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# Street-Level Bureaucrats Shirking to Success: An Application of Principal-Agent Theory to the Implementation of Florida's Third Grade Retention Policy

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### **Abstract**

Policymakers have aimed to increase early reading skills for decades, yet in recent years state governments have placed particular emphasis on the mastery of reading proficiency by the third grade – a pivotal year in a child's education since it is typically when students shift from learning to read to reading to learn (Hernandez 2011). Research provides mixed results as to whether retaining students based on the results of a state standardized test will benefit the student in the long run. This study utilizes principal-agent theory and street-level bureaucracy theory to better understand the ways in which school district teachers and administrators, as street-level bureaucrats, respond to a state-mandated test-based third grade retention policy in Florida. While both policymakers and practitioners may have the same end goal – to increase third grade reading proficiency rates – evidence from regression analyses suggest that street-level bureaucrats use their informational advantage to pursue means other than retention to achieve this end. For example, street-level bureaucrats may be able to shirk around the policy by providing students with exemptions from the state-mandated policy. Thus, while it appears as though a certain percent of students are proficient on the third grade reading exam, these statistics may distort the actual scenario and our understanding of the policy effects. By providing more students with good cause exemptions, these students' FCAT scores are not included in the interpretation of the increase in third grade reading proficiency levels.

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## Introduction

In the American federal system, which divides elements of sovereignty between the central government and the states, the Tenth Amendment of the Constitution grants state governments full reign over their respective public education systems. However, governmental entities at every level of the American federalist system partake in the pursuit of achieving state and national education goals. The federalist structure of American government allows multiple layers of government to engage in public education policymaking. Unlike most other nations, the United States does not operate a national education system, and the federal government has historically taken a relatively decentralized approach to education policymaking. Schools in the United States have been, and remain, overwhelmingly a state and local responsibility.

Each government's level of influence over education policy has historically been a reflection of its funding contribution. According to the U.S. Department of Education, about 90 percent of the annual expenditures of education at all levels come from state, local, and private sources and just 10 percent from the federal government. As states governments have taken on a greater role in the funding of public schools, they have also taken on a greater role in education policymaking. Similarly, the increase in the share of education spending from the federal government has increased from less than 5 percent in the 1980s to 13 percent in 2010 (NCES 2013), and has coincided with an increasing focus on education policymaking at the federal level. Since the distribution of reports such as *A Nation at Risk* (National Commission on Excellence in Education 1983), *Why Johnny Can't Read* (Flesch 1955), and *Why Johnny Still Can't Read* (Flesch 1981), the federal government has taken an active role in increasing reading proficiency. For example, the federal government enacted a federal mandate requiring states to set targets for student performance consistent with national objectives around reading proficiency. The NCLB Act (2002) provided the federal government with a way to monitor adherence to the policy by requiring each state education agency to submit a regular "adequate yearly progress" report to the United States Department of Education.

Under the auspices of the federal government's NCLB provision, state governments and state education agencies require local education agencies (LEAs, i.e., school districts) to set targets for their own performance consistent with progress toward the goals determined on the state level. Similar to the federal-state monitoring process, most states require LEAs to submit a report to the state department of education with data documenting progress toward the state goals. Likewise, to be in compliance with federal and state law, local school district governing boards require school administrators and teachers to set targets for student performance and report progress towards these goals to the local education agency.

This paper will focus on the relationships between state and local education agencies during the implementation of education policy. While state governments typically treat each LEA as a single organization that must set targets for their own performance consistent with progress towards state objectives, they also treat each LEA as a self-managing entity, allowing school administrators and teachers to choose the processes and methods by which they will strive to reach district and, hence, state and national education objectives. These two arms of the education policy body – state government and local education agencies – can thus be perceived as a principal-agent relationship in

which the principal (i.e., state government) designs a contract with various incentive structures to facilitate control of the agent (i.e., LEAs), even when the agents may have different objectives and more information than the principal.

In this research study, I will apply principal-agent theory to the development and implementation of a Florida policy that mandates school districts to retain any third grade student who does not achieve “proficiency” on the annual third grade standardized reading exam. I will analyze Florida’s reading proficiency and retention data as well as data around student good-cause exemptions, and consider the relationship between the state government’s decision to implement a test-based grade retention policy and the decisions of school administrators and teachers around promotion and retention. I will then discuss the implications that state-mandated test-based retention policies may have on the decisions of administrators and teachers, who can be understood to be street-level bureaucrats, to include or exclude students in state standardized tests.

## **Review of Research on Reading Proficiency, Retention, and Student Success**

Researchers and education practitioners alike have long recognized the importance of mastering reading by the end of third grade. This year is seen as a pivotal point in a child’s education since it is typically when students shift from learning to read to reading to learn (Hernandez 2011). Hernandez (2011) found that students who did not read proficiently by third grade were four times more likely to drop out of school than proficient readers. Lloyd (1978), too, found this result – that third-grade reading achievement was a strong predictor of student success – more than three decades ago. Lloyd (1978) also found, however, that retention in any of the first three grades is also a strong predictor of later school dropout.

### **Third Grade Reading Proficiency as a National Movement**

While policy reforms have aimed to increase early reading skills for decades, the most recent nationwide effort – the No Child Left Behind Act of 2001 (NCLB 2002) – required states to test reading skills annually for all students beginning in third grade. The NCLB (2002) Act fully implemented President Bush’s “Reading First” initiative, underlying the President’s “unequivocal commitment to ensuring that every child can read by the end of third grade” (U.S. Department of Education 2002). This emphasis on third grade reading proficiency has continued into the current presidential administration; President Obama reiterated the importance of child literacy in his “Putting Reading First” blueprint for revising the Elementary and Secondary Education Act (ESEA, known in its most recent form as NCLB) when it was being considered for reauthorization (U.S. Department of Education 2010).

