Better Evidence for Better Schools:
Insights from the First 10 Years of the Research Alliance for New York City Schools
The Research Alliance for NYC Schools is a nonprofit, nonpartisan research center housed at NYU's Steinhardt School of Culture, Education, and Human Development. Our mission is to conduct rigorous studies on topics that matter to the City's public schools. We strive to advance equity and excellence in education by providing evidence about the policies and practices that promote students' development and academic success. For more information, visit www.ranycs.org.
Ten years ago, a diverse group of New York City leaders—including representatives from the NYC Department of Education (DOE), the teacher and administrator unions, the philanthropic and business communities, and New York University—came together to establish the Research Alliance for New York City Schools. These leaders held wildly divergent views about key issues in education, but coalesced around the need for better evidence about problems facing the City’s schools and about the effectiveness of reforms aimed at solving these problems.

Today, the Research Alliance is a vital part of NYC’s civic infrastructure. Our mission is to conduct rigorous studies on topics that matter to the City’s public schools. We work closely with policymakers, educators, and other stakeholders to identify pressing research questions and carry out relevant projects. We maintain a vast archive of data on NYC schools and communities—which is, to our knowledge, the largest and most comprehensive education database in the country. To date, we have undertaken more than 40 major studies, conducted field work in hundreds of NYC schools, interviewed thousands of educators and students, and administered more than 56,000 original surveys.¹

What have we learned from this work? What evidence have we amassed that can help City leaders better allocate resources, more meaningfully assess student progress and school performance, and ultimately serve students, families, and communities more effectively? In 2014, we released the first “Better Evidence” brief, which compiled key findings and lessons from the Research Alliance’s early years. We are pleased to say that we know more now than we did five years ago. This updated take on “Better Evidence for Better Schools” highlights important insights from our first decade of work, including an assessment of system-wide progress and challenges, lessons learned about district policies aimed at promoting more effective schools, and insights about the school-level strategies and practices that appear to be making a difference for NYC students. We also note several new areas of inquiry that we hope to pursue in coming years—as we continue providing rigorous, relevant, credible evidence to inform public education debates, in NYC and beyond.
What Have We Learned About System-Wide Progress and Challenges?

New York City schools have improved dramatically.

For decades, during the 1970s, 80s and 90s, more than half of New York City’s students did not graduate on time. The City’s schools were widely viewed as chaotic, dangerous and failing. A 1999 editorial from *The New York Times* summed up a common perception: “Everyone knows that New York City’s schools are in desperate straits, with hordes of students failing to graduate, too many uncredentialed teachers, and facilities that are crowded and decaying.”

The state of New York City’s schools is undeniably better today. Over the last 15 years, dropout rates have fallen steeply. High school graduation rates have improved by more than 25 percentage points. And college enrollment rates have largely kept pace.

These numbers are in part attributable to high schools improving their performance, but evidence also suggests that students are arriving in high school increasingly better prepared. Achievement in the middle and elementary grades has improved (although changes to state tests complicate any assessment of these trends over time). In addition, students have become more likely to stay enrolled in their school—and in the system—compared with prior cohorts, suggesting more satisfaction with NYC’s public education options.
Taken together, these findings provide evidence of broad, system-wide improvement at every level. And it’s worth noting that these changes have taken place at a remarkable scale. New York City’s 1,800 public schools employ approximately 75,000 teachers and serve more than 1.1 million students each year. That’s bigger than the next two largest urban school districts (Chicago and Los Angeles) combined. The size of NYC’s English Learner population is greater than the total student enrollment of 90 percent of school districts in the U.S. Indeed, about 1 of every 44 public school students in the country attends a NYC school.3 Thus the improvements we’ve seen in NYC truly have national implications.

Yet deep inequalities continue to plague the City’s education system.

NYC schools have been—and continue to be—characterized by large inequalities associated with students’ race/ethnicity, neighborhood and family income. These inequalities are starkly evident when we look at high school graduation and college enrollment rates for particular student subgroups. While these rates have been rising across the board—and sometimes faster for those who are historically underrepresented in college—large disparities remain: In 2017, for instance, a little over 50 percent of Black and Latino students graduated on time and enrolled immediately in college, compared to 68 percent of White students and 77 percent of Asian students. Similarly, NYC students who live in poor neighborhoods are much less likely than those in higher-income neighborhoods to graduate from high school on time and enroll in college.

Figure 2: College Enrollment Rates by Race/Ethnicity

Not surprisingly, gaps in high school graduation and college readiness and enrollment can be traced back to much earlier disparities. Black and Latino students and those from poor families have lower average attendance and test scores in middle and elementary school. They are more likely to be referred for special education services, but have less access to the inclusive educational settings that allow students with disabilities to learn alongside non-disabled peers. Black and Latino students are more likely to experience homelessness and a host of other problems associated with poverty, which undeniably impact their academic performance.

