

## Alabama Can

 Improve Student Achievement and Enhance Teacher Quality in Every Public School:
## Here's How

A report to Governor Kay Ivey Regarding
Prepared by: The Commission on
Teaching and Learning Date: December 1, 2023

# Please use this QR Code to access the digital version of the Commission report. 



Alabama Can Improve Student Achievement and Enhance Teacher Quality in Every Public School:

## TABLE OF CONTENTS

Members ..... 05
Support Staff ..... 07
Introduction ..... 08
Recommendations ..... 12
I. Quality Teaching and Learning ..... 13
II. Support High-Poverty and Low- ..... 19
Performing Schools
III. Data Collection and Accountability ..... 22
IV. Educator Recruitment, Retention, ..... 26
and Development
Executive Summary ..... 30
Appendix A ..... 32
Appendix B ..... 35
Appendix C ..... 37
Appendix D ..... 38
Appendix E ..... 48
Appendix F ..... 62

## Governor Kay Ivey’s Commission on Teaching and Learning Members



Joe Morton, Ph.D., Chair
President, Business Education
Alliance of Alabama
State Superintendent of
Education, 2004-2011


Dicky Barlow, Ed.D.
Superintendent, Mountain Brook
School System


Representative Alan Baker
Alabama State House of
Representatives, District 66


Melvin J. Brown, Ed.D. Superintendent of Schools, Montgomery Public Schools


Senator Donnie Chesteen
Alabama State Senate, District 29


Representative Barbara Drummond
Alabama State House of
Representatives, District 103


Derek Henderson
Vice President, Alabaster City School Board


Donna McCurry
Immediate Past President, Alabama Parent Teacher Association


Ben Wallerstein
Founder, Whiteboard Advisors


Carey M. Wright, Ed.D. State Superintendent of Education for Mississippi, 2013-2022


Reggie White
Teacher, Booker T. Washington K-8 School
Birmingham City Schools 2022 Alabama Teacher of the Year

## Governor Kay Ivey's Commission on Teaching and Learning Supporting Staff




Nick Moore
Director of the Governor's
Office of Education and
Workforce Transformation,
Office of the Governor,
State of Alabama


John Gilchrist
Policy Analyst
Education and Workforce
Transformation


Mary Kate Hillis
Policy Advisor
Education and Workforce
Transformation

## Alabama Needs Success Now and in the Future

Alabama's public schools, pre-kindergarten through grade 12, face many challenges, either by federal, state and local laws, rules, regulations or policies, or in many cases by the preparedness of the students who attend. Yet, today in Alabama there are more available resources and opportunities for success than ever before. The greatest challenge facing Alabama is how to match available resources with programs and initiatives that give every child entering a four-year-old pre-kindergarten program the best opportunity to be successful under the guidance of a highly qualified teacher in his/her 14 years of public school. Done right this will enable every student to be college and career ready when they graduate from high school and ready to continue on an educational pathway, go to work, or to do both.

On January 18, 2023, Governor Kay Ivey issued Executive Order No. 730 (Appendix A), which established the Governor's Commission on Teaching and Learning (hereafter referred to in this report as "the Commission"). The Executive Order (EO) charged the 13 Commission members with providing thorough and thoughtful recommendations for enhancing the quality of elementary and secondary education in Alabama. The EO called for a final report by December 1, 2023.

The Commission met eight times. Seven meetings included presentations by state and national leaders who are listed in this report (Appendix B). The Commission learned much from the presentations, discussions, questions, and documents shared in the meetings. The June 26, 2023, meeting included a large portion of time for public input.

While every meeting was informative and each in its own way helped to construct the building blocks of this report, perhaps nothing impacted the Commission more than the sheer magnitude of the challenge school personnel face when teaching students living in poverty. The following description of two elementary schools in Alabama is factual. The names have been changed to avoid causing either undue stress or attention as they daily teach children. At Alpha Elementary School, 108 out of 109 second
graders (today's third graders) were reading at or above grade level in the 2022-2023 school year. At Omega Elementary School, 42 out of 92 second graders read at grade level during the 2022-2023 school year. Moreover, 106 out of 109 of Alpha Elementary School's current third graders were proficient in mathematics as second graders. Omega Elementary had 5 out of 93 second graders reach the proficient level in mathematics. Less than 2 percent of Alpha Elementary's students are living in poverty; whereas, 97 percent of Omega Elementary's students are living in poverty.

Is teaching students living in poverty an insurmountable task? The answer is a resounding "no!" During the 2022-2023 school year, 219 out of 228 second graders at Saraland Elementary, located in the Saraland City School System, were reading at grade level, and 175 out of 226 of those same students reached proficiency in mathematics. Saraland's poverty rate is 55 percent. Mulkey Elementary in Geneva City had 76 out of 82 second graders reading at grade level, and 61 out of 82 were proficient in mathematics. Mulkey's poverty rate is 66 percent (Appendix C).

Two of the presenters who met with the Commission were experts in the field of poverty and offered significant observations, but from two very different perspectives. Nevertheless, both told the Commission the same thing.
> "Solving poverty in Alabama helps all of Alabama."
> Nancy Buckner, Commissioner, Alabama Department of Human Resources

"The classroom of 2035 is beyond reach for high-poverty schools in Alabama unless things change dramatically."
Bill Poole, Finance Director, State of Alabama

The knockout punch in the fight against poverty is to provide every child a top-quality education from Pre-K through grade 12, to have each child literate and numerate before they enter the fourth grade, and to graduate from high school college and/or career ready. This report offers suggestions for a plan that can deliver a knockout punch to low achievement levels for all students, but especially to those attending high-poverty schools. If achieved, Alabama's economic future is brighter and students' lives are changed forever.

The Commission looked at more topics than how to solve reading and mathematics challenges, and this report includes multiple recommendations on myriad topics. However, unless reading and mathematics achievement levels improve statewide, all other initiatives regarding student
achievement will be relegated to the second tier. It's an old axiom, but it is, nevertheless, as true today as the first day it was uttered: "From birth to grade three one learns to read; from grade four and beyond one reads to learn." So many predictions regarding students' life trajectories can be made based upon their reading levels at the third and fourth grade. Additionally, in the field of economic development, all 50 states are competing nationally and internationally to keep existing industries, to expand existing industries, and to recruit new opportunities for economic development. The viability of the workforce is of paramount concern for economic developers. Alabama has a very low unemployment rate, which is a positive. However, Alabama also has one of the nation's lowest labor force participation rates, at 57 percent. Alabama's labor force participation rate is 5 percentage points below the national average, which is a negative. Labor force participation rates and reading and mathematics proficiency rates are not mutually exclusive. In fact, there is only one measurement of state-bystate comparisons of 4th and 8th grade reading and mathematics achievement - the National Assessment of Educational Progress (NAEP). NAEP is also known as The Nation's Report Card. Governor Ivey has established a noble, and achievable, goal of Alabama reaching among the top 30 states on the NAEP. Today we are not there, but the Commission believes the recommendations in this report can help Alabama reach that goal and, in turn, to grow a generation of students who graduate from high school college and/or career ready. Students who graduate college and/or career ready are more likely to go on to postsecondary education and to secure employment in an Alabama economy that grows and prospers.

Generally, there are two sets of factors that greatly affect student achievement. The first set of factors includes out-of-school circumstances, such as home and parental involvement; general support and an encouraging learning environment; student's physical, mental, and emotional health; and relationships with friends and peers. The Commission does recommend more mental health support, but crime, school safety challenges, and other related issues were beyond the Commission's focus on teaching and learning. The second factor includes inschool circumstances, such as teacher quality, class size, teacher professional development, teacher recruitment, teacher retention and support, effective school leadership and coaching, and school culture and climate. These factors are addressed in this report.

However, the Commission agrees no silver bullet exists for improving the quality of P-12 public education. There is no pill to take, shot to inject nor sword to slay the demon of low expectations and low outcomes. It will take dedication, devotion, unity, consistency, hard work and an indeterminable amount of time - all built around a winning game plan.

In recent years, Governor Ivey and the Alabama Legislature have established a solid foundation of game-winning programs to improve public education. The State Superintendent of Education and the State Board of Education have striven to implement the day-to-day parts of the legislative agenda. One such example is the state's student assessment program, the Alabama Comprehensive Assessment Program (ACAP). The Legislature, the State Superintendent of Education, and the State Board of Education collaborated to both fund and develop what is now Alabama's first-rate, comprehensive student assessment system. Over the last decade or so, Alabama utilized four different student summative assessments, including ACAP. The Commission strongly urges all decision makers to not make any more changes in student assessments, other than fine tuning as dictated by revised Courses of Study and statistical modeling, and to continue support for schools to concentrate on one, and only one, summative assessment for grades 3-8. Formative assessments chosen by school systems must also be aligned to, and demonstrate predictive validity for, the ACAP. Analyzing data from multiple assessments and then developing academic strategies to improve student learning is nigh on impossible.

The Commission's final report does not single out detailed recommendations for all facets of P -12 education. The Commission's report is for all students, so there is no clear section, for example, dealing with students with disabilities, or English language learners. Likewise, while all aspects of a well-rounded and comprehensive public education are essential to equipping every student to face life's challenges and rewards, the report does not include separate sections for science, the arts, physical education, history, and civics, nor all of the other important subjects. The Commission concentrated on strategic recommendations that could have the greatest positive impact, in the shortest possible time, and to help every student receive a high-quality public education.

With the above in mind, the Commission does want to acknowledge and support the efforts underway in our state and our nation to celebrate the 250th anniversary of the founding of the United States. Congress has established the America 250 Semiquincentennial Commission to plan and orchestrate events around the date of July 4, 2026. The Commission encourages individual school celebrations utilizing Alabama's top-five rated History and Civics Course of Study.

While this report of the Commission is formally intended to be recommendations to Governor Kay Ivey, it is practically an Emergency Alert to all Alabamians that many aspects of public education must change for the better very soon. The report is also a game plan of both what changes are needed and how to enact them in the short and the long haul.

Through Governor Ivey's leadership Alabamians have the chance to buy into the enclosed recommendations. If they do, our beloved state can reach educational and economic heights of which we have historically only dreamed.

## Recommendations

Following seven days of presentations by national, regional and state authorities, and after thorough deliberations among Commission members during an eighth day of discussion, the Commission reached consensus on organizing the final recommendations and report of the Commission into four domains. The four domains are intended to organize the recommendations into common spheres of emphasis and solutions to challenges facing P -12 public education in Alabama.


## I. Quality Teaching and Learning

A. On June 10, 2019, Governor Kay Ivey signed the Alabama Literacy Act (Act 2019-523) into law. This Act is Alabama's gateway law to ensuring that third graders can read on grade level before moving into the fourth grade. The Alabama Literacy Act is very similar to the Florida and Mississippi literacy acts. The results in Florida and Mississippi have been remarkable. There is no reason whatsoever to believe that Alabama will fail to equal the Florida and Mississippi success stories. Alabama did receive a setback in its implementation of the Literacy Act when in April of 2022, following the pandemic, the Legislature adopted a two-year delay of the fourth grade promotion policy. The Commission is not second guessing that action, but in May of 2022, and again in May of 2023, thousands (an estimated 10,000 each year) of third graders were promoted to the fourth grade who were not reading on grade level. While these students are spread across almost every school system in Alabama, a much higher percentage of them are in high-poverty schools. In many of these schools, the student safety net is much weaker. Fortunately, for the future third graders who cannot read on grade level and who would have been socially promoted and thrust into a more academically challenging fourth grade with substandard reading skills, the two-year delay ends in May of 2024. The Commission strongly supports no additional delays in the full implementation of the Alabama Literacy Act. In a report released by the Thomas Fordham Institute on October 11, 2023, researchers reviewed nationwide practices on retention for non-grade level readers and concluded, "Yes. Retention in elementary school can be beneficial for students and can improve middle school outcomes." (Appendix D)

For a deeper understanding on how the fourth grade promotion policy of the Alabama Literacy Act works to benefit third graders reading below grade level, we can see it in action across our western border in Mississippi. Dr. Carey Wright, a Commission member, was Superintendent of Education during the implementation of the Mississippi Literacy-Based Promotion Act. The practical and research-based approach of strategies employed under her leadership were highly successful. Additionally, a recent study by Boston University's Wheelock Educational Policy Center gives every Commission member full confidence that Alabama can, and should, totally
implement the Alabama Literacy Act (Appendix E). The Boston University study showed that third graders who were retained in Mississippi had substantial and sustained gains in English Language Arts. Literacy gains were especially significant among African American and Hispanic students. Overall, students who were retained did not appear to experience other negative consequences. Additionally, Mississippi NAEP scores went from 50th in the nation in 2013 to 21st in 4th grade reading in 2022, which has been dubbed by many as the "Mississippi Miracle." The Commission believes there can be a forthcoming "Alabama Miracle," and it fully supports the full implementation of the Alabama Literacy Act.

