



Research Rationale and Case Studies of Success

A Briefing for Educators

As many states transition to new, more rigorous, learning standards, educators rightly fear the expected (and, in many cases, observed) decline in student achievement on high-stakes assessments. Authoritative research on the results of implementation of any new instructional system points to initial declines before gains are experienced. In many settings, the transition to new content and practice standards is occurring at the same time as the implementation of new systems to evaluate teacher and principal effectiveness, compounding the anxiety teachers and leaders experience. Data from Agile Mind partners indicate that the effective implementation of our programs, which are built to support next generation standards and learning, can help mitigate the disruptive effects of these changes. Even in a first year – and particularly with multi-year partners – enactment helps accelerate teacher development and supports dramatic growth in student achievement.

In education there are no silver bullets. Research on the adoption of new innovations in public education has clearly demonstrated that – even when transformative results are achieved – the path to comprehensive implementation can be both lengthy and arduous (Hamilton, et al., 2008). Achieving transformative results requires vision, commitment, and persistence. Yet the critical importance of high quality education in science, technology, engineering and mathematics (STEM) has never been more urgent for our nation. The studies of Clifford Adelman of the Institute of Higher Education Policy (IHEP) have identified the completion of advanced courses in mathematics and science as the strongest predictor of college success (Adelman, 1999 and Adelman, 2006). Other studies conclude that the quality of that coursework is more closely correlated to the attainment of a bachelor's degree than high school grades or college entrance exams (ACT, 2006 and ACT, 2010). In short, there is a wide consensus that the quality of secondary science and mathematics instruction is a critical factor in preparing students for success in STEM careers, helping to diversify those fields, and equipping learners for vibrant participation in our economy and as citizens.

Since our founding, Agile Mind has worked to provide the highest quality programs, tools, and services to America's middle and high schools. We respectfully partner with dedicated educators to nurture their students' intellectual passions and to prepare them for success in postsecondary education and the 21st-century workplace.

Our tools, programs, and services are explicitly designed to support schools in their efforts to

- broaden student access to rigorous college-preparatory mathematics and science experiences,
- transform student engagement, persistence, and high achievement, and
- support exemplary, sustainable teaching practices.

The following case studies, reported by district partners, highlight the achievements district leaders who implement with fidelity can expect to achieve for their students and their faculties.

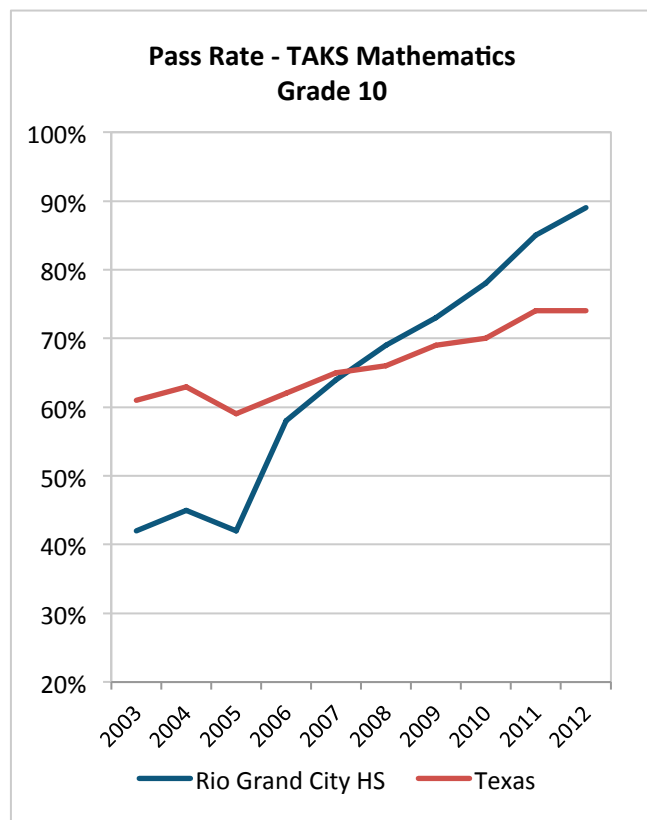
Rio Grande City High School – Rio Grande City, Texas

