

Jessica Logan, Ph.D., Laura Justice, Ph.D., Jamie Davies O'Leary, MPA & Kelly Purtell, Ph.D.

INTRODUCTION



Ohio's third-grade reading guarantee was enacted in 2012 with the goal of ensuring that all third graders were reading proficiently before the transition to fourth grade. Reading guarantee policies are a prime example of policy makers observing research and attempting to craft policy aligned to it. In this case, a solid body of research demonstrates that a child's ability to read by the end of third grade strongly predicts her later schooling and life success.

What has the impact of Ohio's policy been on the proficiency of Ohio's fourth graders? In this paper, we examined this question in two parts, using both national assessment data and Ohio-specific data. We found no meaningful or significant improvements to Ohio's fourth-grade reading achievement from the time the third-grade reading guarantee was implemented. We also examined disparities between the rates reported for the passage rate of the third-grade reading guarantee, actual third-grade proficiency scores, and the proficiency rate for fourth-grade reading achievement.

Finally, the paper offers several broad considerations for policy makers, schools, researchers, and parents — all of whom play a role in ensuring that more Ohio youngsters are on track to reading proficiency and success in schooling.

The Importance of Proficiency by the End of Grade Three

Explicit reading instruction focused on word recognition and comprehension is a critical component of the core curriculum during the elementary grades, particularly from kindergarten through third grade. Children have an estimated 720 school days, on average, to achieve fluency in reading by fourth grade, when the focus of instruction shifts from 'learning to read' to 'reading to learn' (Adams, 1994). At the transition to fourth grade, children are expected to be sufficiently fluent in reading – able to both recognize words and comprehend what they are reading.

Of concern are data showing that too few students have the reading skills at fourth grade to proficiently navigate the academic curriculum. These skills allow students to not only decode and master reading basics, but also to integrate and apply what they read in order to reach higher levels of understanding. According to the latest scores from the 2017 administration of the National Assessment of Educational Progress (NAEP), fewer than four in ten Ohio fourth graders (39 percent) reached reading proficiency – slightly better than the national average (35 percent).

Children who exhibit reading difficulties in the early primary grades – especially during kindergarten and first grade – are extremely vulnerable for being poor readers at the end of third grade and at risk for not achieving the level of reading fluency necessary to ensure ongoing academic success. Some estimates indicate that as many as 70 percent of children who struggle with reading fundamentals during kindergarten will be poor readers at the end of third grade (Logan, Justice, & Pentimonti, 2014). In part, this reflects the high level of stability in children's reading skills over the primary grades: Children who start school with low skill levels tend to maintain these low skill levels relative to their peers (Lonigan, Burgess, & Anthony, 2000).

Schools have pursued many initiatives to identify children in the early primary grades who are struggling with reading achievement. Many of these initiatives build upon research focused on 'response to intervention' (RTI), a strategy in which children are regularly screened for reading skills in order to receive additional layers of instructional support, where necessary. Those who perform poorly on such screeners receive tiered support. Research shows that RTI models spanning kindergarten to third grade can be very effective for early identification and remediation of reading difficulties among at-risk students (Vellutino et al., 2006).



Third-Grade Reading Guarantee as a Policy Lever

A number of states, including Ohio, have advanced legislation to require schools to use systems based on the RTI approach. Frequent diagnostics, coupled with multi-tiered interventions and supports, help ensure that all students are proficient readers by the end of third grade. For those students, the stakes are high. Lawmakers and education leaders have moved toward third-grade reading retention requirements as a policy lever, having recognized the research illustrating this vital third-grade reading proficiency window and the tremendous long-term educational (and economic) costs associated when children do not meet expectations.

To date, 16 states plus D.C. have a third-grade reading guarantee in place that requires retention for students lacking proficiency by the end of third grade (National Conference of State Legislatures, 2018). Policies that require extra support for students – many of whom may be deemed at-risk in multiple ways – have strong appeal for advocates pursuing equity for all students. Meanwhile, third-grade reading guarantees also serve as potential accountability mechanisms, thus appealing to stakeholders who desire more transparency for parents and the public.

