

Running head: TEST-BASED RETENTION

POLICY BRIEF
LITERACY RESEARCH ASSOCIATION

Test-Based Grade Retention

Danielle V. Dennis, Ph.D.
Diane C. Kroeger, Ph.D.
University of South Florida

W. Ian O'Byrne, M. Ed.
University of New Haven

Carla K. Meyer, Ph.D.
Appalachian State University

Sharon B. Kletzein, Ph.D.
West Chester University of Pennsylvania

Andrew Huddleston, M.Ed.
University of Georgia

Colleen Gilrane, Ph.D.
Chair, LRA Policy & Legislative Committee
University of Tennessee

Test-Based Grade Retention: A Policy Brief of the Literacy Research Association

ABSTRACT

Test-based retention policies retain students at the same grade level when they fail to reach proficiency on state assessments. Assessments of reading often figure prominently in such decisions. Several states in the U.S., such as Florida and Texas, have longstanding test-based retention policies, while others, such as Tennessee and Arizona, have only recently adopted policies. Still other states (e.g., Indiana, New Mexico) are in the process of proposing legislation relating to test-based retention. These retention policies and initiatives are not consistent with the research literature, which overall does not support any long-term academic benefits for retention, but does suggest that there are negative social ramifications of such policies. Guided by the literature, in this policy brief we discuss the following five implications of test-based retention: Academic, Socio-political, Correlational, Economic, and Ethical. The test-based retention policies of particular states are discussed, with Florida as a specific case highlighting the potentially detrimental effects of test-based retention policies, especially for Black or Hispanic males from low-income homes. Finally, based on the discussion of the five considerations of this policy, and given the case study of Florida, we call for States to suspend the use of policies mandating test-based grade retention until further research is conducted to examine the efficacy and ramifications of such policies. We also present alternatives to consider while this research is being conducted. These alternatives include, but are not limited to development of policy that supports differentiated and small-group instruction in all classrooms, and support of high-quality summer programs.

INTRODUCTION

As a solution for students with low academic performance, policies mandating test-based grade retention (i.e., repeating another school year at the same grade level) have risen and fallen across the previous several decades. This policy brief challenges grade-retention policies being enacted or considered by states, details a future course of action, and presents alternatives that promise to equal or exceed the goals of retention.

Political support for grade retention as an intervention gradually increased throughout the 1970s, and reached a crescendo in the mid-late 1980s (Jimerson, 1999). By the early 1990s, retention rates across the nation began declining (Alexander, Entwisle, & Dauber, 2003), due to increases in dropout rates among students who had been retained at one or more points in their schooling (Roderick, 1995). However, by the late 1990s, there was renewed political interest in grade retention as an academic intervention (Xia & Kirby, 2009). Since grade retention entered the political scene, several states have adopted policies mandating grade retention for students who do not meet the cut-scores on standardized assessments (Darling-Hammond & Falk, 1997; Jimerson, Pletcher, Graydon., Schnurr, Nickerson, & Kundert, 2006; Roderick, 1995; Xia & Kirby, 2009).

Virtually all research from the previous three decades shows the ineffectiveness of grade retention as a policy solution for low achievement. Grade retention is associated with long-term detrimental implications for individuals, institutions, and society as a whole, as acknowledged by professional organizations, academic researchers, and policy advocacy groups such as the RAND Corporation and the Southern Regional Education Board, (Denton, 2001; Jimerson, 2001; McCoy & Reynolds, 1999; National Association of School Psychologists, 2011; Roderick, 1994; Xia & Kirby, 2009). When combined with the questionable practice of using standardized

assessments as a high-stakes tool for classroom-based instructional decision-making (National Research Council, 2011; Penfield, 2010), the policy of test-based grade retention, as we will substantiate in this policy brief, is at best ineffective and inefficient and at worst unethical.

CONSIDERATIONS OF TEST-BASED GRADE RETENTION

There is a lack of research to support the use of grade retention as an academic intervention to increase achievement. Further, the literature addressing that topic suggests that grade retention as a policy is often fiscally (National Center for Educational Statistics, 2009) and pedagogically (Penfield, 2010) detrimental to schools. The research suggests that grade retention overall is harmful to the academic (Alexander, Entwistle, & Dauber, 2003; Jimerson, 2001; Xia & Kirby, 2009) and socio-emotional development of students (Holmes, 2006; Jimerson, 2001; Roderick, 1994).