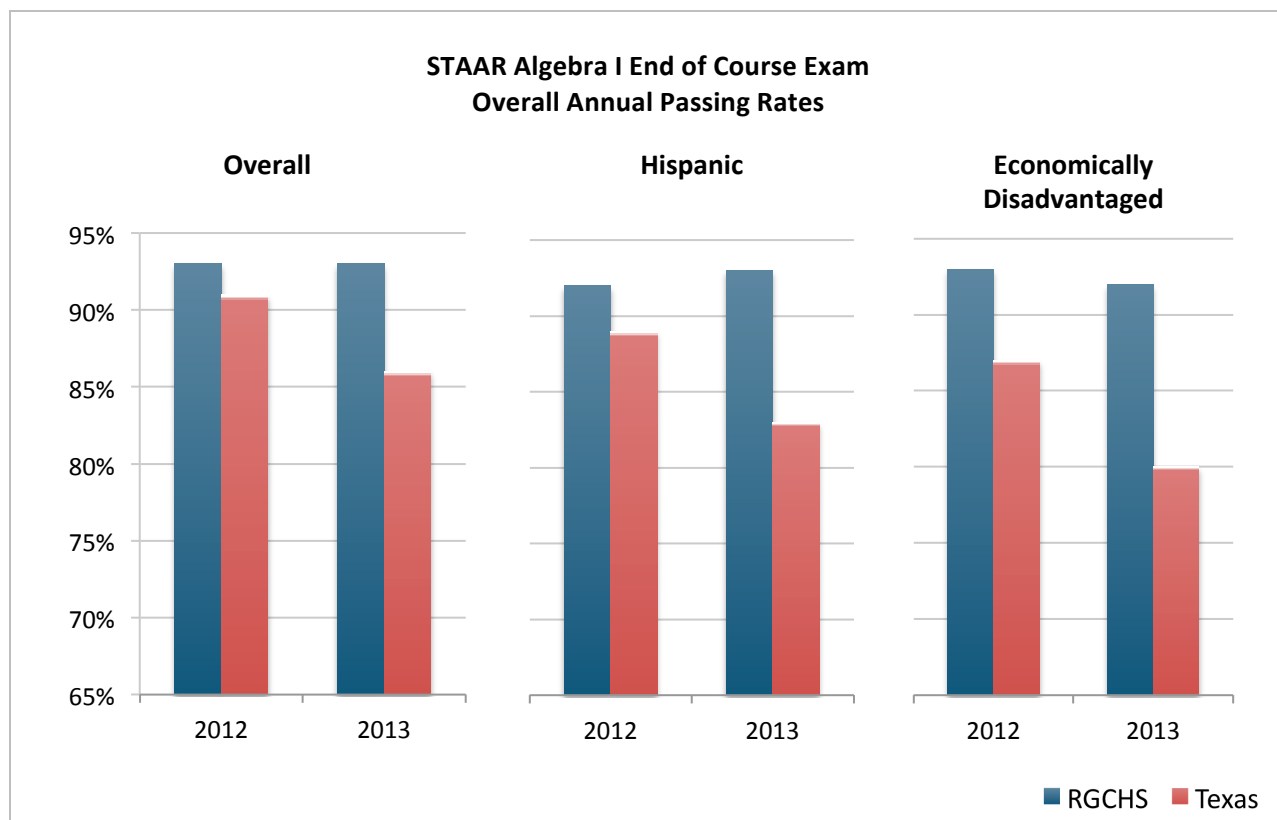
Rio Grande City is located in the southern tip of Texas, on the border of Mexico. Rio Grande City High School (RGCHS) serves 2,000 students, 99% of whom are Hispanic. The student population is highly transitory, and over 95% are Economically Disadvantaged.

RGCHS has partnered with Agile Mind to support high-quality mathematics instruction since 2003. The partnership, which began with a handful of Algebra I teachers, now encompasses Agile Mind’s Algebra I, Geometry and Algebra II programs as the primary mathematics curriculum for the entire school.