In April 2022, Governor Ivey signed the Alabama Numeracy Act (Act 2022-249) into law. The Commission views the full implementation of both the Alabama Literacy Act and Numeracy Acts some of the best work of state government in years. Alabama students are weak in NAEP results at the fourth and eighth grade levels, and too many are ill-prepared for high school and beyond because of poor reading and mathematics skills. The Alabama Literacy and Numeracy Acts offer more than hope for Alabama students and their families; these transformational laws actually offer a roadmap of how to reverse the low achievement levels of thousands of students and to create a highway to success so they can compete regionally and nationally from both the academic and economic perspectives. When the Commission indicates support of the Literacy and Numeracy Acts, it means every aspect of both Acts must be funded and implemented completely. There does exist some uncertainty about the funding of future after-school and summer camps, and activities directly tied to "catching up" students reading below grade level and students who are facing deficits in mathematics. Nothing could serve to hamstring Alabama educational progress more than to fail to fully fund all necessary and critically important after-school and summer programs, and initiatives and activities aimed at improving reading and mathematics skills of underperforming students. Reversing the summer learning slide and learning loss associated with the COVID-19 pandemic require sustained investments in summer and after-school programs, high-dosage tutoring, and other studentlevel reading and mathematics interventions.

With the above being stated in only the strongest and most supportive terms, it is a task too big for low-performing school systems and schools to execute alone. Community partners must be a part of each school system's plan to help every child to become literate and numerate in reading and mathematics. It is unrealistic to expect a school or school system that fails to teach students to perform at grade level from August to May each year to miraculously find a magic formula during the summer or in after-school programs utilizing the same plan that did not succeed from 8-3 daily throughout the school year. In 2000, the Alabama Legislature
adopted Act 2000-776, recognizing and creating by statute the Alabama Network of Family Resource Centers. Today, there are 23 centers statewide, and the numbers are growing. A large percentage of the Family Resource Centers are located in close proximity to lowperforming schools. These centers offer after-school and summer programs for struggling students and families. Family Resource Centers, plus Boys and Girls Clubs, YMCAs and YWCAs, local school foundations, summer programs like Summer Adventures in Learning (SAIL) in Birmingham that serves 16 counties, Alabama Public Television, Chambers of Commerce, and the highly-successful Department of Human Resources (DHR) after-school and summer program implemented through many Family Resource Centers, offer invaluable help to struggling schools, their students, and their families. These community partners must become a stronger aspect of each school system's overall plan to assure parents and guardians that every child will be afforded every opportunity to become literate and numerate.

- Implement and fund every aspect of the Alabama Literacy and Numeracy Acts. This includes fully funding summer camps and after-school programs involving community partners, including the successful DHR after-school and summer programs.
- Every pre-service and in-service $\mathrm{K}-6$ teacher involved in the instruction of reading and/ or mathematics must be trained in the research-based methods grounded in the science of reading and mathematics through professional development activities and educator preparation programs.
- Support the current initiative to train mathematics and reading coaches to focus on practice-based coaching cycles, peer-to-peer observations, and team-based teaching.
B. Nineteen states and the District of Columbia require kindergarten, and seventeen states and the District of Columbia require full-day kindergarten. All Alabama public school systems currently offer kindergarten to five year old children. Arkansas, Tennessee, South Carolina, and Louisiana require kindergarten. Alabama needs to adopt legislation requiring students to complete kindergarten before entering first grade. There should be exemptions for students who are homeschooled, or who complete a private kindergarten program, and pass a short first-grade readiness assessment prior to entering first grade.
- The Alabama Legislature should pass a law requiring kindergarten attendance, with certain exemptions.
C. Create the Alabama School Innovation Fund to empower local school systems and schools to develop and/or pilot innovative school success models and practices to improve student achievement and growth. Not all programs and innovative approaches to improving
student success have to originate at "the top." Programs that spring from boots on the ground may offer more practical and successful initiatives. Applications should initially be prioritized around evidence-based practices and innovative approaches to implementing the Alabama Literacy Act, the Alabama Numeracy Act, and the Alabama Principal Leadership and Mentoring Act; enhancing the teacher pipeline and teacher career advancement pathways; bolstering summer and after-school programs; and enhancing teacher workforce pathways. All public schools should be eligible to apply for 1-3 year innovation grants.
- An Innovation Fund is needed to inspire and foster solutions to serious educational challenges with a focus on student and teacher improvement.
D. Continue funding for the successful dual enrollment program administered by the Alabama Community College System. During the 2022-2023 school year, 27,000 Alabama high school students were enrolled in dual enrollment classes. This represents a $65 \%$ increase from 2015.
- Dual Enrollment is an Alabama success story that needs to be expanded and supported through sustained funding.
E. Career exploration, especially for students in grades $5-8$, is critical to secondary and post secondary success. Students cannot determine what they want to be in life if they have not had an opportunity to see what they can be. Alabama has established 16 career clusters with 79 pathways for student career exploration and discovery activities. The State Board of Education needs to establish baseline and target dates to achieve the goal of $100 \%$ of all 8th graders completing career exploration activities beginning in 5th grade. Properly done, these career exploration programs can lead to true work-based learning opportunities.
- Establish a baseline and target date to achieve the goal of $100 \%$ of all students in grades 5-8 completing career exploration activities.
F. Currently, 86.5\% of Alabama's 758 middle and high schools are complying with the Computer Science for Alabama Act (Act 2019-389). Since 2019, the Legislative appropriation for computer science teacher training has grown from $\$ 3$ million to $\$ 6$ million.
- Establish an implementation and compliance deadline for all elementary, middle, and high schools regarding the Computer Science for Alabama Act.
G. School-level leadership is critical to student success. Leadership begins with effective principals and assistant principals. Every school has a principal, but not enough schools have adequate staffing in the assistant principal ranks. If the Alabama Principal Leadership and Mentoring Act (Act 2023-340) is to be successful, and it must be, then adequate staffing at the assistant principal level is critical.
- Fund assistant principals for every school at the ratio of one to every 250 students.
H. Alabama should continue to expand its support for student mental health and overall wellness. Act 2022-442 established the School System Mental Health Services Coordinator Program. In FY 2024, the Legislature and Governor funded a coordinator in each school system at $\$ 40,000$ per coordinator position. The state should build on this strong foundation in two ways. First, by increasing the amount of funding to $\$ 50,000$ per coordinator to attract top-tier applicants, and second, by adding additional support for larger school systems. Additionally, the state should continue to support partnerships among the Department of Education, Department of Mental Health, local school systems, and regional mental health centers.
- Support and expand existing school-based mental health initiatives.
I. The term "divisors" refers to the method through which the state allocates teacher units to individual schools within local school systems. "Lowering the divisors" is a method to lower the teacher-to-student ratio by providing additional classroom teachers. There is a need for the state to focus its efforts on reducing the teacher-to-student ratios in the middle grades. As third graders who can read at grade level move to the fourth, fifth, and sixth grades, and beyond, many of them will have met the "grade level" threshold by only a point or two on the ACAP test. They will need smaller class sizes in order to be successful. Arriving at a ratio of 18 students to 1 teacher in every grade $4-8$ is not feasible in one year, but it should be a goal over several years.
- Support a multi-year attainment of a grades 4-8 teacher-to-pupil ratio of 1:18.
J. Broadband expansion is taking place across Alabama with alacrity. Since 2018, Governor Ivey has invested $\$ 88.6$ million in state grants to support broadband expansion across 109 projects, and the Governor announced that Alabama received a $\$ 1.4$ billion federal broadband expansion grant in August 2023. It is essential for it to continue so every student can access the internet in a fast and reliable manner from home. Regrettably, expansion in and around high-poverty and low-performing schools can be both expensive and slow. However, it is the students attending these schools that need internet access the most. During the COVID-19 pandemic, students living in poverty suffered the most when schools closed and instruction was conducted virtually. All too many of these students received little to no instruction during this time.
- Alabama should expand broadband to all areas without such service at the most rapid rate possible, and should prioritize areas where highpoverty and low-performing schools exist.


## II. Support High-Poverty and Low-Performing Schools


A. Alabama's First Class Pre-K Program is one of the best in the nation, based on an evaluation of each state's standards. The Commission supports the Department of Early Childhood Education's goal of growing the First Class Pre-K Program to provide full access for every family who wishes to participate by 2030. The Commission commends this effort and supports and recommends that the first priority be given to the placement of future classrooms in high-poverty areas of Alabama. Additionally, funding in those high-poverty areas should be sufficient to allow for extended hours to accommodate working parents. Transportation barriers for after-school programs are serious in many areas of the state and are addressed in the next section of the report.

- Stay the course on implementing the First Class Pre-K Program so that every family who wishes to participate has the ability to do so by 2030. Prioritize high-poverty areas of the state and provide funding for extended day programs to accommodate working parents.
B. The Commission recognizes and supports strong school and community-based summer and after-school programs, especially in
high-poverty and low-performing schools. One key barrier to full success in summer and after-school programs is student transportation. Attendance in these programs for lowperforming students must be a top priority, and transportation roadblocks must not be a reason to permit poor attendance. Alabama Literacy and Numeracy summer and after-school programs, along with the highly successful DHR STEM model, offer great hope for student success. Alabama's student transportation program should be expanded to cover the costs associated with those programs and initiatives.
- Fund and expand after-school and summer programs with a community-based component, especially in high-poverty and low-performing schools; and student transportation deficits must be addressed.
C. Double down on the Governor's Turnaround Schools Initiative. Many of these schools are showing how concentrated efforts can improve student achievement in highly challenging settings. Governor Ivey is to be commended for personally visiting every Turnaround School to emphasize that the State of Alabama is committed to truly seeing an academic turnaround occur in each one. The state should annually analyze all elementary schools' results on the ACAP and create Specialized Ways to Aid Teaching (SWAT) Turnaround Teams for any elementary school with $25 \%$ or more of second or third graders scoring below grade level in reading and/or mathematics. Following the Spring 2023 ACAP Assessment, there were 702 schools in Alabama with a third-grade class of students. Of those, 298 had $25 \%$ or more of their students not reading at grade level. These numbers will change following after-school and summer learning opportunities. Alabama cannot staff 298 SWAT Teams, but with a focus on the schools with the lowest percentage of third graders reading at grade level, positive changes can occur. These SWAT Turnaround Teams can be composed of both retired teachers and Department of Education Office of School Improvement personnel who excel in teaching reading and mathematics. Retired teachers should be compensated. The SWAT Turnaround Teams will work with school staffs and community groups to coordinate in-school, after-school, and summer programs. A financial incentive program should be developed, including incentive pay for personnel, in schools demonstrating the greatest academic success.
- Targeted assistance to low-performing schools is essential for their students' success. The Governor's Turnaround Schools Initiative should be expanded and modified to offer assistance to any elementary school with $25 \%$ or more of their students not performing at grade level in reading and/or mathematics, with an emphasis on grades two and three.
D. Student attendance at school is a serious issue, but especially so at high-poverty and low-performing schools. Chronic absenteeism is currently defined as being absent 10 percent or more of the school year, or approximately 18 days per year. That roughly equates to there being no alarm bells ringing until a student misses $10 \%$ of all days school is in session. When students are trying to learn to read, or perform mathematics skills, and they are already below grade level, adding 18 or more days of school absences to the equation only exacerbates the situation. In early 2023, the Alabama Workforce Council endorsed a policy agenda for addressing chronic absenteeism in Alabama's schools. In an al.com article dated October 17, 2023, Birmingham Mayor Randall Woodfin said that $50 \%$ of third graders in his city are truant.

Recalling the reading and mathematics academic results on the ACAP for Alpha Elementary and Omega Elementary, a review of student attendance at each school begs for a solution. In 2022, Omega Elementary had a student absentee rate of 31\%. Alpha Elementary's student absentee rate was $2 \%$. Low-performing students in reading and mathematics who also have poor attendance rates are virtually assured of remaining below grade level for perhaps their entire P -12, if they stay in school until grade 12 (students who are chronically absent are less likely to graduate from high school). Reaching high school graduation and college and career readiness goals may well become improbable, unless state supported measures are taken.

- Create a state supported incentive program (perhaps monetary incentives) in low-performing schools with poor attendance rates to stimulate better school attendance.
E. The Jobs for Alabama's Graduates (JAG) Program is nationally-recognized for providing students who are at risk of not completing high school with the support needed to graduate on time, to become college and career ready, and to enter postsecondary education and/or the workforce.
- Fund a JAG program in every low-performing/high-poverty high school.


## III. Data Collection and Accountability


A. Implement Act 2023-365 as quickly as possible. This Act creates the Committee on Credential Quality and Transparency and codifies the State Board of Education rule which stipulates that every student earning a high school diploma, beginning in 2026 and beyond, must be College and Career Ready (CCR). Governor Ivey and State Superintendent Dr. Eric Mackey recommended a FY2024 appropriation of $\$ 25$ million for implementation of the CCR requirement, with a priority given to high schools with the greatest implementation challenges. With these funds, many high schools and Career Tech Centers can improve and expand their offerings which can improve high school CCR completion rates by expanding access to CTE programs and credentials. The Act further creates a data system (ATLAS) that enables state and local agencies to evaluate career pathways for students and to greatly elevate an evaluation of the effectiveness of programs throughout public education and state government. In essence, it should virtually eliminate the data gap that currently exists.

