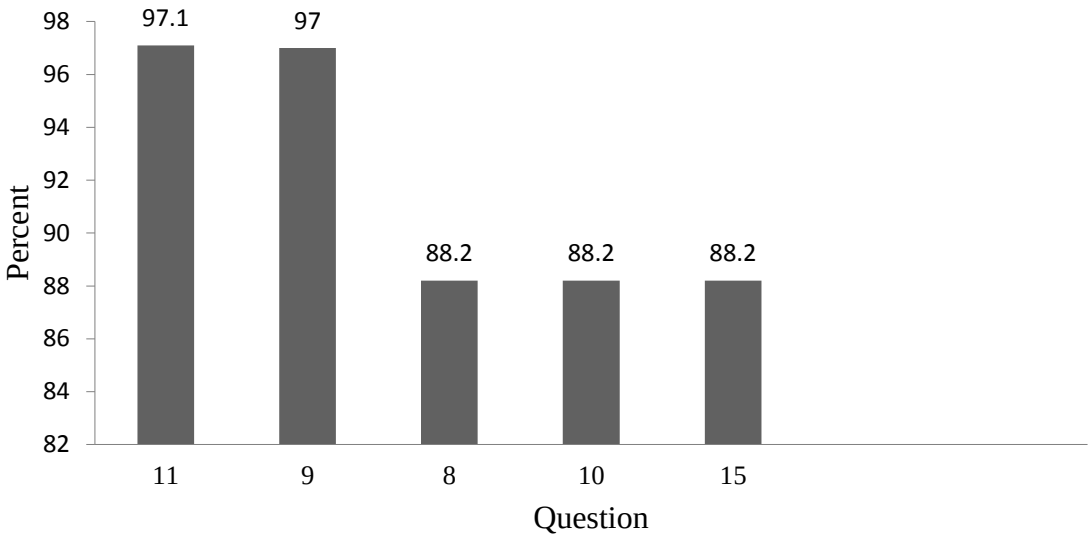


Figure 6. Survey statements with largest percentage of principal agreement. 11 = I have seen students who have shown no significant benefits from retention; 9 = Retention should be done sparingly, if ever; 8 = Retention is done to increase academic achievement; 10 = I have seen students who have benefited from being retained; 15 = I would best describe my school's retention practice as a site-based team decision.

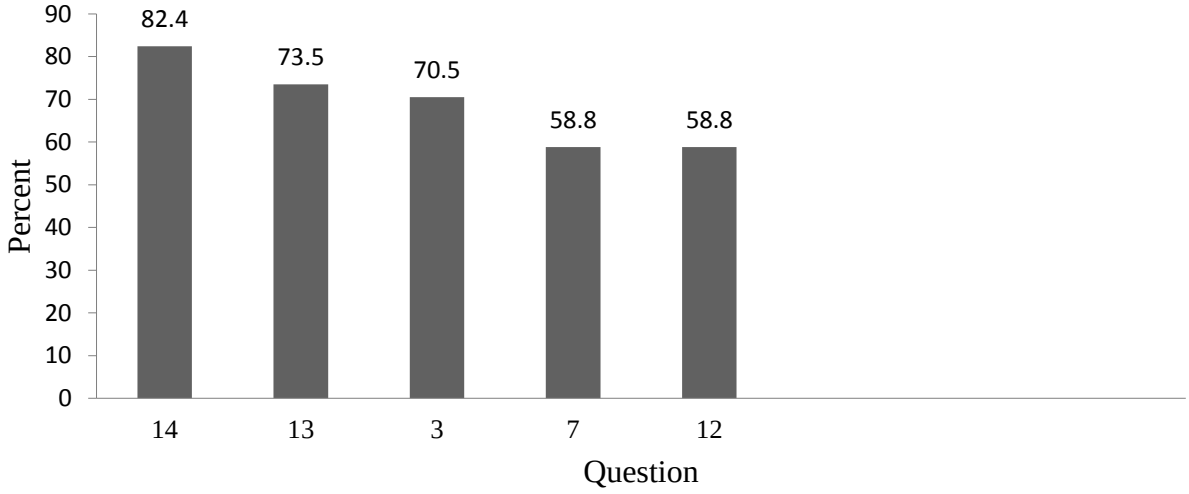


Figure 7. Survey statements with largest percentage of principal disagreement. 14 = I would best describe my school's retention practice as an individual teacher decision; 13 = I feel I have adequate research on the results of retention; 3 = Retention is an intervention prior to special education services; 7 = Retention is done mainly to comply with state and national requirements; 12 = I feel I have been provided with adequate guidelines regarding when to retain a student

Figures 8 to 23 show the principals' responses to the all the individual statements regarding retention to show range of response in regards to agreement and disagreement.

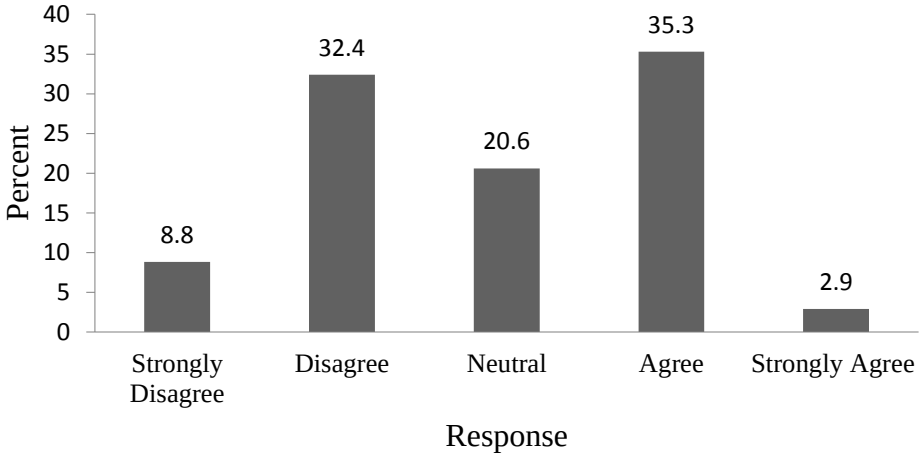


Figure 8. Survey Statement 1: Retention has few, if any, benefits.

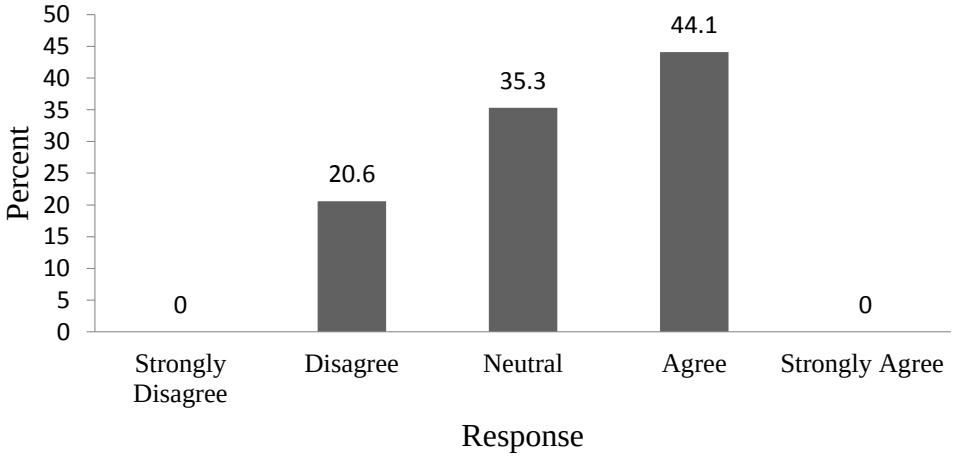


Figure 9. Survey Statement 2: Retention is beneficial to reduce skill variance between students.

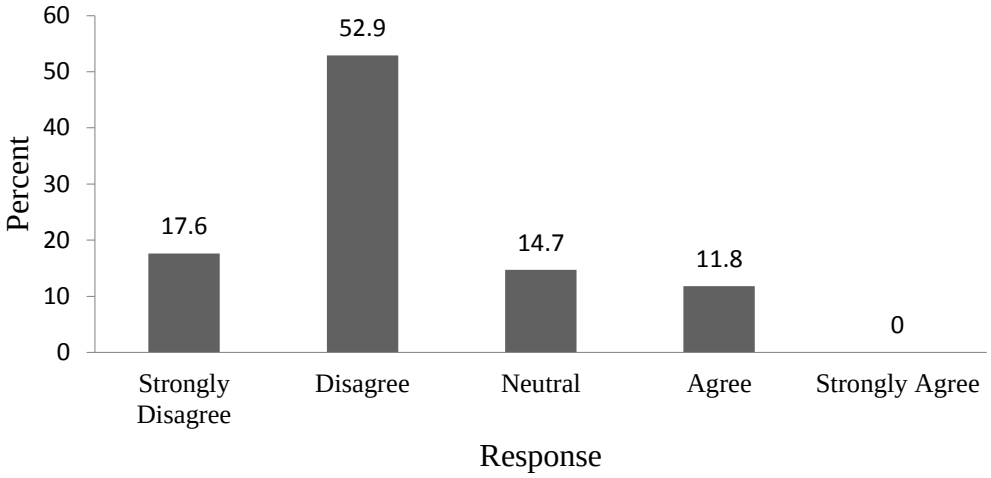


Figure 10. Survey Statement 3: Retention is an intervention prior to special education services. One participant did not respond to this statement.