Significant national attention has been placed on third grade reading proficiency as a signal of future academic access, compelling the federal government to address this issue through education legislation. States and some local school districts have also recognized the urgency to increase third graders’ reading proficiency levels. In fact, several states and some school districts have enacted policies requiring that third grade students who fail to demonstrate basic reading proficiency on the end-of-grade assessment be retained. Similar policies are under debate in

numerous state legislatures across the nation. While such policies have focused on reading proficiency, enacting mandatory third grade retention policies renewed a different longstanding debate: the consequences of retention on student achievement.

### **Return to the Retention Debate**

Grade retention can be used with K-12 students who struggle in school. In today's test-based accountability environment, the term "struggle" often correlates with those students who have not met a state test performance standard. The intended objective of retaining a struggling student is to ensure the student learns the skills and knowledge necessary for success at the next grade level (Krier 2013). Policies of social promotion, on the other hand, allow struggling students to move on to the next grade level with their same-age peers.

Research around student retention and social promotion policies provide mixed results. Proponents of mandatory student retention policies often cite research that shows socially promoted students struggle academically in later grades. Although studies have found a slight gain in academic achievement directly after completing a retention year, the majority did not find long-term positive academic benefits (Moser, West and Hughes 2012; Schwerdt and West 2013; Roderick and Nagaoka 2005).

Opponents of student retention policies argue that grade retention produces more harm than good and that the benefits of keeping students with their age group outweigh the costs (Krier 2013). For instance, when it comes to motivation to learn and succeed – another strong indicator of success in both academic and professional life – numerous studies have found that retention has a negative effect on students (Pierson and Connell 1992). Retained students were found to have lower emotional health, self-esteem, academic self-concept, and homework completion than socially promoted students (Jimerson, Carlson, Rotert, Egeland and Sourfe 1997; Martin 2011). Moreover, elementary school students ranked academic retention as one of the top five most stressful things that could happen to them, just behind losing a parent, parental fighting, getting lost, and being caught stealing (Jimerson, Anderson and Whipple 2005).

### **State Policy Decisions to Increase Student Literacy**

Given the conflicting lines of research around retention and reading proficiency, it seems incredibly challenging to conceive a policy solution to address the one-third of American third graders who are not proficient in the subject of reading, according to the National Assessment of Educational Progress (U.S. Department of Education 2013).<sup>1</sup> While policymakers are aware that third grade students not proficient in reading are at a greater risk for academic struggles in later grades, they also know that retained students are much more likely to drop out of school than those who are socially promoted. So, what decisions have policymakers made thus far?

A total of 32 states and the District of Columbia have enacted policies aimed at improving third grade reading proficiency (Rose 2012). Moreover, 14 states and the District of Columbia have recently enacted policies requiring that students who do not demonstrate basic reading proficiency at the end of third grade be retained and provided with remedial services (Rose 2012). Seven additional states require such students to be retained unless the student participates in an intervention, such as

mandatory summer school before starting fourth grade (Rose 2012). While some states (such as Florida and Ohio) have had laws in place for years that require no student be promoted without reaching the level of proficient on the state standardized third grade reading assessment, others (such as Indiana and North Carolina) implemented such policies within the last three years. In many other states (such as Iowa and Michigan), policy discussions around third grade test-based retention rates are occurring in state legislatures at this very moment.

### **Case Study: Test-Based Third Grade Retention Policy in Florida Retention Policy**

Florida has one of the oldest and most frequently cited models of a strict third grade retention policy (Rose and Schimke 2012). Beginning in the 2002-03 school year, Florida legislative statute mandated retention of students whose reading deficiency was not remediated by the end of third grade, as demonstrated by scoring at Level 2 or higher on the third grade statewide reading assessment (Florida K-20 Education Code 2002). Florida was also one of the first states to include “good cause exemptions” by which students may be exempt from the mandatory retention policy. Good cause exemptions identified in the 2002 Florida K-20 Education Code include:

1. Limited English Proficient students who have had less than two years of instruction in an English for Speakers of Other Languages program;
2. Students with disabilities whose individual education plan (IEP) indicates that participation in the statewide assessment program is not appropriate;
3. Students who demonstrate an acceptable level of performance on an alternative standardized reading assessment approved by the State Board of Education;
4. Students who demonstrate, through a student portfolio, that the student is reading on grade level as evidenced by demonstration of mastery of the Sunshine State Standards in reading equal to at least a Level 2 performance on the Florida Comprehensive Assessment Test (FCAT);
5. Students with disabilities who participate in the FCAT and who have an IEP or a Section 504 plan that reflects that the student has received the intensive remediation in reading (as required in statute) for more than 2 years but still demonstrate a deficiency in reading and who were previously retained in kindergarten, first or second grade; and
6. Students who have received intensive remediation for two or more years but still demonstrate a deficiency in reading and who were previously retained for two years before entering third grade.

Two years after the law went into effect, the Florida Department of Education promulgated rules around the use of alternative standardized reading assessment and student portfolios for good cause promotion. The rules specify that students who score at Level 1 on the grade three reading FCAT may be promoted to grade four if the student scores at or above the 51<sup>st</sup> percentile on the grade three Norm Referenced Test portion of the reading FCAT *or* above the 51<sup>st</sup> percentile on a

parallel form of the SAT-9 alternative assessment. Moreover, good cause promotion under the student portfolio exemption requires evidence, collected by the student's teacher that shows an accurate picture of the student's ability and only includes student work that is independently produced in the classroom. The student portfolio must include evidence that the benchmarks assessed by the grade three reading FCAT are met, which includes multiple choice items and passages that are approximately 60 percent literary text and 40 percent information text, and that are between 100 and 700 words with an average of 350 words. Finally, for each Sunshine State Standard Benchmark for Language Arts assessed on the grade three reading FCAT, the teacher must collect at least five examples of mastery as demonstrated by a grade of "C" or above (Alternative Standardized Reading Assessment 2004).