Passed in 2012, Ohio's third-grade guarantee established requirements that every student in kindergarten through third grade be tested annually, that districts set up reading improvement and monitoring plans (RIMPs), that students in need of reading support be taught by highly qualified teachers, and, ultimately, that non-proficient readers be retained instead of promoted to fourth grade. Like any law, the parameters of Ohio's guarantee have been modified over time. Table 1 outlines the major legislative developments and policy specifics of the third-grade reading guarantee in further detail.

▼ Table 1. Major legislative developments in Ohio's third-grade reading guarantee

Date	Action	Description
June 2012	SB 316 signed by Governor John Kasich; law went into effect September 2012	316 strengthened Ohio's reading guarantee. Despite mention of the guarantee in prior state statute, schools still had flexibility to promote students with limited proficiency based on the individual discretion of teachers or principals. The legislation mandated that non-proficient readers be retained, across the board.
		When the guarantee went into effect, the threshold for determining whether to hold a third-grade student back was lower than the state's benchmark for proficiency. The legislation also authorized the State Board of Education to determine – and raise – cut scores over time until arriving at the "proficient" score.
		316 also established the infrastructure for supporting students in grades K-3. It required that: K-3 students be assessed on their reading skills at the start of each school year; districts identify those below grade level; districts create reading improvement and monitoring plans (RIMPs) for below-level readers; and such data had to be reported to the department of education as well as back to the governor and general assembly.
		Finally, 316 included provisions meant to ensure that underperforming children were taught by qualified teachers. The criteria for qualified would change over time, but at its outset included parameters such as whether teachers passed a rigorous reading instruction test, had a reading endorsement on their license, or were deemed "highly performing" according to growth data and teacher evaluations.

Date	Action	Description	
December 2012	HB 555 signed into law; went into effect March 2013	HB 555, a broad-sweeping bill establishing Ohio's A-F academic performance and rating system, also made changes to the guarantee's teacher quality provisions and established a brand-new K-3 literacy measure for schools and districts on the report cards.	
		The new K-3 metric, to be shown on report cards starting in 2012-13 and graded in 2013-14, was to determine how much progress a district/school made toward improving literacy in kindergarten through third grade. Progress would be measured by a reduction in the percentage of students scoring below proficient, compared from year to year. (Note, schools with fewer than 5% of students off track in reading would get no grade in this category.)	
		Finally, parents were to be notified if a student was deemed underperforming in reading, and students were to receive immediate intervention services including summer remediation.	
June 2013	SB 21 signed and in effect immediately, with an "emergency clause"	The legislation created an alternative pathway by which third graders could pass the state guarantee. Specifically, it enabled students to pass if they earned an "equivalent level of achievement" on an alternative assessment approved by the department of education. Currently, the state has approved five alternatives, such as the Northwest Evaluation Association (NWEA) Measure of Academic Progress.	
		Among other changes, SB 21 also exempted certain limited English proficient students from the guarantee as well as students with significant cognitive disabilities or other disabilities as determined by the department of education on a case-by-case basis.	
2013-14 School Year		Students were retained for the first time under law in 2014. Some activities, like testing and reading improvement plans, went into effect in 2012-13.	
September 2015	HB 64 policy provisions went into effect	The state's biennial operating budget added bonus payments to districts based on how their students fare on the third-grade reading guarantee.	
		Districts and community schools were to receive additional bonus payments based on how many students scored proficient or higher on the third-grade English language arts exam. Those payments were (and are still) derived from the state's complex school funding formula, dependent on the state's share index.	

Source: Legislative text and analysis available via Ohio's Legislative Service Commission and its tools for bill look-up (including archives).

