The Efficacy of Student Retention: A Review of Research & Literature

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Abstract

Multiple statistical studies were used to help determine the efficacy of retention in K-12. Researchers were able to find extensive data on this topic verifying the significance of the debate across the nation for decades. Though researchers found varied results for the implementation of retention policies, the number and quality of data were conclusive. This review includes research where retention has shown to have the desired effect, guidelines recommended by states and districts who have implemented strict retention policies, and cautions against any type of retention policy.
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SECTION I: RESEARCH IN SUPPORT OF RETENTION

Introduction

Academically, retention in elementary grades have shown improvement in reading and math scores. This retention typically happens after grades 1 or 3, but could be after any elementary grade level according to multiple studies. This section of the literature review will examine a range of studies, which support the use of retention in the K-8 setting.

Improvement Rates

A study from the “Journal for School Psychology” suggests “the rate of improvement on the reading and math scores was faster at the beginning of the study, and this rate of improvement reduced (or decelerated) when approaching the transition year (middle school)” (Im, Hughes, Kwok, Puckett & Cerdia, 2013). See Figure 1 on the next page for growth rates. The authors also reported that retained students and their promoted counterparts “share a similar growth trend on both reading and math scores over the middle school years” (Im, Hughes, Kwok, Puckett & Cerdia, 2013). A study published in “Learning & Individual Differences” stated that “in same-grade comparisons, the retained students were superior to the promoted students on both scores, with a larger difference in mathematics than reading” (Klapproth, Schaltz, Brunner & Martin, 2016). Both of these studies suggest an initial positive outcome from student retention in elementary grades; however, none of the studies showed the same improvement over time.

Florida has been using a strict retention policy since the 2002-2003 school year and a series of studies released in 2010 suggest that retention, summer school interventions, and placing retained students with high-performing teachers have a “significant and substantial positive effect on student achievement in math, reading, and science in the years immediately following the treatment” (Robelen, 2012). In addition, these studies found that “students
retained under Florida’s test-based promotion policy perform at higher levels than their promoted peers in both reading and math for several years after repeating third grade; they are also less likely to be retained in a subsequent grade” (West, 2012). These studies support a conclusion that retention in elementary school has some short-term effects academically for students.

Figure 1. Estimated quadratic growth trajectories. Source: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3701161/.
Social and Emotional Impact

Social and emotional consideration of retention has also been studied. According to Cham, Hughes, West and Im (2014), “at year 4 of measurement (mean age = 10.57), students retained in first grade demonstrated better psychosocial adjustment than did propensity-matched promoted peers.” This was a longitudinal study and their finding after 10 years, “did not support the popular view within educational literature that grade retention harms students’ educational success. Instead, we have either found advantages for the retained group or have failed to reject the null hypothesis of no difference between the retained and promoted groups” (Chan, Hughes, West & Im, 2014). This study also found “no evidence that retention in the elementary grades impairs students’ general motivation for educational attainment in grade 9.” (Cham, Hughes, West & Im, 2014). The results from this study indicate the retention benefits students’ motivation and their value of education. Indeed, the results suggest that retention bestows benefits on three specific factors of motivation. A study in Quebec from Pagani, Tremblay, Vitaro, Boulerice, and McDuff (2001) researched the effects of grade retention on behavioral development. Their study focused on the prosocial behaviors of retained students and concluded that “prosocial behavior appeared unaffected by grade retention” (Pagani et. al, 2001).

A study in Texas from Im, Hughes, Kwok, Puckett & Cerdia (2013) found that “students who are retained in grades 1 to 5 are performing in middle schools as well as their propensity matched, continuously promoted peers, both academically and in terms of behavioral engagement and student-reported school belonging.” Their overall conclusion about the efficacy of retention did not show support for or against retention. The transition to high school was also studied by Cham et al. (2014) and found “no ill effects of retention in the elementary grades on students’ overall motivation to complete high school and pursue post-secondary education.”
Their research supported earlier findings from Pierson and Connell (1992) who studied the effect of grade retention on self-system processes, school engagement, and academic performance. The subjects included 74 retained students and 69 matched-ability students who were not retained from nearly 12,000 3rd-12th grade students in suburban/rural and suburban/urban school districts in New York. This was a longitudinal study of students who had been retained in grades 1-4. The analysis revealed “retained students experienced no significant deficits in general self-worth or peer relatedness” and “did not differ significantly in their academic performance from students in their class of the same intellectual ability...”. In fact, “retained students performed significantly better than the socially promoted students”.