Over the period of our collaboration, the students at RGCHS have exhibited dramatic gains in achievement. In 2003, the passing rate on the Texas Assessment of Skills and Knowledge (TAKS) for RGCHS’ 10th graders trailed the statewide average by more than 30%. Over our 10 years of partnership, the RGCHS passing rate increased 120%, compared to a 20% increase across the state. In addition, RGCHS 10th graders have outperformed their Texas peers since 2008 – in 2013, the RGCHS pass rate exceeded the state’s by 28.6%.

In 2012 Texas initiated a major shift in the statewide assessment regime, implementing the State of Texas Assessments of Academic Readiness, or STAAR, as the new system of end-of-course exams. RGCHS students have significantly outperformed their Texas peers, over the past two years, exceeding both the state average and, by a wider margin, that of Hispanic and Economically Disadvantaged students. This means that, while students across the state struggled with the transition to a new testing regime, with the statewide pass rates for the Algebra I exam dropping from 2012 to 2013, RGCHS students have maintained outstanding achievement – even with the new STAAR system.



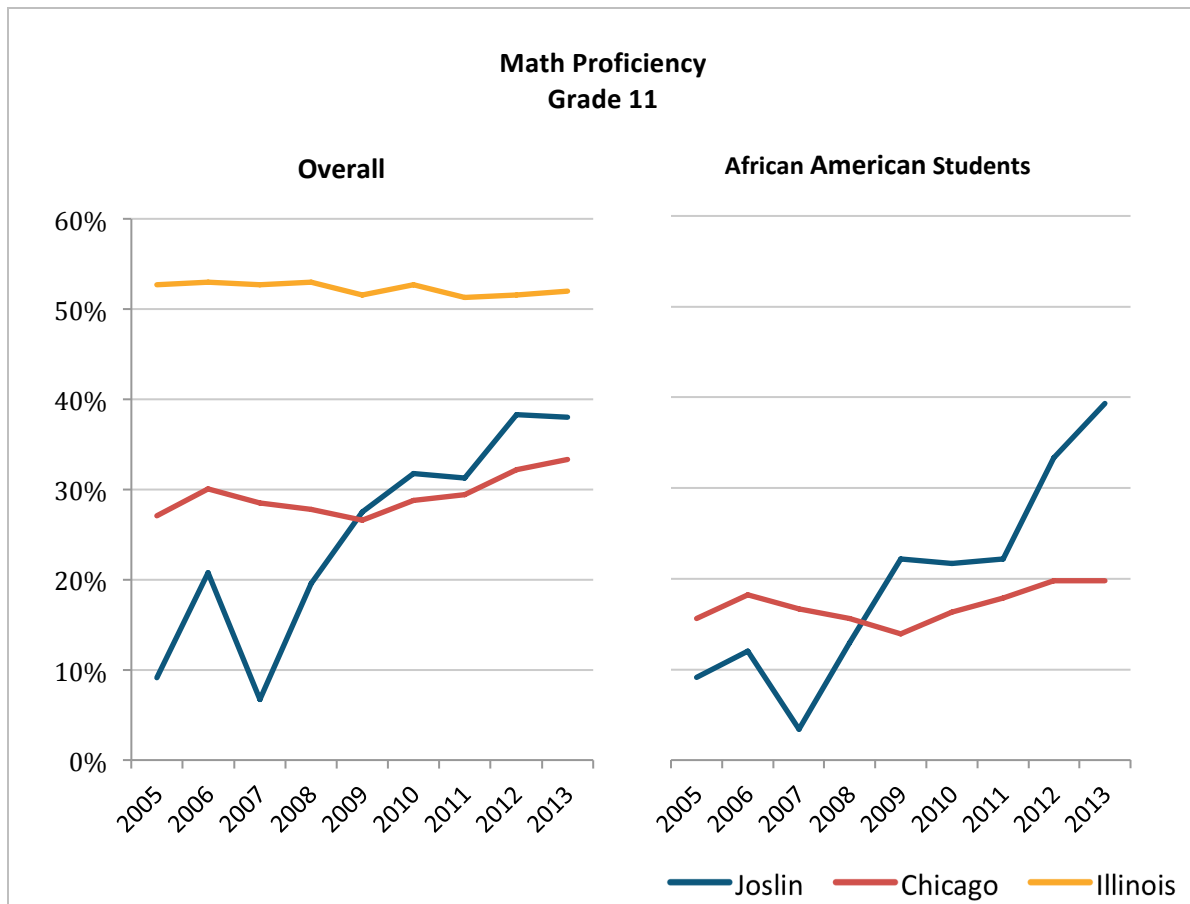


Perspectives Rodney D. Joslin Campus – Chicago, Illinois

Rodney D. Joslin is the founding campus of the Perspective Charter Schools, a network of 5 open-enrollment public charter schools that serve historically disadvantaged students in Chicago. The Joslin campus serves almost 400 students in grades 6 through 12: 66% African American, 27% Hispanic, and 89% of whom qualify for free or reduced lunch.