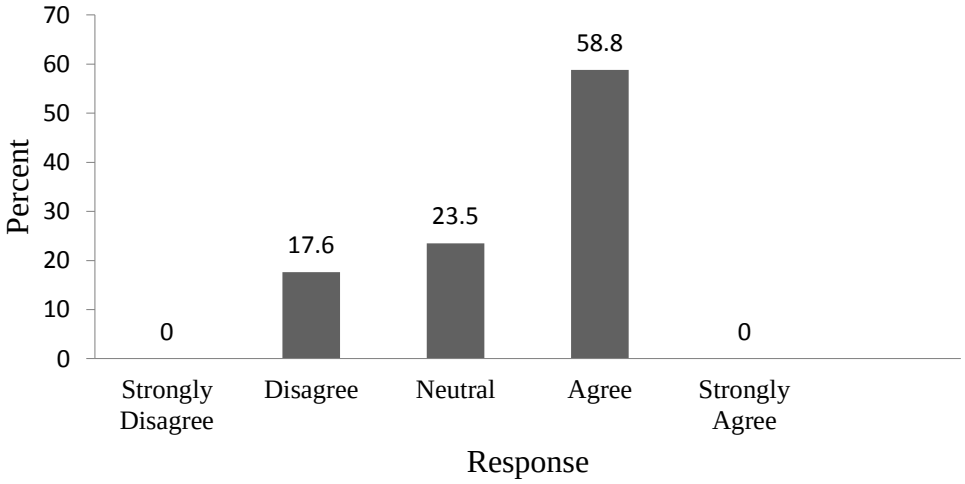


Figure 11. Survey Statement 4: Retention is a gift of time which allows students to develop readiness.

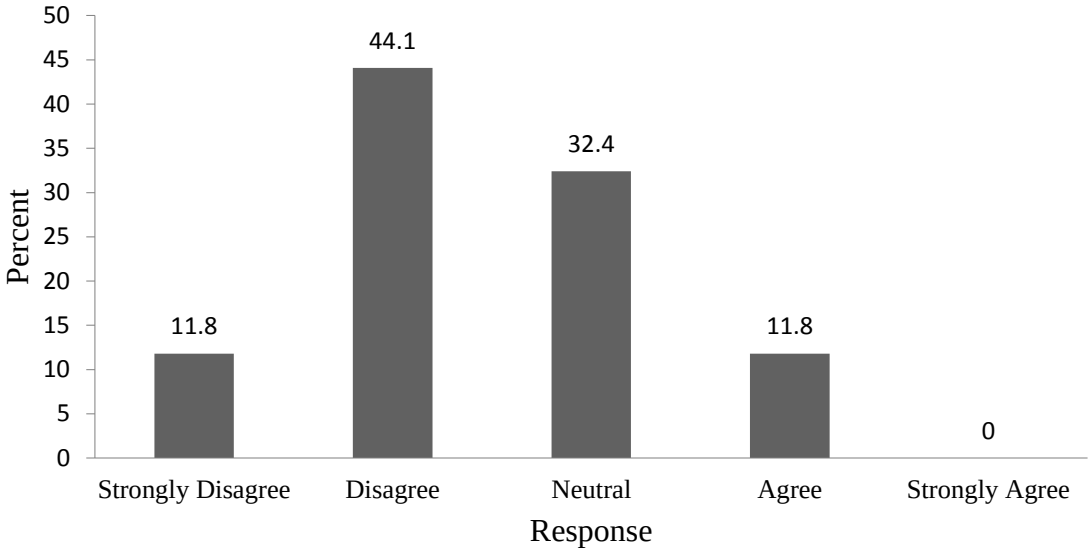


Figure 12. Survey Statement 5: Retention allows an opportunity for children to increase self-esteem.

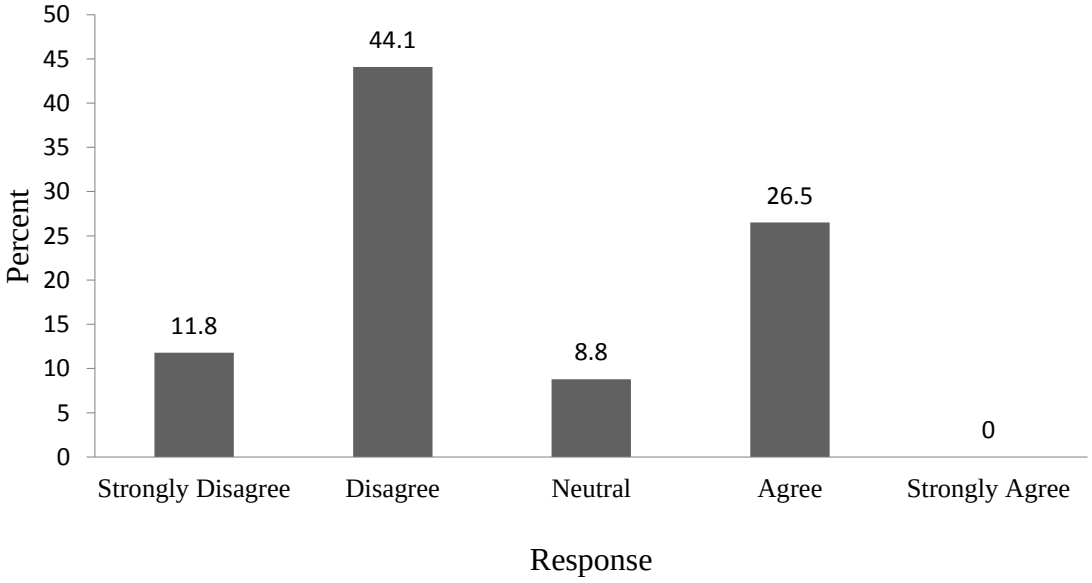


Figure 13. Survey Statement 6: Retention is a means of ending social promotion. Three participants did not respond to this statement.

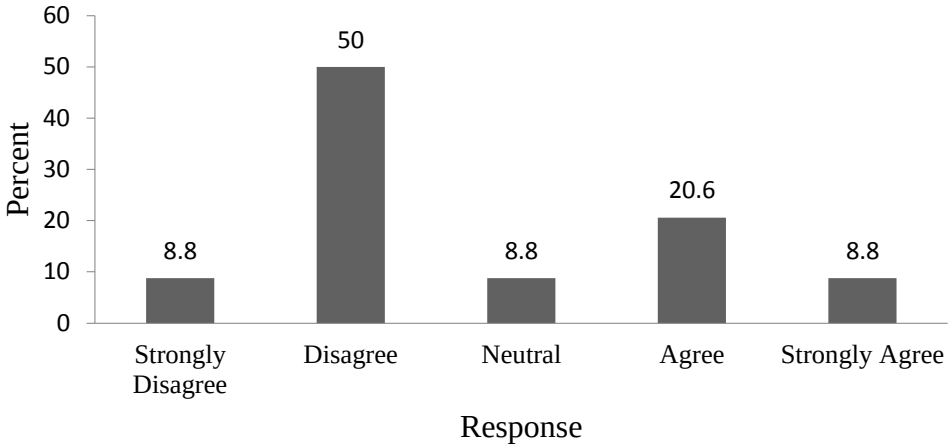


Figure 14. Survey Statement 7: Retention is done mainly to comply with state and national requirements. One participant did not respond to this statement.

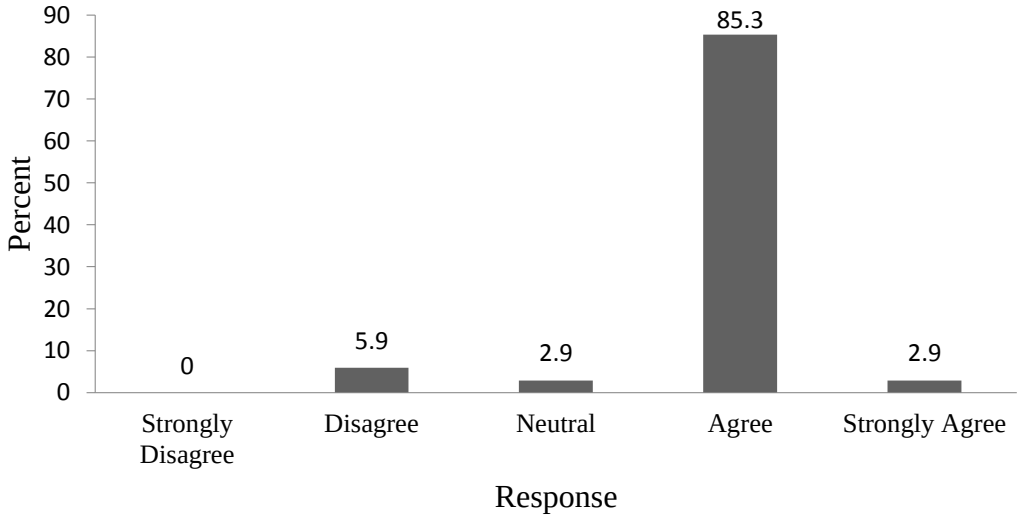


Figure 15. Survey Statement 8: Retention is done to increase academic achievement. One participant did not respond to this statement.