- Expeditiously implement Act 2023-365 to ensure data-informed decisions at all levels of education and state government are made in a timely and thoughtful manner.
- Key state policy and financial decisions must be reinforced with sound data so state and federal tax dollars can be spent wisely and effectively.
- The Commission fully supports the annual continuation of the FY 2024 CCR funding of $\$ 25$ million so each high school and career tech center can be prepared for the 2026 implementation of the CCR high school graduation requirement.
B. Review and revise elements of the state's A-F Report Card for public schools. Alabama citizens recognize and respect accountability, and they will support it. But accountability measures, such as the A-F Report Card, should reflect categories and scoring weights that primarily focus on student achievement, including attendance. The state's Report Card should reflect how students attending public schools (including charter schools) are performing on criteria that are essential to every student having a pathway to high school graduation, a twoor four-year college, and a career in Alabama's workforce.
- The State Board of Education should review and revise the A-F Report Card for public schools to restore confidence in the school accountability program and to give parents a clear understanding of their children's schools' academic standing.
- The state should revisit the A-F Report Card law so there is only one measure-the A-F School and School System Report Card. Multiple accountability reports cause confusion among educators, parents, and the public.
C. Legislation should be adopted requiring Alabama's public and private educator preparation programs to fully comply with the Alabama Literacy Act no later than August 1, 2024. Failure to comply with the Act should mean graduates of any noncomplying college or university cannot be considered for a teaching license. The legislation should also include:

1. A prohibition of the 3-cueing approach in teacher training programs and the practice of 3-cueing in Alabama public school classrooms. 3-cueing downplays phonics in the teaching of students to read, focuses more on guessing which words make the most sense, which is all in contradiction to the vast body of research on the science of reading. Students hurt the most by 3 -cueing are those with poor vocabularies, poor word decoding skills, those with learning difficulties; and English language learners.
2. Assure that colleges of education teach aspiring teachers of reading the five core components of reading instruction:
A. Phonemic Awareness
B. Phonics
C. Fluency
D. Vocabulary
E. Comprehension
3. Require all colleges of education in Alabama to publish the pass rates of first time test takers of the Foundations of Reading licensure test, and do not allow the LETRS test or any other test to substitute for passing the Foundations of Reading licensure test. The State Department of Education shall assign letter grades to Educator Preparation Programs based on the first-time pass rates for the Foundations of Reading licensure test, and there should be no alternative or substitute tests allowed.

- The Alabama Literacy Act has specific requirements for public schools and colleges of education. Full compliance should be the norm for all affected institutions.
- The science of reading is clear about what works and what doesn't work both in training new teachers to teach reading and teaching young students to read. Alabama should follow the science of reading for both students in public schools and colleges of education.
- Accountability for college students taking the Foundations of Reading test is essential. Published first time-test taker rates should be required and a grade given to each college of education, based upon their first time results on the Foundations of Reading licensure test.
D. Alabama is a top-10 state in completion rates of the Free Application for Federal Student Aid (FAFSA). The FAFSA is used to determine student eligibility for federal, state and institutional aid, including Pell Grants. Over $92 \%$ of high school seniors who complete the FAFSA attend a two- or four-year college or university, compared to just $51 \%$ who do not complete the FAFSA. In 2021, Alabama added FAFSA completion (with exceptions) to the graduation requirements checklist for high school seniors. Currently, 64\% of Alabama's graduating class of 2022 have completed FAFSA. That represents a big increase from 2021.
- Alabama should establish a target date for reaching, as near as possible, the $100 \%$ completion rate for all high school seniors to complete the FAFSA, and the state should initiate a statewide campaign to implement the strategies necessary to reach the FAFSA completion goal.
E. Career coaches in Alabama's high schools offer another asset useful for maintaining and improving a 90\% and above high school graduation rate, and having every graduate college and career ready. However, the allotment of career coaches needs a revised distribution formula. First, every high school should receive one career coach. Second, high schools with 1,000 students should receive two career coaches, or a portion of a second coach, if the enrollment is between 501-999. Third, high schools with enrollments of 2,000 should receive three career coaches, or a portion of a third coach if enrollment is between 1,001-1,999. Any high school with an enrollment in excess of 2,000 should earn four career coaches.
- There is virtually no question that career coaches offer much needed help for high school students as they plan for graduation and beyond. Every high school student and his or her family should know what career pathways are available during high school attendance and afterwards so better informed decisions can be made about which are attainable. However, a thorough evaluation by an independent reviewer should be conducted to determine how successful the career coaches program is and where improvements are needed. Career coaches should avail themselves of technology procured by the state to connect students and employers.



## IV. Educator Recruitment, Retention, and Development


A. Alabama has invested in paying teachers on a higher scale over the past five years, and it is paying dividends. The salary for a first-year teacher at the bachelor's degree level is $\$ 44,226$. This ranks 9th among the 16 states in the Southern Regional Education Board and 4th among the eight Southeastern states (Arkansas, Mississippi, Alabama, Tennessee, Florida, Georgia, South Carolina, and Louisiana). Coupled with a strong benefits package that already exists, Alabama is approaching a position to offer a recruitment and marketing message second to none.

- Alabama should continue to pursue the goal of having the highest starting salary for first year teachers in the Southeast and should establish a date for attaining this goal.
B. Recruiting teachers to high-poverty and low-performing schools is a national challenge that certainly does not bypass Alabama. We must continue to enlist multiple strategies in order to recruit more young people to pursue teaching as a career, to emphasize the need for STEM teaching positions, and to support and develop programs connected to STEM teaching positions and any other teaching fields that may become a challenge to
staff. Currently, no challenge facing Alabama is greater than drawing new and experienced teachers to share their teaching expertise in high-poverty and low-performing schools. Any and all incentives must be explored, but financial incentives normally command the greatest attention and results. One program, the National Board for Professional Teaching Standards (National Board Certified Teachers- (NBCTs) is a stellar professional development program for existing teachers. It clearly strengthens each participant's teaching abilities and techniques. Students who are exposed to NBCTs greatly benefit, and teachers are financially rewarded. Regrettably, there are not enough NBCTs in high-poverty and low-performing schools. In the Fall of 2023 (Appendix F), of Alabama's 67 county school systems, 58 out of 67 county boards of education employed NBCTs, and 11 of the 58 had only one NBCT employed in the entire school system. Nine county school systems had no NBCTs employed. Of the 71 city school systems, 65 had NBCTs, but 6 of the 71 had only one NBCT employed for the entire school system. Six city school systems employed no NBCTs.
- Create a signing bonus program for first-year teachers who are employed in schools with a "D" or "F" on the revised A-F School Report Card. The bonus can be a cash payment to cover housing and/or commutes to high-poverty and low-performing schools.
- Continue the NBCT stipend program that currently pays \$5,000 annually per teacher plus an additional \$5,000 annually for teachers in hard-to-fill subject areas who teach in highpoverty schools. Additionally, create a program, including site visits, for high-poverty and low-performing schools to fully explain the NBCT program and to recruit new applicants.
- Evaluate the TEAMS Act through an independent researcher, support recommendations for improvement, and enlist ideas for improvement, as articulated by the Alabama STEM Council.
- Fund payments directly to teacher interns as those college seniors complete one of the final and vital requirements of college graduation. Teacher internships are critical in order to give future teachers field experiences, but interns should not suffer financially in order to complete the requirements. Engineering majors, business majors, and many others are normally compensated at a level that at least covers travel and food. Education majors seeking to become teachers should be treated similarly.
- Continue the STEM Council initiatives at seven Alabama university UTeach sites. Undergraduate STEM majors can add a teaching certificate without extra time or cost, and at two of the seven sites, enrollees already holding a STEM degree can earn an alternative master level certificate while teaching full-time.
C. Beginning in the Spring of 2024, 40 teacher apprentices will begin their journey to becoming a certificated teacher in Alabama. Each apprentice will receive compensation to cover expenses that had been offset with a previously held job. This funding is an incentive and not a grant or loan, and there is no repayment requirement. No participating school or school system will incur any expense. The apprentice program is two years in length for each participant, and it is administered by the Alabama Office of Apprenticeship, in concert with the University of West Alabama, Troy University, Auburn University Montgomery, and Jacksonville State University. The Commission believes this concept has great potential and based upon the results of the first cohort, it should be evaluated, and, if warranted, funded at greater levels to allow for expansion. Additionally, the Alabama Community College System's Dual Enrollment Teacher Pathway Program should be monitored and supported. This program has the potential to complement, and not compete with, the Alabama Teacher Apprenticeship Program.
- Follow through on the Alabama Teacher Apprenticeship Program to help resolve teacher shortages, and support the Dual Enrollment Teacher Pathway Program.
D. The Alabama Commission on Higher Education (ACHE) currently administers a college loan repayment program, the Alabama Math and Science Teacher Education Program, for teachers in high school mathematics and/or science. Recipients have an annual set amount of college tuition reimbursed to the recipient if the person teaches in an Alabama public school.
- Continue the college loan repayment program, but with a reinvigorated outreach effort aimed at high school students, college students with an undeclared major, and persons desiring to return to college to earn a teaching certificate in an allowable tuition forgiveness major.
E. In 2022, the State Board of Education approved a two year experimental program that provided for allowable alternative scores on the Praxis teacher content knowledge examination to be acceptable for Alabama certification.
- Return passing scores on the Praxis teacher content knowledge examination for teacher licensure in Alabama to the pre-2022 levels, and allow the two year experiment of alternate Praxis scores to expire.
F. The Alabama State Department of Education is the licensing agency for all teachers in Alabama. The goal of the teacher licensure section of the Department of Education should be to maintain high professional standards and to identify and eradicate all bureaucratic barriers of applicants seeking teacher licensure, with the exception of never lowering the passing score on any and all required tests or examinations.
- The Alabama Department of Education should create a SWAT (Special Ways to Attract Teachers) Team for teacher licensure/certification in Alabama. This team should assist all applicants seeking teacher licensure in Alabama so the process is expedited, but without sacrificing professional standards.


## V. Executive Summary

There is no question that the COVID-19 pandemic slowed the progress of Alabama's overall goal, and legislatively adopted initiatives, to improve student achievement, especially in reading and mathematics. There is also no question that the challenges of having third graders read and demonstrate mathematics skills on grade level, as well as seeing Alabama 4th and 8th graders achieve Governor Kay Ivey's goal of our state being a top 30 NAEP state, are much bigger than overcoming the setbacks of the COVID-19 pandemic.

The Poverty Pandemic in Alabama is real, and it directly affects student achievement. In fact, when high-performing schools' student assessment results are factored into a statewide look at student achievement, the results of low-performing schools are masked. Alabama will move through the challenges of COVID-19 recovery, but reducing poverty and the detrimental effects it has on student achievement will take longer, and can only be successful, by diligently following a game plan underlined by the premise that Alabama must have a strong public school system.

## Strong public schools must embody, at a minimum, the following goals:

- Staff every school, and especially high-poverty and low-performing schools, with well-trained and well-paid staff.
- Share the challenge of teaching every child to achieve grade level reading and mathematics proficiency with community organizations and state agencies involved in after-school and summer camps.
- Be able to innovate and share in state level funding for "boots-on-theground" programs that work.
- Create one revised A-F report card for all schools and school systems (including charters). This can be an accountability report that educators, parents/guardians, and the public understand and respect.

The challenge of implementing the vast majority of this report falls to many arenas. The challenge of funding is not overlooked, but Alabama is experiencing unprecedented tax revenue growth. Chances are that there are ways to implement many recommendations, some of which require no,
or only small amounts of funding. The arena of understanding and committing to change the results of high-poverty and low-performing schools is before us as a state. To better understand this challenge, one only needs to review again information on two elementary schools with very similarly sized 2022-2023 second grade student populations (today's third graders). One school, Alpha Elementary, has stellar results on every key measure. Omega Elementary has tremendous challenges on every key measure. The graphic below tells the story vividly.

| 2nd Grade Students <br> (Current 3rd Grade Students) | Alpha Elementary | Omega Elementary |
| :---: | :---: | :---: |
| Year | $2022-2023$ | $2022-2023$ |
| Students Reading at Grade <br> Level | $108 / 109$ | $42 / 92$ |
| Students Proficient in <br> Mathematics | $106 / 109$ | $5 / 93$ |
| Poverty Rate | $2 \%$ | $97 \%$ |
| Absenteeism Rate | 8 | $31 \%$ |
| Number of NBCT's <br> (National Board Certified Teachers) | 0 |  |

Without targeted efforts to change outcomes in schools across Alabama with similar student data and outcomes as Omega Elementary, our state cannot become a top 30 NAEP state. Far too many students will be unable to read and demonstrate mathematics skills by the third and fourth grade levels (Alabama Literacy and Numeracy Acts) as well. They will face serious academic challenges in grades 4-12. This spells trouble for Alabama's future economic growth and workforce development.

This report is in response to Executive Order No. 730 signed by Governor Kay Ivey on January 18, 2023. The recommendations contained herein represent ideas and proposals regarding existing initiatives that need to be fully implemented, as well as new programs that should be enacted. The members of the Commission on Teaching and Learning support every recommendation made, and we believe these recommendations can improve student achievement in all P-12 schools, but especially so in schools that have the greatest daily challenges.