So, why is the practice of grade retention gaining traction once again? We believe that there are four factors, all appealing to logic as well as conventional notions of fairness and progress in school. These factors have over-ridden the robust body of research that indicates the ineffectiveness of retaining students in grade. First, there is a general disdain by policymakers for the practice of social promotion (American Federation of Teachers, 2003; Bush, 2002; Clinton, 1999; Thomas, 2000; Xia & Kirby, 2009). Social promotion is the act of promoting to the next grade students who have not met academic expectations in order to keep them with peers of the same age. When grade retention is juxtaposed with social promotion, the argument for retention seems fair. For example, it seems reasonable that poor-performing students who do not learn when given the opportunity should not be rewarded with advancement to the next level along with their peers who made acceptable gains. Second, conventional expectations about time and progress in reading favor our propensity to honor efficiency. For example, Compton-Lilly (2010)

stated, “Passing standardized tests, achieving grade level standards, and reading text level benchmarks all involve temporal expectations” (p. 4). By fitting reading progress into standardized measures and increments of a one-size-fits-all calendar, we force what it means to be a developing reader into the existing assembly-line model of schooling derived from the industrial era (Darling-Hammond, 1997; see also Callahan, 1964). In doing so, the practice of grade retention can be rhetorically represented as a way to embed quality control into system outputs (Darling-Hammond, 1997). Third, the appeal of grade retention is supported by the current climate of test-driven school accountability. The designation of cut-scores on a high-stakes accountability measure seems objective and fair, especially when tests are based on common standards for reading proficiency. Finally, elementary school teachers and other stakeholders frequently cite anecdotal improvements in the performance of students in the months following the decision to retain (Penfield, 2010; Roderick, 1995). As we report later in this policy brief, however, short-term gains are not unusual, especially in a student’s first year after retention. Casual observations made from short-range vantage points perpetuate the notion that retention “works.”

When the constructs of fairness, time, and efficiency are coupled with positive short-term and anecdotal observations, grade retention can be, and often is, represented as a rational solution for students who make limited reading progress. To further clarify these points, we examine the research and examine the following five considerations pertaining to grade retention in general and specifically grade retention based on high-stakes state tests: Academic, Socio-political, Social-emotional, Economic, and Ethical Considerations.

Academic considerations. A fundamental question is whether grade retention increases academic achievement. Historically, reviews of the considerable research on that question have

concluded that the use of retention as an academic intervention does not increase overall academic achievement (Holmes, 1989; Holmes & Mathews, 1984; Jackson, 1975). Research from the previous three decades suggests that, "there is no reliable body of evidence to indicate that grade retention is more beneficial than grade promotion for students with serious academic or adjustment difficulties" (Jackson, 1975, p. 627). Two different statistical syntheses across research studies on grade retention conducted by Holmes and Matthews (1984; 1989) concluded that the negative outcomes of grade retention consistently outweigh the positive outcomes.

Jimerson (2001), in his meta-analysis of grade retention research from 1990 to 1999, argued that "Educational professionals, researchers, and politicians reviewing the efficacy of grade retention on academic success would benefit from awareness of the literature addressing the association between grade retention and dropping out" (2001, p. 433). Jimerson urged educators and policy makers to redirect their attention away from grade retention as an academic intervention.

Greene and Winters' (2006) review of more recent research suggested that states interested in short-term improvements in student achievement might find grade retention to increase some students' test scores initially. The authors pointed out that it is not uncommon to see gains on achievement and test scores for retained students in the year following retention. This finding parallels other research indicating that elementary teachers frequently cite anecdotal improvements in the performance of retained students in the months following the decision to retain (Penfield, 2010; Roderick, 1995). However, as these studies document, these initial gains in student achievement and test scores are often short-lived.

Despite these initial gains, research fails to show any lasting academic benefits in terms of measureable student achievement, beyond the first initial improvement, when students repeat

a grade (Jimerson, 2001; Jimerson & Ferguson, 2007; McCoy & Reynolds, 1999; Xia & Kirby, 2009). The issue has been studied longitudinally. For example, Hong and Yu (2007) found no long-term increases in reading and math scores for retained kindergarten children. Moreover, they found that students retained in first grade experienced immediate negative effects in both reading and math test scores that began with the retention year and remained constant for three years after the retention treatment in relation to students that were not retained.