Source: Research Alliance calculations using data from the NYC DOE, CUNY, and the National Student Clearinghouse.

Note: As in Figure 1, this analysis follows cohorts of first-time 9th graders.
The evidence suggests that Black male students face especially daunting obstacles. Black males have higher suspension rates than other students, and they are greatly overrepresented in special education. In particular, Black boys are more than twice as likely as any other group to be given an IEP (Individualized Education Program) for “emotional disturbance,” which includes depression, anxiety, obsessive compulsive disorder and conduct disorders. Inside and outside the classroom, Black male students encounter biases. They are more likely to be stopped by the police—and these experiences appear to have a direct, negative effect on their academic performance. Our forthcoming brief examines how students performed before, during, and after a police “surge” in their home neighborhood, and how this compared to students in similar neighborhoods that weren’t targeted for a surge. We found that aggressive policing in the neighborhoods where students live significantly reduced test scores for Black males (but not other student groups), with the effect becoming more pronounced as the young men got older.

This and other Research Alliance work highlight how education intersects with broader policy issues. In NYC and across the country, far-reaching inequalities—in housing, the labor market, healthcare, and criminal justice—shape students’ educational experiences and outcomes. And the burden of dealing with these inequalities falls much more squarely on some schools than others.

Vulnerable students are highly concentrated in particular neighborhoods and schools.

Students in poverty are not evenly distributed across the system. The Research Alliance’s work has shown, for example, that homeless elementary students are heavily concentrated in parts of the Bronx, northern Manhattan (e.g., Harlem, Washington Heights, Inwood) and certain sections of central Brooklyn (e.g., Bed-Stuy, Brownsville, East New York). These students are living doubled up with extended family or friends, in shelters or hotels (and in some cases, cars, tents, or the street), often as a result of eviction, domestic violence, or other traumatic experiences. We found that there were 100 NYC elementary schools where between 17 and 52 percent of the student population experienced homelessness during a recent school year. (See Figure 3.)

Likewise, struggling middle and high school students are often concentrated in a relatively small number of schools. Consider the Research Alliance’s recent study of “persisting students” (i.e., those who don’t graduate on time, but remain enrolled in a fifth or sixth year of high school): We found that about a quarter of persisting students started 9th grade in the same 20 schools—out of more than 400 high schools citywide. According to the annual NYC School Survey, these schools are generally viewed by students as less orderly and safe, with adults who are less accessible, compared to the high schools that four-year graduates attended.

Yet, in spite of the challenges these schools face, some of them are producing better-than-expected results for their students. In the studies noted above, we were able to identify schools that serve large numbers of vulnerable students—and that also have better outcomes for them, on average, than similar students across the City. To some degree, these schools and their students are beating the odds.
At the system level, the uneven distribution of students raises hard questions. At what point does it become untenable for a school to serve so many students with intense academic and social/emotional needs? Given the concentration of poverty in some parts of NYC, what would it take to distribute students more evenly across schools? And what effects would this have on students, families and educators? Finally, what is the role of policy changes outside the scope of education (e.g., efforts to provide affordable housing, nurture mixed-income neighborhoods, or increase family income) in alleviating the drag of poverty on students’ educational outcomes and experiences?
Our brief, *Pathways to an Elite Education*, examined the reasons why girls and, most starkly, Black and Latino students are so underrepresented in NYC’s elite specialized high schools. The brief also simulated the effects of several changes in admission that had been proposed for the specialized schools, providing very direct evidence to inform policy decisions. Among the key findings:

- Even when comparing students with similar prior academic achievement (based on state tests), we noted disparities at each stage of the pathway into a specialized school. Girls and Latinos were less likely to take the Specialized High School Admissions Test (SHSAT). And girls, Latino, and Black students who took the test were less likely to qualify for admission based on their score.

- A small number of “feeder” middle schools accounted for a large share of offers to the specialized schools. Between 2005 and 2013, more than half of the students who were admitted to a specialized high school came from just 5 percent of the City’s public middle schools. Predictably, these middle schools tended to be highly selective themselves.

- We examined the likely impact of six alternate admissions rules based on criteria other than the SHSAT, including state test scores, grades, and attendance. In general, we found that these rules would increase the share of Latino, White, and female students admitted. But, most of them would not appreciably increase the share of Black students admitted nor reduce the concentration of offers in a small number of middle schools.

- The one exception was a rule that guarantees admission to all students across the City who are in the top 10 percent of their middle school. This rule would substantially increase diversity, but would also reduce incoming achievement levels, particularly in math. (A variation on this rule, offering admission to the top 7 percent of students in each middle school, has since been proposed by the Mayor and the NYC DOE as a way to diversify the specialized high schools.)

- Overall, our findings highlighted how the disparities in the specialized high schools largely reflect system-wide inequalities—and the sorting of higher- and lower-achieving students that starts well before high school.
What Have We Learned About

District Policies to Promote
More Effective Schools?