Aims of This Study

Overall, the intention behind Ohio's effort has been to improve children's reading abilities by no later than third grade. Though the state has reported high percentages of children passing the third-grade reading guarantee in recent years, this does not necessarily translate to sustained effects on children's reading achievement. The motivations behind the third-grade reading guarantee and the development of the policy over time clearly establish that the goal is to create lasting change in students' reading skills. We can speculate that if the reading guarantee has been successful we should see systematic improvement not only on the passage rates of Ohio's third graders, but this policy should have a similar effect on Ohio's population of fourth graders.

Since the initial inception of the third-grade reading guarantee in 2012, there has been limited formal assessment of its effects on students' reading achievement. In this paper, we analyze Ohio's fourth-grade reading achievement data to determine if the third-grade reading guarantee has had any observable impacts on fourth-grade reading achievement, using the methods described below.

Methods

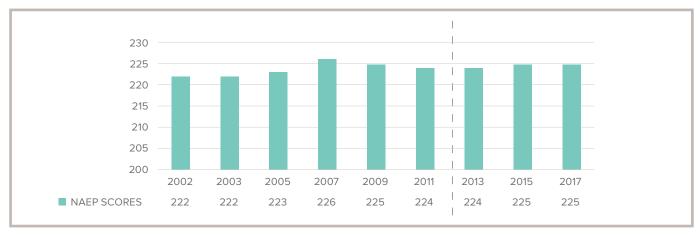
This study was designed to address two research aims concerning the effects of the third-grade reading guarantee on reading achievement among Ohio's primary-grade students.



AIM 1: The first was to examine the effects of the third-grade reading guarantee on reading achievement among Ohio's fourth-grade students. To do so, we analyzed the fourth-grade reading scores from the National Assessment of Educational Progress (NAEP) for a 15-year period from 2002 to 2017. [Note, Ohio's proficiency assessments have undergone significant changes over that same period of time – both the tests themselves as well as the cut scores for proficiency. NAEP, in contrast, has been stable and enables a more consistent comparison]. The NAEP reading assessment is administered every two years to provide an index of reading comprehension among America's students in fourth and eighth grade.

Figure 1 provides a visual depiction of Ohio's NAEP fourth-grade reading scores from 2002 to 2017; the dotted line depicts the point after which Ohio's third-grade reading guarantee was enacted and in effect. In theory, we might speculate that fourth-grade reading scores would increase after 2012, yet no such changes in mean scores is evident. On the contrary, mean reading scores for Ohio's third graders appear remarkably stable over the ten-year period from 2007 (M = 226) to 2017 (M = 225).

▼ Figure 1. Ohio's NAEP scores (fourth-grade reading achievement) from 2002-2017



Source: NAEP scores drawn from the data tool available at www.nationsreportcard.gov

Although Figure 1 indicates that the overall mean scores for reading achievement were stable over time, we further considered whether implementation of the third-grade reading guarantee affected proficiency rates over time. Even if the mean score is stagnant, it would be possible for proficiency rates to rise.

To address this, it is important to understand that NAEP scores are also used to classify students into categories based on cut-points: below basic, basic, proficient, and advanced. Table 2 provides a description of what students are expected to demonstrate in order to attain each of these scoring categories.

▼ Table 2. Score categories for National Assessment of Educational Progress (NAEP)

Achievement category, 4th grade reading	Description	
Below basic	Below basic is anything falling below the threshold for basic, or a score of 208.	
Basic	According to NAEP, "fourth-grade students performing at the <i>Basic</i> level should be able to locate relevant information, make simple inferences, and use their understanding of the text to identify details that support a given interpretation or conclusion. Students should be able to interpret the meaning of a word as it is used in the text.	
Proficient	Fourth-grade students performing at the <i>Proficient</i> level should be able to integrate and interpret texts and apply their understanding of the text to draw conclusions and make evaluations.	
Advanced	Fourth-grade students performing at the <i>Advanced level</i> should be able to make complex inferences and construct and support their inferential understanding of the text. Students should be able to apply their understanding of a text to make and support a judgment."	