The Florida Department of Education (FDE) administrative rule was amended twice more in 2008. The first set of amendments permitted the use of the SAT-10 as an alternative reading assessment and reduced the required student score percentile on any of the alternative reading assessments from the 51<sup>st</sup> to the 45<sup>th</sup> percentile. The second set of amendments allowed teachers to administer the SAT-9 or SAT-10 to a student two times, as compared to the previous rule that only allowed the student one try to achieve a proficient score on the SAT-9 or SAT-10 (Alternative Standardized Reading Assessment 2004, as amended in 2008).

One year later, in 2009, the rule underwent major reconstruction. Rather than limit the alternative standardized reading assessment to just the SAT-9 and SAT-10, the FDE permitted school districts to submit requests for approval of alternative standardized reading assessment that met certain criteria determined by FDE. Once an assessment was approved by FDE, it was also approved for statewide use. Moreover, the FDE was required to approve the percentile passing score for each approved alternative standardized reading assessment based on an analysis of Florida student achievement results (Alternative Standardized Reading Assessment 2004, as amended in 2009).

The latest FDE rule change occurred in 2011. The change removed the SAT-9 as an acceptable alternative assessment, increased the average number of words required in the passages included in a student portfolio from 350 to 500 words, decreased the number of examples of mastery included in a student's collection of evidence from five to three examples, and changed the definition of "mastery" for student portfolio work from a grade of "C" or above to a grade of 70 percent or above (Alternative Standardized Reading Assessment 2004, as amended in 2011).

### **Intervention Policy**

Under the first iteration of the Florida test-based third grade retention legislation, school districts were only required to provide a retained student with supplemental instructional services and supports. In early 2004, however, the legislation was amended to include suggested interventions, including, but not limited to: small group instruction; reduced teacher-student ratios; more frequent progress monitoring; tutoring or mentoring; transition classes containing both third and fourth grade students; extended school day, week or year; and/or summer reading camps (Florida K-20 Education Code 2002, as amended in 2004). The 2004 amendments also required school districts to: (1) implement a policy for midyear promotion of any retained student who can demonstrate that he

or she is ready to be promoted to fourth grade; (2) provide retained students with a higher-performing teacher; and (3) provide parents of retained students with either supplemental tutoring options, a “Read at Home” plan outlined in a parental contract, or a mentor/tutor with specialized reading training (Florida K-20 Education Code 2002, as amended in 2004).

No amendments were made to the third grade test-based retention statute of the Florida K-20 Education Code between 2005 and 2012. In 2013, the legislature amended the statute to require school districts to provide retained third grade students with a school district summer reading camp (Florida K-20 Education Code 2002, as amended in 2013).

### **Policy Effects**

In the 2002-03 school year, the first year of implementation, the number of third graders retained jumped from 3.3 percent (6,435 students) to 14.4 percent (27,713 students). The number of Florida students retained in third grade has fallen steadily over the last nine years, reaching 7.3 percent (15,098 students) in 2012 (Florida Department of Education Bureau of Education Information and Accountability Services). Schwerdt and West (2013) contend that this steady decline is primarily due to an increase in the number of students meeting the promotion standard, level 3 on the third grade FCAT reading assessment.

### **Theoretical Framework: Street-Level Bureaucrats and Principal-Agent Theory**

In this study, I utilize two theories to develop a hypothesis about the relationship between state government and school district administrators and teachers in the implementation of the Florida test-based third grade retention policy: street-level bureaucracy theory and principal-agent theory. Lipsky’s (1969) theory of street-level bureaucracy identifies street-level bureaucrats as people employed by the government who are constantly called upon to interact with citizens in the regular course of their jobs; have significant independence in job decision-making; and potentially have extensive impact on the lives of their clients. Moreover, street-level bureaucrats’ work experiences are relatively strongly affected by three conditions: relative unavailability of resources, both personal and organizational; regular challenges to bureaucrats’ authority; and ambiguous, contradictory, and in some ways unattainable, role expectations (Lipsky 1969). Public school administrators and teachers are often referred to as street-level bureaucrats because they are employed by the school district and their work environment closely emulates that which is described by Lipsky (1969).

Principal-agent theory focuses on the dynamic process of interaction between principals and agents. Economists developed principal-agent theory in the 1960s and early 1970s in an effort to describe the so-called agency problem that occurs when cooperating parties have different goals and divisions of labor (e.g. Jensen and Meckling 1976; Ross 1973). The theory attempted to describe the relationship between a work-delegating party (the principal) and a work-performing party (the agent) using the metaphor of a contract (Jensen and Meckling 1976).

From an economic perspective, principal-agent theory is concerned with two dilemmas that occur in agency relationships: conflicting desires or goals of the principal and agent and oversight costs for the principal to verify what the agent is actually doing (Eisenhardt 1989). Given these two

dilemmas, the focus of the theory is on determining the most efficient contract governing the principal-agent relationship given assumptions about people (e.g., self-interest, bounded rationality, risk aversion), organizations (e.g., goal conflict among members), and information (e.g. commodification of information) (Eisenhardt 1989).

### **Applying Principal-Agent Theory to Education Policymakers and Street-Level Bureaucrats**

In the 1980s, Terry Moe (1984; 1987) extended the principal-agent framework to relationships where a contract is implied rather than executed, particularly in the public sector context. Moreover, Matt McCubbins and colleagues (1987) adopted a distinct political approach to the goal conflict and information asymmetry dilemmas of principal-agent theory arguing “a system of rewards and punishments is unlikely to be a completely effective solution to the control problem” due to “the cost of monitoring, limitations in the range of rewards and punishments, and for the most meaningful forms of rewards and punishments, the cost to the principals of implementing them” (McCubbins et al. 1987, 251).