Since the initiation of our partnership with Joslin in 2007, Joslin students have shown dramatic growth in achievement in mathematics. On the Prairie State Achievement Examination (PSAE), which measures 11th grade achievement relative to the Illinois Learning Standards, the Joslin growth rate far exceeds that of the state and Chicago Public Schools, reducing the historical gap in achievement between “average” students and students of poverty. During the course of the partnership with Agile Mind, the percentage of students meeting or exceeding the standards on the PSAE math exam has more than quadrupled. In contrast, the overall proficiency rate in Chicago has grown 18%%; across the state, the proficiency average has gone down. In addition, Joslin minority and historically disadvantaged students have exceeded their peers in both achievement and growth. African American students have grown from 9% proficiency in 2005 to 39% proficient in 2013, compared to their African American peers in the rest of the city, who grew from 16% to 20% in the same period. This pattern is the same for Hispanic students, those who qualify for free or reduced lunch, and – importantly – female students.

It is important to note that Joslin students achieved this strong rate of growth even though they are engaged in course programs that are aligned to the Common Core State Standards but are taking an exam that is aligned to their state's content standards.



Supporting a Successful Transition to the Common Core: Our Indiana Partners

Some of Agile Mind’s earliest work on the Common Core State Standards has been in Indiana. During the period of our partnership with three districts, the state has undergone significant shifts in policy relative to CCSS, to education leadership in the state, and to its approach to measuring teacher effectiveness. Yet, in the midst of a turbulent policy environment, dedicated adults have achieved significant gains for their students. Data from Agile Mind partners in Indiana show that effective enactment of new standards, used as one lever of inflecting teaching and learning, can result in substantial growth in student achievement.