New York City’s sweeping high school reform efforts improved outcomes, but had some unintended consequences.

In the early 2000s, the NYC DOE implemented the largest systemic reform of urban high schools in the country (and one of only a few to be subjected to rigorous, independent research). The three pillars of these much debated reforms were: 1) closing large, persistently low-performing schools; 2) opening new small schools; and 3) extending high school choice to students throughout the district. As we describe below, there is now strong evidence, from studies by the Research Alliance and others, suggesting that these reforms had a substantial positive impact on key student outcomes. There are also hints, however, that the reforms had unintended consequences, especially in the case of the high school choice process.

Small High Schools

Rigorous research by MDRC has shown that the new small high schools had large and sustained positive effects on graduation rates and college enrollment and persistence, particularly for disadvantaged students of color. The Research Alliance conducted fieldwork in 25 of the most highly effective small schools, to learn about how they achieved this success. Educators in these schools highlighted:

• **Personalization**, including structures to foster strong relationships with students and their families, systems for monitoring student progress beyond just grades and test scores, and efforts to address students’ social and emotional needs, as well as academic ones;

• **High expectations**—for students and for educators—and instructional programs that were aligned with these ambitious goals; and

• **Dedicated and flexible teachers**, who were willing to take on multiple roles, sometimes outside their areas of expertise.

Our study also explored some of the challenges faced by educators in small schools. These included teacher burnout, ill-fitting external partnerships, and inflexible accountability benchmarks.

High School Closures

The school closure process was by far the most controversial of NYC’s high school reform efforts. The Research Alliance examined the impact of 29 high school closures that took place between 2002 and 2008, drawing on data about more than 21,000 students. Our study found that closing these schools had little effect, positive or negative, on students who were enrolled during the phaseout process. However, the closures did produce notable benefits for students
who came after—that is, those who would have enrolled in these schools, but had to make a
different choice because their most likely option had been shuttered. **These students ended up in**
**higher-performing schools than the schools that had closed, in terms of achievement and**
**attendance, and experienced a 15-point increase in graduation rates.**

Research on school closures in other cities has produced mixed results—in fact, some studies have
found that closures had a **negative** effect on student outcomes.7 It clearly matters how schools are
targeted for closure; how the closure process is managed (e.g., are schools closed immediately
or phased out over time?); and—most crucially—whether better schools are available for students
to attend. Closing low-performing schools also comes with a range of costs for families, educators
and communities that the Research Alliance study was not designed to assess. Still, our findings
suggest that, at least under certain conditions, closing persistently low-performing schools can
markedly improve opportunities and outcomes for students.

**High School Choice**

The Research Alliance has also studied the City’s high school choice process, the third pillar in
the district’s expansive high school reform effort. We were particularly interested in how the choice
process functions for the more vulnerable, lower-achieving students in the system.8 We found that,
on average, low-achieving 8th graders chose and attended high schools that were less selective,
lower-performing, and more disadvantaged than their peers.

**Figure 4: Characteristics of First-Choice High Schools**

![Figure 4: Characteristics of First-Choice High Schools]

Source: Research Alliance calculations using data from the NYC DOE

Note: Analyses focus on 2007 through 2011. “Economically Disadvantaged” is based on the percentage of students eligible for free and
reduced price lunch. “Low-achieving” students are those scoring among the bottom 20 percent on state tests in middle school.

Our study highlighted that, in general, students appear to prefer schools that are close to home, so
differences in students’ choices likely reflect, at least in part, the fact that lower-achieving students
are often concentrated in poor neighborhoods, where options may be more limited. In other work,
we discovered that high-achieving students travel farther to get to school than low-achieving
students, on average. Thus it appears that students who are already positioned to do well are the
most likely to take advantage of choice policies allowing them to access a high-quality school in
another part of the City.
The unintended result of this dynamic is an increasing concentration of low-performing students—who are disproportionately poor students of color—in lower-quality neighborhood schools. This insight is consistent with work by other researchers who have examined the link between school choice and racial and socioeconomic segregation at the elementary level, finding somewhat higher rates of segregation under the current system than would be seen if all students simply enrolled in their zoned elementary school. As the authors of that report concluded: “School choice may indeed give thousands of children better educational opportunities by allowing them to escape low-performing schools in their neighborhoods. But the schools they leave behind face ever-greater challenges as they struggle to serve the City’s neediest children.”

Overall, the evidence demonstrates that students benefitted from NYC’s constellation of high school reforms, but it also raises difficult questions about the choice process in particular. The current approach often funnels students into different schools based on prior achievement—and by extension, access to resources. This sorting tends to amplify pre-existing inequalities associated with race, class, home language, and so forth.

The NYC DOE has recently begun to experiment with some deliberate mechanisms to foster racial and socioeconomic diversity while preserving school choice. So far, these changes are focused mainly on elementary and middle schools, and it remains to be seen how, if at all, they will affect the participating schools, let alone the pipeline of students into high school. The Research Alliance intends to study the implementation and impact of these efforts over the next several years—along with other research designed to further illuminate relationships between school choice, segregation, and students’ educational opportunities and outcomes.