In other longitudinal studies in Chicago (Roderick, Jacob, & Bryk, 2002), Florida (Greene & Winters, 2006), and New York City (McCombs, Kirby, & Mariano, 2009), where policies mandated retention of students based on test scores, students experienced an academic boost, but only in the short-term. None of these studies provides evidence that test-based retention improves academic performance beyond a year or two and these gains are often dissipated after another year or two. In fact, Roderick & Nagaoka (2005) showed that the academic boost students received from retention was lost within two years. Additionally, sixth graders actually declined in academic growth as a possible effect from retention as an academic intervention.

Thus, there is virtually no research evidence to suggest that retained students ultimately catch up to their peers, as is often argued by those who support retention policies. Even those who have found some modest support for that position offer caveats. For example, Alexander, Entwisle, and Dauber (2003), who found limited positive academic effects of grade retention, stated: "Retention does not turn failures into academic superstars, or even into average students. At best it helps [poor performing children] hang on . . ." (p. 264). Students retained in grade continue to "perform marginally" (p. 257) and, they are ill-equipped to negotiate the institutional demands of the secondary grades. Most importantly, and as is the case in the majority of studies

(e.g., Jimerson, 1999; Jimerson, Anderson, & Whipple, 2002; McNeil, Coppola, Radigan, & Heilig, 2008; Roderick, 1994), their study revealed that of the 287 students retained, over two-thirds (67%) dropped out of school in comparison to 32% of their matched peers who were not retained (Alexander, Entwisle, & Dauber, 2003).

Socio-political considerations. Another consideration is the inequities in who is retained. Males, minorities, and students from low-income families (Alexander, Entwisle, & Dauber, 2003; Denton, 2001; Greene & Winters, 2007; Jimerson, et al., 2006; Penfield, 2010; Xia & Kirby, 2009) are those most likely to be retained when states mandate test-based retention policies. Concerns about equity are exacerbated when the strong association between retention and marginalized populations is coupled with the lack of evidence that retention increases academic achievement for individuals in the long term and with the propensity for retained students to leave school without graduating.

Correlational considerations. The research is exceptionally clear about a correlation between grade retention and dropping out of school (Holmes, 2006). Indeed, grade retention has been shown to be a powerful predictor of dropping out of school (Bowman, 2005; Jimerson, 2001; Pagani, Tremblay, Vitaro, Boulerice, & McDuff, 2001; Roderick, 1994; Rumberger, 1995; Xia & Kirby, 2009). Exiting school before graduation is an act associated with diminished self-regard (Alexander, Entwisle, & Dauber, 2003), restricted employment options, insufficient resources for living (immediately and in the long term), and limited lifetime earnings (Blanton & Wood, 2009; Haynes, 2007; Moore, 2009). Although there is no conclusive evidence that retention policies directly influence dropout rates and the negative outcomes associated with dropping out of school, there is reason to be concerned that retention plays a role in reinforcing dysfunctional socio-emotional conditions and patterns.

Economic considerations. The monetary costs of grade retention are staggering. In 2009, 55.2 million children were enrolled in K-12 public schools in the United States (National Center for Educational Statistics, 2009) with public school systems spending approximately \$10,000 per student (National Center for Educational Statistics, 2009). Estimates derived from census data suggest six to nine percent of students are retained annually (Aldridge & Goldman, 2006). Based on these figures, approximately three to five million children are retained yearly with annual estimated costs between \$33 to \$50 billion. These costs raise questions of efficiency, which rarely enter the political discourse about retention. Is retention a cost-efficient approach to increasing achievement? Are there other approaches that might be less costly and equally or more effective, especially considering the research suggesting concerns about negative socio-emotional fallout from retention? We offer some potential alternatives in a subsequent section.

Ethical considerations. The practice of grade retention is compounded by concerns about the shortcomings of standardized tests and their use as an incentive for improvement (National Research Council, 2011). Penfield (2010) questioned the ethics of test-based retention policies because they do not meet national standards for fair and appropriate test use. Given that retention has not been shown to be effective as an academic intervention, at least in the long term, Penfield (2010) argued that this practice amounts to providing children with a “low quality form of educational placement” (p. 113). Although legal challenges to grade retention have to date been unsuccessful, mounting research evidence may lead to a shift in how test-based grade retention is perceived in and out of the courtroom (Penfield, 2010).