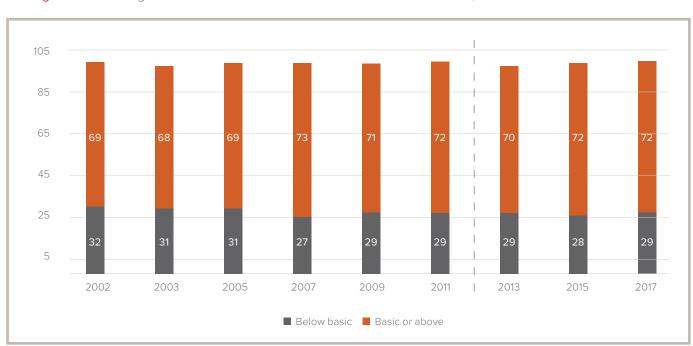
 $Source: \verb§"NAEP" scale" scores and achievement levels" provided at \verb§"https://nces.ed.gov/nationsreportcard/guides/scores_achv.aspx.$

Next, we looked at whether Ohio saw an increase in the number of proficient readers or a decrease in below basic readers over time. Figure 2 depicts the percentages of students in each of those four categories from 2002 to 2017. This figure also demarcates the introduction of the guarantee in 2012.

▼ Figure 2. NAEP proficiency categories of Ohio's fourth graders, from 2002-2017



As evident in Figure 2, the percentage of Ohio's fourth graders who are proficient readers has barely budged over the last ten years: in 2007, 28% of students reached NAEP proficiency, compared to 29% in 2015 and 2017. Figure 3 simplifies the above data by combining the data into two categories: basic or above, and below basic. These graphs show a high level of stability across the two categorical groupings. In particular, the percentage of fourth graders who cannot read at basic levels has remained remarkably stable before and after the introduction of the third-grade reading guarantee. These graphs suggest that even with introduction of a third-grade reading guarantee – and all of the supports that go along with it – a troubling percentage of Ohio's fourth graders cannot read at basic levels, at least according to the nation's report card.



 ✓ Figure 3. Percentage of Ohio children below basic achievement on the NAEP, 2002-2017

Source: NAEP scores drawn from the data tool available at www.nationsreportcard.gov



AIM 2: The second aim was to examine the relationship between passage of the third-grade reading guarantee and fourth-grade reading achievement among Ohio students, using state data. Specifically, we examined Ohio Achievement Assessment (OAA) data reported by the Ohio Department of Education (ODE) for reading achievement.

Using state-level data to analyze the efficacy of the third-grade reading guarantee has both benefits and drawbacks. On the one hand, state data on third-grade reading achievement provides information at the district and school level. This is not the case with NAEP. Ohio teachers also align their instruction with state assessments, not national goals; thus, one might expect improvements to show up more readily here even while NAEP scores remain flat. On the other hand, the state assessments have undergone significant changes in recent years – both in the assessments delivered as well as the cut scores necessary to be deemed proficient. This makes year-to-year comparisons difficult. To account for this, we examined the two most recent years of data – several years after Ohio's last testing change.

Statewide, Ohio reports that 95% of students passed the third-grade reading guarantee in 2017-2018. If the guarantee is working, we might expect most of Ohio's fourth graders to exhibit proficiency on the same state test the following year.

To test this premise, we analyzed data on fourth-grade reading achievement levels on the Ohio's Achievement Assessment from recent years, from the publicly available district-level reporting tool on ODE's website (ODE, 2018). Percentages of students passing the third-grade reading guarantee as well as third-grade proficiency scores were pulled from annual report card data provided at the district level (ODE, 2018). For this analysis, we selected those students who were in third

grade in 2016-2017, and presumably matriculated to fourth grade in 2017-2018. These scores are from five years after the passage of the guarantee, and several years after the latest test change. In theory, this would provide enough time for districts to adjust to new exams and proficiency cut scores, as well as enough time for the reading guarantee policy to have its intended impact. We examined the third-grade reading guarantee passage rates and fourth-grade OAA proficiency rates for all 611 school districts in Ohio.