**Chicago Case Study**

Other benefits to districts beyond student performance were notable in the Chicago Public School System when they instituted a strict retention policy in 1996. They found the threat of retention had a positive effect on attendance rates. The year following policy implementation, attendance rates in the district rose 6% from 89% to 95%. Though the district could not attribute this rise entirely to the policy change, this policy was the only significant change to the district in that year (Karp, 2011).

This Chicago Public School policy led to the retention of thirty percent of students in the benchmark grades of 3, 6, and 8. Though this initial rate was high, policy makers were quick to point out that this rate dropped by ten percent in the following year and was down to four percent in 2011. They cited revision to the policy in 1998, which required increased remediation for at-risk students as well as the overall threat of retention as motivation for students and parents to take school more seriously (Karp, 2011).
SECTION II: GUIDELINES FOR RETENTION

Introduction

Approaches to retention vary greatly depending on the state, region, or local district. In fact, Missouri Bill 319, enacted in 2001, was put in place to clarify guidelines for early assessment of reading skills and clearly requires retention of students in fourth grade if they are reading below a third-grade level (SJSD, 2008). Though there are several exceptions to this requirement, it should be noted that Missouri does have legislation regarding the practice. It is also beneficial, as we look at the guidelines for retention, to examine St. Joseph School District current board policy on student promotion, acceleration and retention. In accordance with the state requirement, this school district requires students identified as failing to master grade-level skills and competencies to participate in remediation. This remediation may include summer school, tutoring, or other programs outside of the school day. Board policy not only complies with Bill 319, but also retains students when students fail to attend remediation that was assigned as a condition of promotion. Retention may also be assigned as recommended according to the professional judgment of staff and administration. Upon this recommendation, a notification and explanation are sent to parents. This section of the literature review will examine a range of studies that offer guidelines for retention. The case study from Chicago Public Schools is revisited in this section along with studies from Texas and Florida. Many states, have instituted retention policies for students who perform at the lowest level on state reading assessments at 3rd grade. Guidelines for these policies often exempt students who have been exposed to the English language for less than two years, as well as students who have transferred schools within the school year (Robelen, 2012). Light’s Retention Scale is also examined given its popularity for determining student success with retention. Another popular guideline used is birthdate to
determine delaying or retaining in Kindergarten. This practice was researched as was parental education on the efficacy of retention to determine misconceptions about the practices.

**The Case for Remediation**

Remediation for students at-risk of retention is the most popular guideline to forming a retention policy in school districts, according to the literature. For example, Chicago public schools restructured their retention policy from the rigid policy of 1996 that banned social promotion initiated during the benchmark grades of 3, 6, and 8. This restructuring included a Summer Bridge, which cost the district millions of dollars, but worked to assist many students in meeting the standards. “The average 8th-grader gained nearly a year in reading and eight months in math” (Pick, 1998). In addition, “math and reading results in the elementary and high school grades were at the highest level in a decade” (Ratnesar & Cole, 1999). This program also included “transition high schools” for 8th grade students who would turn 15 by Dec. 1. These special high schools provide smaller classes and extra help (Pick, 1998). Principal, Lisa Moreno of Schoop Elementary School in the district used discretionary funds to pay retired teachers, used resource teachers, and volunteers to tutor these students (Karp, 2011). The idea of remediation for at-risk students is essential in the process and according to the interim Chief Education Officer for Chicago Public Schools, Charles Payne. He cited this lack of remediation as the major flaw in the initial policy of 1996 (Karp, 2011). He supported the idea that smaller class sizes for at risk students should be included as remediation. In addition, he recommends the highest quality teachers be assigned to these classes.