Executive Order No. 730

## Establishing the Governor's Commission on Teaching and Learning

WHEREAS my administration is committed to tackling the challenge of recruiting and retaining highly-qualified and effective educators;

WHEREAS, for the 2022-2023 school year, the minimum salary for first-year teachers in Alabama is just over $\$ 43,000$, which represents an 11.6 percentage point increase in first-year teacher salaries during my administration;

WHEREAS the $\$ 8.3$ billion FY 2023 Education Trust Fund budget was the largest in Alabama's history for the fourth year in a row and provides at least a four percent pay raise for teachers based on experience;

WHEREAS, despite historic pay raises for teachers, since 2003, the number of graduates of Alabama's educator preparation programs has declined almost 20 percent;

WHEREAS this precipitous decline in interest in the field of education must be reversed;

WHEREAS my administration is focused on developing principals as instructional leaders and teacher-leaders who will support the educator talent pipeline;

WHEREAS tomorrow's teachers demand options for robust educator preparation programs and alternative certification programs, such as teacher apprenticeship programs and opportunities for advancement and higher pay;

WHEREAS the Strong Start, Strong Finish initiative has resulted in the most sweeping, transformative, and bipartisan education agenda in Alabama's history; and

NOW, THEREFORE, I, Kay Ivey, Governor of the State of Alabama, by the authority vested in me by the Constitution and laws of the State of Alabama, do hereby establish the Governor's Commission on Teaching and Learning as further set forth below:

1. Purpose. The purpose of the Commission is to provide thorough and thoughtful recommendations for enhancing the quality of elementary and secondary education in Alabama.
2. Final report. By December 1, 2023, the Commission shall submit a final report to the Governor and the Legislature containing summary factual data and recommendations for each of the following key areas:
a. Improving teacher quality and quantity.
b. Reducing unnecessary administrative and paperwork burdens on educators.
c. Increasing student growth and proficiency.
d. Improving educator preparation and certification.
e. Developing the classroom of tomorrow with a focus on teacher quality of life.
3. Chair. The chair of the Commission shall be appointed by, and serve at the pleasure of, the Governor. The chair of the Commission may oversee implementation of this order and the work of the Commission; convene and preside at meetings; and request technical assistance from the Governor's Office as needed.
4. Membership. The members of the Commission shall be appointed by, and serve at the pleasure of, the Governor.
5. Meetings. The Commission shall hold its first meeting at the call of the Governor. It shall meet periodically thereafter as determined necessary by the chair, holding at least three meetings that are open to the public.
6. Compensation and expenses. Members of the Commission shall serve without compensation but may elect to receive the per diem and
transportation allowance authorized by state law for persons traveling on official state business.
7. State-agency cooperation. State agencies and other state-funded entities shall cooperate with the Commission and provide information requested by the Commission.
8. Technical assistance. The Governor's Office, principally through the Governor's Office of Education and Workforce Transformation, will supply legal, clerical, administrative, and other technical assistance as deemed appropriate by the Governor.
9. Duration. The Commission shall be dissolved upon the submission of its report.

DONE AND ORDERED this 18th day of January 2023.


ATTESTED

Wes Allen
Secretary of State

## Governor's Commission on Teaching and Learning



## Meeting Dates and Presenters

February 27, 2023

- Dr. Eric Mackey, State Superintendent of Education
- Dr. Barbara Cooper, Secretary, Alabama Department of Early Childhood Education
- Dr. Katie Kinney, Dean, UNA College of Education and Human Sciences and President of the Alabama Association of Colleges for Teacher Education
- Dr. Vicky Ohlson, Vice Chancellor for Instruction, Research, and Development for the Alabama Community College System


## April 5, 2023

- Dr. Carey Wright, Retired Mississippi State Superintendent of Education
- Dr. Stephen Pruitt, Southern Regional Education Board President
- Mark Dixon, A+ Education Partnership President


## April 17, 2023

- Emily Schultz, Executive Director for Alabama Families for Great Schools
- Nancy Buckner, Commissioner, Alabama Department of Human Resources Commissioner
- Paul Morin, STEM Program Coordinator, Alabama Department of Human Resources
- Dr. Suzanne Lacey, Superintendent of Talladega County Schools
- Jeff McClure, Administrative Assistant to the Superintendent of Pike County Schools


## May 15, 2023

- Ted Clem, Alabama Department of Commerce Secretary Director of Business

Development

- Kevin Taylor, Deputy Director, Alabama Industrial Development Training
- Josh Laney, Director, Alabama Office of Apprenticeship
- Tim McCartney, Chair, the Alabama Workforce Council


## June 26, 2023

- Jason Callahan, Assistant Secretary for Student Pathways and Opportunity, Indiana Department of Education
- Nick Moore, Director, Governor's Office of Education and Workforce Transformation
- Bill Poole, State Finance Director
- Public Comments- A public session for any citizen to appear before the Commission and make comments/share information.


## August 16, 2023

- Dr. Heather Peske, President, National Council on Teacher Quality
- Marcus Morgan, Executive Director, Alabama Commission on the Evaluation of Services
- Dr. Eric Mackey, State Superintendent of Education


## September 5, 2023

- U. S. Senator and U.S. Attorney General Jeff Sessions
- Meeting of the Commission to work on Draft Outline of the Final Report


## October 27, 2023

- Working meeting of the Commission to finalize the Report.


## December 1, 2023

- Governor Ivey presents the Commission on Teaching and Learning Report at the Winter Meeting of the Alabama Association of School Boards and releases the Report to the public.


## Poverty Rate and Reading and Mathematics Proficiency Rates, 2022-2023

| 2nd Grade Students <br> (Current 3rd Grade Students) | Saraland Elementary, <br> Saraland City | Mulkey Elementary, <br> Geneva City |
| :---: | :---: | :---: |
| Poverty Rate | $55 \%$ | $66 \%$ |
| 2nd Grade Students <br> Reading at Grade Level | $219 / 228$ | $76 / 82$ |
| 2nd Grade Students <br> Proficient in <br> Mathematics | $175 / 226$ | $61 / 82$ |



# Think Again: <br> Is grade retention bad for kids? 

by Umut Özek and Louis T. Mariano



## About Fordham

The Thomas B. Fordham Institute promotes educational excellence for every child in America via quality research, analysis, and commentary, as well as advocacy and exemplary charter school authorizing in Ohio. It is affiliated with the Thomas B. Fordham Foundation, and this publication is a joint project of the Foundation and the Institute. For further information, please visit our website at fordhaminstitute.org. The Institute is neither connected with nor sponsored by Fordham University.

## About the Authors

Umut Özek, Ph.D., is a senior economist at the RAND Corporation who focuses on education. His recent research interests include immigrant students and English learners, implementation and consequences of educational accountability, K-12 remediation policies and their effects, and the design and effects of school-choice programs.

Louis T. Mariano, Ph.D., is a senior statistician at RAND whose education research has focused on evaluation of the efficacy of education programs, policies, and reforms, experimental and quasiexperimental design methodology, and statistical applications to mental measurement, including student assessment.

## Suggested Citation

Umut Özek and Louis T. Mariano. Think Again: Is grade retention bad for kids? Washington D.C.: Thomas B. Fordham Institute (October 2023).
https://fordhaminstitute.org/national/research/think-again-grade-retention-bad

## Acknowledgments

This brief was made possible through the generous support of our sister organization, the Thomas B. Fordham Foundation. We are deeply grateful to authors Umut Özek and Louis Mariano for their knowledgeable and unbiased approach to this important subject. We also extend our gratitude to external reviewer Marcus Winters for his insightful feedback on early versions of the brief, and to Pamela Tatz for copyediting the final report. At Fordham, we would like to thank Chester E. Finn, Jr., Michael J. Petrilli, Amber M. Northern, and David Griffith (who also managed the project) for reviewing drafts; Victoria McDougald for her role in dissemination; and Stephanie Distler for developing the report's cover art and coordinating production.

## Executive Summary

For many years, the conventional wisdom in the field was that grade retention was a bad idea. A 1997 opinion piece in Education Week titled "Grade retention doesn't work" reflected the prevailing sentiment in the education community and the available research evidence at that time: retained students performed worse than their promoted peers in the years that followed. ${ }^{1}$ This brief challenges that notion, based on more recent studies that do a better job of isolating the causal effect of retention.

## Key Questions

## Can grade retention be beneficial for students?

Answer: Yes. Several recent studies have found that retention in elementary school can be beneficial for students in improving middle school outcomes when the students most likely to benefit are identified and retention is paired with appropriate instructional supports.

## What risks are associated with retention?

Answer: There is evidence that students who are retained in middle school are less likely to graduate high school or enroll in college, suggesting that intervening sooner is a safer course.

Is grade retention too costly for school systems?
Answer: Not necessarily, because the long-term costs school systems actually incur could end up being only a fraction of the cost of an additional year of schooling.

## The Bottom Line

Retention is more likely to succeed in elementary grades and when coupled with instructional supports that are tailored to the educational needs of retained students.

## Recommendations

1. Ensure that retention policies target elementary school, as opposed to middle school.
2. Provide individualized support for students as soon as the risk of retention becomes apparent and continue supporting those who are nevertheless retained.
3. When assessing the cost effectiveness of retention policies, consider the long-term costs, the possible benefits for retained students, and the potential for positive spillovers.

## Introduction

In the twentieth century, education researchers conducted dozens of studies of "discretionary grade retention," which occurs whenever teachers, parents, and/or principals use their individual or collective discretion to require a student to repeat a grade. High-profile metaanalyses based on these studies concluded that grade retention was associated with poorer academic outcomes (including higher dropout rates) and greater risk of behavioral issues. ${ }^{2}$ However, the studies included in these meta-analyses were mostly correlational rather than causal.

Despite these negative findings, concerns about "social promotion," as well as the increasing popularity of accountability and standardized testing, led to the implementation of universal and theoretically mandatory retention policies in many states and school districts. A decade after President Clinton's 1998 call to end social promotion, at least six states and twelve large school districts had adopted test-based promotion policies, whereby students had to score above minimum thresholds on standardized tests to advance to the next grade level. By 2020, about half of states required or encouraged school districts to retain students whose third-grade reading scores showed they were struggling to meet basic standards. ${ }^{3}$

The use of test-based promotion policies, including the requirement that retention decisions be based on a clearly defined cut score, allowed for a more rigorous examination of the causal effects of grade retention. As a result, a new and extensive literature has emerged over the past two decades that paints a much more nuanced picture of grade retention and its consequences. This recent work uses methods that focus on students scoring near the test-score cutoffs around which the promotion or retention decision has been made, and the effects we discuss are applicable to the students scoring at this decision threshold.

## Question 1: Can grade retention be beneficial for students?

Contrary to the conventional wisdom in education circles, recent research suggests that retention in earlier grades can benefit students. For example, recent studies from Florida, ${ }^{4}$ Indiana, ${ }^{5}$ Mississippi, ${ }^{6}$ Chicago, ${ }^{7}$ and New York City ${ }^{8}$ provide evidence that grade retention in elementary school (generally in grades 3-5), when implemented as part of a broader remediation effort, can increase test scores through middle school and reduce the need for future remediation. ${ }^{9}$ Retention in elementary school may also increase the likelihood that students take advanced courses in middle and high school. ${ }^{10}$ Furthermore, new evidence suggests that these academic benefits may be substantially larger for students with lower baseline achievement at the time of retention. ${ }^{11}$

In addition to these academic benefits, evidence from descriptive surveys indicates that students retained in elementary school reported a greater sense of school connectedness, ${ }^{12}$ lasting several years beyond retention, than comparable students who were promoted. However, research on the effect of grade retention on disciplinary outcomes is skimpy and mixed, with one study finding a short-lived increase ${ }^{13}$ in suspensions and the other finding a similarly short-lived decline. ${ }^{14}$

Research also suggests that retention is more likely to succeed when paired with instructional supports that are tailored to the educational needs of students identified as potentially at risk for retention. In fact, all the studies that have found positive effects of retention were of policies that included supplemental instruction for retained students. For example, Florida's third-grade retention policy, which has provided the blueprint for early grade-retention policies in many other states, ${ }^{15}$ requires schools to (1) develop academic improvement plans for students that specifically address their learning needs, (2) assign these students to high-performing teachers, (3) provide at least ninety minutes of daily reading instruction, and (4) offer summer reading camp at the end of the year that facilitates intensive reading intervention lasting between six and eight weeks for all students who scored below the retention cutoff. Similarly, in New York City, ${ }^{16}$ Indiana, and Mississippi, both retained and at-risk elementary students who were ultimately promoted received instructional support. It is unlikely that retention alone, without such additional instructional help, would produce similar benefits.

Importantly, evidence suggests that providing supplemental services to at-risk students in the time prior to the promotion decision drastically reduces ${ }^{17}$ the number of retained students. For example, when New York City's policy was initiated for fifth graders, 22 percent of the first cohort was identified as at-risk of being retained. After exposure to a dedicated set of academic intervention services throughout the school year, only 3 percent of the cohort was ultimately retained. Later cohorts, who were exposed to the policy's intervention services in earlier grades, saw a large reduction in the proportion of students needing intervention services upon entry to fifth grade.