By the 1990s, the politically oriented principal-agent theory framework was expanded again, allowing for one to view public funding of government agencies as a “contract” (e.g., Boston 1991; Downs and Rocke 1994). Under this condition, an executive can be viewed as an agent of the public; while the public may be unable to monitor each and every action taken by the chief executive, they can readily monitor the success or failure of his decisions and take action (i.e., vote to remove or reelect) based upon the perceived success or failure of the chief executive’s policy (Downs and Rocke 1994).

Both the 1980s and 1990s principal-agent theory applications to political science can be applied to the American education policy arena. Moe’s (1984; 1987) conception of an implied contract can be applied to state government and LEAs. The state government, as the principal, needs certain tasks carried out, such as ensuring all third grade students achieve proficiency on the state standardized reading assessment. Because the state government lacks the time and expertise to personally carry out this task, it delegates the task to LEAs. Therefore, the state government enters into a contract with the LEAs in which the state government will allocate taxpayer dollars to pay for the cost of educating each student and, in return, the LEAs must provide education services to children that will ostensibly increase student reading proficiency levels.

At the heart of this principal-agent relationship is the question of how the state government can design the contract with various incentive structures to facilitate control of the LEAs when: (a) the objectives of the state government and LEA diverge, such as when street-level bureaucrats at the school district level see a different means – other than mandatory retention – to reach the end goal of all third graders reading proficiently; and (b) the LEA has an informational advantage over the state government. From this informational advantage, two dilemmas arise: adverse selection and moral hazard. For example, when the state government devolves much of the responsibility for educating students to the LEAs and when the school district level educators (i.e., school administrators and teachers) are embodiments of street-level bureaucrats, the LEA has a comparative advantage that stems from the information and expertise possessed by the street-level bureaucrats. In this situation, the problem of adverse selection arises if the state government is not

fully informed about the abilities of the school district level educators. Moreover, the problem of moral hazard arises when the contract between the principal and agent has been agreed to and the agent, realizing the principal's lack of information, pursues the agent's own objectives at the expense of the principal's interests.

In the next section, I will return to the Florida test-based third grade retention policy and utilize the theoretical frameworks of street level bureaucracy and principal-agent relationships to hypothesize how the enactment and implementation of the policy may be impacted by the aforementioned dilemmas that occur in principal-agent relationships.

## **Hypothesis**

Drawing upon the previous discussion of principal-agent theory and street-level bureaucracy theory, I conjecture that the implementation of Florida's third grade test-based retention policy will lead street-level bureaucrats to (a) shirk in response to goal conflict and (b) define student interests in ways different from those of the state government and subsequently impose their own view of student interest due to the dilemma of asymmetric information.

Therefore, I hypothesize that because of agent shirking and the dilemma of asymmetric information, a positive change (in this case, a decrease) in the percentage of third grade students not proficient on the FCAT reading assessment will be associated with a positive change (in this case, an increase) in the percentage of students receiving good cause exemptions from the FCAT reading assessment.

## **Data and Methods**

To test my hypothesis, I use data publicly provided by the Florida Department of Education. My rationale for including only data from Florida is based upon data availability and the policy implementation timeframe. Florida provides public access to school district level longitudinal data with data available at the grade level by year. Furthermore, no other states have had a test-based third grade retention policy in place for more than two years. Therefore, data from Florida allows for a longitudinal study of student achievement, retention, and good cause exemption after the test-based third grade retention policy was enacted. Appendix 1 outlines the sources of the data used in this study.

I conduct simple descriptive analyses to examine trends in third grade student reading proficiency levels, third grade retention rates, and third grade good cause exemption rates. I also conduct bivariate regression analyses to understand how the implementation of the Florida test-based third grade retention policy impacted the percent of third grade students proficient on the third grade reading assessment. In the analysis, I also consider school district-level factors to examine whether changes in student proficiency rates are significantly related to school district-level characteristics such as a change in the percent of students receiving a good cause exemption; student population, stability, and demographics; and teacher expertise, education level, and salary.

Further, to understand the relationship between the change in the percentage of third grade students proficient on the FCAT reading assessment and the school district-level variables, I apply a production function that starts with the following general education production function: the change in the percent of third grade students proficient on the third grade reading assessment in school district  $j$  between 2002-2003 and 2010-2011 is a function of school district-level student characteristics,  $StudChar$ , school district-level teacher characteristics,  $TeachChar$ , and the change in the percentage of students receiving good cause exemptions from the FCAT reading assessment at the school district level,  $%Exempt$ .

$$SchChange\%Prof_j = f(StudChar_j, TeachChar_j, \%Exempt_j) \quad (1)$$

From this production function, model 2 was developed. The log of school district enrollment, school district average level of teacher experience, and school district average teacher salary were used to improve model fit. Descriptions of the variables in model 2 are provided in Appendix 1.

$$SchChange\%Prof_j = \alpha + \beta_1 \log(SchEnroll) + \beta_2 SchStabil + \beta_3 Sch\%White + \beta_4 Sch\%ELL + \beta_5 Sch\%FRPL + \beta_6 Sch\%SWD + \beta_7 Teach\%AdvDeg + \beta_8 \log(TeachAvgSal) + \beta_9 \log(TeachAvgExp) + \beta_{10} SchChange\%Exempt + \varepsilon \quad (2)$$

## Analysis and Discussion

### Student Reading Proficiency and Retention

To understand whether the implementation of the Florida test-based third grade retention policy had an effect on student reading proficiency levels and student retention rates, I conducted an analysis of the trends of the third grade proficiency and retention rates before and after the policy was implemented.