Spencer Elementary School in Austin, Texas ranked third in the nation in 2011 of schools with the highest retention rate. Shawn L. Jackson, Principal, retained thirty percent of students in third grade in 2010. He uses volunteers as remedial help for students who have been retained
and emphasizes the “heavy lifting” that must be done in the primary years by both teachers and parents to prepare students to succeed in 3rd grade (Karp, 2011). Blondon Davis, former Chicago Chief of Schools and Regions, has also been quoted as critiquing the policy stating that standardized testing should not be the “gatekeeper” and believes the process should be “more subjective, done in consultation with teachers, parents, and principals” (Karp, 2011). Some states, including Florida, also offer alternative assessments to demonstrate readiness including portfolios (Robelen, 2012). In October of 2016, Michigan Governor, Rick Snyder signed a bill similar to that of other states requiring third grade retention of students reading below grade level. In this case, students can show grade-level reading competency on the state assessment, an alternative assessment, or multiple work samples (Mack, 2016). Ohio implemented this same policy in 2014, although they also required annual testing in Kindergarten through third grade. Those students in the primary grades who were reading below grade level were each required to have specialized plans supervised by teachers who are required to report each step of the process to the state (Livingston, 2013).

Fidelity of Implementation

A study completed by Pierson and Connell (1992) researched the effect of grade retention on self-system processes, school management, and academic performance. They found that a disparity in the implementation of retention procedures often exists (Pierson & Connell, 1992) and expressed the belief that additional supports should lead to positive outcomes, if students who are having academic difficulty are given optimal levels of structure, autonomy support, and involvement by parents and teachers, their psychological needs should be met and their subsequent engagement and academic performance should improve (p. 307)
For this reason, they recommend further research on the implementation of retention policies before determining overall success (1992).

**Light’s Retention Scale**

Though the research overwhelmingly states that retention is not the answer for a majority of students, there are some that seem to benefit from this practice. In order to determine whether a student would benefit from retention, Light’s Retention Scale was developed in 1986. In the original scale, nineteen different criteria are measured in this scale including: sex, age, knowledge of the English language, physical size, present grade placement, previous grade retentions, number of siblings, parents’ school participation, experiential background, transiency, school attendance, estimates of intelligence, history of learning disabilities, present level of academic achievement, attitude toward possible retention, motivation to complete school tasks, immature behavior, emotional problems, and history of delinquency. Parents and teachers would then measure students on a scale of 0-5 on each of these items. The sum of scores determines suitability for retention. Despite the wide use of this scale, Sandoval found that early versions of the scale lacked validity and reliability and that scores “did not correlate with academic performance, self-concept, or mental health of retained students” (Westbury, 1999, p. 460). Though the scale has been revised over time to accommodate for those deficiencies, Westbury set out in 1999 to ascertain the reliability and validity of the scale through a Canadian study of 93 one-time-retained elementary students. These were randomly selected students from several schools, most of which had been retained in first or second grade (1999).

The results of her study affirmed that 68.7% of students in the retained sample would have scored as good retention candidates on the scale. The rest of the students would have fallen into the fair or marginal retention category (Westbury, 1999). However, Westbury did not find
any long-term differences in improvement in verbal and quantitative ability between those determined to be good candidates for retention and those who were measured as poor candidates. Overall results of her study found that the Light Retention Scale is neither valid nor reliable. The recommendation is consideration of abandoning retention policies until reliable and valid measures are developed (Westbury, 1999).

**Birthdate and Parental Education**

It is common practice to use birthdate as a major factor in determining whether to delay or retain a student in Kindergarten. Ladig conducted a study in one suburban school district comparing students who had delayed kindergarten even though they were eligible but had a late birthday to those who had not waited to enroll. The focus was on achievement, social/emotional status, and athletic competence. There was no difference in academic achievement in elementary students and the students who had delayed entry achieved at a lower level than those who had stared with their peers. There were no social/emotional differences, but those who had waited were found to be more involved in athletics (Ladig, 1991).