Retention policies that identify students who are likely to benefit from retention are also more likely to succeed. For example, under Florida's legislation, low-performing third graders are exempt from retention if they have certain disabilities and have been already retained once; if they have received intensive reading remediation for two years and have already been retained twice; if they have been in the English-learner program for less than two years; if they can perform at an acceptable level on an alternative reading assessment approved by the State Board of Education; or if they can demonstrate proficiency through a teacher-developed portfolio.

Similarly, establishing the right criteria for promotion is important because retention may be less effective for relatively higher-performing students and because retaining too many students may hinder schools' ability to provide the necessary instructional support. For example, one study finds that students just above Florida's retention cutoff as well as low-performing students who were exempt from the policy would have been less likely to benefit from retention had they received it. ${ }^{18}$ In other words, Florida's retention policy may be successful in part because it endeavors to identify the students who are likely to benefit.

In short, recent research has shown that grade retention in elementary school can increase test scores through middle school and reduce the need for future remediation. It is most likely to succeed when it is supplemented with individualized instructional support as soon as the risk of retention becomes apparent and when the students who are ultimately retained are the students who are likely to benefit from the experience.

## Question 2: What risks are associated with retention?

While the evidence on grade retention in the elementary grades has become increasingly positive, the research on retention in middle school grades remains negative. Despite the fact that the structure of middle school retention policies has generally mirrored that of elementary retention policies, including requirements for demonstrating a minimum proficiency on applicable state assessments and instructional supports, overall the research on these policies suggests little or no effect on academic achievement and higher levels of student disengagement. ${ }^{19}$ For example, students retained in middle school are less likely to graduate from high school ${ }^{20}$ and more likely to drop out. ${ }^{21}$ Additional evidence from Louisiana finds that students retained in eighth grade are less likely to enroll in college ${ }^{22}$ and more likely to be involved in criminal activity as adults. ${ }^{23}$

Although additional research is needed to understand why negative impacts are more likely to occur when retention is implemented in the higher grades, one common argument against grade retention policies is that they place a significant emotional burden on students: because students can be stigmatized as failing and must adjust to a new peer group, they may feel singled out and disengage from schooling.

One factor that might exacerbate these unintended consequences is inconsistent enforcement of retention policies. After all, despite the important role that test scores play in twenty-firstcentury retention policies, because many students receive exemptions, only a fraction of students who are identified for retention based on their test scores are actually retained. ${ }^{24}$ While these exemptions could help schools avoid retaining students who are less likely to benefit from retention, discretionary exemptions (such as using portfolios of student work) can also lead to differential policy enforcement ${ }^{25}$ because parents from more advantaged backgrounds are more likely to advocate for (and succeed in) avoiding retention, which could contribute to feelings of being excluded or singled out for retained students, especially among traditionally marginalized groups. While differential enforcement is also a concern for earlier grade retention, the negative academic effects found for middle school retention, such as lower graduation rates, do not materialize in the earlier grades.

In short, available evidence indicates that retention in middle school grades is less likely to succeed. This is perhaps because it leads to feelings of being singled out; however, the reasons why middle school grade retention is not as successful requires further study.

## Question 3: Is retention too costly for school systems?

Another criticism of grade retention is that it is expensive for school systems because schools must offer an additional school year to retained students. However, to make an informed decision, policymakers must consider the long-term benefits of retention, as well as the timing of the costs.

Recent studies suggest that the long-run cost of early grade retention is only a fraction of the cost of an additional year of schooling ${ }^{26}$ because retained students are significantly less likely to be identified for remediation or retained again in later grades. ${ }^{27}$ And conversely, students who
are at risk of retention but are ultimately promoted often take longer than four years to graduate high school. ${ }^{28}$

As noted, in addition to these fiscal offsets, there is evidence that (in addition to boosting middle school test scores) early grade retention increases the likelihood of taking college-creditbearing courses in high school, potentially better preparing students for college-level coursework. ${ }^{29}$ Furthermore, many cost-effectiveness calculations also ignore the potential for spillover effects. For example, the threat of retention could improve outcomes for a broad set of students, as may have happened in Florida, where the share of first-time third graders scoring below the retention cutoff dropped from 21 percent to 14 percent in the first five years of implementation. ${ }^{30}$ Logically, this change was very likely driven by improved learning experiences for students in earlier grades and during the third-grade year, rather than retention itself. Finally, the threat of retention could lead parents to reallocate their resources (whether in the form of time or money) to avoid the retention of their children. For example, new evidence suggests that the benefits of early grade retention can spill over to the younger siblings of identified students, in part because parents are more likely to move their younger child to a higher-performing school when the older sibling is identified for retention. ${ }^{31}$

From a public policy perspective, all these spillover effects are "free" and as such may have profound effects on the cost effectiveness of early grade-retention policies. The overwhelming majority of students aren't retained, so even a small spillover effect on the educational outcomes of students not targeted by the policy (e.g., their siblings or their peers not at risk of retention) could offset the costs associated with retention. In short, it is important for policymakers to weigh the long-term benefits of retention and the likely spillover effects on nonretained students against the likely costs.

Despite the volume of research on grade retention, we have much to learn. For example, the long-term effects of early grade-retention policies are not well understood, and there is potential for the effects experienced in middle school to dissipate. We need more research on how early grade retention affects students with lower baseline achievement and/or other educational needs, because some evidence suggests that effects could be substantially different for this population. ${ }^{32}$ In addition to these gaps, we still know little about the spillover effects of early grade-retention policies on other students (though what we do know seems promising). Finally, additional research is needed to better understand the reasons for the seemingly negative impacts of grade retention in middle school.

## The Bottom Line

Empirical research in the twenty-first century provides substantial evidence that grade retention in elementary school can be an effective lever for improving student outcomes. But school and district leaders should absorb the full lessons of the past two decades: waiting until middle school, retaining kids without providing the necessary supports, or failing to identify the students most likely to benefit are unlikely to yield the desired results and could even lead to adverse effects.

## Recommendations

1. Ensure that retention policies target elementary school, as opposed to middle school.
2. Provide individualized support for students as soon as the risk of retention becomes apparent and continuing support to those who are nevertheless retained.
3. When assessing the cost effectiveness of retention policies, consider the long-term costs, the possible benefits for retained students, and the potential for positive spillovers.

## Endnotes

${ }^{1}$ Arthur J. Reynolds and Judy Temple, "Grade retention doesn't work," Education Week, September 17, 1997, https://www.edweek.org/leadership/opinion-grade-retention-doesnt-work/1997/09.
${ }^{2}$ Charles T. Holmes, "Grade level retention effects: A meta-analysis of research studies," in Flunking grades: Research and policies on retention, eds. L. A. Shepard and M. L. Smith (London: Falmer Press, 1989), 16-33; and Shane R. Jimerson, "Meta-analysis of grade retention research: Implications for practice in the 21st century," School Psychology Review 30, no. 3 (September 2001): 420-37, https://doi.org/10.1080/02796015.2001.12086124.
${ }^{3}$ Education Commission of the States, "50-state comparison: State K-3 policies," https://www.ecs.org/50-state-comparison-state-k-3-policies-2023.
${ }^{4}$ Guido Schwerdt, Martin R. West, and Marcus Winters, "The effects of test-based retention on student outcomes over time: Regression discontinuity evidence from Florida," Journal of Public Economics 152 (August 2017): 154-69, https://doi.org/10.1016/j.jpubeco.2017.06.004.
${ }^{5}$ NaYoung Hwang and Cory Koedel, "Holding back to move forward: The effects of retention in the third grade on student outcomes" (EdWorkingPaper no. 22-688, Annenberg Institute at Brown University, December 2022), https://doi.org/10.26300/mmxx-3e82.
${ }^{6}$ Kirsten Slungaard Mumma and Marcus A. Winters, "The effect of retention under Mississippi's testbased promotion policy" (working paper 2023-1, Wheelock Educational Policy Center at Boston University, Winter 2023), https://doi.org/10.26300/hq2t-7x64.
${ }^{7}$ Brian A. Jacob and Lars Lefgren, "Remedial education and student achievement: A regressiondiscontinuity analysis," The Review of Economics and Statistics 81, no. 1 (2004): 226-44, https://doi.org/10.1162/003465304323023778.
${ }^{8}$ Louis T. Mariano and Paco Martorell, "The academic effects of summer instruction and retention in New York City," Educational Evaluation and Policy Analysis 35, no. 1 (March 2013): 96-117, https://doi.org/10.3102/0162373712454327.
${ }^{9}$ Jay P. Greene and Marcus A. Winters, "Revisiting grade retention: An evaluation of Florida's test-based promotion policy," Education Finance and Policy 2, no. 4 (2007): 319-40,
https://doi.org/10.1162/edfp.2007.2.4.319; and David Figlio and Umut Özek, "An extra year to learn English? Early grade retention and the human capital development of English learners," Journal of Public Economics 186 (June 2020): 104184, https://doi.org/10.1016/j.jpubeco.2020.104184.
${ }^{10}$ Figlio and Özek, "An extra year to learn English?"
${ }^{11}$ Isaac M. Opper and Umut Özek, "A global regression discontinuity design: Theory and application to grade retention policies" (EdWorkingPaper no. 23-798, Annenberg Institute at Brown University, June 2023), https://edworkingpapers.com/sites/default/files/ai23-798.pdf.
${ }^{12}$ Vi-Nhuan Le, Louis T. Mariano, and AI Crego. "The Impact of New York City's Promotion Policy on Students' Socio-emotional Status." In: Ending Social Promotion Without Leaving Children Behind: The Case of New York City, eds. Jennifer Sloan McCombs, Sheila Nataraj Kirby, and Louis T. Mariano (Santa Monica, CA: RAND Corporation, 2009).
${ }^{13}$ Umut Özek, "Hold back to move forward? Early grade retention and student misbehavior," Education Finance and Policy 10, no. 3 (2015): 350-77, https://doi.org/10.1162/EDFP a 00166.
${ }^{14}$ Paco Martorell and Louis T. Mariano, "The causal effects of grade retention on behavioral outcomes," Journal of Research on Educational Effectiveness 11, no. 2 (2018): 192-216, https://doi.org/10.1080/19345747.2017.1390024.
${ }^{15}$ Amy Cummings and Meg Turner, "COVID-19 and third-grade reading policies: An analysis of state guidance on third-grade reading policies in response to COVID-19" (policy brief, Education Policy Innovation Collaborative, October 2020), https://epicedpolicy.org/wp-content/uploads/2020/10/RBG3-Reading-Policies-FINAL-10-29-20.pdf.
${ }^{16}$ Jennifer Sloan McCombs, Scott Naftel, Gina Schuyler Ikemoto, Catherine DiMartino, and Daniel Gershwin. "School-Provided Support for Students: Academic Intervention Services." In: Ending Social Promotion Without Leaving Children Behind: The Case of New York City, eds. Jennifer Sloan McCombs, Sheila Nataraj Kirby, and Louis T. Mariano (Santa Monica, CA: RAND Corporation, 2009).
${ }^{17}$ Sheila Nataraj Kirby, Scott Naftel, Jennifer Sloan McCombs, Daniel Gershwin, and AI Crego. "Performance of 5th Graders in New York City and Overall Performance Trends in new York State." In: Ending Social Promotion Without Leaving Children Behind: The Case of New York City, eds. Jennifer Sloan McCombs, Sheila Nataraj Kirby, and Louis T. Mariano (Santa Monica, CA: RAND Corporation, 2009).
${ }^{18}$ Opper and Özek, "A global regression discontinuity design."
${ }^{19}$ Julie A. Marsh, Daniel Gershwin, Sheila Nataraj Kirby, and Nailing Xia, Retaining students in grade: Lessons learned regarding policy design and implementation (Santa Monica, CA: RAND Corporation, 2009), https://www.rand.org/pubs/technical reports/TR677.html.
${ }^{20}$ Brian A. Jacob and Lars Lefgren, "The effect of grade retention on high school completion," American Economic Journal: Applied Economics 1, no. 3 (July 2009): 33-58, https://doi.org/10.1257/app.1.3.33.
${ }^{21}$ Louis T. Mariano, Paco Martorell, and Tiffany Berglund, The effects of grade retention on high school outcomes: Evidence from New York City schools (Santa Monica, CA: RAND Corporation, 2018), https://www.rand.org/pubs/working papers/WR1259.html.
${ }^{22}$ Matthew F. Larsen and Jon Valant, "Fuzzy difference-in-discontinuities when the confounding variation is sharp: evidence from grade retention policies," Applied Economics Letters 30, no. 15 (2023): 2009-13, https://doi.org/10.1080/13504851.2022.2089339.
${ }^{23}$ Ozkan Eren, Michael F. Lovenheim, and H. Naci Mocan, "The effect of grade retention on adult crime: Evidence from a test-based promotion policy," Journal of Labor Economics 40, no. 2 (April 2022): 361-95, https://doi.org/10.1086/715836.
${ }^{24}$ For example, in the first year of Florida's third-grade retention policy, one-third of students who scored below the cutoff were promoted because they received exemptions. This number increased to 55 percent in the fifth year of the policy. See Christina LiCalsi, Umut Özek, and David Figlio, "The uneven implementation of universal school policies: Maternal education and Florida's mandatory grade retention policy," Education Finance and Policy 14, no. 3 (2019): 383-413, https://doi.org/10.1162/edfp a 00252. ${ }^{25}$ Ibid.
${ }^{26}$ Marcus A. Winters, "The cost of retention under a test-based promotion policy for taxpayers and students," Educational Evaluation and Policy Analysis (2022):
https://doi.org/10.3102/01623737221138041; and Mariano, Martorell, and Berglund, The effects of grade retention on high school outcomes.
${ }^{27}$ Figlio and Özek, "An extra year to learn English?"; and Schwerdt, West, and Winters, "The effects of test-based retention on student outcomes over time."
${ }^{28}$ Mariano, Martorell, and Berglund, The effects of grade retention on high school outcomes.
${ }^{29}$ Figlio and Özek, "An extra year to learn English?"
${ }^{30}$ LiCalsi, Özek, and Figlio, "The uneven implementation of universal school policies."
${ }^{31}$ David N. Figlio, Krzysztof Karbownik, and Umut Özek, "Sibling spillovers may enhance the efficacy of targeted school policies" (working paper 31406, National Bureau of Economic Research, June 2023), https://doi.org/10.3386/w31406.
${ }^{32}$ Opper and Özek, "A global regression discontinuity design."


