
Technical Appendix

Repeating a yearⁱ

Negative impact for very high cost, based on moderate evidence



-4

Definition

Repeating a year is the practice of requiring pupils who do not reach a given standard of learning at the end of one academic year to repeat that year of learning by joining a class of younger students the following academic year. It is also known as “grade retention”, “non-promotion”, or “failing a grade”. For students at secondary school level, repeating a year is usually limited to the particular subject or classes that a student has not passed.

Repeating a year is relatively common in the USA, where the No Child Left Behind Act (2002) recommended that students be required to demonstrate a set standard of achievement before progressing to the next grade level. Students can also be required to repeat a year in some countries in Europe including Spain, France and Germany. In Finland, pupils can repeat a year in exceptional circumstances, but this decision is made collectively by teachers, parents, and the student, rather than on the basis of end of year testing.

In England, repeating a year is currently very uncommon and schools cannot require that students repeat a year without parental consent. However, it is included within the Toolkit as it is a policy which periodically attracts some interest among schools and the media.

Search Terms: grade retention; grade repetition; non promotion; holding back

Evidence Rating

There are five meta-analyses suggesting that repeating a year has negative effects for students, especially those from disadvantaged backgrounds. Only two of these have been published in the last ten years. There are no studies that have used an experimental design. However, overall, there are a number of high quality evidence reviews which show that negative effects have been found

consistently over the last fifty years in both Europe and North America. There is some evidence that more rigorous studies find a smaller negative impact.

After one year, students who repeat a year are typically four months' behind those who move on in terms of academic achievement. The evidence suggest that repeating a year is likely to lead to greater negative effects when used in the early years of primary school and for students from ethnic minorities. Although the overall average impact of repeating a year is negative, some studies suggest that in individual circumstances it can benefit the student, particularly in the short term. However, it does not appear to be easy to identify which students will benefit from repeating a year prior to making a decision, suggesting that choosing to do so represents a significant risk. Overall, the evidence is rated as moderate.

Cost Information

The costs are equivalent to an additional year of schooling. In the US this was estimated at \$8,916 per pupil in 2006. Annual costs of schooling vary widely in England, with secondary school costs tending to fall between £4,000 and £9,000, and primary school costs between £3,000 and £8,000. Costs are therefore estimated at £6,000 per pupil per year.

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Summary of effects

Meta-analyses	Effect size	FSM effect size
Allen, C. S., Chen, Q., Willson, V. L., & Hughes, J. N. (2009)	-0.3	- (low quality studies)
	0.04	- (medium and high quality studies)
Bright, A. D. (2011)	-0.5	-
Holmes, C. T., & Matthews, K. M. (1984)	-0.34	-
Jimerson, S. R. (2001)	-0.31	-
Yoshida, S. A. S. (1989)	-0.6	-
Single Studies		
Indicative Effect Size	-0.32	

Meta-analyses abstracts

1

Allen, C. S., Chen, Q., Willson, V. L., & Hughes, J. N. (2009)

The present meta-analysis examined the effect of grade retention on academic outcomes and investigated systemic sources of variability in effect sizes. Using multi-level modeling, we investigated characteristics of 207 effect sizes across 22 studies published between 1990 and 2007 at two levels: the study (between) and individual (within) levels. Design quality was a study-level variable. Individual level variables were median grade retained and median number of years post retention. Quality of design was associated with less negative effects. Studies employing middle to high methodological designs yielded effect sizes not statistically significantly different from zero and 0.34 higher (more positive) than studies with low design quality. Years post retention was negatively associated with retention effects, and this effect was stronger for studies using grade comparisons versus age comparisons. Results challenge the widely held view that retention has a negative impact on achievement. Suggestions for future research are discussed.

2

Bright, A. D. (2011)

This dissertation investigates the relationship between grade retention and students' academic achievement for K-6 students. A meta-analysis was conducted from studies published between 1990 and 2010 that reported data on the effects of elementary grade retention and students' academic achievement. The primary hypothesis for this dissertation was that there was a positive relationship between grade retention and students' academic performance. An extensive systematic review of the literature was conducted using bibliographic databases and other sources, resulting in the review of hundreds of abstracts and articles. Initially, this review resulted in the identification of approximately 120 articles, from which, 68 were identified as potential studies for inclusion in this meta-analysis. As data were abstracted from each potential study and evaluated, 43 studies remained for inclusion in this meta-analysis. Of these 43 studies, 31 either reported effect sizes in the results section or included sufficient data to calculate the effect sizes. After testing each study for statistical significance and eliminating insignificant studies, 26 studies remained. Effect sizes for these 26 studies were averaged and an effect size of medium strength was revealed ($ES = -0.50$). This effect size indicated that retained students scored 0.50 standard deviations lower than promoted students on academic outcome measures. Sixteen studies included in this meta-analysis had never been included in any prior meta-analysis, thus adding to the existing literature. This study found that there was not a positive relationship between grade retention and students' academic performance. Results support the findings of most prior studies on grade retention concluding that grade retention is not an effective intervention. Major findings are provided for the four research questions examined in this study. In addition, implications for practitioners and implications for researchers are included, as well as, suggestions for future research.