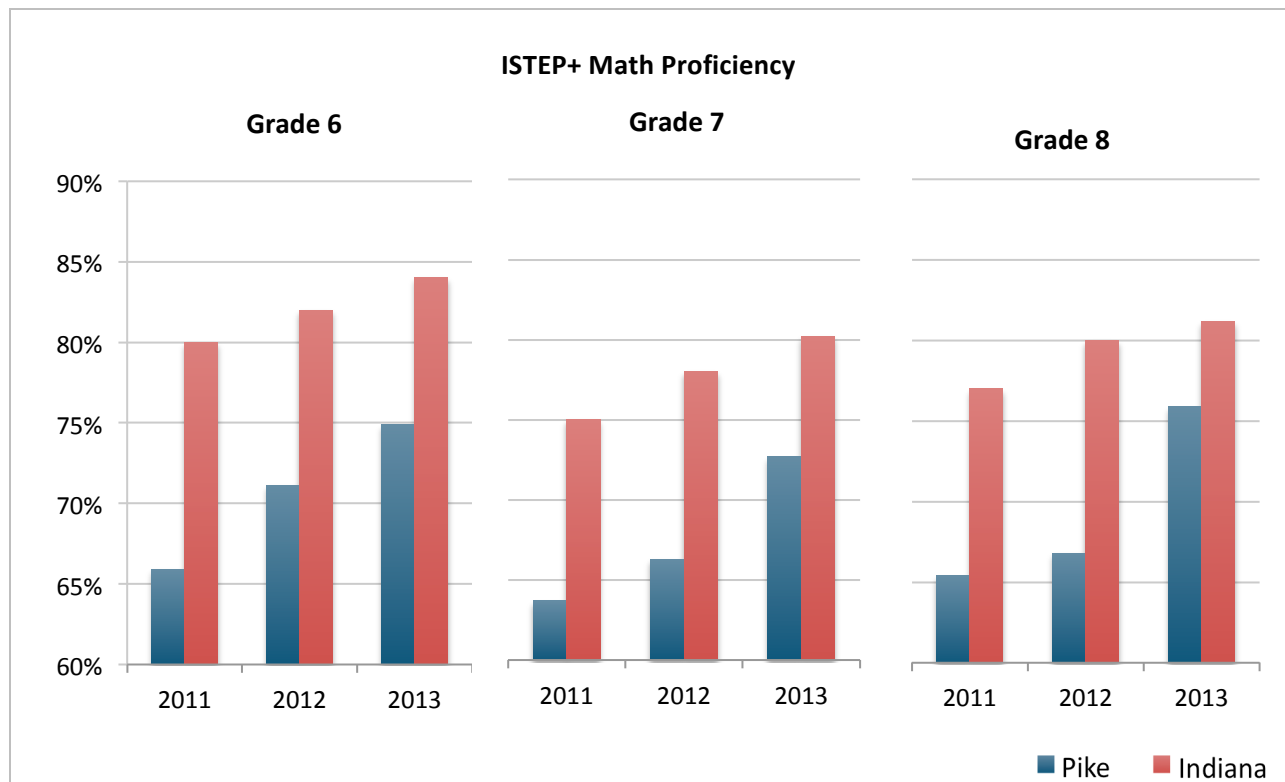
Pike Central Middle School – Pike Metropolitan School District

An Agile Mind partner since 2010, Pike Middle School serves 500 students in grades 6 through 8, 97% of whom are white and 42% of whom qualify for free or reduced-priced lunch.

During the period of Pike’s partnership with Agile Mind, student growth on the ISTEP+ has accelerated at all grade levels. From 2011 to 2013, the average growth in percentage of students meeting or exceeding standards in mathematics – 14% – is nearly double the two-year gains across the state during the same time span. Pike students made these strides despite the alignment of the ISTEP+ to the Indiana content standards, not the Common Core.

“This change of practice is the hardest thing I have ever done. But it is absolutely the right thing, and the best for kids. Now, my students never ask why they have to learn something any more. Student motivation has increased dramatically since I began enacting the program and the recommended strategies.”