# The Effect of Retention Under Mississippi's Test-Based Promotion Policy 

Kirsten Slungaard Mumma and Marcus A. Winters

## BU

W=PC
Boston University Wheelock College of Education \& Human Development

# The Effect of Retention Under Mississippi's Test-Based Promotion Policy 

Kirsten Slungaard Mumma, PhD* Marcus A. Winters, $\mathrm{PhD}^{\dagger}$


#### Abstract

We apply a regression discontinuity design to investigate the effect of retention under Mississippi's third grade test-based promotion policy on student outcomes through the sixth grade. Retention led to large improvements in ELA scores, though we find no significant impacts in math. The test score impacts are driven by Black and Hispanic students. Retention did not significantly impact attendance rate or the likelihood that a student is later classified as having a disability.


Acknowledgements: We extend our gratitude to the Mississippi Department of Education for their cooperation and support for this project. This project was made possible by a grant from ExcelinEd. Neither the Department of Education nor ExcelinEd had editorial control over the content in this manuscript. All remaining errors are our own.

[^0]
## 1 Introduction

Motivated by a need to improve early literacy, 17 states currently require students who score below a minimum threshold on a standardized test be retained in the third grade, where they also receive additional interventions (Cummings and Turner, 2020). The impacts of treatment under such "test-based promotion" policies in early grades tend to be positive, but vary somewhat by locality. Retention under Florida's third-grade policy increased student test scores (Schwerdt et al., 2017; Winters and Greene, 2012; Greene and Winters, 2007, 2009), but also disciplinary incidences in the short-run (Özek, 2015). Treatment in the fourth grade under Louisiana's policy had no impact on high school graduation probability (Eren et al., 2017). Evidence from Chicago suggests that treatment under the city's fourthgrade policy had an initial positive effect (Jacob and Lefgren, 2009) that dissipated by the second year following retention (Roderick and Nagaoka, 2005). New York City's fourth grade policy led to improvements in student test scores (Mariano and Martorell, 2013) and had no impact on behavioral outcomes (Martorell and Mariano, 2018).

We add to this line of research evidence on the impact of retention in the third grade under Mississippi's test-based promotion policy. In 2013, Mississippi adopted test-based promotion as part of a comprehensive effort to improve early literacy outcomes that also included a program to support collaborations between public and private pre-K providers and targeted supports to teachers to build skills in the science of reading (Burk 2020). The state has since received considerable attention for its substantial improvements in student reading outcomes. Between 2013 and 2019, average fourth grade reading scores on the NAEP increased by 10 points in Mississippi, more than any other state, while the national average declined by a point.

We apply a fuzzy regression discontinuity (RD) design leveraging the change in the likelihood of retention at the passing threshold on the state's third grade ELA test for the first cohort of students subjected to the policy. Retained students scored more than a standard deviation higher relative to their grade-level peers in the sixth grade than if they had been promoted, and this impact is driven by Black and Hispanic students. We do not
find effects in math. Retention did not impact student absences or the likelihood of being classified as having a disability in later years.

## 2 Data and Method

We analyze longitudinal administrative data containing standardized test scores, demographics, classification status, and number of days absent for each student from 2014-15 through 2018-19 provided by the Mississippi Department of Education. We thus can follow the typical student from the first cohort subjected to the policy who was retained in the third grade as far as the sixth grade. See Table A1 in the Online Appendix for relevant descriptive statistics.

Mississippi's test-based promotion policy required third grade students to score Level 2 (second lowest level) or above on the state's standardized reading test in order to be automatically promoted to the fourth grade. For the 2014-15 school year, the test was the Mississippi K-3 Assessment System (MKAS), and we use scale scores on this test for the first-stage in the method described below. The following year, the statewide assessment changed to the Mississippi Academic Assessment Program (MAAP). When considering test scores as outcomes, we use MAAP scores standardized by grade and year.

As is common for such policies, retention is not the only intervention delivered to treated students. In addition to repeating the grade, schools are required to provide retained students with 90 -minutes of reading instruction and intensive interventions with progress monitoring and other supports. Thus, it should be kept in mind that the estimates in this paper reflect the overall treatment under the policy, not only retention.

### 2.1 Within-Age vs Within-Grade Comparisons

Comparing the later outcomes of students retained at a point in time to students in their cohort who were promoted is complicated by the fact that the two groups are enrolled in different grade levels during later years. One could choose a "within-age" approach by
comparing the groups after a particular amount of time or a "within-grade" approach by comparing them when enrolled in a particular grade. Prior studies have applied both approaches. Interpretation under both strategies requires additional assumptions and neither is strictly preferable when investigating the impact of retention. Within-age comparisons can be confounded by differences in learning and behavioral trajectories across grades, while within-grade comparisons are complicated by age differences when the students complete a particular grade (Schwerdt et al., 2017).

The preferred comparison also depends on how one thinks of the treatment. Policyinduced retention is a somewhat unique intervention in that the additional year of schooling itself is arguably an important component of the treatment. For example, if we were to consider the effect of policy-induced retention in the third grade on long-run student academic performance, it is arguably more policy-relevant to compare the difference in student proficiency at the point at which they graduate rather than nine years following their initial entry into the third grade.

When evaluating standardized test scores as the outcome, within-age comparisons are further complicated by the fact that retained and promoted students take different gradelevel tests at any given point in time. In some cases, authors can address this challenge by utilizing test scores reported on a vertically aligned scale (for example, Schwerdt et al. (2017)).

Unfortunately, within-age comparisons of student test scores are not possible in Mississippi because scores on the state's standardized tests are comparable within grades over time but not across grades. Non-test score outcomes are not impacted by this measurement issue and so we apply both the within-age and within-grade approaches when considering them.

### 2.2 Identification Strategy

The primary challenge with estimating the causal effect of retention induced by Mississippi's test-based promotion policy is that there are likely unobserved characteristics that are cor-
related both with a student's later outcomes and the probability that they were treated under the policy. We address this challenge by employing a fuzzy RD design that exploits the discontinuous relationship at the policy threshold between a student's third-grade ELA score and the probability they are retained.

We estimate a two-stage least-squares regression within a sample restricted to include only third grade students who scored within 20 scale points of the Level 2 threshold on the MKAS ELA test. The first stage uses a vector of observed baseline characteristics $(X)$, the difference between the student's score and the passing threshold (dif), and an indicator for whether the student's score on the initial third grade ELA test fell below the policy threshold (Below) to predict the likelihood a student repeated the third grade the following year (Retained). The second stage then uses these controls but replaces Below with the predicted retention from the first stage $\left(\right.$ Retained $\left._{i}\right)$ to predict the respective outcome in the 6th grade $\left(y_{i 6}\right)$. Formally:

$$
\begin{align*}
& \text { Retained }_{i}=\alpha_{0}+\alpha_{1} \text { dif }_{i}+\alpha_{2} X_{i}+\alpha_{F S} \text { Below }_{i}+\mu_{i}  \tag{1}\\
& y_{i g}=\beta_{0}+\beta_{1} \text { dif }_{i}+\beta_{2} X_{i}+\beta_{I V} \text { Retained }_{i}+\epsilon_{i g} \tag{2}
\end{align*}
$$

When investigating non-test-score outcomes, we also estimate within-age regressions that instead measure the dependent variable as of 2018-19, when the typical retained student is in the sixth grade and the typical promoted student is in the seventh grade.

The coefficient $\beta_{I V}$ represents the Local Average Treatment Effect (LATE) for the impact of retention due to the policy on the respective outcome. The key identifying assumptions are that 1) Conditional on the covariates there is a significant relationship between where a student's score fell relative to the policy threshold and the probability they were retained, and 2) The only reason that the conditional relationship between scoring below the threshold and retention probability exists is that scoring below the threshold triggers the policy.

Figure 1 speaks to the first key assumption by illustrating the relationship between third grade ELA scores and retention probability. Notice that most students who scored below the policy threshold were not retained because they received one of the several exemptions under the policy. Indeed, within this cohort half of the students who scored below the passing threshold on the first attempt passed on their second or third attempt. Nevertheless, we do observe a discontinuous jump in the probability of being retained on either side of the cut score. This relationship is also reflected in the results from the first-stage regressions reported below.

## [FIGURE 1 ABOUT HERE]

We investigate the plausibility that the second key assumption holds by evaluating whether the observed covariates are balanced on either side of the threshold, conditional on $d i f$. Consistent with this expectation, Table A2 in the Online Appendix shows no discontinuities in student characteristics around the cut score.

## 3 Results

Table 1 reports our results for each outcome from the full sample and for samples restricted by a student's race/ethnicity. The table includes estimates from the relevant first stage and reduced form in addition to the causal instrumental-variable estimate for the effect of retention. See Tables A2 and A3 in the Online Appendix for estimates from models that use alternative specifications for the forcing variable and bandwidths. The magnitude and direction of the estimates are robust to multiple specifications, though some models are estimated less precisely.

## [TABLE 1 ABOUT HERE]

Column (1) reports results for ELA test scores. For the full sample, students retained under the policy scored about 1.15 standard deviations higher on the ELA test in the sixth
grade than they would if they had instead been promoted. This result is estimated imprecisely and is significant only at the $10 \%$ level. The results from the analyses by race/ethnicity suggest that the overall effect is primarily driven by impacts on Black and Hispanic students.

The remaining columns report results for other outcomes of interest. We find no significant impact of retention on student math scores, absence rate, or the likelihood that a student was classified as having a disability.

The variation by student race/ethnicity in the first stage estimates is interesting to consider from a policy perspective. Scoring below the threshold on the third grade ELA test increased the likelihood that a Black student, by far the largest subgroup, was retained by only 3.7 percentage points. For Hispanic students, scoring below the threshold increased the likelihood of retention in the third grade by about 19 percentage points. Notably, both Black and Hispanic students benefited substantially in ELA if they were retained.

## 4 Implications and Future Directions

Our results are generally promising for the effects of test-based retention as implemented in Mississippi. We find large positive impacts from retention on student ELA achievement, which is the policy's primary goal. That we fail to find impacts on SPED classification status or absences suggests that retention did not have lasting negative impacts on the students' experiences in school, as some fear.

There are, however, some notable differences between our findings for Mississippi and prior evidence from other localities that are worthy of future consideration. Most importantly, though like most other states Mississippi's policy is targeted towards improving student reading proficiency, the fact that we do not find impacts of repeating a grade on student math scores is at least somewhat concerning and is inconsistent with findings from other localities.

Further, differences in the implementation of the retention treatment between Mississippi and other states is a notable distinction with implications for future research. For
example, Schwerdt et al. (2017) report that for the first cohort of third grade students subjected to Florida's policy, scoring below the threshold increased the probability a student was retained by 37.3 percentage points. In contrast, we find that scoring below the threshold increased the probability of retention by only 5.8 percentage points in Mississippi. Much of this large difference is due to the fact that Florida set a very high standard for students to obtain an exemption from the treatment by passing an alternative test than did Mississippi. Since our estimates can only be interpreted as LATEs, we are not able to assess whether students who obtained an exemption would have benefited if they were instead retained.

From a policy perspective, there is a clear need to update the analysis in this paper in future years in order to investigate the potential for the ELA impact to fade over time and also to consider other outcomes such as educational attainment. We also look forward to future research investigating impacts on later student cohorts. In particular, an interesting feature of Mississippi's policy is that the state raised the passing threshold on the test beginning with the 2018-19 cohort of third grade students. It will be interesting to consider in the future whether this change had implications for the impact of retention under this policy.