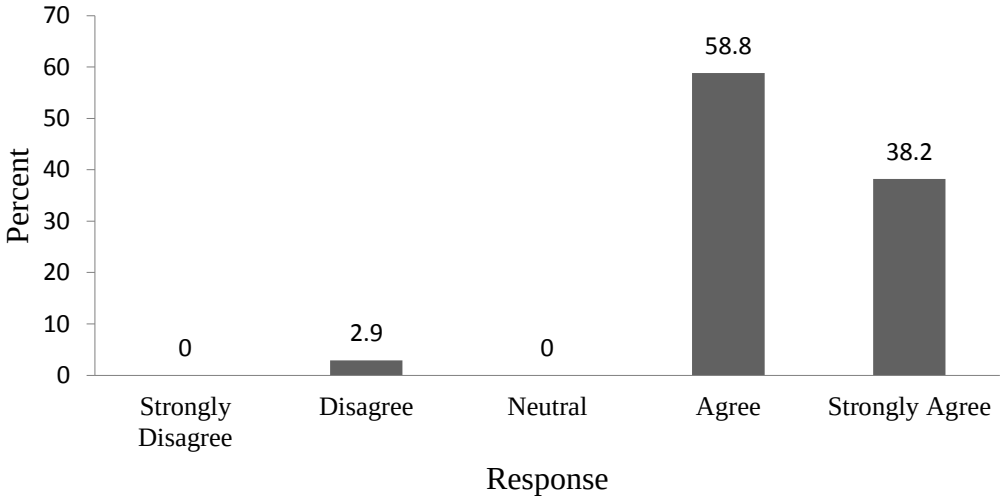


Figure 16. Survey Statement 9: Retention should be done sparingly, if ever.

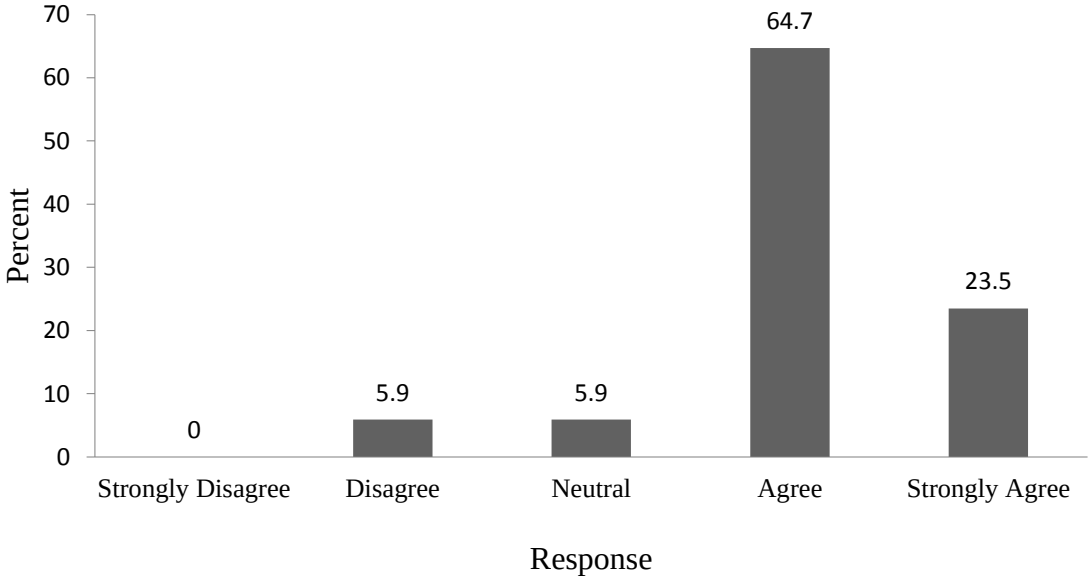


Figure 17. Survey Statement 10: I have seen students benefit from being retained.

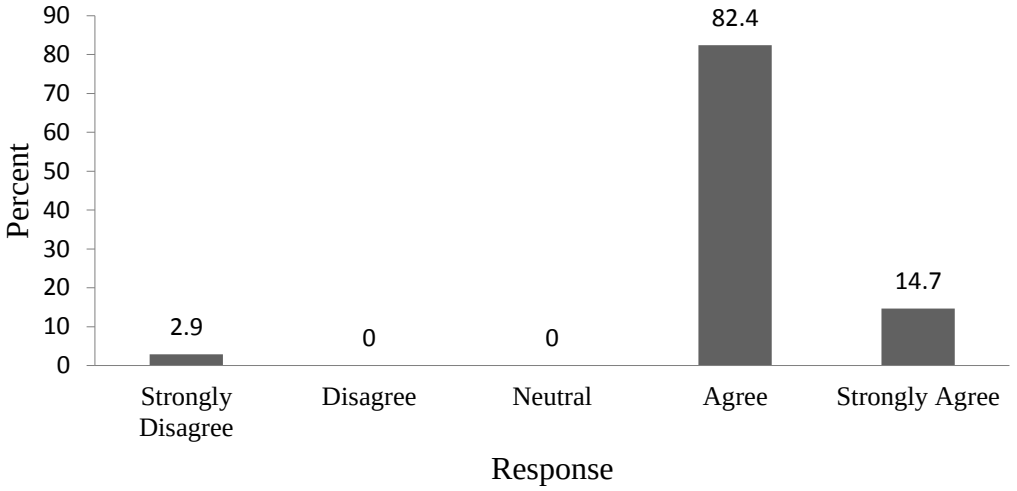


Figure 18. Survey Statement 11: I have seen students who have shown no significant benefits from retention.

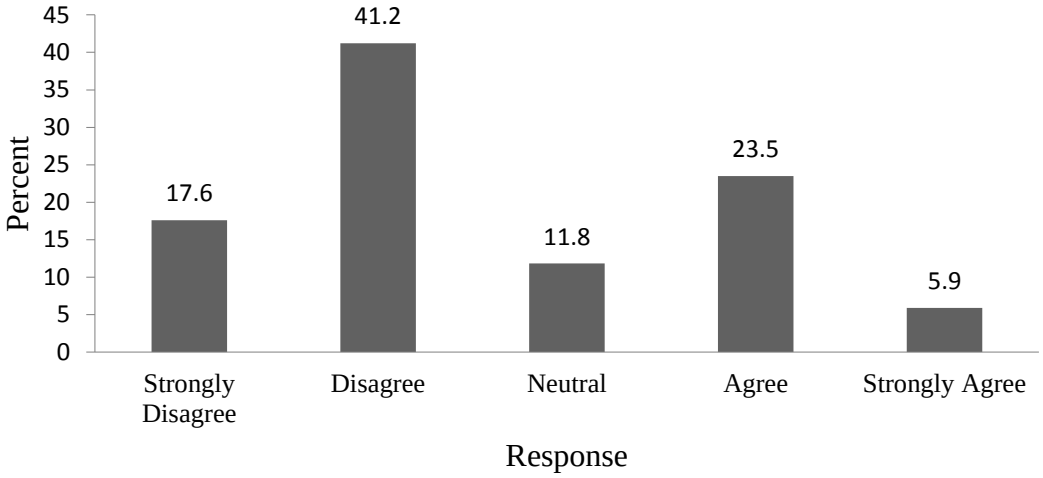


Figure 19. Survey Statement 12: I feel I have been provided with adequate guidelines regarding when to retain a student.

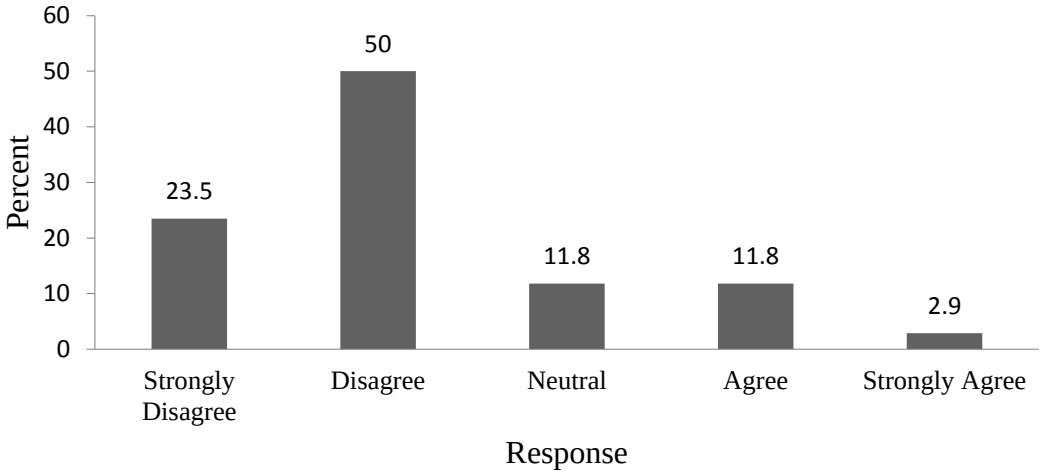


Figure 20. Survey Statement 13: I feel I have adequate research on the results of retention.