**District initiatives benefit from an explicit theory of action.**

The Research Alliance has formally evaluated a number of large-scale district initiatives (e.g., the InnovateNYC Ecosystem, the Expanded Success Initiative, and the ongoing Computer Science for All initiative). In our experience, at the outset, most such initiatives do not have an explicit and well defined theory of action. Indeed, one of the benefits of working with a research partner is that they can help initiative leaders articulate and examine assumptions about how the initiative is supposed to work.

Ideally, a theory of action provides a roadmap for how an initiative is expected to achieve results, including information about the specific inputs or actions of the initiative (i.e., programs, services, curricula, training, etc.), interim outcomes (what should change as a direct result of these inputs?), and longer-term outcomes (what are the initiative’s ultimate goals?). Developing this kind of theory can be challenging, even for a small targeted program—and it is even more difficult for complex, large-scale initiatives with many moving parts.

Early on in an evaluation, the Research Alliance encourages in-depth conversations about an initiative’s theory of action—not only with initiative leaders, but also other stakeholders, including funders, professional development providers, partnering community-based organizations (CBOs), and educators in schools. We have often found that these stakeholders have differing underlying ideas about the initiative’s work. There can be confusion or disagreement about the definition of terms, how program elements are supposed to be implemented, which activities and outcomes are most important and can be realistically achieved, and how outcomes should be measured. It is not unusual for competing priorities to surface. In CS4All, for example, interviews with stakeholders...
highlighted the challenges inherent in trying to expand access to computer science education for all students while simultaneously providing adequate attention and support for schools with the least computer science capacity. Recognizing these sorts of tensions can help initiative leaders make more deliberate choices about the allocation of resources. We have seen conversations about the theory of action inform how initiative leaders define, prioritize and communicate about their work.

Equally important, a clear theory of action provides a foundation for assessing and improving an initiative’s implementation. Again and again, our evaluations have highlighted that the quality of implementation varies widely across participating sites. District leaders can draw on a well-thought-out theory of action to develop detailed standards and guidelines for implementing high-quality programs, including concrete goals for student participation and “dosage” (i.e., how much of the initiative’s services and activities are students expected to receive?). By systematically measuring implementation against these standards, initiative leaders can identify sites that are struggling and in need of extra support.

This information is crucial not only for improving implementation over time, but also for making sense of an initiative’s impact or lack thereof. When an initiative’s results are lackluster, we want to know if the theory of action is fundamentally flawed, or if it’s possible that poor implementation was the culprit. When results are mixed, we want to be able to explore the relationship between impacts and various aspects of program implementation (e.g., are higher rates of student participation—or specific program features—linked with better results?). Finally, when an initiative has positive effects, we want to have a clear sense of how it was done, in hopes of replicating that success.

Good, strong implementation measures make this type of analysis possible.

Preparing for Evaluation in Collaborative Initiatives

In 2016, the Research Alliance partnered with the Teagle Foundation, to explore the feasibility of a variety of approaches to evaluating Teagle’s College-Community Connections (CCC) initiative. CCC funds partnerships between CBOs and universities, aimed at promoting college access and success among talented but underrepresented students in NYC. Our report highlighted questions in five key areas, which stakeholders in any collaborative initiative might use to help prepare for a rigorous evaluation of their work:

• Articulate goals and outcomes: What long-term goals and interim outcomes does the initiative seek to affect? How might these be measured? Do partners share an understanding of the initiative’s intended impact?

• Assess past learning and identify current evaluation needs: What do we already know about the initiative, based on previous program reviews? What do those findings suggest about evaluation needs for the future?

• Describe current operations: What are the current structures and elements found among initiative partners? What do these suggest about the most promising designs for an evaluation? Are program-level goals and activities consistent with larger initiative goals?

• Develop mechanisms for organizational learning: Will stakeholders be able to use evaluation findings productively? What new mechanisms for feedback might improve organizational learning?

• Explore evaluation strategies: What is the current potential for a rigorous experimental evaluation? What evaluation approaches would best meet the initiative’s needs?
Measure what matters.

The Research Alliance has done a good deal of work with the district focused on how to assess school quality and performance using a well-rounded framework that includes not only student test scores, but also key aspects of school climate. Our studies have pointed to such elements as school safety, leadership, collaboration, and high expectations as important for promoting strong teaching and learning.

This work builds on research initially conducted in Chicago, which identified “five essential supports” for school improvement. Beginning in 2014, the Research Alliance partnered with the NYC DOE to adapt these findings to the NYC context, identify other relevant research, and develop what would become the DOE’s “Framework for Great Schools.” The Framework outlines school conditions and capacities that have been linked to improved student outcomes in past studies. We worked with the NYC DOE over several years to redesign the annual NYC School Survey, so it would capture valid, reliable information about the Framework’s key elements.

