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New York City's Children First

Lessons in School Reform

By Maureen Kelleher

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Introduction and summary

Under Mayor Michael Bloomberg, New York City's education system embarked on a massive change effort, known as Children First, that produced significant results: new and better school options for families, more college-ready graduates, and renewed public confidence in New York City's schools. New York City's reform effort has also produced significant change beyond the city's own schools and has helped to set a national agenda for reforming education.

Over the past 12 years, other districts, especially in large urban centers, have looked to New York City for ideas as they work to improve outcomes for their students. New York City's central administrators have also gone on to lead districts elsewhere in the nation, spreading not just particular reform strategies but also a mindset focused on bold and rapid system change to improve student achievement.

This report tells the story of how Children First reforms evolved over the course of Bloomberg's mayoralty and synthesizes research on the effectiveness of those reforms. Urban district leaders can learn from both the successes and challenges of New York City's ambitious reform effort.

Some of New York City's most successful reforms created conditions that permitted school-level innovation and built human-capital pipelines to develop more qualified pools of teachers and administrators. These reforms included:

- A governance shift from a fragmented, locally based system of 32 community districts to mayoral control. It was the foundation for change that made other reforms possible.
- Devolving authority to building principals who were closer to the classroom and who could make better decisions about budgets, staffing, professional development, and operations to support their schools. Well ahead of the curve, New York City also created a district-specific training academy for principals to ensure they had the necessary skills to support high levels of autonomy.

- Creating small schools to replace large, impersonal high schools and transform them into smaller, more personalized environments. The shift to small schools eliminated “dropout factories” and better supported students, especially high-need students, to graduate and go on to college. Research shows New York’s small schools of choice have reduced dropout and increased graduation rates while encouraging more students to meet higher standards.¹
- Welcoming charter schools to the system while holding them just as accountable for student performance as district schools. Charter schools have been encouraged to use available space within existing public schools. National research shows New York City’s charters outpace the nation in measures of student performance.
- Increasing funding equity within the district by using a weighted per-pupil formula to allocate the majority of school-level funds. This was a significant departure from the traditional system of building school budgets based on teacher salaries, which gives more resources to schools with highly educated, veteran teachers regardless of the student populations they serve. The new formula shifted resources toward high-poverty schools and schools with large numbers of disadvantaged students, such as students in special education and English language learners.
- Revamping teacher recruitment, pay, and hiring strategies, allowing New York City to recruit and retain a stronger teaching force and compete more successfully with nearby suburban districts. Human resource reforms shifted the hiring timeline earlier, in line with suburban practice. Highly-selective alternative certification programs trained teachers who replaced unlicensed staff. Broad pay raises combined with a focus on improved salaries for early-career teachers also made New York City more competitive with surrounding suburbs.
- Proactively addressing Common Core State Standards implementation. In 2010, all New York City public school teachers were introduced to Common Core standards.² In summer 2013, teachers received new curriculum materials aligned to the standards and vetted by the central office.³

In the midst of these many successes, however, New York City also saw some challenges:

- A short-lived attempt to enact a pay-for-performance system for teachers failed.⁴ Over three years, New York City piloted a voluntary program that awarded bonuses of up to \$3,000 per teacher to schools that met performance targets for school environment and student performance, including student growth on standardized tests. Ultimately, research showed the program had no impact on teachers' reported attitudes and behaviors and no impact on student achievement.
- New systemic efforts to support schools have struggled to gain traction in the face of difficult school-level conditions: weak internal capacity, competing priorities, and the rapid pace of change. Since 2006, New York City's schools have begun to assimilate new supports, from Quality Reviews in which outsiders carefully observe the school, to creating in-house teams of teachers and administrators focused on refining instructional practice based on data and results for students, to building relationships with peer schools and support providers through networks. To varying degrees, teachers and administrators have struggled to find time and energy to incorporate these supports into their work.
- As is true elsewhere, New York City's education leadership is struggling to calibrate the right balance between pressuring schools to change in response to high-stakes accountability and supporting them to change by promoting networks, coaching, and collaboration to build a trust-based, professional culture.⁵ Finding the right balance will entail both attention to a balanced set of accountability tools—including test scores, surveys, student college and career outcomes, and more—and focus on providing time, professional development, and feedback for teachers to make the leap to new heights of instructional practice. A recent report from the Parthenon Group recommended system leaders give sustained attention to streamlining policy and upgrading archaic systems and practices with the goal of freeing principals' time. More time would allow them greater opportunity to lead instructional change in their schools.⁶

While New Yorkers reflect on what should be sustained from the Bloomberg years and other districts mine New York City's reforms for ideas to support their own improvement processes, our findings suggest the following policy recommendations for urban district leaders:

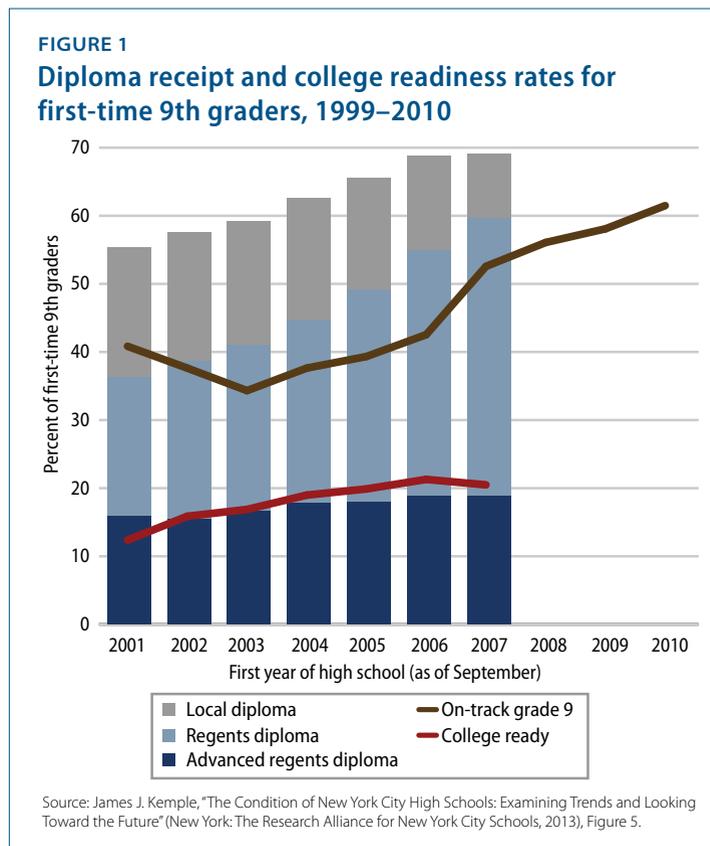
- **Focus on the school as the site of change and the principal as the primary change agent.** Perhaps the most significant reform under Mayor Bloomberg was the decision to offer schools autonomy regardless of past performance in exchange for accountability for future results. This groundbreaking exchange opened up new possibilities for innovation even in schools with poor track records of educating their students. New York City also took important steps to support schools and their leaders. By eliminating layers of middle management, the city shifted significant resources away from the central office and toward schools. It also used per-pupil budgeting to realign more resources to schools with higher enrollments of needy students. At the same time, central office gave principals much greater authority to determine how to allocate those resources to support teaching and learning. By working with the union to change seniority privileges, New York City also gave principals much greater control over teacher hiring—a key lever for building a professional climate in their schools.
- **Develop a pool of talent—teachers and principals—who are well versed in the local context and needs.** New York City partnered with outside groups to improve its recruitment, hiring, and retention strategies and created district-specific training programs for principals and teachers.
- **Sustain the highly successful small high schools and investigate the reasons for their success.** Since 2002, New York City has opened more than 200 small, nonselective high schools, largely concentrated in the Bronx and Brooklyn. They were designed to serve students in the city’s most disadvantaged neighborhoods and many replaced large high schools with histories of low performance. A growing body of research shows these small schools have improved student attendance, graduation rates and college performance.⁷
- **Build a portfolio of schools to encourage school-level innovation and give families quality options.** While the national picture of charter school performance is mixed, New York City’s charter schools—particularly those run by a handful of charter-management organizations—have shown strong results for student learning. Facilities support coupled with strong accountability for performance appear to be among the keys to New York City’s success.
- **Balance “disruptive change” with clear priorities for the work of principals and teachers.** In New York City, Mayor Bloomberg and his education team emphasized the need for bold, rapid change in both the system and the schools. But deep change in teachers’ classroom practices requires disciplined focus, consistent priorities, and patience with adult learning. Researchers repeatedly noted that in

the Bloomberg era, New York City educators scrambled to assimilate frequent policy changes, build communities of practice, and access needed district-level supports in a rapidly shifting system. Urban districts must balance the pressure for quick results with the often slow and difficult work of transforming struggling schools into strong, collaborative learning communities. A district must send clear, focused messages to principals and teachers about the district’s priorities in improving practice and provide time and external expertise as needed to help staff master new skills that are essential to produce lasting results for students.