Maturity and academic reasons are cited most often as retention criteria. When parents were asked about the practice of retention for certain students, feelings were overwhelmingly favorable. However, although parents of students who had been retained for maturity reasons had an overall positive feeling about the decision, research has also found that those parents had never been educated or informed about the lack of documented research in support of retention. When interviewed, parents were unaware of the overwhelming research citing the lack of efficacy of retention (Shepard & Smith, 1989).
SECTION III: CAUTIONS AGAINST RETENTION

Introduction

There is a vast amount of research related to the adverse effects of student retention dating as far back as the 1970’s. This section of the review of literature will concentrate on the following most notable concerns: (a) Lack of long term academic gains, (b) Dropout rates, (c) Student psychosocial adjustment, (d) Disproportionate effect on minority students, (e) Monetary cost to districts, and (f) Increased special education placement.

Lack of Efficacy

The most notable concern is the lack of efficacy of retention. Though a few studies have found increased performance, overall research does not support the desired improvement in student achievement following retention. A study conducted in Florida public schools by Vandecandelaere, Vansteelandt, De Fraine and Van Damme (2016) suggested that retention in the 3rd grade show substantial short-term gains in math & reading. After two years, retained students outperformed their same-aged peers (those who were promoted) in reading and math although the performance in math was less than reading. However, within 5 years, these positive effects were insignificant in both subject areas. The authors did “find that retention and mandatory summer school had a small positive short-term effect on achievement for third graders but not for sixth graders” (Vandecandelaere et al., 2016). Jenny Nagaoka, a staff researcher at the University of Chicago’s School of Social Service Administration, was the lead author on two studies on retained students in Chicago found that “students in 3rd grade who barely avoided being retained are doing slightly better, by 6th and 8th grade, than kids who were retained” (Trotter, 2004, p. 18). In addition, S.R. Jimerson, professor at the University of California, Santa Barbara, conducted a meta-analysis of grade retention research in 2001, which
found that increases in achievement for retained students did not exist or were not maintained in subsequent years after retention (Jimerson, 2001). In his study, he included a meta-analysis conducted by Holmes and Matthews of 44 studies which compared 4,208 retained students and 6,924 non-retained students. They discovered significant differences in the two groups. Specifically, retained students had significantly decreased academic achievement, personal adjustment, and self-concept. They also disliked school more compared to promoted students (Jimerson, 2003).

This conclusion supported a study conducted at the University of Wisconsin from 1990 which reported that “by 8th grade, retained students lagged six months behind their age-mates in their schools on [standardized tests]” (Pick, 1998, p. 1). Another meta-analysis of 63 studies from 1989 conducted by University of Georgia professor, Thomas Holmes compared performance of retained students with similarly poorly performing students who were promoted. He found that “in 54 cases the retained students did worse once they went on to the next grade than those who had not been held back” (Ratnesar & Cole, 1999, p. 52). A study conducted by researchers in North Carolina found that “students face unique challenges, including mastery of previous material while simultaneously attempting to learn new material” (Tingle, Schoeneberger, & Algozzine, 2012, p. 184) They suggest that additional attention and different instructional strategies would be needed if retained, the same conditions that could have helped prevent retention.
 Dropout Rates

Not only has retention proven not to be effective in overall academic performance, but it has a strong correlation with dropout rates. In 2004, Elaine Allensworth, Associate Director of the Consortium on Chicago School Research, conducted a study which found that “78 percent of the students retained in 8th grade dropped out by the time they turned 19” (Trotter, 2004, p.18). Jimerson (2001) also found that “retention increases the risk of dropping out between 20% and 50%” and that “up to 78% of students who drop out before graduation have been retained at least once”. In 1999, a national study of 12,000 United States students found that retention before 8th grade more than doubled the dropout rate when compared to students who had been promoted with their age group (Ratnesar & Cole, 1999). E.R. House completed a 1998 study in New York that had similar findings. He found “retained students did not improve academically, despite intensive interventions and retained students dropped out at substantially higher rates than non-retained students” (Bleyaert, 2005, p. 2). A study completed by Scott, et al., in 1995 found that “Retained students who were two or more years older than their grade cohort were 34% more likely to drop out of school” (Bleyaert, 2005, p. 1). A study from Im et al. (2013) found that “previously retained students reach the age for legally dropping out of school or working as well as other developmental milestones, such as becoming a parent, when they are further away from graduation than are continuously promoted, same-age cohorts” (p. 365.). These situations cause students to drop out of school not because they are continuing to fail classes or have no hope to gain credits, but rather because of social situations related to their advanced age caused by previous retentions.
Psychosocial Adjustment