Our 2016 brief, *Schools as Organizations*, underscored the importance of this work. The study explored how changes in school climate were related to changes in teacher turnover and student achievement in 278 NYC middle schools. We found that leadership, high academic expectations for students, teacher collaboration, and school safety and order were all related to decreases in teacher turnover. This was especially notable, given that turnover rates in NYC middle schools stood at about 15 percent—higher than in elementary or high schools. We also discovered that improvements in two dimensions of school climate—safety and academic expectations—predicted small, but meaningful gains in students’ performance on standardized math tests.

Other Research Alliance studies have helped illuminate what these conditions and capacities look like in practice. Below, we highlight some of what we’ve heard from teachers, administrators and students about the strategies and practices they see as important for supporting strong teaching and learning.  

**School Leadership**

Across numerous Research Alliance studies, educators have highlighted the essential role that principals play in setting the tone at a school and supporting their staff’s efforts to meet student needs. A prime example is our study of “turnaround” middle schools, which explored how two initially low-performing NYC middle schools managed to dramatically improve their performance (without a large infusion of extra resources or the wholesale reassignment of students, teachers and administrators). The leaders in these turnaround schools were highly strategic. They set goals that were focused and specific (e.g., aiming to improve instruction for a certain student subgroup and/or in a particular subject area, rather than vague commitments to improve overall test scores). The principals developed strategies and, to the extent possible, deployed resources that were well
aligned with their articulated goals. And they communicated their vision clearly, frequently, and consistently to the entire school community—a skill that educators have highlighted as important in several Research Alliance studies.

The principals of the turnaround schools also saw creating a positive work environment for staff as a necessary condition for school improvement. They accomplished this by providing teachers with personal support and high-quality professional development opportunities, encouraging collaboration, and empowering teachers to make decisions about curriculum and instruction. Professional development was tailored to teachers’ specific needs and often leveraged the strengths and skills of teachers already on staff.

Finally, principals in the turnaround schools prioritized school safety and order. They understood that discipline problems can severely limit teachers’ ability to focus on instruction. Importantly, it was not the addition of punitive disciplinary actions, like suspensions, that helped the principals get their buildings “under control.” Rather, it was a concerted effort on the part of the principals and their staff to be physically present in areas where students congregated and to prevent disruptions from occurring. These leaders emphasized developing positive relationships and providing students with social and emotional support—strategies that have been identified as “keys to success” in other Research Alliance studies, and that we describe in more depth below.

Creating a Welcoming and Supportive Learning Environment

Interviews with hundreds of teachers, school administrators, support staff, and students, across multiple Research Alliance studies, have emphasized the importance of creating a warm, supportive learning environment. This work has also highlighted some specific strategies that schools are using to achieve this goal.

For instance, our evaluation of the Expanded Success Initiative (ESI)—which aimed to improve college and career readiness for Black and Latino young men in 40 NYC high schools—highlighted the development of culturally relevant education (CRE). Many ESI educators reported changes in their mindsets and beliefs about their Black and Latino male students, as a result of CRE training provided by the initiative. These changes included a greater awareness of the challenges students face, a clearer focus on meeting their social and emotional needs, and a willingness to confront biases and critically examine assumptions.

Principals and teachers in ESI schools also reported that CRE training had influenced their curricular and instructional practices. Many reported modifying their curriculum with an eye toward affirming students’ race, ethnicity, and cultural backgrounds. They selected texts written by people of color or featuring protagonists of color. They worked to incorporate topics and events that were relevant to their students’ lives. Educators also described moving away from traditional lectures and presentations to more collaborative and creative student work and assessments, including hands-on activities, experiential learning, storytelling, group-based projects, and public speaking opportunities.

Another strategy that emerged as important—in our ESI evaluation, our study of NYC’s effective small high schools, and a number of other Research Alliance studies—was the promotion of strong, supportive in-school relationships. Educators described the use of mentoring programs (including traditional and peer mentoring approaches); advisory classes (in which teachers meet regularly with a small group of students to support them in whatever way is needed); and a variety of enrichment activities that allowed students and teachers to spend time together outside of class. All of these efforts were aimed at building connections between teachers and students, as well as among the students themselves.
Along similar lines, educators in several Research Alliance studies emphasized the importance of forming relationships with students’ families. Some described doing this through classes or events for parents at the school. We heard about outreach to families from school-based social workers or members of school “attendance teams.” Our brief on homelessness among elementary students highlighted the extraordinary lengths that some school staff go to in an effort to support families in crisis (e.g., walking children to school, accompanying families to an office in the Bronx to help them apply for shelter). Many of the educators we spoke to in that study said that CBO partner organizations played an important role in helping build close relationships with families and connecting them with needed resources.