District performance and student outcomes in the Bloomberg years

During the Bloomberg years, New York City students improved their performance on multiple measures. Of these, increases in graduation rates and college readiness are those most likely to affect students’ life outcomes. A March 2013 brief from the Research Alliance for New York City Schools on high schools and their performance between 1999 and 2011 provides evidence of these increases, calculating a rise of nearly 20 percentage points, from 51 percent graduating for the class of 2003 to 69 percent graduating for the class of 2011.⁸

As graduation rates have increased, more New York City students are also receiving the rigorous, state-sponsored Regents and Advanced Regents diplomas, which require students to pass challenging, content-based examinations. The Regents diploma requires passing scores on five exams, while seven exams are required to earn the Advanced Regents diploma.⁹ College-readiness rates—as measured by the Regents examination scores in reading and math, which are used to predict if a student will need remediation in college—have shown dramatic improvement, from 13 percent for the class of 2005 to 21 percent for the class of 2011, the time period for which the Research Alliance had reliable data for the measure.¹⁰ There continue to be areas for improvement, but the results thus far are encouraging.



New York City's students are also showing increased college readiness based on Advanced Placement and SAT participation and test results. Between 2002 and 2012, the number of New York City public high school students taking one or more Advanced Placement examinations has grown from 17,165 to 32,471, an increase of 89 percent.¹¹ While the overall pass rate held steady at about 56 percent, the number of African American students passing at least one exam rose by about 49 percent between 2008 and 2012. The number of Hispanic students passing at least one exam increased by about 46 percent during the same period.¹² SAT trends show a similar pattern—greater participation without a drop in overall scores. In 2007, the College Board began tracking the number of New York City public high school students taking the SAT. By 2013, that number had increased by nearly 14 percent, and the increase was driven by more African American and Latino students taking the test.¹³ The average SAT score among New York City public school students has held steady as participation increased.

Assessing the growth in student performance on state standardized tests is more complicated due to changes in both the proficiency threshold and in the test itself. Between 2006 and 2009, New York City's students showed substantial performance increases on state standardized tests, including noteworthy increases in the percentages of students considered proficient in state standards.¹⁴ Citywide, the number of students in grades 3–8 scoring proficient in English language arts rose from 50.7 percent in 2006 to 68.8 percent in 2009.¹⁵ In mathematics, the number of students in grades 3–8 scoring proficient rose from 38.9 percent in 2006 to 81.8 percent. Notably, regardless of the changes in testing, by 2013, New York City was home to 22 of the 25 highest-performing schools in the state as measured by state standardized test scores.¹⁶ In 2002, none of the state's top 25 highest-performing schools were in New York City. Over the period between 2002 and 2013, New York City's share of the state's lowest-performing schools shrank from 62 percent to 30 percent.¹⁷

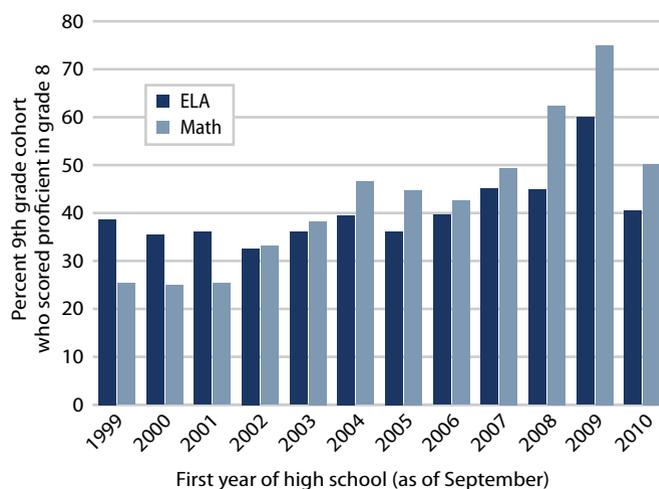
However, since 2009, two major changes in state testing policy have disrupted the upward trend in proficiency rates among New York City students. First, in 2010, the state raised the minimum cut scores required for students to be deemed proficient in mathematics and reading.¹⁸ Then, in 2013, the state rolled out a new, more challenging test aligned to Common Core State Standards.¹⁹ Though scores declined sharply both across the state and in New York City schools, this year's decline did not indicate anything positive or negative about New York City's reform efforts. It simply reflected the tougher standards against which student academic performance was being measured.