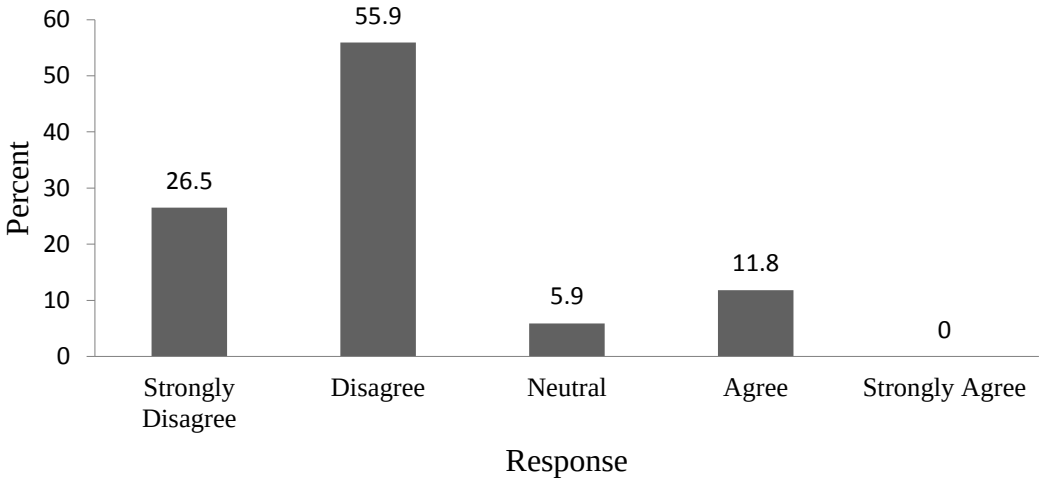


Figure 21. Survey Statement 14: I would best describe my school's retention practice as an individual teacher decision.

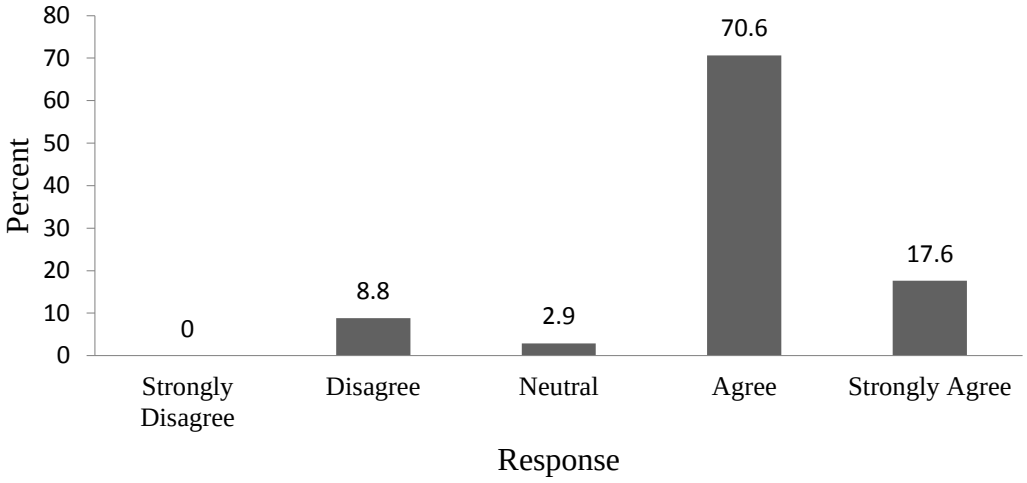


Figure 22. Survey Statement 15: I would best describe my school's retention practice as a site-based team decision.

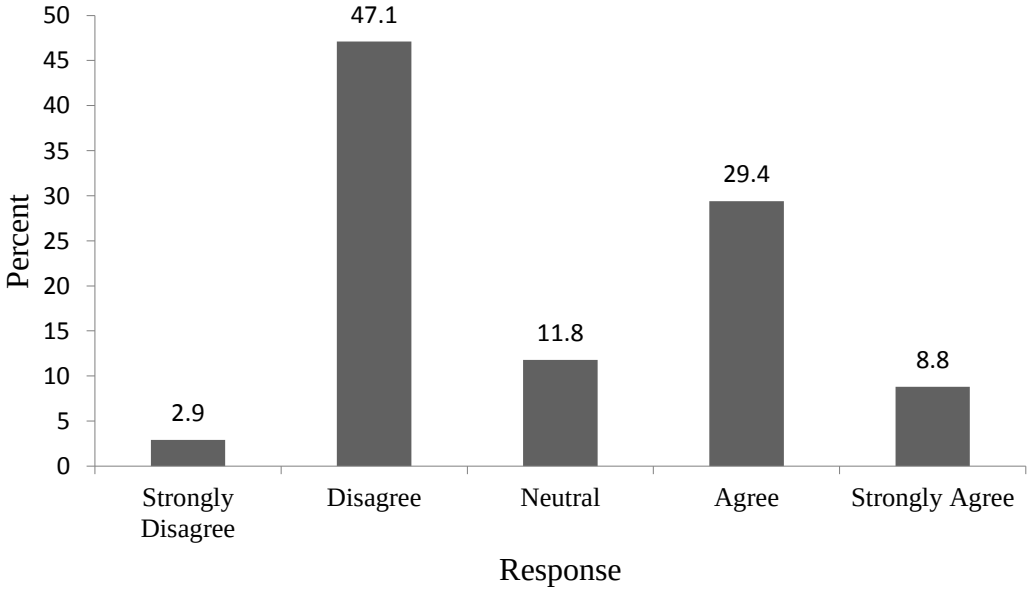


Figure 23. Survey Statement 16: I would best describe my school's retention practice as a parent decision.

The second part of the survey asked principals to mark whether or not certain conditions were factors when the decision to retain was made. They marked the item either a priority factor or not a concern. These factors were established using impact

factors from the following studies: financial impact cited in Xia and Glennie (2005a.); academic impact identified in the NASP (2003) position statement on retention; behavioral impact as notes by Hong & Yu (2008), Jimerson, and Ferguson (2007); impact on high school persistence cited in studies by Jimerson et al. (2002), McGrath (2006), Smith (2004); and socio-economic impact based on studies by Anderson, Whipple and Jimerson (2002) and Range et al. (2009). Figure 24 shows the principal's views as to what factors impacted the decision to retain students.

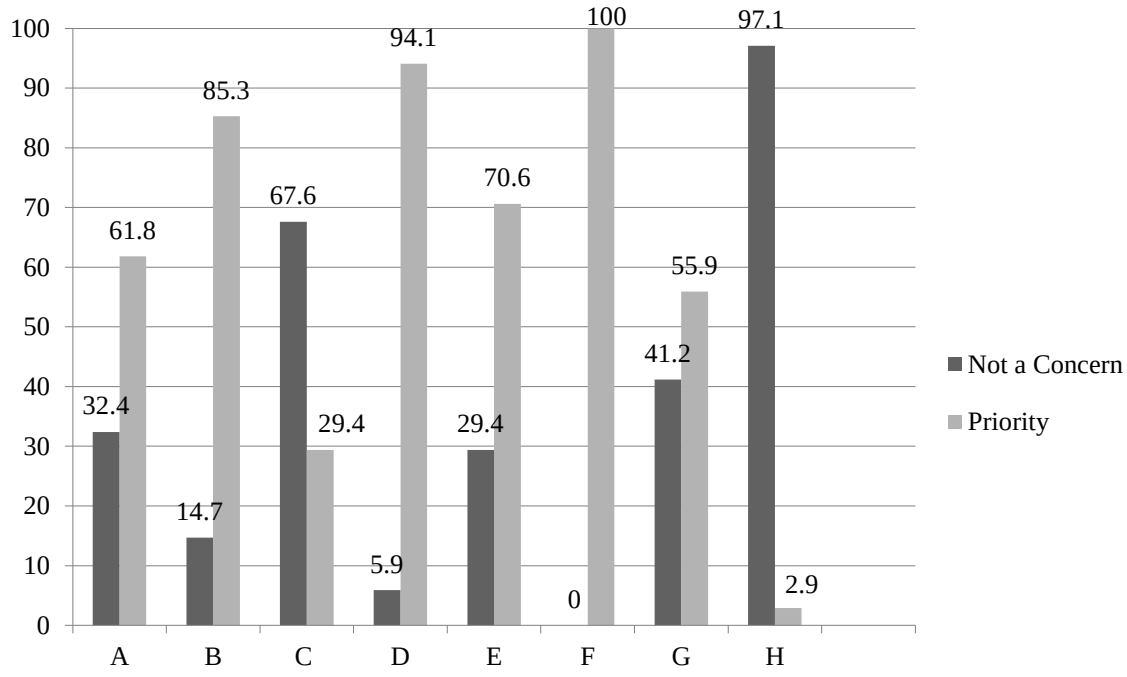


Figure 24. Survey results for priorities for retention.
A = lack of options; B = social/emotional adjustment; C = possible SPED placement; D = increase in probability of drop out; E = increased behavior problems; F = lack of academic gains; G = possible retention later; H = cost

All of the principals (100%) stated lack of academic gains was a high priority when considering whether or not to retain a student. This is a factor in both current and historical research regarding retention. The principals' area of least concern was that of

financial cost to the district (97.1%) which is a more recent concern found in retention research.