**Monitor student progress early and often.**

Studies by the Research Alliance and others have shown that engagement and achievement—as early as the elementary grades—offer strong signals about which students are on the path to graduate high school and which are at risk of dropping out. This means there are opportunities to identify students who may need additional support and intervene before they fall too far behind.

Building on “9th-grade indicator” work in other cities, the Research Alliance found that NYC students who earned at least 10 course credits and passed at least one Regents exam in 9th grade were significantly more likely to graduate than classmates who did not. Regardless of background characteristics, this on-track indicator provides strong signals about students’ chances of graduating. Other Research Alliance studies have highlighted that attendance and test scores in elementary and middle school strongly predict a student’s high school performance. Even students who are performing reasonably well at the beginning of middle school sometimes fall off track during grades 7 or 8, with serious consequences for their progress toward graduation. Declines in attendance and math scores appear to be particularly worrisome.

**Many schools have systems for monitoring not only students’ academic progress, but also their social and emotional well-being.** These systems may incorporate information about students’ performance on assignments and in-class tests, attendance, teachers’ observations of students' behavior and engagement in class, and advisors’ and counselors’ insights about how students are faring socially and emotionally. Educators have reported to us that tracking this variety of information enables them to nurture student growth by offering personalized support.

**Build educator capacity to use data effectively.**

While many teachers and school leaders report that they use data to help identify and address student needs, our work suggests wide variation in how successfully educators are able to leverage data to actually improve teaching and learning. One early Research Alliance study, focused on the City’s $80 million Achievement Reporting and Innovation System (ARIS), found that while ARIS had been relatively useful as a tool for school-wide planning, it was much less valuable as a direct aid to classroom instruction. We suggested that developing new education technology tools in closer consultation with educators might improve their utility. Our subsequent study of NYC’s InnovateNYC initiative examined efforts to better connect educators and ed-tech developers. This work highlighted many challenges, including those related to defining the problem of practice, selecting educators and ed-tech companies who were a good fit to work together, and implementing and evaluating products in real-world settings.
Another Research Alliance study, launched in 2014, took an in-depth look at how teachers in nine New York City elementary schools were using data to inform their classroom practice, how schools were supporting them in this effort, and to what effect. Focused on 4th and 7th grades, the study explored differences between schools that were struggling to use data to inform literacy instruction and those that were succeeding in this complicated task. Drawing on in-depth interviews and field observations over a two-year period, our work identified several keys to successful data use in teaching, including:

- **Developing a broad view of assessment data**, as well as an understanding its strengths and limitations (using not only standardized test data, but also data that teachers collect themselves—by listening to students read, reading what they write, talking with them, and exploring what they offer in discussion);

- **Strong content knowledge among teachers** (in the schools we studied, student performance data proved useful only when interpreted by teachers who understood how literacy functions and develops), and

- **Cultivating student ownership of data** (the most successful schools worked to actively and continually instill in students a sense of agency and ownership of their own data—and their own learning).

While our work has highlighted a number of challenges in this area, it also points the potential to use data effectively—as one part of the complex art and science that is teaching.

Since 2015, the Research Alliance has been working with the Student Success Network (SSN), a group of about 60 youth development and education organizations (including schools) that have coalesced around the goal of measuring and improving students’ social and emotional learning (SEL). SSN member organizations serve more than 150,000 middle and high school students throughout New York City. Twice each year, the organizations conduct a student survey designed to measure growth mindset, academic self-efficacy, interpersonal skills, self-regulated learning, self-advocacy, problem solving, and other SEL skills.

The Research Alliance’s collaboration with SSN has focused on refining its SEL measurement strategy, analyzing data from its student survey, and helping member organizations make use of the resulting information. One way we did this was by identifying “bright spot” sites, whose students had experienced more SEL growth than other similar sites in the network. SSN used the information from this analysis to engage members in conversations about which practices might be responsible for the unusual growth seen at the “bright spot” sites. The Research Alliance also provided feedback on SSN’s Continuous Improvement Fellowship pilot, informing a number of changes to the fellowship in the following year. In coming years, our work together will continue to explore the relationship between various SEL measures and students’ academic performance.
Looking Ahead

The Research Alliance remains deeply committed to conducting research that makes a difference for NYC students and schools. This includes work that helps identify both drivers of NYC’s successes and factors that explain why so many students are still being left behind. In keeping with these goals, we see our work over the next 10 years revolving around three related strands of inquiry: 1) identifying the location and sources of educational inequality in NYC schools; 2) assessing the efficacy of strategies designed to produce more equitable learning opportunities and outcomes; and 3) using evidence to directly and continuously inform the work of key stakeholders who are implementing—and striving to improve—those strategies. Following are examples of studies that are underway and priorities for future work in each of these areas.