Our results show that every single school district reported a higher third-grade-reading guarantee passage rate than fourth-grade proficiency rate for the OAA. It is important to note, however that some districts showed very small differences between passing and proficiency rates, while others had much larger differences. To illustrate this, we selected ten school districts that were at least an average size student population according to their classifications with the Ohio Department of Education, bridging urban and suburban settings and high and low student poverty. Third-grade passing rates and fourth-grade proficiency rates are reported anonymously for each of the ten selected districts in Table 3.

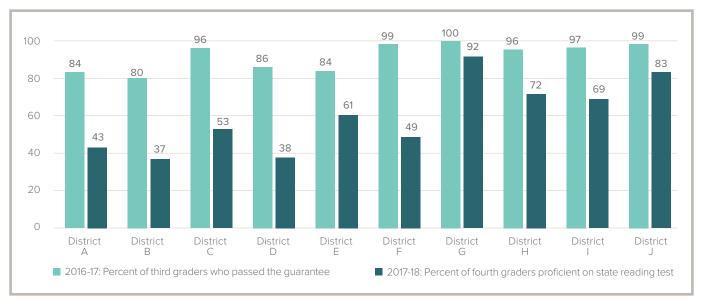
As Table 3 shows, there are wide discrepancies between the percentages of students passing the third-grade reading guarantee and those reaching proficiency on the state fourth-grade exam. This pattern holds true for urban as well as suburban districts, though by narrower margins for the latter. It is also important to note that this is an imperfect comparison of each cohort of children moving from third to fourth grade; specifically, the fourth grade estimate does not include students who may have left their district, as well as those who were retained. Yet the overall point remains: if such overwhelming percentages of third graders are passing the guarantee, why are there so few proficient readers the next year?

▼ Table 3. Third-grade reading guarantee passage rate v. percent proficient on fourth-grade exam,
10 large Ohio districts

	District typology	2016-17: Percent of third graders who passed the guarantee	2017-18: Percent of fourth graders proficient on reading exam	Difference between third- grade passage and fourth-grade proficiency
District A	Urban: Very High Student Poverty, Very Large Student Population	84	43	41
District B	Urban: Very High Student Poverty, Very Large Student Population	80	37	43
District C	Urban: Very High Student Poverty, Very Large Student Population	96	53	43
District D	Urban: Very High Student Poverty, Very Large Student Population	86	38	49
District E	Urban: High Student Poverty, Average Student Population	84	61	24
District F	Urban: Very High Student Poverty, Very Large Student Population	99	49	50
District G	Suburban: Very Low Student Poverty, Large Student Population	100	92	8
District H	Suburban: Very Low Student Poverty, Large Student Population	96	72	24
District I	Suburban: Very Low Student Poverty, Large Student Population	97	69	28
District J	Suburban: Very Low Student Poverty, Large Student Population	99	83	16

Note: the 2017-18 cohort does not include kstudents who may have moved out of the district or were retained under the third-grade reading guarantee. Source: Ohio's interactive Local Report Cards. District typology defined by the Ohio Department of Education, http://education.ohio.gov/.

✓ Figure 4. Third-grade reading guarantee passage rate v. percent proficient on fourth-grade exam, 10 large Ohio districts



Note: the 2017-18 cohort does not include children who may have moved out of the district or were retained under the third-grade reading guarantee. Source: Ohio's interactive Local Report Cards

One reason that there may be an observed difference between the passing rates for the guarantee and fourth-grade proficiency may be that some students qualify for passing the third-grade guarantee via alternative assessments: Ohio reported that 4.3 percent of third graders statewide passed the guarantee in this way in 2017. In the same year about 7% of students were exempt from the promotion threshold, for disability or English Language Proficiency reasons.