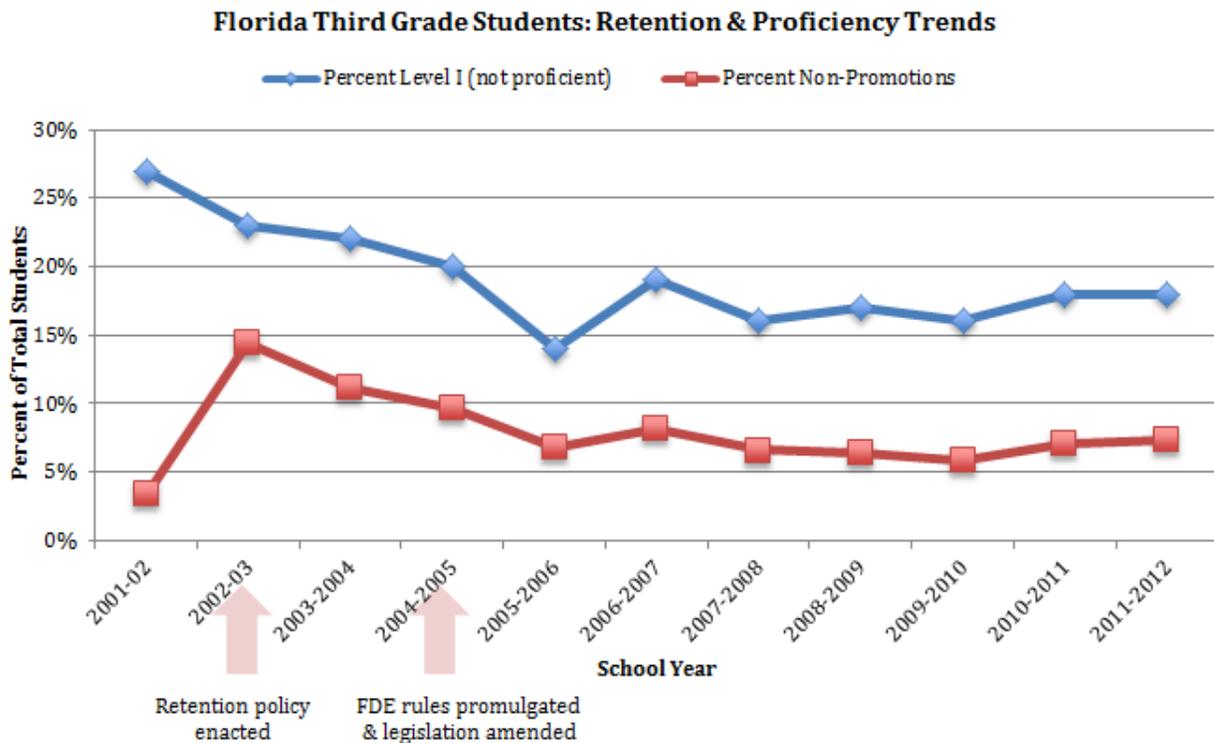
The blue trend line in Figure 1 shows that the percent of students testing not proficient in reading decreased the first three years after the retention policy was enacted, as determined by the statewide assessment. This decrease was followed by a sharp increase in the percentage of students designated not proficient in reading. This dramatic shift occurred in the two school years following the FDE's promulgation of rules around the alternative standardized reading assessment and use of student portfolios for good cause promotion. This also marked the year that the Florida legislature amended the law to require school districts to: (1) implement a policy for midyear promotion of any retained student who can demonstrate that he or she is ready to be promoted to fourth grade; (2) provide retained students with a higher-performing teacher; and (3) provide parents of retained students with either supplemental tutoring options, a "Read at Home" plan outlined in a parental contract, or a mentor/tutor with specialized reading training. Since the 2007-08 school year, the percent of third grade students testing not proficient in reading has remained relatively steady at between 16 and 18 percent.

The red trend line in Figure 1 also shows that after the enactment of the retention policy, the percent of retained third graders more than tripled, from less than four percent to more than 14 percent. After the initial spike, however, the percent of retained third graders steadily declined for the next three years. Third grade student retention has remained at about seven percent since the 2007-08 school year.