Despite the changes in state testing, there is strong evidence that student academic performance improved over time and that Children First reforms produced those improvements. A key part of the New York City Education Reform Retrospective’s research agenda was to determine what effect, if any, Children First reforms had on student performance as measured by standardized tests. James Kemple, executive director of the Research Alliance for New York City Schools, used a comparative interrupted time series analysis—a method of statistical analysis commonly used in education research and evaluation to determine the impact of broad policies on student outcomes—to examine state test scores for the years 2003 through 2010.²⁰ This form of analysis controls for both the influences of reforms and trends already underway in New York City prior to Children First and of state and national education policy reforms related to accountability, including No Child Left Behind.²¹

Kemple’s analysis of test scores from 2003 through 2009 showed that while some of the increase in student proficiency rates was likely attributable to other factors, the evidence indicated Children First produced improvements in scores.²² Moreover, those positive effects on scores persisted and increased throughout the period.²³ Kemple then analyzed 2010 test score results separately due to the increase in cut scores used to determine proficiency and determined that Children First reforms continued to have positive effects on student proficiency in both fourth and eighth grade, though the size of the effects became smaller.²⁴ Kemple suggests these smaller differences indicate Children First had weaker effects on students at the higher end of the test score distribution.²⁵

In a 2013 paper examining the current state of New York City’s public high schools, Kemple noted that the 2010 increase in cut scores reduced proficiency levels no lower than they were in 2006.²⁶ This indicates that New York City students are still entering high school better prepared than they did in 2003, especially in math.

FIGURE 2
Grade 8 proficiency rates in ELA and math for first-time 9th graders, 1999–2010



Source: James J. Kemple, “The Condition of New York City High Schools: Examining Trends and Looking Toward the Future” (New York: The Research Alliance for New York City Schools, 2013), Figure 6.

Between 2003 and 2011, New York City schools made small but significant overall gains on the National Assessment of Educational Progress, also known as “The Nation’s Report Card” or NAEP. Although NAEP is not tied to state standards and thus is less closely aligned to curriculum than state standardized tests, the test remained consistent between 2003 and 2011, the most recent administration. This makes it easier to judge whether students are making progress. The chart below shows that the city’s students, including subgroups, generally outperformed other large cities on the NAEP Trial Urban District Assessment and showed improvement over time.²⁷

TABLE 1
New York City Math and Reading NAEP Scores: Percent of students who are proficient or above by race, eligibility for free or reduced price lunch, and English language proficiency, as compared to the national average for city districts

4th Grade		2003		2005		2007		2009		2011		Change 2003-2011	2011 District Performance
		District	Average										
Overall	Math	21	20	26	24	34	28	35	29	32	30	+	+
	Reading	22	19	22	20	25	22	29	23	29	24	+	+
White	Math	42	42	46	50	53	54	58	55	50	55	+	-
	Reading	45	39	36	40	45	44	49	47	51	47	+	+
Black	Math	12	8	14	11	20	13	21	14	19	16	+	+
	Reading	13	10	16	11	15	12	17	13	20	14	+	+
Latino	Math	13	13	18	17	26	21	24	21	22	23	+	-
	Reading	16	13	15	13	16	14	20	14	19	16	+	+
Asian	Math	47	47	60	49	65	57	68	58	57	52	+	+
	Reading	39	35	47	35	43	40	50	42	43	38	+	+
ELL	Math	13	7	11	10	5	12	7	11	n/a	14	n/a	n/a
	Reading	5	6	4	5	2	6	4	4	n/a	6	n/a	n/a
Free/Reduced Price Lunch	Math	32	12	22	15	18	19	n/a	20	n/a	22	n/a	n/a
	Reading	26	12	20	12	20	13	18	15	15	16	-	-

8th Grade		2003		2005		2007		2009		2011		Change 2003-2011	2011 District Performance
		District	Average										
Overall	Math	22	16	20	19	20	22	21	24	24	26	+	-
	Reading	22	19	20	20	20	20	21	21	24	23	+	+
White	Math	40	36	38	39	39	44	47	46	44	48	+	-
	Reading	42	37	38	38	41	39	41	42	38	43	-	-
Black	Math	9	5	10	7	10	9	12	10	12	13	+	-
	Reading	13	10	10	10	11	10	12	11	16	13	+	+
Latino	Math	15	10	12	11	14	13	14	16	12	19	-	-
	Reading	17	12	14	13	13	12	13	14	17	16	+	+
Asian	Math	38	33	50	40	53	44	64	52	57	49	+	+
	Reading	35	30	42	35	37	34	40	38	46	41	+	+
ELL	Math	4	4	2	4	1	4	3	4	2	5	-	-
	Reading	2	2	2	3	1	2	1	2	1	2	-	-
Free/Reduced Price Lunch	Math	15	9	18	11	19	14	23	15	21	18	+	+
	Reading	18	12	18	13	17	12	18	13	22	16	+	+

Notes: Clarifications on the two summary indicators used on the NAEP tables for individual districts:

First, the "Change" indicator is to summarize improvement (+) or lack of improvement (-) between the first year of available Trial Urban District Assessment (TUDA) data for the district and the 2001 TUDA performance for the district. For example, for New York and Cleveland, the comparison is for 2003 and 2011, while Baltimore and Philadelphia have data for 2009 and 2011.