However the primary reason for this discrepancy is likely a feature of the guarantee that was built into the policy: Passing the third-grade reading guarantee is not the same as scoring proficiently on the third-grade OAA in reading (called English Language-Arts or ELA). As established in the 2012 roll out of the guarantee, the threshold for passing third grade was set lower than the proficiency rate (see the first entry in Table 1), meaning that it is easier to get a passing score than a proficient score. Though it has been incrementally increasing in the last several years, the discrepancy is still in place. Specifically, in the 2018-2019 school year, the proficiency score on the OAA was 700 or above. While promotion score was set substantially lower at 677.

To illustrate how this difference in criteria is related to passage rates, we also examined the third-grade proficiency rates for the ten example districts reported in Table 3. In District A, for example, where 84% of students passed the third-grade reading guarantee in 2016-2017, only 40% of these same students scored in the proficient range on the third-grade OAA. This is much more closely aligned with the proficiency numbers for fourth grade (43%; Table 3). The results were also aligned for the other examined districts, including those that had the lowest percentages of third-grade guarantee passers (e.g., District E had 84% of students who passed the guarantee, but only 54% were proficient on the third-grade OAA, which increased to 61% in fourth grade), and those with the highest passage rates (District G had 100% passing rate, but only 88% were proficient in third grade, and 92% were proficient in fourth grade). All other districts showed similar results.

Conclusion and Discussion

It has been nearly seven years since the passage of Ohio's third-grade reading guarantee, a statewide mandate meant to end social promotion and ensure elementary-aged students are prepared for deep reading fluency and understanding. In light of these findings the question has to be asked, does the current policy work?

By shining a spotlight on the importance of early reading development and intervention, one could argue that the law successfully galvanized support for attention to early reading achievement and helped to crystalize this conversation in public discourse. It required that students on a reading improvement plan be taught by highly qualified teachers, an important step toward insisting that schools not skimp on quality during the first years of school. It mandated that parents be notified if and when their children were deemed off-track in reading, another important factor in ensuring that at-risk readers receive early support. And it created a report card metric focused on K-3 that, while imperfect, demonstrates to parents and the public that a school or district's performance during the early years is important to children's later success.

If the fundamental goal of the legislation is to provide help and support to make sure students are on track for reading success by the end of third grade, it is unclear whether the reading guarantee has made a lasting and significant difference.

In this work, we demonstrated that Ohio's fourth-grade NAEP scores have not changed since the implementation of the third-grade reading guarantee in 2012, either in terms of average reading scores or proficiency levels. The number of children scoring below basic on the NAEP is almost one in three, a number that has been the same for the last 15 years. State test results do not offer much more reason for optimism. Though some slight changes in proficiency levels can be seen over time, there is no clear pattern.

Meanwhile, passage rates for the guarantee threshold have soared statewide. Our findings demonstrate that this does not reflect the reality, which is that significant percentages of third and fourth graders are not reading proficiently. Given the critical window of time for young students to achieve reading proficiency, what can be done? We highlight several considerations for policy makers, schools, researchers, and parents.

Policy makers should continue to observe Ohio's third-grade reading trends, report out key data points, and make it clear that the passage rate for the third-grade reading guarantee is not the same asthe reading proficiency rate on state exams. The state might also consider an examination of states that have implemented similar reading guarantees and have seen more sustained improvements on the NAEP, such as Florida. Finally, policy makers may want to consider taking a long-view of school readiness. In addition to key supports for students in kindergarten through grade three, research shows that school readiness is heavily influenced by children's experience in high-quality early care and Pre-K (or lack thereof).