-- Participating Teacher, Pike Metro SD



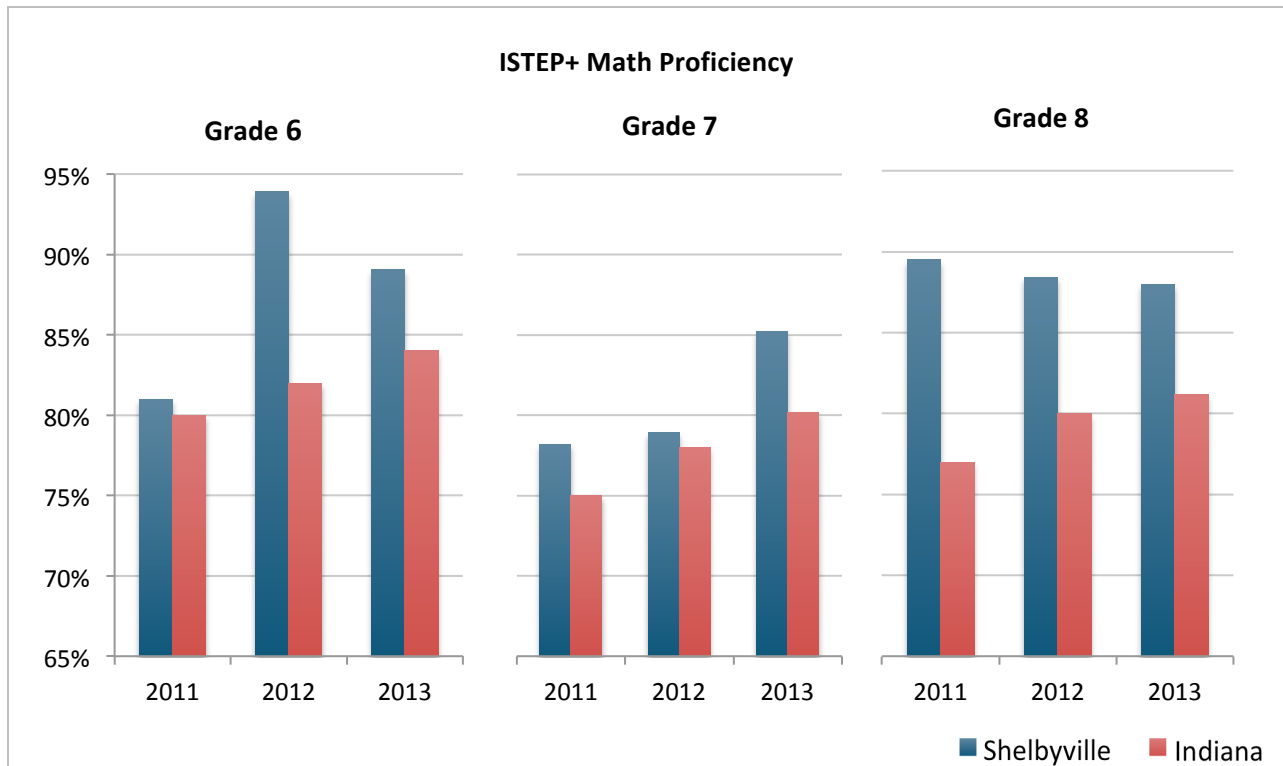
Shelbyville Middle School – Shelbyville Central Schools – Shelbyville, Indiana

Located 30 miles southeast of Indianapolis, Shelbyville Middle School serves almost 1000 students in grades 6 through 8. The student population is 7% Hispanic, 4% Multiracial, 1% Asian and 1% African American, and 55% eligible for free or reduced-price lunch.

Since the inception of our partnership in 2010, Shelbyville students have demonstrated robust growth and achievement on the Indiana Statewide Testing for Educational Progress Plus (ISTEP+) at all grade levels. Middle school students outperformed their counterparts in 6th, 7th and 8th grade in each of the last 3 years. The achievement of Shelbyville students is particularly impressive in light of the fact that the statewide assessment was aligned to existing state content standards, while Shelbyville students were enrolled in courses aligned to the CCSS-M.

“Agile Mind is a primary driver of our success in math. It has pushed our faculty to think differently about math instruction, especially the types of questions we ask our students. Its interactive nature helps students engage in different ways. The program has made a dramatic impact on teaching and learning.”

-- Ryan Mikus, Shelbyville M.S. Principal



Speedway High School – School Corporation of Speedway – Speedway, Indiana

Located in a small town within the city limits of Indianapolis, Speedway High School serves 500 students in grades 9-12. The population is 18% African American, 10% Hispanic, 4% Multiracial, and 3% Asian, with 53% of students qualifying for free or reduced-price lunch.

“I have over 30 years of teaching experience in mathematics. I struggled initially to implement, but I persisted. Now, I feel that this is the most powerful experience I have had in all my years of education.”

-- Participating Teacher, Speedway HS

In 2009-10, the year before partnering with Agile Mind to enact Common Core programs, 46% of 9th grade Algebra I students passed the Indiana End of Course Assessment (ECA). The following year, as the school transitioned to an Agile Mind CCSS program, the percentage of students who passed the Algebra I ECA – an exam that was aligned to the existing state standards, not the CCSS-M – increased by 46%. During the last three years of partnership with Agile Mind, the Algebra I pass rate doubled from 45% in 2010 to 90% in 2013. In comparison, the statewide pass rate increased by 11% during the same timeframe.