Second, the indicator on "Above/Below City Average in 2011" considers the difference in performance between the district and the "large central city average" in 2011. In NAEP, the "large central city average" is based on the performance of students who enroll in public schools that are located in large central cities (with population 250,000 or more) within a U.S. Census Bureau-defined Core-Based Statistical Area. It is not synonymous with "inner city."

At the same time, NAEP performance gaps between lower- and higher-income students narrowed substantially. In 2003, students eligible for free or reduced-price lunch (a measure of family income) had an average math score 34 points lower than their wealthier peers. By 2011, the gap had been reduced to 18 points.²⁸ Similarly, in eighth-grade reading, low-income students' 2003 average score was 30 points lower than the average among wealthier students; by 2011, their average score was only 14 points lower.²⁹

All of these measures—NAEP scores, high school graduation and college-readiness rates, and eighth-grade proficiency on state tests prior to the introduction of the Common Core State Standards—show that New York City students made academic performance gains during the Bloomberg years. Results on the new state test reflecting tougher standards show that their performance compares favorably to that of their peers across the state.

In fact, under the new test, New York City elementary students outperformed their peers from other large urban districts in the state and came close to the new state averages in the percentages of students proficient in math and English. In New York City, 29.6 percent of students scored proficient in math compared to 31 percent statewide, while 26.4 percent of city students scored proficient in English compared to 31 percent statewide.³⁰ This is a departure from historical trends, which show significantly fewer New York City students deemed proficient compared to the rest of the state, though the gap between city and state shrank between 2003 and 2010.³¹

Although there is strong evidence to show that overall, Children First reforms improved student outcomes, determining exactly which components of the reform were key to that success is tricky. Researchers caution that the complexity of interlocking reforms makes it difficult to determine what strategies, and/or interplay among strategies, produced which results. “Children First is quite difficult to do that with,” observes Kemple. “It’s like mercury—as soon as you put your finger on it, it shifts.”³²

NYC's reforms in the Bloomberg years

In 2002, Mayor Bloomberg assumed control of New York City's public schools and set off a wave of reform efforts still in motion more than a decade later. Mayor Bloomberg's ambitious education reforms, known as Children First, have drawn the attention of scholars and policymakers for their depth of systemic change and for their impact on student achievement. This section provides a brief history of the Children First reforms.

New York City is a unique environment. At 1.1 million students and 1,800 schools, it is the largest and most complex public school district in the nation.³³ While many observers have focused on the troubles that New York City's public schools faced before Mayor Bloomberg's election—including a fragmented system of governance and high numbers of unqualified teachers, especially in the neediest schools—it is important to note the district had also pursued strategies prior to Children First that supported reform and innovation, including a pilot effort to eliminate middle layers of bureaucracy.³⁴

New York City has long been home to some of the nation's best teacher-training institutions, such as Teachers College, Columbia University, and the Bank Street College of Education, and has also led in improving support for teacher professional development. Between 1987 and 1995, Community School District 2 superintendent Anthony Alvarado changed its staffing and implemented innovative professional-development practices that improved the overall quality of teaching.³⁵ Even without drastic changes in New York City's school human-capital system, Alvarado deliberately replaced about two-thirds of the district's principals within four years.³⁶ He also pushed principals to evaluate teachers more thoughtfully, which led, paradoxically, to both stronger working relationships between principals and teachers and the replacement of about 50 percent of the district's teaching force over eight years.³⁷

Alvarado's professional-development practices emphasized creating a culture of personal commitment and mutual concern among school staff coupled with relentless focus on improving classroom instruction. District 2 teachers and principals built collegial networks within and across schools. Through these networks, school staff collaboratively planned instruction. Teachers and administrators had regular opportunities to see best practices, try them in their own settings, receive feedback, and reflect on the results.³⁸ Long after Alvarado's departure, the teachers, principals, staff developers, and other district personnel of District 2 continued these practices; some are still working in New York City schools today. The mindset and capacity of these professional educators to lead instructional improvement are often-overlooked assets in discussions of the city's education reform efforts.

Likewise, the roots of New York City's high school transformation run deeper than Mayor Bloomberg, beginning with leading educator Deborah Meier's innovative Central Park East small schools, including a small high school founded in 1985.³⁹ The 1990s saw continued interest in small schools as a tool for reform. Much of that work was funded by the Annenberg Challenge and managed by the nonprofit New Visions for Public Schools.⁴⁰ Research indicates that the decision by Mayor Bloomberg and his schools chancellor, Joel Klein, to scale up pre-existing efforts to transform so-called dropout factories into smaller, more personalized high schools paid off in reducing the number of dropouts and increasing the number of college-ready graduates.⁴¹ New Visions itself is but one example of the many locally based nonprofits that have supported public school improvement efforts. This deep bench of support from external agencies is another New York City asset envied by many other cities.