The third section of the survey included three open-ended questions. The responses in these three sections reveal a perception of the principals' overall view as to what they consider the costs and benefits, or pros and cons, of grade-level retention and allowed them to share any additional information they felt would benefit the researcher. Of the 34 principals responding to the survey, 26 responded to one or more of the open-ended questions. Included here are summary of responses to each question made by three or more of the respondents.

Section three, item 18. What other comments or concerns do you have regarding retention at the primary level?

Principals stated that retention was made on an individual case basis dependent on each specific student being considered. They also stated that many factors were involved. Several shared concerns parents were able to request retention and they needed more research-based guidelines to share not only with parents, but also with teachers. It was also noted some principals did not know how retention might impact a student's future.

Section three, item 19. How might you and your staff benefit from current information regarding retention?

Over half of the principals surveyed stated their staffs would benefit from research regarding retention. Additionally, it was stated that having the latest research regarding retention would aid the principals in decision making as well as helping them understand future implications for retained students.

Section three, item 20. Is there anything else you would like the researcher to know concerning your school and/or retention?

Principals shared that even though retention was implemented due to a parent request, they did not always feel it was the best decision.

The fourth section of the survey included demographic variables explained at the beginning of this chapter. (Table 7.)

Secondary Data Base Results

Although elementary principals surveyed did not view cost as a factor in making the decision to retain, cost was a key component in the 2005 study by Hill and Weiss. Hill and Weiss (2005) found "grade retention is one of the more expensive educational policies available" (para. 1). According to Thompson and Cunningham (2000), the minimum cost is the cost of an additional year of schooling for each retained student. Smith (2004) examined the consequences of retention for the state of Florida and estimated the cost per pupil to be $7500 per year. Xia and Glennie (2005a) cited the National Center for Education Statistics as estimating the average expenditure per pupil to be $7,524 for the 2001-2002 school year. More recently, the USDOE, National Center for Education Statistics (2011) estimated the cost of yearly expenditures per student in the school year 2007-2008 to be $10,441. The same cost factor, the cost of an additional year of schooling based on Average Daily Attendance and yearly expenditures, was used in this study in order to determine the estimated cost for the 221 students in this study.

Cost for retaining students was calculated by accessing the District Finance Report on the Missouri Department of Elementary and Secondary Education website. The Current Expenditures per ADA (Average Daily Attendance) was used for each year

studied. This core data is submitted by the school districts to the state department each fiscal year in. Table 31 shows the Current Expenditures per ADA, the frequency of retentions, and the total cost per year for retained primary students. Total estimated cost to retain students for the years studied was $1,776,328.00.

Table 31

Cost of Retention of K-2 Students For School Years 2007-2009 based on ADA

Year	Students Retained	Current Expenditure per ADA per student	Annual Cost
2006-2007	92	$7,684.00	$706,928.00
2007-2008	62	$8,225.00	$509,950.00
2008-2009	67	$8,350.00	$559,450.00
Total	221		$1,776,328.00

Chapter Five: Conclusions and Recommendations

The issue of retention is not new to the American educational system and has existed since the inception of the graded school system in the mid-1850s (Beebe-Frankenberger et al. 2004; Harvey, 1994; Peterson & Hughes, 2011). Yet in recent years, the number of students retained has increased as school have strived to meet state and federal guidelines and struggled with increasing financial pressures during economic recession (Penfield, 2010). This study examined retention during grades K-2 and identified costs and benefits to students, principals, and the district studied. A summary of the study, responses to the research questions, conclusions with implications for practice, and recommendations are presented in this chapter.

Summary of the Study

The purpose of this study was to analyze costs and benefits of retaining primary (K-2) students using a methodological triangulation. First, academic growth among one cohort of primary (K-2) students from an urban school setting was examined. Specifically, the academic growth of students in reading the year prior to retention was compared to the academic growth in reading during the year of retention to determine if there was a significant academic growth difference. This study also sought to identify retention trends for this urban district in regards to gender, ethnicity, socioeconomic status, and school type (Title I and Non-title). Next, the financial cost of retaining students for one year in an urban district was calculated. The calculations were based on the Average Current Expenditures per Average Daily Attendance (ADA) listed on the District Report Card from MODESE for each year students were retained. Lastly, elementary principals were surveyed to gain their perspective on the costs and benefits of

retention in grades K-2. Grades K-2 were selected because these grade levels have the most retainees over the past three years in the district studied and also in national data.

Findings

The following research questions guided the study and informed the hypotheses.

Research question one. What was the academic growth in reading of K-2 retained students during the year prior to retention based on beginning of the year (BOY) and end of the year (EOY) data?

The average increase in students reading scores from BOY to EOY on a 10 point scale on the Early Literacy Survey for the 2006-2007 school year for kindergarteners was 2.4268. For the 2007-2008 school year, retained kindergarteners' average increase was 1.7692. For the 2008-2009 school year, retained kindergarteners' average increase was 2.3871. These results reflect kindergarten students made progress in their reading performance from BOY and EOY during the year prior to retention.

The average increase in first grade students reading scores from BOY to EOY on the DRA for the 2006-2007 school year was .7500. The average increase in first grade student scores on the DRA BOY to EOY for the 2007-2008 school year was .3333. The average increase in first grade scores on the DRA BOY to EOY for the 2008-2009 school year was .0667. Although the first grade students showed growth during the year prior to retention, their growth was lower than students retained in kindergarten and growth declined over the three year period studied. No results were able to be determined for second grade students due to the lack of valid pairs of reported data for all year studied. Due to this, no second grade results will be reported for the rest of this chapter.

Research question two. What was the academic growth in reading of K-2 retained students during the year of retention based on BOY and EOY data?

During the year of retention the average increase from BOY to EOY for kindergarten student reading scores based on a 10 point scale on the Early Literacy Survey for the 2007-2008 school year was 5.1220. The average increase in kindergarten student scores on the ELS from BOY to EOY during the year retained was 5.6346. For the 2008-2009 school year, kindergarteners average increase in reading scores from BOY to EOY was 5.5000. These results reflect kindergarten students made progress in their reading performance from BOY and EOY during the year retained.

For first grade students, negative reading growth was shown for each of the three years studied during the year of retention. This indicates their reading scores declined during the year. First grade students' scores on the DRA for the 2007-2008 school year showed a negative growth from BOY to EOY at -.4375. Negative growth in first grade students scores on the DRA for the 2008-2009 school year was -.5000. For the 2009-2010 school year first grade students showed a -.4667 reading growth on the DRA from BOY to EOY.

Research question three. Is there a significant growth difference in students' reading between the year prior to retention and the year retained?

(H_0) The amount of reading growth from year prior to retention to the year retained will remain statistically the same.

(H_1) The amount of reading growth from the year prior to retention to the year retained will differ statistically.

In regards to kindergarten results, the null hypothesis was not accepted. There was a highly significant correlation of improved reading growth for all three years. This indicates that kindergarteners studied grew significantly more in their reading growth during the year of retention in comparison to the year prior to retention. Significance was .000 for all three years studied. As a result, H_0 was not accepted.

In regards to first grade results, there was a negative growth or decline in reading for all three years studied. In 2007-2008 first grade students reading growth decreased by .4375. Then in 2008-2009, growth fell by .5000 followed by a decrease of .4667 in 2009-2010. This data indicates that first grade students retained did not have as much growth in reading the year retained as they did the year prior to retention. The H_0 was not accepted.

Research question four. What is the relationship between students retained in kindergarten, first, or second grade and academic growth based on the following variables: gender, ethnicity, socioeconomic status (SES), and school type (Title I or Non-title).

(H_0) There is no statistically significant relationship between any one of the identified variables (gender, ethnicity, SES, or school type) and retained students' reading growth.

(H_1) There is a significant relationship between one or more of the identified variables (gender, ethnicity, SES, or school type) and retained students' reading growth.

In kindergarten, overall data analysis showed both boys and girls showed reading growth with White students on free meals at Title I sites having the greatest average gains. Both kindergarten boys and girls for all three years studied showed either

significant or highly significant growth in reading. With the significance ranging from boys in school year 2007-2008 (.001) to boys in school year 2008-2009 (.000).

White kindergarten students showed highly significant reading growth all three years studied whereas Black kindergarten students showed highly significant growth only the first year of the study and the following two years could not be computed because there were no valid pairs. Kindergarten students receiving free meals showed highly significant reading growth for all three years of the study. Kindergarteners on full pay meals did not show significant growth the first and last year, but did show highly significant growth the second year. For two of the three years studied, both Title 1 and Non-title kindergarten students showed either significant or highly significant reading growth. The only sub group that did not show reading growth were the kindergarten students retained in Non-title schools during the 2007-2008 school year.