Identifying the Location and Sources of Educational Inequality

In 2018, the Research Alliance launched a new series called Equity, Access and Diversity in NYC Schools, which aims to advance our understanding of the mechanisms driving educational inequality in NYC schools. The project has used a combination of quantitative and qualitative methods to explore a variety of topics, including the characteristics and pathways of students who struggle to graduate and challenges faced by homeless students and their families. These and other Research Alliance studies have highlighted the uneven distribution of students across the system—raising hard questions about entrenched socioeconomic and racial segregation in NYC schools. A high priority for future work will be learning about how segregation shapes students’ educational experiences, their access to resources, and their achievement.

More broadly, we seek to continue generating descriptive research that helps identify and define problems, highlights “bright spots” in the system, and provides deeper insight into the state of the City’s schools. This might include, for instance, research on:

- Pathways and barriers to college;
- Labor market outcomes for high school and college graduates;
- Service contexts and outcomes for students with disabilities;
- Pathways to success for English learners and foreign-born students;
- School funding and its influence on student outcomes;
- Relationships between various aspects of school climate and student and teacher outcomes;
- Equitable access to high-quality Pre-K; and
- Conditions associated with improvement in low-performing schools.

Assessing the Efficacy of Strategies to Promote More Equitable Learning Opportunities and Outcomes

Recently in NYC, momentum has been building around efforts to promote educational equity, including efforts to address longstanding racial and socioeconomic segregation. Notably, three Community Schools Districts have adopted diversity plans, and in February 2019, the School Diversity Advisory Group issued a series of short- and long-term recommendations to foster “real integration and equity for NYC public school students.”
We believe research has a vital role to play in informing—and assessing the effectiveness—of these efforts. As a starting point, it will be extremely important to study the implementation and impact of the diversity plans being rolled out in Districts 1, 3, and 15. How do students, families, teachers, and administrators experience the process? What challenges arise? How do schools change as a result of the diversity plans? What is the impact on students’ educational opportunities and outcomes? Furthermore, in light of heavy concentrations of poverty in large swaths of the City, what will it take to address segregation outside of these three community school districts? What are the possibilities and limitations for system-wide integration efforts?

While examining the racial makeup of schools will be an essential aspect of this work, it is also critical to understand the strategies educators are using to promote more equitable and inclusive learning environments. In 2018, the NYC DOE announced that it would invest $23 million in anti-bias training and other resources designed to enhance culturally sustaining practices in the classroom. Research can help track how these resources are deployed, how they affect teachers’ mindsets and practices, and how they ultimately impact students’ experiences and outcomes. One contribution to this body of work is the Research Alliance’s ongoing study of the Center for Racial Justice in Education, which strives to disrupt racism through professional development, training and coaching for educators. This study is documenting the Center’s program activities, examining implementation quality, and assessing the program’s outcomes for participating educators and schools.

The NYC DOE’s “Equity and Excellence for All” initiatives encompass a wide range of efforts to provide more equitable and higher-quality learning opportunities for NYC students. These include the Universal Literacy initiative, Algebra for All, AP for All, and Computer Science for All (CS4All)—which the Research Alliance is currently evaluating. CS4All aims to provide all NYC students with a meaningful computer science education at every grade level (i.e., elementary, middle and high school). Our study, which we are conducting in collaboration with Education Development Center, will answer important questions about the results of CS4All for schools, teachers and students, with a focus on those who are underrepresented in CS and STEM.

The Research Alliance’s work will continue to include a focus on critical transitions from K-12 to post-secondary education and the labor market. We have several studies underway that will contribute evidence in this area—perhaps most notably our study of NYC’s Career Technical Education (CTE) programs. This work is leveraging the vast size and diversity of the City’s CTE landscape to identify specific program features that are associated with stronger impacts on education and employment outcomes, for different types of students. We also expect our ongoing partnership with the NYC DOE and the City University of New York (CUNY) to produce new studies focused on promoting college readiness, access, persistence, and completion.

Providing Evidence to Directly and Continuously Inform Policy and Practice

Moving forward, the Research Alliance seeks to deepen our relationships with practitioners and hone our ability to provide evidence that directly informs their work. This is exemplified by projects like the Maker Partnership, an effort to help teachers integrate computer science and computational thinking into elementary science instruction through the use of maker pedagogy. This study is providing quick-turnaround feedback that informs the work of the program developers—Schools That Can and Maker State—as well as participating schools and teachers,
through a series of user-friendly reports and facilitated discussions of findings from surveys, student assessments, and case study research.

Another example is a new pilot project with #DegreesNYC, which will create a learning network for college-focused CBOs. This project will link data from the Research Alliance archive (including extensive information from CUNY and the NYC DOE) with data that the CBOs collect themselves. We will use this database to provide participating organizations with aggregate reports about the students in their program and to develop a set of key indicators that young people are on track for post-secondary success. Importantly, this work will also involve learning group sessions designed to help CBOs build their capacity to collect and use data to inform their programs.