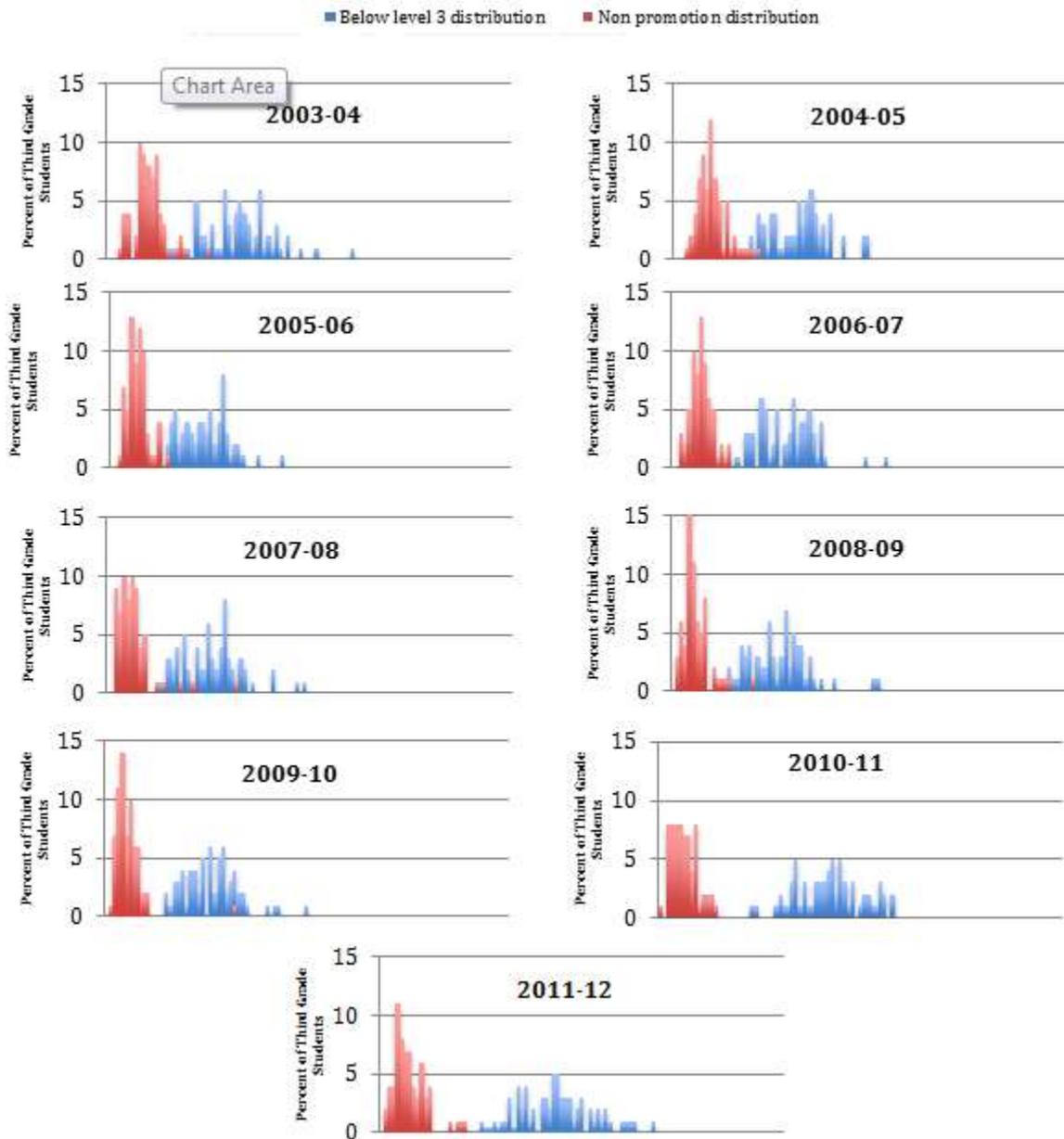
Finally, the gap between the percentage of third grade students retained and the percentage of third grade students testing not proficient in reading as seen in Figure 1 narrowed after the enactment of the test-based third grade retention policy. Since the initial year of implementation, the difference between these two factors has remained relatively stable between 10 and 11 percent. A visible punctuation occurred during 2005-06 school year, which marks the year when both FDE and Florida legislature made substantial changes to the test-based third grade retention policy.

Figure 2 compares the distributions of school districts' percent of third graders who were not proficient in reading and the percent of non-promotions for each year after the implementation of the Florida retention policy. From this figure, two takeaways are evident: first, there is a stark shift between the distribution of the percent of third graders who are not proficient in reading and the distribution of the percent of third graders who are not promoted; second, the gap between these two distributions has widened over the last ten years.

**Figure 1.** Comparison of Percent of Third Grade Students in Florida Not Proficient on FCAT and Percent of Third Grade Students in Florida Retained in Third Grade, 2001-02 School Year to 2011-12 School Year.



**Figure 2.** Comparison of Distribution of School Districts' Percent of Third Grade Students Not Proficient on FCAT and Percent of Third Grade Students in Florida Retained, 2001-02 School Year to 2011-12.



**Reading Proficiency, Retention, Good Cause Exemption, and School District Level Factors**

Table 1 presents the bivariate linear regression analyses with change in percent of third grade students proficient on the third grade reading FCAT as the dependent variable. Two significant relationships emerged from these bivariate analyses: first is a positive relationship between the change in percent of proficient students and the change in percent of students retained; second is a positive relationship between the change in percent of proficient students and the change in percent of students who receive a good cause exemption. The change in percent of proficient students and

change in percent of students who receive a good cause exemption were highly correlated and the analysis estimates that a one percent decrease in the percentage of third grade students scoring at Level 1 on the FCAT is associated with a 72.9 unit increase in the school district’s percent of students receiving a good cause exemption. For example, if a school district were to decrease the percentage of third grade students scoring at Level 1 on the FCAT by 5 percent between 2003-04 and 2010-11 and the percent of students receiving a good cause exemption in 2003-04 was 4 percent, the bivariate linear regression estimates that the percent of students receiving a good cause exemption in 2010-11 would increase by 2.9 percent (72.9 percent of 4 percent) to 6.9 percent.

**Table 1.** Bivariate linear regression results with dependent variable, SchChange%Prof.

<i>Explanatory Variable</i>	<b><math>\beta</math> coefficient</b>	<b>R<sup>2</sup></b>	<b>Adjusted R<sup>2</sup></b>	<b>P-Value</b>	<b>Ho (5%) Rejected?</b>
<i>School District level Students Characteristics</i>					
Log(SchEnroll)	0.005	0.004	-0.012	0.628	No
SchStabil	-0.125	0.004	-0.012	0.632	No
Sch%White	0.046	0.035	0.02	0.128	No
Sch%ELL	-0.15	0.037	0.022	0.118	No
Sch%FRPL	-0.064	0.026	0.011	0.196	No
SCh%SWD	0.295	0.035	0.02	0.13	No
SchChange%Retain	0.374	0.079	0.065	0.021	<b>Yes</b>
SchChange%Exempt	0.729	0.261	0.249	0.000	<b>Yes</b>
<i>School District level Teacher Characteristics</i>					
Log(TeachAvgExp)	0.065	0.007	-0.008	0.501	No
Log(TeachAvgSal)	-0.093	0.004	-0.011	0.607	No
Teach%AdvDeg	0.071	0.018	0.003	0.275	No