4

Holmes, C. T., & Matthews, K. M. (1984)

In this study data from all studies identified as meeting the selection criteria were mathematically integrated to determine the effect of grade-level retention on elementary and/or junior high school pupils. When each effect size calculated was treated equally, a grand mean effect size of $-.37$ was obtained indicating that, on the average, promoted children scored $.37$ standard deviation units higher than retained children on the various outcome measures. When the effect sizes within each study were first averaged so that each study could be given equal weight, a grand mean of $-.34$ was obtained. By using the effect sizes from only those studies in which the promoted and non-promoted pupils had been matched, a grand mean of $-.38$ was calculated. The high degree of consistency in these measures lends credibility to the validity of these findings. In addition to the grand means,

effects sizes were calculated on various dependent variable measures, including academic achievement (further subdivided into various areas), personal adjustment (which included self-concept, social adjustment, and emotional adjustment), and attitude toward school, behavior, and attendance. In all cases, the outcomes for promoted pupils were more positive than for retained pupils.

7


Jimerson, S. R. (2001)

Retaining a child at grade level has become increasingly popular, consistent with the emphasis on accountability and standards in elementary education. This article provides a comprehensive review of the research examining the academic and socio-emotional outcomes associated with grade retention. Following a brief historical overview of previously published literature reviews, a summary of studies published between 1990 and 1999 is provided. A systematic review and meta-analysis of 20 recent studies includes: outcome variables (i.e., achievement and socio-emotional adjustment), age or grade of retained population, matched or controlled for variables in analyses with comparison groups, and the overall conclusion regarding the efficacy of grade retention. Results of recent studies and this meta-analysis are consistent with past literature reviews from the 1970s and 1980s. In addition to a summary of the results, the discussion addresses the disparity between educational practice and converging research regarding grade retention and suggests directions for practice. This review encourages researchers, educational professionals, and legislators to abandon the debate regarding social promotion and grade retention in favor of a more productive course of action in the new millennium.

11

Yoshida, S. A. S. (1989)

Current interest in the grade-standards promotion policy and grade retention, resulting from the minimum competency testing movement, emphasizes the need for practical research information on the differential effects of promotion policies in a way that can assist policy makers. Meta-analysis was employed to conduct an integrative review of the research literature, and to analyze relationships between substantive and methodological variables of the sample studies and study results. The substantive variables included sex, ethnicity, SES, and grade level of the pupils retained; the academic interventions used during the year of retention; and the measures or criteria used to determine academic progress subsequent to retention. The methodological variables were the quality of the study; the era of publication, that is, the promotion policy in vogue when the study was published; and the time elapsed between retention and the measurement of the effects. Thirty-four studies were drawn from dissertation abstracts, journal articles, ERIC documents, narrative reviews, and education references. They met these criteria: (a) they investigated the effects of grade retention in the elementary grades on subsequent student achievement, (b) they included two groups of students, retained students and promoted students, (c) they took place in the United States, and (d) they reported data from which an effect size, that is, a normally distributed statistic defined as the mean of the treatment group minus the mean of the control group divided by the standard deviation of the control group, could be computed. The results of the meta-analysis indicated that grade retention has a negative impact overall on subsequent academic achievement across studies with different designs and methodologies. Most studies did not define what occurred during the year of retention. However, the value of an individualized educational program (IEP) for each retained student needs further evaluation because retained students appeared to do better in arithmetic with an IEP in two studies which specified their use during the year of retention. No significant differences were found for grade level of retention. The sampled studies contained insufficient data for comparisons based upon sex, ethnicity, and SES. Suggestions for future research include: (a) random assignment of low achieving



student to a retention or promotion condition, (b) operational definition of the retention treatment, and (c) development of a policy evaluation program that includes variables such as the promotion policy as written, the policy as implemented in specific sites, and the effects of the implemented policy on groups of students and individual students with different characteristics.