What We Can Achieve

Historically, the work of researchers has been disconnected from that of school district officials and educators, and research findings have often done little to influence policy or improve day-to-day practices in schools. The Research Alliance is changing this picture in New York City. Our studies are providing evidence about policies and practices that promote student development and academic success—evidence that local stakeholders are using as they work to improve educational opportunities and outcomes. Together, we are creating conditions to nurture more effective policies, higher-quality schools, and stronger youth-serving organizations. We look forward to more progress toward these goals in the decade ahead.

Endnotes

1. This is in addition to our partnership with the NYC DOE on its annual School Survey, which is taken by more than a million students, parents, and teachers each year.

2. For evidence of improvement, see O’Day, Bitter and Gomez, 2011, Chapter 11, which shows that between 2002 and 2010, gains in 4th and 8th grade test scores in NYC outpaced both the other large cities in New York and the state as a whole, for both ELA and Math.

3. For information about the size of the national public school population, see https://nces.ed.gov/fastfacts/display.asp?id=372. “In fall 2018, about 56.6 million students will attend elementary and secondary schools, including 50.7 million students in public schools and 5.9 million in private schools.”

4. Analysis of police data from 2004-2012 (when stop and frisk policies were in effect in NYC) revealed a striking spike in the rates of police “stops” for Black boys (and to a lesser extent Latino boys) starting at age 13. See forthcoming Spotlight on NYC Schools post.

5. At the other end of the spectrum, there are schools with very low rates of homelessness: At the 100 elementary schools in NYC with the lowest concentration of homeless students, 1 percent or less of the students experienced homelessness in a given year. At 13 of these schools, there were no homeless students. These data are for the 2012-2013 school year, when the cohort of students we were following in this study began kindergarten.

6. Consistent with the inequalities described in the previous section, persisting students are disproportionately Black and Latino and have higher levels of neighborhood poverty, compared with those who graduate on time.

7. See, for example, Brummet, Q., 2014; Carlson, D., and Lavertu, S., 2015; Bross, W., Harris, D. and Liu, L., 2016; Steinberg, M. and MacDonald, J., 2018; Gordon, et al. 2018. Chalkbeat also produced a helpful review of closures research in February 2019: https://www.chalkbeat.org/posts/us/2019/02/05/school-closure-research-review/

8. In this study, “low-achieving” students were defined as those scoring among the bottom 20 percent on standardized state tests in middle school.

9. Mader et al., 2018. See also Hemphill and Mader, 2016; Roda and Wells, 2013.

10. Notably, when researchers and initiative stakeholders co-create a theory of action, it also helps ensure than an evaluation is well aligned with the initiative’s goals.

11. There is evidence that the efforts educators described to create a supportive school climate made a meaningful difference for students’ educational experiences. For example, as noted above, the City’s small high schools had
large, positive effects on graduation rates. Another study we draw on here is our evaluation of the Expanded Success Initiative. While ESI did not impact students’ academic outcomes, it did increase Black and Latino young men’s exposure to culturally relevant coursework and college-focused supports, as well as their sense of belonging and fair treatment, which was consistently higher than that of similar students in comparison schools.

12. Our findings about the importance of the principal’s role are consistent with those from other research. Strong school leadership is now well established as a key factor that influences student achievement. See, for example, Grissom & Loeb, 2011; Herman, et al., 2008; Le Floch et al., 2016.

Research Alliance Works Cited


Other References


Acknowledgements

This brief reflects the work of far too many people to name individually. Countless Research Alliance staff, partners, and funders have contributed to the studies highlighted in the preceding pages. Please see page 18 for a list of cited publications. The partners and funders who were involved in these studies (and foundations that have provided vital support for the Research Alliance’s core operations) are listed on our website.

A number of colleagues at the Research Alliance played a central role in conceptualizing and developing the brief. These include James Kemple, Adriana Villavicencio, Cheri Fancsali, Kayla Stewart, Kathryn Hill, Lisa Merrill, Zitsi Mirakhur, and Research Alliance affiliate Sean Corcoran. Members of the Research Alliance Steering Committee and staff at the NYC Department of Education also reviewed and provided helpful feedback on drafts. We are especially grateful to Michelle Paladino and her team at the DOE’s Research and Policy Support Group for their ongoing collaboration. Penelope Malish developed the graphic design for the brief, helping make the material more accessible and engaging.

Finally, we are indebted to the many students, parents, teachers, principals, and other school and CBO staff who have participated in Research Alliance studies. Their willingness to invite us into their schools and programs and to share their experiences and perspectives through surveys, interviews and focus groups is essential to our work. We hope the findings and lessons compiled here prove useful to them and to other education stakeholders, in NYC and around the country.

Many thanks,
Chelsea Farley

Steering Committee

Augusta Souza Kappner, Chair
President Emeritus, Bank Street College of Education

Jennifer Jones Austin
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James Kemple
Executive Director

Adriana Villavicencio
Deputy Director

Cheri Fancsali
Research Director

Chelsea Farley
Communications Director

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