Table 2 presents an analysis using a relative change ordinary least squares regression model with change in percent of third grade students proficient on the third grade FCAT reading assessment as the dependent variable. The model in table 2 allows for an examination of the factors associated with a school district’s decrease in the percent of third grade students performing below proficient on the FCAT reading assessment. Results from this analysis indicate that there is a significant, positive relationship between the change in the percent of students scoring at a level 1 on the FCAT reading assessment and the change in percent of third grade students receiving a good cause exemption. Holding all other school-level variables constant, a one unit increase in a school district’s change in percent of students scoring at level 1 on the FCAT reading assessment is associated with a 39.5 unit increase in the school district’s change in percent of third grade students receiving a good cause exemption. That is, a large decrease in the percent of students scoring non-proficient on the reading assessment is associated with a large increase in the percent of students receiving good cause exemptions. Using the same example above, if a school district were to decrease the percentage of third grade students scoring at level 1 on the FCAT by 5 percent between 2003-04 and 2010-11 and the percent of students receiving a good cause exemption in 2003-04 was 4 percent, the full model difference regression estimates that the 2010-11 percent of

students receiving a good cause exemption would increase from 1.6 percent (39.5 percent of 4 percent) to 5.6 percent.

Results from this analysis also indicate that there is a significant, positive relationship between the change in the percent of students scoring at a level 1 on the FCAT reading assessment and the change in percent of third grade students with disabilities. That is, a decrease in the percent of students scoring non-proficient on the reading assessment is associated with an increase in the percent of students identified as a student with a disability within the school district. While these results do not suggest that such an increase in the percent of students with a disability within a school district could cause the decrease in the percent change of students proficient on the FCAT assessment, they do suggest that school districts that experience an increase in the percent of students with a disability may also experience a decrease in the percent of students not proficient on the test. One possible explanation for this is that the students with disabilities may be exempt from taking the FCAT assessment and, instead, take an alternative assessment or complete a reading portfolio; thus, the scores that these students would have received on the FCAT reading assessment are not taken into account.

**Table 2.** Full model differenced regression results with dependent variable, SchChange%Prof.

Independent Variable	Coefficient (Standard Error)
Intercept	0.431(0.984)
<i>School District level Student Characteristics</i>	
Log(SchEnroll)	0.018(0.015)
SchStabil	0.02(0.275)
Sch% White	0.035(0.043)
Sch%ELL	0.009(0.136)
Sch%FRPL	-0.034(0.063)
SCh%SWD	0.505(0.203)**
SchChange% Exempt	0.764(0.16)***
<i>School District level Teacher Characteristics</i>	
Log(TeachAvgExp)	0.005(0.089)
Log(TeachAvgSal)	-0.147(0.206)
Teach% AdvDeg	-0.02(0.064)
R <sup>2</sup>	0.387
Adjusted R <sup>2</sup>	0.278
Sample Size	67

<sup>o</sup>p<.10, \*p<.05, \*\*p<.01, \*\*\*p<.001.

## Shirking Student Success?

These analyses provide evidence that student proficiency levels increased and student retention levels decreased after the initial enactment of the Florida test-based third grade retention policy. This offers some evidence that the policy was successful and that school districts have emphasized the importance of increasing the number of students who are proficient in reading by the end of third grade.

However, my analyses also support the hypothesis that school districts that experienced a positive change (i.e., a decrease) in the percentage of non-proficient students on the FCAT reading assessment also experienced a positive change (i.e., an increase) in the percentage of students receiving good cause promotions. Since the Florida law provides teachers and, ultimately, school administrators with the authority to decide which students receive a good cause exemption, these results suggest that street-level bureaucrats take advantage of the asymmetric information dilemma in the principal-agent relationship. The results indicate that perhaps one of the reasons a school district experienced a decrease in the percent of students scoring at level 1 on the FCAT reading assessment is because school administrators and teachers provided more students with good cause exemptions (e.g., determining that the student will take an alternative assessment or the teacher will complete a reading portfolio for the student). School district bureaucrats may do this for a variety of reasons. For example, they may provide more students with good cause exemptions so that certain students who may put the school district at risk for lower FCAT scores will, instead, take the alternative assessment or complete a reading portfolio. Alternatively, street-level bureaucrats may not agree with the objectives of the state government's mandated policy and, instead, believe that social promotion is best for their students; therefore, the bureaucrats may provide more students with good cause exemptions so that they can be promoted with the rest of their grade level cohort.

At the heart of this principal-agent relationship is the question of how the state government can design a contract with LEAs to increase third grade reading proficiency levels when the objectives of the state government and LEAs may diverge and when the LEA has an informational advantage over the state government. These two dilemmas are deeply intertwined in the development and implementation of any test-based third grade retention policy. The state government realizes it is being held accountable by the public to do *something* about the large number of third graders with dismal reading proficiency levels. In Florida, the state government responded to this call for action by implementing a test-based third grade student retention policy. While this study does not provide insight into how the Florida policymakers came to the final conclusion to enact a policy mandating retention of a third grader who does not score proficient on the state standardized reading assessment, the findings of this study indicate that street-level bureaucrats and policymakers may diverge in how to reach the end goal of increasing third grade reading proficiency. The LEAs' comparative advantage stemming from the information (e.g., student-specific circumstances) and expertise (e.g., research-based reading intervention strategies) possessed by the street-level bureaucrats may have led to agent shirking to provide more students with good cause exemptions.

## Conclusion

In the case of Florida, policymakers enacted a test-based third grade retention policy with hopes of increasing third grade reading proficiency levels (as measured by standardized reading assessments) and, in the long term, student academic success. However, the results of this study suggest that street-level bureaucrats in school districts may shirk around the mandatory third grade retention policy, leading to an increasing number of students receiving good cause exemptions and, therefore, removing low-achieving students from the population whose scores are considered in the measure of third grade reading proficiency. The removal of certain students from taking the third grade FCAT reading assessment could overestimate the percentage of third grade students who are proficient in reading when the measure used by policymakers to monitor this education policy's success is the percent of students scoring at the proficient level on the third grade FCAT reading assessment. Furthermore, providing more students with good cause exemptions could exacerbate information asymmetry between the policymakers and street-level bureaucrats in the school districts since policymakers have provided relatively open-ended descriptions of the elements required in two of the most often used good cause exemptions: alternative assessments and student portfolios.