FLORIDA: A CASE OF TEST-BASED RETENTION

In this section, we discuss Florida’s test-based retention policy as a case illustrating misguided decisions influenced by political rhetoric. In 2002, as part of a revision to the K-20

Education Code, the Florida legislature passed statute 1008.25. The statute introduced a test-based retention policy for third-grade students who score below a cut-score on the reading section of the Florida Comprehensive Assessment Test (FCAT). The Foundation for Excellence in Education, a conservative organization whose vision is, “An education system that ensures each and every student achieves his or her God-given potential for learning and prepares all students for success in the 21st century economy,” (Foundation for Excellence in Education, 2011, Our Vision, paragraph 1) is a driving force behind Florida’s test-based retention policy. The Foundation and its Chairman, Jeb Bush, who was Florida’s Governor when the 2002 statute passed, have touted the test-based retention policy as one of six factors in the “Florida Formula” for successful education reform. They claim that, as a result of the six factors, Florida’s students have narrowed the achievement gap according to scores on the fourth-grade portion of the National Assessment of Educational Progress (NAEP). However, the National Education Policy Center (NEPC), a public think tank whose mission is, “...to produce and disseminate high-quality, peer-reviewed research to inform education policy discussions...[and is] guided by the belief that the democratic governance of public education is strengthened when policies are based on sound evidence,” cast doubts on the claims made by the Foundation and suggests that the gains were exaggerated: “NAEP performance of grade 4 students was artificially inflated due to the screening out and elimination of the weakest readers by the state’s retention policy mandate, particularly Hispanic and Black students, and the presence of smaller numbers of older retained students” (Chatterji, 2010, p. 6).

A longitudinal study of one of Florida’s largest school districts supports the cautionary research literature, and Chatterji’s (2010) assertions. Dennis, Kroeger, Welsh, Brummer, and Baek (2010) conducted a two-level, Multi-Level Modeling on four cohorts of third-grade

students beginning with the 2002-2003 cohort. Comparing retained and administratively promoted (those who qualified for retention but were exempted based on “good cause”) in each cohort demonstrated that retained students experienced neither short- or long-term gains when compared to those who had been administratively promoted. In other words, neither retained students, nor their administratively promoted peers, reached proficiency on the FCAT reading assessment. These students, whether retained or not, never attained an achievement level comparable to their more successful peers. Further, 60% of the students retained are male, 43% Black, 31% Hispanic, and 81% receive free or reduced lunch.

Thus, the political rhetoric touting the successes of this program and specifically retention is at best questionable in light of the data and at worst distorted. Students retained in third grade as a result of the policy did not reach proficiency on the FCAT reading assessment at any point in their school career, which leads to questions regarding the Foundation’s assertion that those same students were reaching proficient levels on the NAEP reading assessment in subsequent years. In fact, the data in Florida, when examined closely underneath the veneer of political rhetoric, are consistent with the peer-reviewed research that is unresponsive of test-based retention policies, which suggests caution for states that currently have, or that are considering these policies. Nonetheless, increasing achievement for all students is an important goal. Given the considerable evidence that test-based retention is ineffective, costly, and may produce undesirable socio-emotional and societal consequences, we conclude this policy brief by offering several alternatives.

RECOMMENDATIONS

Accountability works both ways. If high-stakes tests are used to make decisions about grade retention, then at the very least, states should openly and annually report the longitudinal,

disaggregated test results of students who have been retained to inform the public about the efficacy of this policy. Given the extensive body of research that refutes the long-term effectiveness of grade retention, states in particular should follow and annually report cohorts' long-term progress. We agree with Jimerson (2001), "In isolation, neither social promotion nor grade retention will solve our nation's educational ills nor facilitate the academic success of children. Instead, attention must be directed toward alternative remedial strategies" (p. 14). As such, we offer two alternatives to grade retention that may benefit student who have low achievement in reading.

Increase policy attention on differentiated and small group instruction. Because struggling students need continued support throughout their school careers, states should *intensify policies that support differentiated instruction and provide support for one-on-one and small-group instruction.* Such interventions require additional resources of time, space, and personnel, but are essential to address the various needs of students who struggle with reading and are likely to be impacted by test-based retention policies. These approaches require teachers to engage in problem solving using data-driven decision-making (Fuchs & Fuchs, 2006) that make use of multiple assessments to inform instructional decisions for students. Providing differentiated instruction to support the literacy needs of all students will promote the skills of those who struggle with reading. By establishing these instructional approaches, schools will be able to meet the needs of all students, and avoid the use of test-based retention policies.