Some of Mayor Bloomberg and Klein's initial reform strategies—notably, centralized governance and mandated curriculum—echoed strategies used by Chancellor Rudy Crew in 1996, when he took direct control of 58 of the city's lowest-performing schools.⁴² This “chancellor's district,” as it was called, increased student achievement for participating schools but had no impact on the larger system and was dissolved. In essence, mayoral control provided an opportunity to scale up direct control of schools by the chancellor. Though schools later received much greater autonomy, this initial centralization laid a foundation of consistent citywide practices.

Mayor Bloomberg and his education leadership had the advantage of launching Children First with the support of critical pre-existing assets, including a foundation of reform and innovation. Once launched, Children First reforms evolved.

Over its entire history, no single person other than Mayor Bloomberg himself stayed involved in the central leadership of the effort. Rather than thinking of Children First as a neat blueprint of internally consistent school-reform strategies, it might be more accurate to view it as a series of three phases involving significant shifts in strategy.

Phase 1: Consolidation and centralization

In 2002, Mayor Bloomberg won control of New York City's schools and appointed Klein to serve as chancellor of the system.⁴⁴ Much of the initial Bloomberg/Klein strategy was focused on remaking the New York City Board of Education and the city's 32 community school districts. Both these structures had long been viewed as bastions of patronage and red tape that prevented systemic change from taking root.

To that end, Mayor Bloomberg immediately replaced the elected board of education with the Panel for Educational Policy, an appointed board with a majority of members chosen by the mayor.⁴⁵ Under New York City's version of mayoral control, the mayor also appoints the school's chancellor. In 2003, Klein restructured district administration, replacing the 32 community districts with 10 administrative regions. Klein's express intent in doing so was to disrupt business as usual in hiring and the exchange of political favors.

Mayor Bloomberg and Klein also centralized key practices that previously were locally determined. They ended social promotion—passing students to the next grade level to keep them with their peers regardless of academic attainment—and required all schools to use common math and literacy curricula.⁴⁶ It seems likely that centrally mandating curriculum was an important first step in a system with high student mobility and no citywide curricular framework. Although the later advent of school autonomy meant that the common curricula were recommended, not required, by 2013 about 70 percent of schools were still using the math and literacy curricula mandated 10 years earlier.⁴⁷

A research-based perspective on New York's City's evolving reforms

In 2009, the American Institutes for Research launched the New York City Education Reform Retrospective, an effort to document key reform policies of Children First, explore their implementation, review their results, and identify possible lessons learned.⁴³ The retrospective scholars observed that Children First reforms occurred in two main phases. The years 2002 through 2006 saw consolidation in both governance and curriculum. From 2007 through 2010, a new wave of reforms took hold, focused on offering greater autonomy to schools and their leaders in exchange for greater accountability for performance. This report follows the retrospective's distinction between these two phases of reform and adds more recent information on the third phase, which began with Joel Klein's 2010 resignation and continues through 2013, when Mayor Bloomberg's third and final term ended.

While transforming the district, Mayor Bloomberg and Klein also took steps to remake the schools. Years before what is referred to in education circles as the “urban principal pipeline” became a national priority, Mayor Bloomberg and Klein launched a central academy for principal training—the NYC Leadership Academy. They also scaled up pre-existing efforts in the city to establish smaller schools—part of the small school movement aimed at reorganizing large high schools into small schools of no more than 400 students—and opened the door to charter schools.

Mayor Bloomberg and Klein aggressively courted private investment that supported their reform agenda. New York City began to work closely with the Bill & Melinda Gates Foundation on small schools. The city’s small schools initiative also engaged nonprofit intermediary organizations such as New Visions for Public Schools. This early work set the stage for the extensive partnerships with outside organizations in phase two of New York City’s school reform, when New Visions and other intermediaries took on district-like levels of support and oversight for the new schools they helped birth.⁴⁸

By 2004, Mayor Bloomberg and Klein were beginning to lay the foundations of the autonomy-accountability exchange that would dominate phase two of Children First. They invited 29 schools to join the Autonomy Zone, which offered schools per-pupil budgeting, the freedom to hire teachers regardless of seniority, and independence in choosing sources of professional development.⁴⁹ The following year, Mayor Bloomberg and Klein created the Office of Accountability, the centralized department charged with developing evaluation tools to hold schools accountable for student performance.

In 2005, phase one of Bloomberg’s reforms culminated in an innovative contract with the United Federation of Teachers that changed teacher-transfer policies and gave principals greater freedom to hire teachers regardless of seniority. The contract built upon earlier human capital work to reduce the numbers of unlicensed teachers, make hiring practices more competitive, and increase both principal and teacher control over teachers’ school placements.