School districts are now allowed to submit a request for approval of any alternative standardized reading assessment to the Florida Department of Education. While FDE does require that the alternative assessments meet certain criteria, this may make it more difficult for the state to monitor whether students are reaching the perceived level of reading proficiency as measured by the state standardized assessment by the end of third grade. Similarly vague descriptions are given around the good cause exemption of a student reading portfolio. Florida Department of Education rules require just three examples of mastery included in a student's reading portfolio that are graded by the classroom teacher. Letting school districts complete such reading portfolios for their students may, again, make it more difficult for the state to monitor whether students are reaching the perceived level of reading proficiency by the end of third grade.

Policymakers are aware that students who are not proficient on a third grade reading assessment are at greater risk to struggle in later grades and drop out of school. They also know that students who are retained are much more likely to drop out of school than those who are socially promoted. In developing policy to increase third grade reading proficiency, policymakers across the United States are currently considering whether they want to prioritize reading proficiency at the expense of the potential negative effects of student retention. This study provides an examination of how street-level bureaucrats at the school district level in a principal-agent relationship with state government responded to a state's prioritization of reading proficiency over retention. It should be noted that the results by no means suggest that shirking by street-level bureaucrats is wrong; it may in fact be best for local administrators to make decisions about the students with whom they are in close contact. What this study does show, however, is that principal-agent theory and street level bureaucracy theory can help explain why ground-level results may deviate from initial policy goals. When the principal-agent relationship between government and LEAs includes a street-level bureaucrat as an agent, it seems that, despite their best efforts to control the agents, agents as street level bureaucrats take into account their context and use their expertise and in-depth knowledge of

the students in the on-the-ground implementation of the policy. Further research with student-level data is needed to understand whether the school street-level bureaucrats' decisions to provide more students with good cause exemptions in fact positively effects academic achievement in subsequent years.

Although the results drawn from this case study can tell us a great deal about the trends in third grade student retention and reading proficiency after the implementation of a mandatory test-based third grade retention policy, they cannot be generalized to other states with different reading assessments, different student populations, and different social, political, and economical environments. Once more longitudinal data is available, additional research of other states that have implemented test-based third grade student retention policies will be necessary to inform further case study work on the subject. Furthermore, findings from this research could be strengthened with qualitative research aimed at understanding the ways in which street-level bureaucrats interpret and implement test-based retention policies.

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## Appendix 1. Variable Descriptions and Source

<i>Variable</i>	<i>Description</i>	<i>Source</i>
<b><i>SchChange%Retain</i></b>	The change in the percent of third grade students retained between 2003-2004 and 2010-2011, measured at the district level	Florida Department of Education Bureau of Education Information and Accountability Services (EISA)
<b><i>SchChange%Exempt</i></b>	The change in the percent of third grade students who receive a good cause exemption between 2003-2004 and 2010-2011, measured at the district level	Florida Department of Education Bureau of EISA (2004-05 to 2010-11); Florida Department of Education Bureau of Exceptional Education and Student Services (2003-04)
<b><i>SchChange%Prof</i></b>	The change in the percent of third grade students who score a proficiency level of 1 on the third grade FCAT reading assessment between 2003-2004 and 2010-2011, measured at the district level	Florida Department of Education District Reading Demographic Reports
<b><i>Log(SchEnroll)</i></b>	Logarithm (base 10) of total school district enrollment in the year 2010-2011	Florida Department of Education, Florida Student Indicators Report
<b><i>SchStabil</i></b>	Percentage of students in school district from October student count who are at the same school in February of the same school year for the year 2010-2011	Florida Department of Education, Florida Student Indicators Report
<b><i>Sch%White</i></b>	Percentage of school district's students whose race is identified as white for the year 2010-2011	Florida Department of Education, EIAS
<b><i>Sch%ELL</i></b>	Percentage of the school district's students who are ELL students served in English for Speakers of Other Languages Programs for the year 2010-2011	Florida Department of Education, EIAS
<b><i>Sch%FRPL</i></b>	Percentage of school district's students eligible for free or reduced-price lunch for the year 2010-2011	Florida Department of Education, EIAS
<b><i>Sch%SWD</i></b>	Percentage of students from October membership count in exceptional student education programs, excluding gifted students for the year 2010-2011	Florida Department of Education, EIAS
<b><i>Teach%AdvDeg</i></b>	Percentage of teachers in a school district with a master's degree or higher for the year 2010-2011 For the purposes of this indicator, teachers are defined as professionals who are paid on the	Florida Department of Education, EIAS

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	instructional salary schedule negotiated by a Florida school district.	
<b><i>Log(TeachAvgSal)</i></b>	Logarithm (base 10) of average salary for all teachers within a school district for the year 2010-2011 For the purposes of this indicator, teachers are defined as professionals who are paid on the instructional salary schedule negotiated by a Florida school district.	Florida Department of Education, EIAS
<b><i>Log(TeachAvgExp)</i></b>	Logarithm (base 10) of average number of years of teaching experience for all teachers within a school district for the year 2010-2011. Both in-state and out-of-state experience is counted.	Florida Department of Education, EIAS

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Note: ANOVA analyses were conducted to test the hypothesis that means of the following variables are equal across school years between 2001-02 and 2010-11, the year in which the most recent data was available: Log(SchEnroll), SchStabil, Sch%White, Sch%ELL, Sch%FRPL, Sch%SWD, Teach%AdvDeg, TeachAvgSal, and TeachAvg Exp. The ANOVA results indicated that there was no significant difference in any of the variables across school years. Therefore, I chose to include the most recent data in my analyses.