Although first grade boys and girls had negative reading growth the year of retention, the data shows that only one year in particular showed highly significant negative growth (.006). This was for first grade boys for the school year 2007-2008. The confidence interval of the difference was 95%. All first grade students showed either no growth or negative academic growth the year retained, but White students in particular showed a highly significant negative growth in the first two sets of years compared and no growth at all the third year. All first grade students showed either no growth or negative growth in all SES areas for the year retained. First grade students who received free meals and were retained during 2007-2008 showed a highly significant (.001) negative gain in reading growth. Although they did continue to decrease in reading growth the data was not significant for the following two years. The number of students

on reduced meals was not large enough to compute any of the years and there was no significant growth increase or decrease for students

When looking at reading growth at Title I vs. Non-title sites, the results were mixed. One year of Title I students (school year 2007-2008) showed highly significant (.000) negative academic growth while one year of Non-title students (school year 2008-2009) showed significant (.034) negative growth. Other years no significance was found on full pay meals. Overall, first grade students showed negative reading growth the year retained. The groups showing the highest negative growth included: boys in school year 2007-2008, White students, students on free meals for the 2007-2008 school year, and those in a Title I school during the 2007-2008 school year. H_0 was not accepted.

However the null hypothesis was accepted in the following areas. Hispanic kindergarten students showed no significant reading growth the first two years studied and did not have enough valid pairs for data to be calculated for the third year. The case weights for the Asian/Pacific Kindergarten students were not high enough (less than or equal to 1) to be calculated the last two years of the study and no valid pairs were found for year one. Kindergarteners on reduced meals showed no significant growth for two years and for the school years 2007-2008 and 2008-2009 the case weights were less than or equal to 1. First grade girls showed no growth difference at all for the 2009-2010 school year.

In conclusion, retention most academically benefitted White kindergarten boys and girls who qualified for free meals at Title I schools. Retention had the most negative academic impact on first grade White boys on free meals regardless of type of school.

Research question five. What are elementary principals' views regarding the benefits of retention, knowledge of retention, and how the decision for a student to be retained is decided?

The first section of the survey asked principals to respond to statements regarding retention. Possible responses ranged from 1-strongly disagree to 5-strongly agree. Based on the statements with which the principals had the strongest agreement, the data found principals perceived there were students who showed no significant benefits from retention and retention should be done sparingly. On the other hand, the principals did agree they had seen students who benefited from retention and the decision to retain was not an individual, but a site-based decision. Principals had the strongest disagreement to the statement the decision to retain was based on individual teacher decisions. They also felt they did not have adequate research or guidelines regarding retention. In addition, the principals' responses indicated they did not use retention as a precursor to special education services nor to simply comply with state and national requirements.

The second part of the survey asked principals to mark factors which influenced the decision to retain a student. Principals selected each item as a priority factor or not a concern. The principals were in 100% agreement that lack of academic gains were a high priority in making this decision. The other two top priorities were the need for students to successfully graduate from high school and time for students to grow emotionally or socially. Principals' areas of least concern were in regards to financial cost to district. They also did not view the increased probability of the retained student being placed in special education later as a deciding factor.

The third portion of the survey consisted of open-ended questions that were optional to the principals. Twenty-six of the 34 principals did respond to one or more of the questions. From the responses, it is evident the principals wanted it to be known they felt retention was a complex issue which had many factors and was considered on an individualized basis. Concern was expressed that parents could request retention even when the building educators did not feel it was best practice. Over half of the principals stated their staffs would benefit from being provided research regarding retention and this research would enable them to make more informed decisions and help them understand future implications for retained students.

Research question six. What is the monetary cost of retention for this cohort of K-2 retained students for the years retained (2006-2009)?

Costs for retaining students was calculated by accessing the District Finance Report on the Missouri Department of Elementary and Secondary Education website. Total estimated cost to retain students for the three years studied was $1,776,328.00.

Conclusions

Two hundred and twenty one K-2 students who were retained during the 2006-2007, 2007-2008, and 2008-2009 schools years were the participants in this study. Over half of the retained students were in kindergarten (66.1%) and male (62.4). The majority (81.4%) were white, qualified for free lunches (59.7%) and attended a Title 1 school (61.5%). Estimated cost of retaining these students was $1,776,328.00 based on statistics from the Missouri Department of Elementary and Secondary Education.

When looking at students' academic growth in reading within the three year research period, both kindergarten and first grade students showed reading growth the year prior to

retention. The following year, the year retained, only kindergarten students continued to show reading growth while the first grade students declined in reading ability. When comparing the growth between the year prior to retention and retention, once again kindergarten students showed statistically significant gains. They grew more in reading during the year of retention than the prior year. First graders, on the other hand, showed statistically significant negative growth, which would indicate that in the area of reading retention was not effective.

In regards to the variables of gender, ethnicity, socioeconomic status, and school type, once again the results varied from kindergarten to first grade. Overall analysis showed retention most academically benefitted white kindergarten boys and girls who qualified for free lunch at Title 1 schools. Students who showed the least academic gains, in fact academic loses, during the year of retention were first grade boys who qualified for free lunches at both Title 1 and Non-Title 1 schools.

Elementary principals surveyed conveyed they had seen both sides of the academic spectrum. In their opinions, some students benefitted from retention while others showed no benefits. They also expressed the decision to retain was a site-based decision versus an individual teacher decision, but they did express concern about parent requests for retention. Principals agreed 100% concerning the lack of academic gains by students were a high priority when the decision to retain was made. They also voiced both they and their staffs would benefit from current research concerning retention to enable them to make more informed decisions. Although the principals marked financial costs were not a concern when recommending retention, it may be this has not be offered as pertinent information regarding this issue.

Recommendations

This study would be enhanced by following this cohort of 221 students as they continue their academic careers in this district. This would specifically benefit the kindergarten students who showed gains during the year of retention since often academic gains are temporary and begin declining a year or two after retention (Jimerson, 2001). It would also enable educators to follow and support the first graders now entering second grade, after being retained, at an academic disadvantage in the area of reading. Concern at this point would be raised as to whether or not these students would show additional indicators which would be of future concern in regards to persistence to graduation. Blazer (2008) stated 'studies have found that retention is strongly associated with dropping out of school in later years" (p. 1). It would also be recommended that a method of identifying prior retainees be established in the district data warehouse system so documentation of prior retention would be taken into consideration before the student is retained again. According to Hennick (20080, a student retained one year had a 40% increased risk of dropping out and students who were retained two times had an increased risk of 90% of dropping out.

A deeper investigation of reading support and instruction at the first grade level could be attempted for students who have been retained. If students receive additional support, such as Reading Recovery, during the year prior to retention, could part of the reason they show negative growth the year of retention be that they no longer qualify for these services? If so, the district could consider what interventions might be implemented to help prevent further reading decline or as Davenport et al. (1998) suggested implement "promotion with extra help" (p. 10). First grade retention is of

particular concern based on research by Thompson and Cunningham (2000), which concluded first grade retention is "harmful and risky" and students in first grade do worse than expected both academically and emotionally (para. 9). Montes and Lehman (2004) determined early predictors matter and students who repeated "1st grade increased their chance of dropping out by 300%" (p.1).

In addition to helping ensure academic and future success to students who have already been retained, it is imperative alternatives to retention are explored. Davenport et al. (1998) outlined eight different strategies as alternatives to retention. These include: offering high quality early childhood education, basic school restructuring, smaller learning communities utilizing effective educational practice, all grades receiving effective reading instruction, and increased parental involvement. Although it might be argued that all of these alternatives are costly, the other side of the argument includes the large amount of money spent on retention could be better used to implement effective change and prevent retention. According to Fager and Richen (1999), many alternatives are now available to educators and the goal of "prevention, not retention is the best answer of all" (p. 21). The district might also consider analyzing existing initiatives through the lenses of Blazer's (2008) recommended alternatives to determine what programs currently exist to reduce retention and what new programs might be implemented.

Since building administrators play a vital role in site decision-making, it is important they are given research and strategies for assisting their staffs in making the best decision possible when it comes to retention. Jimerson et al. (2005) stated administrators need to be given the tools to "engage student support personnel . . .to develop and implement

alternative strategies to retention" (p. 14). Based on the survey results of this study, elementary principals would benefit from receiving current research regarding retention and also guidelines as to when it is appropriate to retain a student. The research and guidelines can then be shared with staff and parents. A district wide process of retention, such as implementation of Light's Retention Scale (2006), could be implemented for consistency in decision making.

Another responsibility of building administrators is the hiring and placing of high quality teachers within their sites. It is critical kindergarten through second grade teachers, in particular, receive professional learning in regards to developmentally appropriate practices and the long-range impact of retention on students so they can make more informed decisions when the issue of retention is raised. Okpala (2007) specifically recommends kindergarten teachers be equipped with "intervention strategies that will promote young children's social and cognitive competencies" and interventions such as "remedial instruction, cooperative learning, peer tutoring, after-school programs, and individualized instruction should be employed" (p. 3). Along with professional learning in these interventions, classroom teachers would also benefit from a gaining information regarding a district-wide, systematic approach, which could be used to screen students for possible retention and allow teachers to explore other alternative interventions within the district.

Summary

The practice of retention has grown as state and federal policies are pressuring schools to have every student attain minimum academic standards for proficiency. Yet, running parallel to this issue are financial struggles faced by both states and local school

districts. The issue of retention is no longer simply an academic consideration, but a decision in which both costs and benefits should be thoroughly examined. Educators must ask themselves if the benefits to students, and in turn society, outweigh the costs.