Phase 2:

The essential exchange—autonomy for accountability

After piloting the Autonomy Zone, Klein chose to rapidly expand autonomy to most of the city's schools—a decision that became the hallmark of phase two of reform under Mayor Bloomberg. By the fall of 2006, the Autonomy Zone had been renamed the Empowerment Zone, and 332 of the system's roughly 1,600 schools were participating.⁵⁰ Progress reports and quality reviews were employed to measure schools' performance. A citywide data system and specialists were put in place to support schools as they shifted toward more data-driven instructional practices.

Accountability for performance reached new levels of depth in the school system. In the spring of 2007, principal-performance reviews and reward systems were renegotiated to align principal evaluation with the city's progress reports for schools. Principals also signed performance contracts, in which they agreed to meet goals for student academic performance. Starting in 2012, significantly fewer teachers have been awarded tenure as multiple value-added measures have been applied to tenure decisions.⁵¹ But a pilot effort to institute performance pay for teachers was scrapped after a RAND study found that the program had had no impact on student achievement, most likely because it did not change teachers' instructional practices.⁵²

During phase two, the central office was reorganized again, this time to streamline supports for autonomous school leaders by decentralizing them. At first, schools could choose to partner with one of 11 school support organizations operating citywide. By 2009, this strategy had evolved into networks of support for schools.⁵³ Today, every principal must choose to affiliate with one of 55 networks—teams of about 15 people that help with everything from professional development to budgeting—based on their sense of fit with a network's philosophy and the supports it offers. The networks must balance supporting schools with informing the still-existing community-district superintendents about the performance of principals and teachers.⁵⁴ A 2012 principals survey found 90 percent of respondents to be satisfied or very satisfied with the networks they have joined.⁵⁵

In New York City, Children First reforms have strengthened leadership at the top and bottom of the governance system, while reducing the bureaucratic log jam in the middle. In political scientist Paul Hill's view, New York City's reform strategy increased leadership—the ability of top officials to make change—and reduced the governance constraints—distributed powers, required consultations, and established procedures—that can hinder leaders' ability to act.⁵⁶ The New York City

district won recognition of the changes and their results for students in 2007, when the Broad Foundation awarded the city’s school system its coveted prize for urban school districts that “demonstrate the greatest overall performance and improvement in student achievement while reducing achievement gaps among low-income and minority students.”⁵⁷ Eligible large urban districts are reviewed by a board of prominent education experts, who select four finalists based on their students’ performance and improvement results on state standardized tests, progress reducing achievement gaps, graduation rates, performance on Advanced Placement tests and college-readiness tests like the SAT and ACT, and demographics.⁵⁸ Each finalist district receives a four-day site visit from a team of experienced education researchers and practitioners, who analyze district policy and practices for their effectiveness in teaching and learning, leadership, and operations. A selection jury of nationally known leaders from business, government, and public services reviews the quantitative and qualitative data to choose the winner.⁵⁹

In 2008, the New York City Council voted to extend mayoral-term limits, allowing Mayor Bloomberg to run for an unprecedented third term. In 2009, the New York State Legislature chose to renew mayoral control of the New York City schools.⁶⁰ Together, these legislative decisions gave Mayor Bloomberg control of the schools for a far longer period than anyone anticipated when he took office.

Phase 3: Sustaining reforms during leadership change

These steps toward long-term continuity of reform were briefly interrupted. Klein’s 2010 resignation as chancellor sparked a short period of uncertainty at the top. Mayor Bloomberg hired Cathleen Black, formerly chairwoman of Hearst Magazines, to replace Klein, but she resigned suddenly after a controversial three months in office.⁶¹ Deputy Mayor Dennis Walcott, a former kindergarten teacher and a longtime Bloomberg education advisor, took over as chancellor in 2011 and has remained in the job since.

Walcott has focused on strengthening and sustaining earlier reforms, particularly the management of the city’s portfolio of schools. During Walcott’s tenure as chancellor, the city has opened 132 new schools and closed or phased out 41 schools deemed under-performing.⁶² Walcott himself has focused attention on reforming the city’s struggling middle schools—commissioning research to determine why middle school teachers leave, intensifying professional development with a focus on improving student literacy, and creating a cadre of middle schools with expanded learning time.⁶³