## References

Cummings, A. and Turner, M. (2020). Covid-19 and third-grade reading policies.
Eren, O., Depew, B., and Barnes, S. (2017). Test-based promotion policies, dropping out, and juvenile crime. Journal of Public Economics, 153:9-31.

Greene, J. P. and Winters, M. A. (2007). Revisiting grade retention: An evaluation of Florida's test-based promotion policy. Education Finance and Policy, 2(4):319-340.

Greene, J. P. and Winters, M. A. (2009). The effects of exemptions to Florida's test-based promotion policy: Who is retained? Who benefits academically? Economics of Education Review, 28(1):135-142.

Jacob, B. A. and Lefgren, L. (2009). The effect of grade retention on high school completion. American Economic Journal: Applied Economics, 1(3):33-58.

Mariano, L. T. and Martorell, P. (2013). The academic effects of summer instruction and retention in New York City. Educational Evaluation and Policy Analysis, 35(1):96-117.

Martorell, P. and Mariano, L. T. (2018). The causal effects of grade retention on behavioral outcomes. Journal of Research on Educational Effectiveness, 11(2):192-216.

Özek, U. (2015). Hold back to move forward? Early grade retention and student misbehavior. Education Finance and Policy, 10(3):350-377.

Roderick, M. and Nagaoka, J. (2005). Retention under Chicago's high-stakes testing program: Helpful, harmful, or harmless? Educational Evaluation and Policy Analysis, 27(4):309-340.

Schwerdt, G., West, M. R., and Winters, M. A. (2017). The effects of test-based retention on student outcomes over time: Regression discontinuity evidence from Florida. Journal of Public Economics, 152:154-169.

Winters, M. A. and Greene, J. P. (2012). The medium-run effects of Florida's test-based promotion policy. Education Finance and Policy, 7(3):305-330.

## Tables and Figures

Figure (1) Relationship Between 3rd Grade ELA Score and Retention Probability


Notes: This figure illustrates the relationship between scores on the 3rd grade administration of the MKAS ELA test in 2014-15 and the probability a student was observed in the 3rd grade the following year. Dots represent average outcome for students who obtained a particular score on the test. Vertical line illustrates the passing threshold observations to the left of the line did not meet the policy's promotion requirement. Lines going through the dots represent flexible polynomial fits. Figure illustrates only scores that fell within 20 points of the passing threshold.

Table (1) Regression Results

|  | Grade 6 |  |  |  | Year 4 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} (1) \\ \text { ELA } \end{gathered}$ | (2) <br> Math | (3) <br> Absences | (4) <br> Sped | (5) <br> Absences | (6) Sped |
| First Stage | $\begin{gathered} 0.058^{* * *} \\ (0.016) \end{gathered}$ |  | Full S | ample | $\begin{gathered} 0.067^{* * *} \\ (0.017) \end{gathered}$ |  |
| Reduced Form | $\begin{aligned} & 0.067^{*} \\ & (0.035) \end{aligned}$ | $\begin{aligned} & -0.025 \\ & (0.042) \end{aligned}$ | $\begin{gathered} -0.115 \\ (0.546) \end{gathered}$ | $\begin{gathered} -0.016 \\ (0.016) \end{gathered}$ | $\begin{gathered} 0.505 \\ (0.579) \end{gathered}$ | $\begin{gathered} -0.024 \\ (0.018) \end{gathered}$ |
| Retained (IV) | $\begin{aligned} & 1.153^{*} \\ & (0.657) \end{aligned}$ | $\begin{gathered} -0.436 \\ (0.743) \end{gathered}$ | $\begin{gathered} -1.983 \\ (9.433) \end{gathered}$ | $\begin{gathered} -0.284 \\ (0.292) \end{gathered}$ | $\begin{gathered} 7.512 \\ (8.820) \end{gathered}$ | $\begin{aligned} & -0.361 \\ & (0.280) \end{aligned}$ |
| Average Outcome N | $\begin{gathered} -.84 \\ 4729 \end{gathered}$ | $\begin{gathered} -.73 \\ 4719 \end{gathered}$ | $\begin{aligned} & 9.61 \\ & 4729 \end{aligned}$ | $\begin{gathered} .20 \\ 4729 \end{gathered}$ | $\begin{aligned} & 10.41 \\ & 4562 \end{aligned}$ | $\begin{gathered} .21 \\ 4562 \end{gathered}$ |
| First Stage | $\begin{aligned} & 0.037^{* *} \\ & (0.019) \end{aligned}$ |  | Bl |  | $\begin{aligned} & 0.045^{* *} \\ & (0.020) \end{aligned}$ |  |
| Reduced Form | $\begin{gathered} 0.106^{* * *} \\ (0.040) \end{gathered}$ | $\begin{gathered} -0.017 \\ (0.047) \end{gathered}$ | $\begin{gathered} -0.021 \\ (0.646) \end{gathered}$ | $\begin{gathered} -0.018 \\ (0.017) \end{gathered}$ | $\begin{gathered} 0.580 \\ (0.664) \end{gathered}$ | $\begin{aligned} & -0.024 \\ & (0.019) \end{aligned}$ |
| Retained (IV) | $\begin{gathered} 2.842 \\ (1.731) \end{gathered}$ | $\begin{gathered} -0.464 \\ (1.295) \end{gathered}$ | $\begin{gathered} -0.574 \\ (17.321) \end{gathered}$ | $\begin{gathered} -0.485 \\ (0.525) \end{gathered}$ | $\begin{gathered} 12.925 \\ (15.921) \end{gathered}$ | $\begin{gathered} -0.544 \\ (0.499) \end{gathered}$ |
| Average Outcome N | $\begin{gathered} -.90 \\ 3382 \end{gathered}$ | $\begin{gathered} -.83 \\ 3376 \end{gathered}$ | $\begin{gathered} 9.17 \\ 3382 \end{gathered}$ | $\begin{gathered} .15 \\ 3382 \end{gathered}$ | $\begin{gathered} 9.92 \\ 3253 \end{gathered}$ | $\begin{gathered} .15 \\ 3253 \end{gathered}$ |
| First Stage | $\begin{aligned} & 0.186^{* *} \\ & (0.077) \end{aligned}$ |  | Hisp | anic | $\begin{gathered} 0.230^{* * *} \\ (0.084) \end{gathered}$ |  |
| Reduced Form | $\begin{aligned} & 0.379^{* *} \\ & (0.186) \end{aligned}$ | $\begin{gathered} 0.071 \\ (0.225) \end{gathered}$ | $\begin{gathered} -0.704 \\ (2.147) \end{gathered}$ | $\begin{gathered} -0.076 \\ (0.060) \end{gathered}$ | $\begin{gathered} 2.722 \\ (2.522) \end{gathered}$ | $\begin{aligned} & -0.081 \\ & (0.054) \end{aligned}$ |
| Retained (IV) | $\begin{gathered} 2.042 \\ (1.250) \end{gathered}$ | $\begin{gathered} 0.380 \\ (1.194) \end{gathered}$ | $\begin{gathered} -3.793 \\ (11.492) \end{gathered}$ | $\begin{gathered} -0.408 \\ (0.368) \end{gathered}$ | $\begin{gathered} 11.832 \\ (10.683) \end{gathered}$ | $\begin{gathered} -0.350 \\ (0.269) \end{gathered}$ |
| Average Outcome N | $\begin{gathered} -.57 \\ 206 \end{gathered}$ | $\begin{aligned} & -.33 \\ & 205 \end{aligned}$ | $\begin{gathered} 8.1 \\ 206 \end{gathered}$ | $\begin{gathered} .12 \\ 206 \end{gathered}$ | $\begin{gathered} 8.85 \\ 204 \end{gathered}$ | $\begin{gathered} .12 \\ 204 \end{gathered}$ |
| First Stage | $\begin{gathered} 0.098^{* * *} \\ (0.036) \end{gathered}$ |  | Wh |  | $\begin{gathered} 0.103^{* * *} \\ (0.039) \end{gathered}$ |  |
| Reduced Form | $\begin{gathered} -0.066 \\ (0.077) \end{gathered}$ | $\begin{gathered} -0.093 \\ (0.099) \end{gathered}$ | $\begin{gathered} 0.074 \\ (1.190) \end{gathered}$ | $\begin{gathered} -0.001 \\ (0.045) \end{gathered}$ | $\begin{gathered} 0.429 \\ (1.329) \end{gathered}$ | $\begin{aligned} & -0.007 \\ & (0.047) \end{aligned}$ |
| Retained (IV) | $\begin{gathered} -0.678 \\ (0.869) \\ \hline \end{gathered}$ | $\begin{gathered} -0.940 \\ (1.084) \end{gathered}$ | $\begin{gathered} 0.760 \\ (12.135) \\ \hline \end{gathered}$ | $\begin{gathered} -0.014 \\ (0.455) \end{gathered}$ | $\begin{gathered} 4.156 \\ (12.964) \\ \hline \end{gathered}$ | $\begin{aligned} & -0.066 \\ & (0.455) \\ & \hline \end{aligned}$ |
| Average Outcome | -. 69 | -. 54 | 11.33 | . 39 | 12.21 | . 39 |
| N | 1042 | 1039 | 1042 | 1042 | 998 | 998 |

Note: Table reports first-stage, reduced-form, and IV estimates for the full sample and samples restricted by race/ethnicity. Dependent variable for first-stage regressions is an indicator for whether the student was retained in the third grade; dependent variables for reduced-form and IV regressions are listed at top of each column. Columns (1) - (4) report within-grade comparisons; Columns (5) and (6) report within-age comparisons. All samples are restricted to only students who scored within 20 points of the Level 2 threshold on the third grade MKAS ELA test in 2014-15. All regressions control for original third grade ELA score, gender, and special education and Limited English proficiency status as of the initial third grade year. Full sample regressions also control for student race/ethnicity. See Online Appendix for results from models that apply alternative bandwidths and specification for the forcing variable. Robust standard errors reported in parentheses. ${ }^{*} p<0.10, *_{p}^{*}<0.05, * * *$ $p<0.01$

Suggested Citation: Slungaard Mumma, K., \& Winters, M. A. (2023). The Effect of Retention Under Mississippi's Test-Based Promotion Policy. (Working Paper 2023-1). Wheelock Educational Policy Center. Available at wheelockpolicycenter.org.

## OUR MISSION

The Wheelock Educational Policy Center (WEPC) conducts and disseminates rigorous, policy-relevant education research in partnership with local, state, and federal policymakers and stakeholders to improve pk-20 educational opportunities and holistic outcomes for underserved students.
www.wheelockpolicycenter.org
wheelockpolicy@bu.edu

## BU

Boston University Wheelock College of Education \& Human Development Wheelock Educational Policy Center

## 2023 NATIONAL BOARD CERTIFIED TEACHERS (NBCT) PARTICIPANT ANALYSIS REPORT

1. Number of Alabama NBCT Scholarship Grant applicants: 338
2. Number of Alabama NBCT Scholarship Grant recipients:

248
3. Number of participants awarded the additional salary supplement by NBCT certification area:

| NBCT CERTIFICATION AREA | NUMBER OF TEACHERS WHO RECEIVED <br> ADDITIONAL FUNDS |
| :--- | :--- |
| Literacy-Reading Language Arts | 57 |
| English as a New Language | 10 |
| Mathematics | 16 |
| Science | 10 |
| Career and Technical Education | 13 |
| Exceptional Needs Specialist | 35 |
| TOTAL | $\mathbf{1 4 1 *}$ |

*Number indicates a 9.61\% decrease from last year.
4. Number of participants by grade level who received additional supplement:

| K | Grade <br> $\mathbf{1}$ | Grade <br> $\mathbf{2}$ | Grade <br> $\mathbf{3}$ | Grade <br> $\mathbf{4}$ | Grade <br> $\mathbf{5}$ | Grade <br> $\mathbf{6}$ | Grade <br> $\mathbf{7}$ | Grade <br> $\mathbf{8}$ | Grade <br> $\mathbf{9}$ | Grade <br> $\mathbf{1 0}$ | Grade <br> $\mathbf{1 1}$ | Grade <br> $\mathbf{1 2}$ |
| :--- | :--- | :--- | :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 6 | 12 | 14 | 16 | 14 | 13 | 13 | 10 | 10 | 8 | 8 | 9 | 8 |

5. Total number of participants by elementary school, middle school, and high school who received additional supplement:

| K-8 | Elementary School | Middle School | High School |
| :---: | :---: | :--- | :--- |
| 6 | 69 | 33 | 33 |