Schools and teachers are the front-line implementers of the reading guarantee, and as such, have valuable input as to what is and is not working well. Educators and school leaders should further offer meaningful tools to parents to support their young readers when they are deemed off track. This includes helping them understand the state's Kindergarten Readiness Assessment as well as any diagnostic or interim test data available to them. Finally, schools should ensure that teachers receive coaching and development around instructional techniques used to teach reading.

Researchers can continue to conduct work on the importance of early prevention of reading problems. Where possible, efforts should be made to localize this research and to examine state or local early literacy data points to help make their case. It would further be worthwhile to use research to hone in on questions such as: what aspects of reading guarantee polices, if any, drive improvements in reading proficiency? Are there particular practices in place in districts or schools, especially those serving high percentages of at-risk students, which have managed to achieve solid growth in reading skills between third and fourth grade? If so, what are they, and how could they be scaled?

Parents are their child's first and most important advocate. As such, it is important that they feel empowered to engage schools and ask sometimes tough questions about the reading supports provided to their student. Teachers should help parents understand the diagnostics used to determine reading success as well as concrete steps to take with their child at home to improve skills. Toward this end, policy makers may want to consider what, if any, supports should be made available for parents to enhance their student's learning in the event that school supports are insufficient. Finally, parents should be aware that passage of the third-grade reading guarantee does not *guarantee* that their child is done learning to read.

References

- Adams, M. J. (1994). Beginning to read: Thinking and learning about print. MIT press.
- Logan, J., Justice, L. M., & Pentimonti, J. M. (2014, winter). Ready to Read and School Success: Kindergarten Readiness and the "Third Grade Reading Guarantee." Columbus, OH: Crane Center for Early Childhood Research and Policy, The Ohio State University.
- Lonigan, C. J., Burgess, S. R., & Anthony, J. L. (January 01, 2000). Development of Emergent Literacy and Early Reading Skills in Preschool Children: Evidence From a Latent-Variable Longitudinal Study. *Developmental Psychology*, 36, 5.
- Nation's Report Card. (n.d.). National Assessment of Educational Progress (NAEP). Retrieved from: https://www.nationsreportcard.gov/
- National Conference of State Legislatures. (2018). Retrieved from: http://www.ncsl.org/research/education/third-grade-reading-legislation.aspx
- Ohio Department of Education. (2018). Ohio Achievement Assessment (OAA). Retrieved from: https://reportcard.education.ohio.gov/download
- Ohio Department of Education. (n.d.). Ohio's Fall 2018 October Headcount. Retrieved from: http://education.ohio.gov/
- Ohio Legislative Service Commission (n.d.) Retrieved from: https://www.lsc.ohio.gov/
- Vellutino, F., Scanlon, D., Small, S., & Fanuele, D. (January 01, 2006). Response to Intervention as a Vehicle for Distinguishing Between Children With and Without Reading Disabilities. *Journal of Learning Disabilities, 39,* 2, 157-169.

Author Note

The activities of the Crane Center for Early Childhood Research and Policy are supported in part by a generous gift of the Crane family to The Ohio State University. The content of this work reflects the views and opinions of the named authors, and does not necessarily reflect those of The Ohio State University. Correspondence about this work may be addressed to Jessica Logan. Email: logan.251@osu.edu

The Crane Center for Early Childhood Research and Policy (CCEC)

The Crane Center for Early Childhood Research and Policy, in the College of Education and Human Ecology, is a multidisciplinary research center dedicated to conducting high-quality research that improves children's learning and development at home, in school, and in the community. Our vision is to be a driving force in the intersection of research, policy, and practice, as it relates to children's well-being. The Crane Center white paper series provides original research and thinking to practitioners and policymakers on matters of pressing concern.

The recommended citation for this paper is:

Logan, J. A. R., Justice, L.M., O'Leary, J. L.D., & Purtell, K.M. (2018). Has Ohio's Third Grade Reading Guarantee Led to Reading Improvements? Columbus, Ohio: Crane Center for Early Childhood Research and Policy & The Ohio State University.