Provide support for high-quality summer programs. Children need to continue practicing literacy throughout the summer months. Multiple reports conclude that summer reading loss accounts for nearly 80% of the achievement gap between students on free and reduced-price lunch and those who are not, and that reading books during the summer is the greatest predictor

of school success in the subsequent fall (Allington & McGill-Franzen, 2008; Kim, 2004). Each of these reports highlights that students from low-income families are less likely to have access to books and reading instruction in the summer, and these are the very students who are most likely to fall victim to test-based retention policies. Thus, we recommend that states support districts in the design and delivery of high-quality summer reading programs for struggling readers as opposed to implementing test-based retention policies.

REFERENCES

- Aldridge, J., & Goldman, R. (2006). *Issues and trends in education* (2nd ed.). Boston, MA: Allyn & Bacon.
- Alexander, K. L., Entwisle, D. R., & Dauber, S. L. (2003). *On the success of failure: A reassessment of the effects of retention in the primary grades* (2nd ed.). Cambridge, England: Cambridge University Press.
- Allington, R. L., & McGill-Franzen, A. (2008). Got books? *Educational Leadership*, 65(7), 20-23.
- American Federation of Teachers. (2003). *Setting Strong Standards*. (Item No. 39-0175). Washington, DC.
- Blanton, K. D., & Wood, W. E. (2009). The case for improving adolescent literacy instruction. In K. E. Wood, & W. E. Blanton (Eds.), *Literacy Instruction for Adolescents: Research-Based Practice*. (pp. 1-12). New York, NY: The Guilford Press.
- Bowman, L. (2005, Spring). Grade retention: Is it a help or hindrance to student academic success? *Preventing School Failure*, 49(3).
- Bush, J. (2002, February 10). Governor's goals. *The Orlando Sentinel*, p. G2.
- Callahan, R. E. (1964). *Education and the Cult of Efficiency: A Study of the Forces that Have Shaped the Administration of the Public Schools*. Chicago: The University of Chicago Press.
- Chatterji, M. (2010). *Review of "Closing the Racial Achievement Gap: Learning from Florida's Reforms."* Boulder, CO: National Education Policy Center. Retrieved June 30, 2011 from <http://nepc.colorado.edu/thinktank/learning-from-florida>

- Clinton, W. J. (1999, January 19). Address before a joint session of the Congress of the State of the Union. In J. T. Woolley & G. Peters, *The American Presidency Project* [online]. Retrieved from <http://www.presidency.ucsb.edu/ws/?pid=57577>
- Compton-Lilly, C. (2010). Following students through school: Timing and schooling. *Wisconsin English Journal*, 52(1), 3-5.
- Darling-Hammond, L., & Falk, B. (1997, November). Using standards and assessments to support student learning. *The Phi Delta Kappan*, 79, 190-199.
- Dennis, D. V., Kroeger, D., Welsh, J., Brummer, R., & Baek, E. (2010, December). *The road thus far: Long-term academic outcomes of Florida's third-grade retention policy*. Paper presented at the annual meeting of the Literacy Research Association, Fort Worth, TX.
- Denton, D. R. (2001). *Finding Alternatives to Failure: Can States End Social Promotion and Reduce Retention Rates?* Atlanta, GA: Southern Regional Education Board.
- Fuchs, D., & Fuchs, L. S. (2006). Introduction to Response to Intervention: What, why, and how valid is it? *Reading Research Quarterly*, 4 (1), 93-99.
- Greene, J. P., & Winters, M. A. (2006). Getting ahead by staying behind: An evaluation of Florida's program to end social promotion. *Education Next*, 6, 65-69.
- Greene, J. P., & Winters, M. A. (2007). Revisiting grade retention: An evaluation of Florida's test-based promotion policy. *Education Finance and Policy*, 2, 319-340.
- Haynes, M. (2007). *From State Policy to Classroom Practice: Improving Literacy Instruction for All Students*. Alexandria, VA: National Association of State Boards of Education.
- Holmes, C. T. (1989). Grade-level retention effects: A meta-analysis of research studies. In L. A. Shepard & M. L. Smith (Eds.), *Flunking grades: Research and policies on retention* (pp. 16-33). London, England: The Falmer Press.