The purpose of this study was to analyze the costs and benefits of retaining primary (K-2) students using a methodological triangulation. The academic growth of students in reading the year prior to retention was compared to the academic growth in reading during the year of retention to determine if there was a significant academic growth difference. This study also sought to identify retention trends for this urban district in regards to the variables of gender, ethnicity, socioeconomic status, and school type (Title I and Non-title). In addition to reading data, data was collected regarding the financial cost of retaining students for one year in the district studied. Lastly, elementary principals were surveyed to gain their perspective on cost, benefits, and reasons for retention in grades K-2.

The data collection instruments used in this study were the Emerging Literacy Survey (ELS) at the kindergarten level and Developmental Reading Assessment (DRA) at grades one and two. Data was collected from the district data warehouse for the school years 2007-2008, 2008-2009, and 2009-2010 for both the beginning of the year (BOY) and end of the year (EOY) testing results. The data was sorted by year of retention, grade-level of student, and other demographic variables listed in the study. Surveys were administered to elementary principals in the fall of 2011. Survey results were sorted and placed in data charts for each portion of the survey. Financial information used to calculate the estimated cost of retention for this group of students was obtained from the Missouri Department of Elementary and Secondary Education's Annual Report of School

Data looking in particular at the Finance Report, 2006-2010. This data was submitted to the Department of Education by the district which participated in the study.

In the design of the study to gain inferential statistics, dependent sample t-tests were used to determine if there was significant growth on the ELS or DRA reading assessments during the year prior to retention and the year retained. A t-test was also used to determine if there was significant growth difference between the two years researched. Additional descriptive statistics were used to further support the research questions. A qualitative method was used to study the perceptions of elementary principals through the administration of a survey. In addition, statistical landmarks were used to provide background for the data such as mean, significance level, and standard deviation.

In this study, kindergarten students who had been retained showed a significant amount of growth in reading compared to their reading growth during the year prior to retention. Kindergarteners who showed significant or highly significant growth were both boys and girls, white, qualifying for free lunch, and at both Title I and Non-title sites. First grade retained students showed a decline in reading achievement during the year retained when their growth was compared to the year prior to retention. Although all first grade retained student showed negative results, only the following sub groups had significant or highly significant negative growth.

- First grade boys showed highly significant negative growth for one year of the study
- White first graders showed a highly significant negative growth in the first two years of the study and no growth at all the third year

- First grade students who qualified for free meals during the first year of the study showed highly significant negative growth
- One year of Title I first graders during the first year of the study showed highly significant growth and the second year of the study showed Non-title students showed significant negative growth

Principals who were surveyed showed strong agreement they had seen students who had shown no significant benefits from retention and also students who had shown benefits. Principals voiced the fact that the decision to retain was a site-based team decision and their open ended responses stated retention was based on each individual student under consideration. Principals showed the strongest disagreement to statements that said retention was a decision made solely by individual teachers, retention was a precursor to special education services, and retention was done mainly to comply with state and national requirements. Principals also disagreed that they had adequate research on the results of retention. All of the principals stated lack of academic gains as a high priority when considering whether or not to retain a student. They also considered the need for students to persist to graduation and have time to grow or adjust emotionally or socially. Over half of the principals cited the lack of other educational options for struggling students as a priority when the decision to retain was made at the primary level. Although the principals did not consider cost of retention to the district as a factor in making the decision to retain, estimated costs for this three year period to retain this group of 221 students was $1,776,328.00.

To address the issue of retention, educators need to be aware of the specific costs and benefits for the students they serve. They also need to ensure district administrators

and staff are equipped with current research regarding both short and long-term effects on retained students and involved them in pursing alternatives to retention at the primary grades by analyzing if the current money spent to retain students might be better spent in research based, early interventions.

Appendix A

Emerging Literacy Survey

School_____

Kindergarten Teacher_____

Student's Name_____ School Year_____

Emerging Literacy Survey Criteria for Intervention: Kindergarten (BOY and MOY)

Performance Level	Rhyme	Beginning Sounds	Blending onsets & rimes	Segment onsets & rimes	Blending Phonemes	Segment Phonemes	Concepts Print	Letter Names	Word Recognition	Word Write	Sentence Dictation 1st 2 sent.
Possible	8	8	8	8	8	8	8	/52	30		32
Proficient	7-8	7-8	7-8	7-8	7-8	7-8	7-8	50-52	11-30	8 or >	26-32
Developing	5-6	5-6	5-6	5-6	5-6	5-6	5-6	40-49	4-10	4-7	10-25
Not yet	0-4	0-4	0-4	0-4	0-4	0-4	0-4	39 or <	0-3	0-3	0-9

Last modified October 5, 2005

Beginning of the Year
Proficient: Mastery of 4 or more subtest
Nearing Proficiency: Mastery of 3 subtests
Progressing: Mastery of 2 subtests
Step 1: Mastery of 0-1 subtests

Middle of the Year
Proficient: Mastery of 4 or more subtest
Nearing Proficiency: Mastery of 3 subtests
Progressing: Mastery of 2 subtests
Step 1: Mastery of 0-1 subtests
Intervention: Mastery of less than 4 subtests
No Intervention: Mastery of 4 or more subtests

Emerging Literacy Survey Criteria for Intervention: Kindergarten (EOY)

Performance Level	Rhyme	Beginning Sounds	Blending onsets & rimes	Segment onsets & rimes	Blending Phonemes	Segment Phonemes	Concepts Print	Letter Names	Word Recognition	Word Write	Sentence Dictation 1st 2 sent.
Possible	8	8	8	8	8	8	8	52	30		32
Proficient	7-8	7-8	7-8	7-8	7-8	7-8	7-8	50-52	11-30	8 or >	26-32
Developing	5-6	5-6	5-6	5-6	5-6	5-6	5-6	40-49	4-10	4-7	10-25
Not yet	0-4	0-4	0-4	0-4	0-4	0-4	0-4	39 or <	0-3	0-3	0-9

End of Year
Proficient: Mastery of 9 or more subtests
Nearing Proficiency: Mastery of 7-8 subtest
Progressing: Mastery of 3-6 subtests
Step 1: Mastery of 0-2 subtests

Appendix B

Data Collection Chart

2006-2007 School Year		**2007-2008 School year**		**2008-2009 School Year**		**2009-2010 School Year**	
K1, Year 1 (63 students)		K2, Year 1 (40 students)		K3, Year 1 (43 students)		K3, Year 2 (43 students)	
BOY ELS	EOY ELS	BOY ELS	EOY ELS	BOY ELS	EOY ELS	BOY ELS	EOY ELS
Grade One 1, 1 Year 1 (21 students)		Grade One 2, Year 1 (16 students)		Grade One 3, Year 1 (14 students)		Grade One 3, Year 2 (14 students)	
BOY DRA	EOY DRA	BOY DRA	EOY DRA	BOY DRA	EOY DRA	BOY DRA	EOY DRA
Grade Two 1, Year 1 (8 students)		Grade Two 2, Year 1 (6 students)		Grade Two 3, Year 1 (10 students)		Grade Two 3, Year 2 (10 students)	
BOY DRA	EOY DRA and/or Terra Nova	BOY DRA	EOY DRA and/or Terra Nova	BOY DRA	EOY DRA and/or Terra Nova	BOY DRA	EOY DRA and/or Terra Nova
		K1, Year 2 (63 students)		K2, Year 2 (40 students)			
		BOY ELS	EOY ELS	BOY ELS	EOY ELS		
		Grade One1, Year 2 (21 students)		Grade One 2, Year 2 (16 students)			
		BOY DRA	EOY DRA	BOY DRA	EOY DRA		
		Grade Two 1, Year 2 (8 students)		Grade Two 2 , Year 2 (6 students)			
		BOY DRA	EOY DRA and/or Terra Nova	BOY DRA	EOY DRA and/or Terra Nova		

.

Appendix C

Survey for Elementary Principals

A Cost Benefit Analysis of Retention of K-2 Students in an Urban District:

Fall 2011

This study is being conducted to determine the perceptions of elementary principals in regards to the benefits and costs of retention at the primary level. The researcher would like to hear from you about your feelings concerning what you consider to be both the positive and negative aspects of retention as viewed through the lenses of costs and benefits. Your participation in the survey is voluntary and all responses are anonymous. Responding to this survey is a way you can help inform the field of education and assist Lindenwood University in its research efforts.

The survey should take about 5 to 10 minutes to complete. Upon completion of this study, you will be sent a link to the research for your review.

Thank you for your assistance!

Debbie Yonke

SECTION ONE: Please check the column that best reflects how you feel about each of the following statements.	**Strongly Disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**
1. Retention has few, if any, benefits.					
2. Retention is beneficial to reduce skill variance between students.					
3. Retention is an intervention prior to special education services.					
4. Retention is a gift of time which allows students to develop readiness.					
5. Retention allows an opportunity for children to increase self-esteem.					
6. Retention is a means of ending social promotion.					
7. Retention is done mainly to comply with state and national requirements.					
8. Retention is done to increase academic achievement.					
9. Retention should be done sparingly, if ever.					
10. I have seen students benefit from being retained.					
11. I have seen students who have shown no significant benefits from retention.					
12. I feel I have been provided with adequate guidelines regarding when to retain a student.					
13. I feel I have adequate research on the results of retention.					
14. I would best describe my school's retention practice as an individual teacher decision.					
15. I would best describe my school's retention practice as a site-based team decision.					
16. I would best describe my school's retention practice as a parent decision.					