6. Geographical locations of participants:

| SCHOOL SYSTEM | CURRENT <br> NBCTS WHO <br> RECEIVED <br> BASE <br> SUPPLEMENT | SCHOLARSHIP APPLICANTS | SCHOLARSHIP RECIPIENTS | NEW NBCTS |
| :---: | :---: | :---: | :---: | :---: |
| Autauga County | 5.00 | 3.00 | 3.00 | 0.00 |
| Baldwin County | 32.00 | 6.00 | 6.00 | 9.00 |
| Barbour County | 0.00 | 0.00 | 0.00 | 1.00 |
| Bibb County | 10.00 | 0.00 | 0.00 | 0.00 |
| Blount County | 16.00 | 2.00 | 2.00 | 2.00 |
| Bullock County | 1.00 | 0.00 | 0.00 | 0.00 |
| Butler County | 1.00 | 4.00 | 4.00 | 0.00 |
| Calhoun County | 17.00 | 2.00 | 2.00 | 0.00 |
| Chambers County | 1.00 | 0.00 | 0.00 | 0.00 |


| SCHOOL SYSTEM | CURRENT <br> NBCTS WHO <br> RECEIVED <br> BASE <br> SUPPLEMENT | SCHOLARSHIP APPLICANTS | SCHOLARSHIP RECIPIENTS | NEW NBCTS |
| :---: | :---: | :---: | :---: | :---: |
| Cherokee County | 5.00 | 1.00 | 1.00 | 0.00 |
| Chilton County | 5.00 | 2.00 | 2.00 | 1.00 |
| Choctaw County | 3.00 | 1.00 | 1.00 | 0.00 |
| Clarke County | 0.00 | 0.00 | 0.00 | 0.00 |
| Clay County | 1.00 | 0.00 | 0.00 | 1.00 |
| Cleburne County | 7.00 | 0.00 | 0.00 | 0.00 |
| Coffee County | 1.00 | 0.00 | 0.00 | 0.00 |
| Colbert County | 12.00 | 2.00 | 2.00 | 0.00 |
| Conecuh County | 0.00 | 0.00 | 0.00 | 0.00 |
| Coosa County | 0.00 | 0.00 | 0.00 | 0.00 |
| Covington County | 3.00 | 0.00 | 0.00 | 0.00 |
| Crenshaw County | 0.00 | 1.00 | 1.00 | 0.00 |
| Cullman County | 17.00 | 1.00 | 1.00 | 4.00 |
| Dale County | 3.00 | 3.00 | 2.00 | 1.00 |
| Dallas County | 0.00 | 1.00 | 1.00 | 0.00 |
| DeKalb County | 13.00 | 3.00 | 1.00 | 3.00 |
| Elmore County | 9.00 | 1.00 | 0.00 | 0.00 |
| Escambia County | 1.00 | 1.00 | 1.00 | 0.00 |
| Etowah County | 13.00 | 5.00 | 5.00 | 1.00 |
| Fayette County | 1.00 | 1.00 | 1.00 | 0.00 |
| Franklin County | 7.00 | 0.00 | 0.00 | 0.00 |
| Geneva County | 0.00 | 0.00 | 0.00 | 0.00 |
| Greene County | 1.00 | 0.00 | 0.00 | 0.00 |
| Hale County | 2.00 | 0.00 | 0.00 | 0.00 |
| Henry County | 2.00 | 1.00 | 1.00 | 0.00 |
| Houston County | 3.00 | 2.00 | 2.00 | 0.00 |
| Jackson County | 12.00 | 1.00 | 1.00 | 2.00 |
| Jefferson County | 122.00 | 13.00 | 6.00 | 6.00 |
| Lamar County | 4.00 | 1.00 | 1.00 | 0.00 |
| Lauderdale County | 12.00 | 1.00 | 0.00 | 1.00 |
| Lawrence County | 3.00 | 1.00 | 0.00 | 1.00 |
| Lee County | 7.00 | 2.00 | 1.00 | 0.00 |
| Limestone County | 9.00 | 0.00 | 0.00 | 3.00 |
| Lowndes County | 0.00 | 0.00 | 0.00 | 0.00 |
| Macon County | 1.00 | 1.00 | 1.00 | 0.00 |
| Madison County | 47.00 | 7.00 | 4.00 | 16.00 |
| Marengo County | 0.00 | 0.00 | 0.00 | 0.00 |
| Marion County | 6.00 | 1.00 | 1.00 | 0.00 |
| Marshall County | 9.00 | 6.00 | 5.00 | 1.00 |
| Mobile County | 76.00 | 37.00 | 27.00 | 13.00 |
| Monroe County | 2.00 | 6.00 | 6.00 | 1.00 |
| Montgomery County | 10.00 | 7.00 | 4.00 | 2.00 |


| SCHOOL SYSTEM | CURRENT <br> NBCTS WHO <br> RECEIVED <br> BASE <br> SUPPLEMENT | SCHOLARSHIP APPLICANTS | SCHOLARSHIP RECIPIENTS | NEW NBCTS |
| :---: | :---: | :---: | :---: | :---: |
| Morgan County | 13.00 | 4.00 | 3.00 | 2.00 |
| Perry County | 0.00 | 0.00 | 0.00 | 0.00 |
| Pickens County | 2.00 | 1.00 | 1.00 | 2.00 |
| Pike County | 1.00 | 0.00 | 0.00 | 1.00 |
| Randolph County | 3.00 | 4.00 | 4.00 | 0.00 |
| Russell County | 2.00 | 2.00 | 1.00 | 0.00 |
| St. Clair County | 20.00 | 8.00 | 4.00 | 3.00 |
| Shelby County | 84.00 | 10.00 | 6.00 | 12.00 |
| Sumter County | 0.00 | 6.00 | 5.00 | 0.00 |
| Talladega County | 11.00 | 6.00 | 4.00 | 0.00 |
| Tallapoosa County | 1.00 | 0.00 | 0.00 | 0.00 |
| Tuscaloosa County | 61.00 | 20.00 | 19.00 | 4.00 |
| Walker County | 7.00 | 0.00 | 0.00 | 1.00 |
| Washington County | 1.00 | 0.00 | 0.00 | 0.00 |
| Wilcox County | 2.00 | 0.00 | 0.00 | 0.00 |
| Winston County | 2.00 | 0.00 | 0.00 | 0.00 |
| Alabaster City | 27.00 | 0.00 | 0.00 | 1.00 |
| Albertville City | 11.00 | 0.00 | 0.00 | 2.00 |
| Alexander City | 2.00 | 4.00 | 4.00 | 0.00 |
| Andalusia City | 2.00 | 0.00 | 0.00 | 0.00 |
| Anniston City | 2.00 | 3.00 | 2.00 | 1.00 |
| Arab City | 9.00 | 1.00 | 1.00 | 0.00 |
| Athens City | 9.00 | 1.00 | 1.00 | 2.00 |
| Attalla City | 5.00 | 0.00 | 0.00 | 1.00 |
| Auburn City | 22.00 | 6.00 | 5.00 | 3.00 |
| Bessemer City | 10.00 | 1.00 | 0.00 | 1.00 |
| Birmingham City | 70.00 | 17.00 | 9.00 | 4.00 |
| Boaz City | 13.00 | 0.00 | 0.00 | 2.00 |
| Brewton City | 1.00 | 0.00 | 0.00 | 0.00 |
| Chickasaw City | 0.00 | 0.00 | 0.00 | 0.00 |
| Cullman City | 42.00 | 1.00 | 0.00 | 3.00 |
| Daleville City | 4.00 | 1.00 | 1.00 | 0.00 |
| Decatur City | 20.00 | 11.00 | 9.00 | 3.00 |
| Demopolis City | 1.00 | 0.00 | 0.00 | 0.00 |
| Dothan City | 9.00 | 6.00 | 5.00 | 0.00 |
| Elba City | 1.00 | 0.00 | 0.00 | 0.00 |
| Enterprise City | 8.00 | 0.00 | 0.00 | 1.00 |
| Eufaula City | 3.00 | 2.00 | 1.00 | 1.00 |
| Fairfield City | 3.00 | 1.00 | 1.00 | 0.00 |
| Florence City | 13.00 | 5.00 | 5.00 | 2.00 |
| Fort Payne City | 9.00 | 0.00 | 0.00 | 3.00 |
| Gadsden City | 11.00 | 7.00 | 4.00 | 2.00 |


| SCHOOL SYSTEM | CURRENT <br> NBCTS WHO <br> RECEIVED <br> BASE <br> SUPPLEMENT | SCHOLARSHIP APPLICANTS | SCHOLARSHIP RECIPIENTS | NEW NBCTS |
| :---: | :---: | :---: | :---: | :---: |
| Geneva City | 2.00 | 1.00 | 1.00 | 0.00 |
| Gulf Shores City | 3.00 | 0.00 | 0.00 | 3.00 |
| Guntersville City | 5.00 | 1.00 | 1.00 | 0.00 |
| Haleyville City | 3.00 | 0.00 | 0.00 | 0.00 |
| Hartselle City | 11.00 | 3.00 | 3.00 | 0.00 |
| Homewood City | 40.00 | 3.00 | 0.00 | 6.00 |
| Hoover City | 109.00 | 6.00 | 5.00 | 5.00 |
| Huntsville City | 53.00 | 0.00 | 0.00 | 2.00 |
| Jacksonville City | 2.00 | 1.00 | 0.00 | 0.00 |
| Jasper City | 4.00 | 4.00 | 2.00 | 1.00 |
| Lanett City | 1.00 | 1.00 | 1.00 | 0.00 |
| Leeds City | 14.00 | 6.00 | 3.00 | 1.00 |
| Linden City | 0.00 | 0.00 | 0.00 | 0.00 |
| Madison City | 91.00 | 0.00 | 0.00 | 11.00 |
| Midfield City | 1.00 | 1.00 | 0.00 | 0.00 |
| Mountain Brook City | 51.00 | 0.00 | 0.00 | 1.00 |
| Muscle Shoals City | 16.00 | 2.00 | 2.00 | 3.00 |
| Oneonta City | 8.00 | 1.00 | 1.00 | 1.00 |
| Opelika City | 5.00 | 4.00 | 3.00 | 0.00 |
| Opp City | 0.00 | 0.00 | 0.00 | 1.00 |
| Oxford City | 6.00 | 4.00 | 1.00 | 1.00 |
| Ozark City | 2.00 | 0.00 | 0.00 | 0.00 |
| Pelham City | 13.00 | 0.00 | 0.00 | 3.00 |
| Pell City | 13.00 | 7.00 | 6.00 | 6.00 |
| Phenix City | 0.00 | 0.00 | 0.00 | 0.00 |
| Piedmont City | 22.00 | 0.00 | 0.00 | 0.00 |
| Pike Road City | 5.00 | 3.00 | 3.00 | 1.00 |
| Roanoke City | 8.00 | 1.00 | 0.00 | 1.00 |
| Russellville City | 3.00 | 2.00 | 1.00 | 0.00 |
| Saraland City | 14.00 | 3.00 | 3.00 | 2.00 |
| Satsuma City | 0.00 | 2.00 | 2.00 | 3.00 |
| Scottsboro City | 7.00 | 2.00 | 2.00 | 2.00 |
| Selma City | 3.00 | 2.00 | 2.00 | 1.00 |
| Sheffield City | 2.00 | 0.00 | 0.00 | 0.00 |
| Sylacauga City | 6.00 | 4.00 | 0.00 | 0.00 |
| Talladega City | 4.00 | 0.00 | 0.00 | 0.00 |
| Tallassee City | 0.00 | 0.00 | 0.00 | 0.00 |
| Tarrant City | 2.00 | 0.00 | 0.00 | 0.00 |
| Thomasville City | 5.00 | 0.00 | 0.00 | 0.00 |
| Troy City | 0.00 | 0.00 | 0.00 | 0.00 |
| Trussville City | 22.00 | 0.00 | 0.00 | 1.00 |
| Tuscaloosa City | 51.00 | 15.00 | 12.00 | 1.00 |


| SCHOOL SYSTEM | CURRENT <br> NBCTS WHO <br> RECEIVED <br> BASE <br> SUPPLEMENT | SCHOLARSHIP APPLICANTS | SCHOLARSHIP RECIPIENTS | Appendix F NEW NBCTS |
| :---: | :---: | :---: | :---: | :---: |
| Tuscumbia City | 2.00 | 0.00 | 0.00 | 0.00 |
| Vestavia Hills City | 61.00 | 3.00 | 2.00 | 2.00 |
| Winfield City | 0.00 | 0.00 | 0.00 | 0.00 |
| AIDB | 2.00 | 0.00 | 0.00 | 0.00 |
| Alabama Aerospace | 1.00 |  |  | 0.00 |
| School of Fine Arts | 2.00 | 0.00 | 0.00 | 0.00 |
| Math and Science | 2.00 | 1.00 | 1.00 | 0.00 |
| Cyber Technology | 1.00 | 0.00 | 0.00 | 0.00 |
| LEAD Academy | 1.00 |  |  | 1.00 |
| Legacy Prep Charter | 1.00 | 0.00 | 0.00 | 0.00 |
| University Charter | 1.00 | 0.00 | 0.00 | 0.00 |
| Youth Services | 0.00 | 0.00 | 0.00 | 0.00 |
| I3 Academy | 7.00 | 0.00 | 0.00 | 0.00 |
|  |  |  |  |  |
| TOTAL | 1,717.00 | 338.00 | 248.00 | 187.00 |

(0)


[^0]:    *Kirsten Slungaard Mumma is a postdoctoral fellow at the Wheelock Educational Policy Center.
    $\dagger$ Marcus A. Winters is an associate professor at the Boston University Wheelock College of Education \& Human Development and faculty director of the Wheelock Educational Policy Center.