- Holmes, C. T. (2006, Winter). Low test scores + high retention rates = more dropouts. *Kappa Delta Pi Record*, 42, 56-58.
- Holmes, C. T. & Matthews, K. M. (1984, April). The effects of nonpromotion on elementary and junior high school pupils: A meta-analysis. Paper presented at the meeting of the American Educational Research Association, Quebec, Canada. Retrieved from Academic Search Complete database.
- Hong, G., & Yu, B. (2007). Early-grade retention and children's reading and math learning in elementary years. *Educational Evaluation and Policy Analysis*, 29, 239-261.
- Jackson, G. (1975). The research evidence on the effects of grade retention. *Review of Educational Research*, 45, 613-635.
- Jimerson, S. R. (1999). On the failure of failure: Examining the association between early grade retention and education and employment outcomes during late adolescence. *Journal of School Psychology*, 37, 243-272.
- Jimerson, S. R. (2001). Meta-analysis of grade retention research: Implications for practice in the 21st century. *School Psychology Review*, 30, 420-448.
- Jimerson, S. R., Anderson, G. E., & Whipple, A. D. (2002). Winning the battle and losing the war: Examining the relation between grade retention and dropping out of high school. *Psychology in the Schools*, 39, 441-457.
- Jimerson, S. R., & Ferguson, P. (2007). A longitudinal study of grade retention: Academic and behavioral outcomes of retained students through adolescence. *School Psychology Quarterly*, 22, 314-339.
- Jimerson, S. R., Pletcher, S. M. W., Graydon, K., Schnurr, B. L., Nickerson, A. B., & Kundert, D. K. (2006). Beyond grade retention and social promotion:

- Promoting the social and academic competence of students. *Psychology in the Schools*, 43(1), 85-97.
- Kim, J. (2004). Summer reading and the ethnic achievement gap. *Journal of Education for Students Placed at Risk*, 9(2), 169-188.
- McCombs, J. S., Kirby, S. N., & Mariano, L. T. (Eds.). (2009). *Ending social promotion without leaving children behind: The case of New York City*. Santa Monica, CA: RAND.
- McCoy, A. R., & Reynolds, A. J. (1999). Grade retention and school performance: An extended investigation. *Journal of School Psychology*, 37, 273-298.
- McNeil, L. M., Coppola, E., Radigan, J., & Helig, J. V. (2008). Avoidable losses: High-stakes accountability and the dropout crisis. *Education Policy Analysis Archives*, 16(3). Retrieved from <http://epaa.asu.edu/epaa/v16n3/>
- Moore, D. W. (2009). Advocating reading instruction in middle and high school classrooms. In K. D. Wood & W. E. Blanton (Eds.), *Literacy instruction for adolescents* (pp. 13-33). New York, NY: Guilford Press.
- National Association of School Psychologists. (2011). Grade retention and social promotion (White Paper). Bethesda, MD: Author.
- National Center for Educational Statistics. (2009). Digest for educational statistics. Retrieved from http://nces.ed.gov/programs/digest/d09/tables/dt09_002.asp
- National Research Council. (2011). *Incentives and test-based accountability in education*. Washington, DC: The National Academies Press.
- Pagani, L., Tremblay, R. E., Vitaro, F., Boulerice, B., & McDuff, P. (2001). Effect of grade retention on academic performance and behavioral development. *Development and Psychopathology*, 13, 297-315.

- Penfield, R. D. (2010). Test-based grade retention: Does it stand up to professional standards for fair and appropriate test use? *Educational Researcher*, 39, 110-119.
- Roderick, M. R. (1994). Grade retention and school dropout: Investigating the association. *American Educational Research Journal*, 31, 729-759.
- Roderick, M. R. (1995, December). Grade retention and school dropout: Policy debate and research questions. *Phi Delta Kappa Research Bulletin*, 15, 1-6.
- Roderick, M., Jacob, B. A., & Bryk, A. S. (2002). The impact of high-stakes testing in Chicago on student achievement in promotional gate grades. *Educational Evaluation and Policy Analysis*, 24, 333-357.
- Roderick, M., & Nagaoka, J. (2005). Retention under Chicago's high-stakes testing program: Helpful, harmful, or harmless? *Educational Evaluation and Policy Analysis*, 27, 309-340.
- Rumberger, R. (1995). Dropping out of middle school: A multilevel analysis of students and schools. *American Educational Research Journal*, 32, 583-625.
- Thomas, V. G. (2000, Fall). Ending social promotion: Help or hindrance? *Kappa Delta Pi Record*, 37, 30-32
- Xia, N. & Kirby, H. (2009). Retaining students in grade: A literature review of the effects of retention on students' academic and nonacademic outcomes. Santa Monica, CA: RAND Corporation. Retrieved on July 4, 2011 from:
http://www.rand.org/pubs/technical_reports/TR678.html