SECTION TWO **Listed below are some of the factors involved in retention. Please check the "Priority" column if you feel the factor is given high priority when the decision to retain is made at the primary level. Check the "Not a Concern" column if you feel that factor is not a major concern when retaining at the primary level.**	**Priority**	**Not a Concern**
a. Cost to district of student repeating grade		
b. Increase in probability of retention in later grades		
c. Lack of academic gains		
d. Increased behavior problems		
e. Failure to persist to graduation (drop out)		
f. Increase in probability of special education placement		
g. Social or emotional adjustment		
h. Lack of other educational options for struggling student		

SECTION THREE

18. What other comments or concerns do you have regarding retention at the primary level?

19. How might you and your staff benefit from current information regarding retention?

20. Is there anything else you would like the researcher to know concerning your school and/or retention?

SECTION FOUR

21. What is your gender? Male_____ Female_____

22. How long have you been in an administrative role?

0-5 years_____ 5-10 years _____ 10-15 years_____

15-20 years_____ 20 or more years_____

23. What is your age group?

20-29_____ 30-39_____ 40-49_____

50-59_____ 60-69_____ 70 and over _____

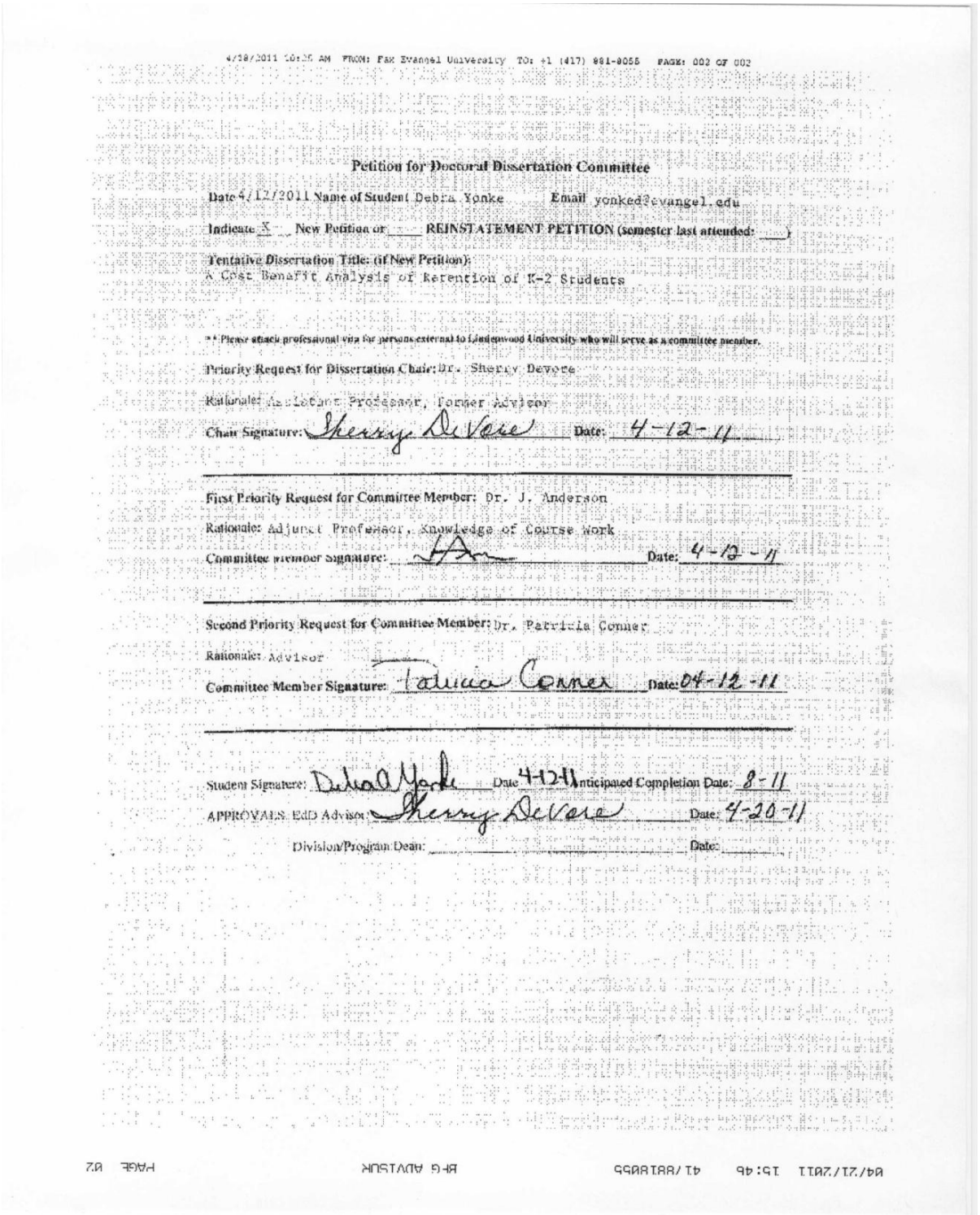
24. What is your highest degree earned?

_____Bachelors _____Masters

_____Specialist _____Doctorate

Appendix D

Dissertation Proposal Approval



4/18/2011 10:26 AM FROM: Fax Evangel University TO: +1 (417) 881-8055 PAGE: 002 OF 002

Petition for Doctoral Dissertation Committee

Date 4/12/2011 Name of Student Debra Yonke Email yonked@evangel.edu

Indicate X New Petition or ____ REINSTATEMENT PETITION (semester last attended: ____)

Tentative Dissertation Title: (if New Petition):
A Cost Benefit Analysis of Retention of K-2 Students

** Please attach professional vita for persons external to Lindenwood University who will serve as a committee member.

Priority Request for Dissertation Chair: Dr. Sherry Devore

Rationale: Adjunct Professor, Former Advisor

Chair Signature: Sherry DeVore Date: 4-12-11

First Priority Request for Committee Member: Dr. J. Anderson

Rationale: Adjunct Professor, Knowledge of Course Work

Committee Member Signature: [signature] Date: 4-12-11

Second Priority Request for Committee Member: Dr. Patricia Conner

Rationale: Advisor

Committee Member Signature: Patricia Conner Date: 04-12-11

Student Signature: Debra Yonke Date 4-12-11 Anticipated Completion Date: 8-11

APPROVALS: EdD Advisor: Sherry DeVore Date: 4-20-11

Division/Program Dean: _____ Date: _____

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APPENDIX E

Institutional Review Board Disposition Report

LINDENWOOD UNIVERSITY

Institutional Review Board Disposition Report

To: Ms. Debra Yonke
CC: Dr. Sherry DeVore
IRB Project Number 11-77
Title: ***A Cost Benefit Analysis of Retention of K-2 Students in an Urban District***

The IRB has reviewed your application for research according to the terms and conditions below, and it has been approved.

IRB Approval Date: 5/20/2011
Expiration Date: 5/20/2012
Type of Review: Expedited
Research Risk Level: Level 1 – Minimal Risk

The Lindenwood IRB complies with Federal regulations 45 CFR 46, 45 CFR 164, 21 CFR 50 and 21 CFR 56, which allows for the use of an expedited review procedure for research which presents no more than minimal risk to human participants and meets the criteria for one or more of the categories of research published in the Federal Register . All actions and recommendations approved under expedited review are reported to a Full Board meeting.

Changes in the conduct of the study, including the consent process or materials, require submission of an amendment application which must be approved by the IRB prior to implementation of the changes.

According to Federal regulations, this project requires IRB continuing review. As such, prior to the project expiration date above, you must submit either a Renewal through the abbreviated application form or a Final Report.
If you have questions or require additional information, please contact the Chair.

Ricardo Delgado
5/23/11
Institutional Review Board Chair Date

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VITA

Debbie is an Associate Professor of Education at Evangel University in Springfield, MO. She also is a Part-time National Trainer for Kagan Cooperative Learning. Prior to this, Debbie served as an Instructional Specialist for School Improvement and Staff Development Specialist for Springfield Public Schools. She has had the opportunity to teach every grade K-5, as well as, multi-age classrooms.

Debbie earned her Educational Specialist degree in Instruction Leadership from Lindenwood University in 2009 and her Master's degree in Elementary Education from Missouri State University in 2001. Her Bachelor of Arts degrees in both Elementary Education and Early Childhood Education were earned from Evangel University in 1983.

The topic of retention has been an interest of Debbie's for the past several years. In Fall 2011, she co-authored an article with Dr. Bret Range and Mrs. Susie Young of the University of Wyoming for the Journal of Research in Education entitled, Pre-service Teacher Beliefs About Retention: How Do They Know What They Don't Know? It is her desire to pursue publication of her dissertation, A Cost Benefit Analysis of Retention of K-2 Students in an Urban District, as well in order to provide educators with current research regarding this topic.