Beyond academics, research has also examined the psychosocial adjustment of students who were retained. According to Andrew (2014), retention is a scarring event in the educational life of a student. The researcher found that not only did retention reduce the likelihood of graduation by 75% but it also affected many other areas of a student’s life including relationship with parents and drug usage (see Table 2 on pages 11-12). This matched results from the 2001 Quebec Longitudinal Study of Kindergarten Children looking at the impact of retention in primary grades on behavioral outcomes until age 12. Specifically they noted that, “Children’s anxious, inattentive, and disruptive behaviors persisted and, in some cases, worsened after grade retention” (Pagani, 2001, p. 314). These findings have echoes from the early 1900’s. A meta-analysis of studies dating back to 1925 was conducted at the University of Georgia in 1989 and found that “retained students are worse off than their promoted counterparts, on self-concept, attitude toward school, and attendance” (Pick, 1998, p. 1).
<table>
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<th>Non-retained</th>
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Disproportionality of Retention

Facts show that a disproportionate number of minority students are facing retention. Boys, minorities, and low-socioeconomic students are more likely to be retained according to a Meisels and Liaw study from 1993. This study used the National Educational Longitudinal Study from 1988. It looked at three major issues: who was retained, retention’s effect on...
improved student outcomes at eighth grade, and the way different demographic groups respond to retention. Results showed a significant difference between white and minority retention. Over 65% of students retained in this study were minority students either Black or Hispanic. Boys significantly outnumbered girls, and 33.9% of retained students were from the lowest socio-economic groups. This brings to light a focus on proactive strategies targeting support for these at-risk groups (1993). This is partially due to the disproportionate number of minorities who live below the poverty level, which has a direct correlation with low achievement. Nevertheless, the Chicago Public School System has faced a federal investigation because of the disproportionate impact of the retention policy on black and Latino students (Karp, 2011). Another notable finding includes the increasing number of students that were retained were funneled into special education. In Florida, following the implementation of the retention policy, “almost 20 percent of the retained students were placed in special education (Balkcom, 2014).

Financial Costs

Finally, there is a financial consideration to the implementation of retention policies. While summer school remediation and alternative programs cost districts millions of dollars, the Chicago Public School System estimated that twenty years ago, it cost the district approximately $5,500 for each student that needed an extra year of school, a cost that grows each year (Lenz, 1998). When you consider the cost of retention with the mixed outcomes cited in research, the return on investment is questionable at best.
SECTION IV: ANALYSIS OF LITERATURE

Conclusion

Following the review of literature regarding the retention of students K-12, our conclusion is that the concerns and negative research for retention of any student K-12 far outweighs any positive impact it may have. While the threat of retention may persuade and motivate some students and parents to take school more seriously, those who experience retention suffer from ongoing negative academic and psychosocial effects. Even if there are short-term positive academic results from retention, those improvements plateau and fall below the promoted counterparts within a few years. Rather than relying on the retention of students to address academic deficits, research offers many research-based alternative methods supporting remediation.

Research-Based Remediation Strategies

- Adding the 7th and 8th grades to high school to reduce the transition stress on students and prevent the “dropout slide” which occurs in the 9th grade year (Gehring, 2004).
- Increasing parental involvement in schools primarily in the elementary and home assistance programs for parents to learn how to help with homework.
- Increasing culturally sensitive instructional strategies
- Implementation of preschool programs
- Systematic progress-monitoring
- Early reading programs
- Reading Recovery Program
- Looping teachers with students
- School-based mental health programs (to address behavior problems specifically)
- Alternative educational settings such as: extended year, day, and remedial summer school
- Tutoring and mentoring programs
- Response to Intervention (RTI) programs
- Mixed age classes
- Individualized instruction, or smaller class sizes particularly in primary grades
- Delaying achievement testing in areas where students need additional support
REFERENCES


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