Changes in teacher evaluation are likely to be one of the most significant reforms accomplished during Walcott's tenure. A New York state law passed in 2010 required districts to create four tiers of possible evaluation ratings based on both classroom observations of teacher performance and student test scores.⁶⁴ But a standoff between the district and the teachers union over details of the city's teacher-evaluation system led to a loss of \$250 million in state aid to city schools and required an arbitrator to step in to finalize the new system.⁶⁵ The new system, scheduled to roll out in the fall of 2013, calls for 20 percent of a teacher's rating to be based on student growth on state tests, another 20 percent on measures established within each school, and the remaining 60 percent based on classroom observations.⁶⁶ The percentages proposed were open to change if the New York State Board of Regents approved a value-added model for teacher evaluation; however, the Board of Regents chose to adopt a very similar model while leaving the weights unchanged in the first year of implementation.⁶⁷

Remaking the district: Mayoral control, school autonomy, and accountability

In 2002, state lawmakers granted Mayor Bloomberg control of New York City's school system, opening the way for him to restructure its longstanding configuration of 32 local, semiautonomous districts. Of the various forms of mayoral school control now operating in large cities, only Chicago's system grants the mayor more power than New York City. The mayor of New York City appoints the chancellor, who chairs an advisory board known as the Panel on Educational Policy, or PEP. The mayor appoints eight of the 13 members; each borough president appoints one of the remaining five members. The official who appoints a board member can remove that member at any time. In 2009, state legislators renewed mayoral control, which will remain in effect until 2015, when it could be renewed or rejected.⁶⁸

Mayor Bloomberg and his first schools chancellor, Joel Klein, exercised that control in a two-phase process: first centralizing authority to eliminate layers of red tape and establish citywide norms, and then devolving authority to school principals in exchange for greater accountability for the academic performance of their students. This essential exchange of autonomy for accountability, regardless of a school's prior performance, stood in sharp contrast to other districts where autonomy served as a reward for strong school performance. It appears that broader access to autonomy, coupled with accountability for results, allowed schools to improve. There has been pushback, however, from principals, teachers, and the public over the pace of change, the balance between sanctions and support, and the lack of clarity over how to access district resources.⁶⁹

Education scholar Frederick Hess has observed that mayoral control in the hands of "a strong and accountable mayor is a promising way to jump-start school improvement."⁷⁰ Even critics of New York's mayoral control have concurred that it fostered change in a long-stagnant system.⁷¹ Strengthening top-level leadership made it possible for those leaders to give school principals greater authority and responsibility for how the work of learning was conducted in their schools. However, in recent polls, New Yorkers appear ready to have their mayor share

control of the schools with an independent school board, including 67 percent of public school parents surveyed.⁷² At the same time, New York City Council members have also engaged in a vigorous debate about how best to fine-tune the district's role in accountability and support for schools.⁷³

Cutting bureaucracy through centralization

Prior to mayoral control, New York City's schools were governed by a partially decentralized system created in response to the late 1960s' calls for greater local control to meet local needs. The system comprised a chancellor who was responsible to an elected central board and 32 locally elected community boards, each with its own superintendent.⁷⁴ Researchers have characterized this system as poorly implemented, with conflicting powers held by both the chancellor and the local boards and without sufficient training for either the local board members or for central office staff. Though the effort to decentralize encouraged the early growth of small schools and increased minority hiring, these successes were outweighed by reports of nepotism, corruption, and continued central mismanagement.⁷⁵ Previous state legislation had already shifted some authority to the central office, such as giving the chancellor power to fire low-performing local superintendents. But Mayor Bloomberg used the negative reputation of the 32 community school districts to push for further centralization.⁷⁶

Once Mayor Bloomberg had control of the school system, he and his appointed chancellor, Joel Klein, took swift steps—both symbolic and substantive—to consolidate their new authority and shake up the old ways of doing business. The longstanding central district offices, 110 Livingston St. in Brooklyn, were closed and the renamed New York City Department of Education moved to new offices in the Tweed Courthouse, next door to City Hall. The Tweed headquarters was configured in open-office style, eliminating closed-door offices in an effort to break down silos and promote collaboration. It also strengthened Klein's oversight and coordination of governance functions, including the general counsel, which worked closely to support reform efforts. Those efforts included monitoring reform actions that might prompt lawsuits making sure that the district would have legal grounds sufficient to win if challenged. This was and is a departure from most school districts' legal staff, which usually operate with greater independence and put brakes on reform efforts likely to provoke legal challenge.⁷⁷

Klein also reorganized the central office into 10 regions, eliminating the central structures that corresponded to the old 32 community districts. He reduced the authority of the 32 local superintendents and mandated common math and literacy curricula for grades K-8.

Increasing school autonomy

As early as the fall of 2004, Klein launched a pilot project that gave school principals greater autonomy and freedom to lead within their buildings. A total of 29 schools, including 14 new schools, volunteered to join the new so-called Autonomy Zone. In exchange for control of budgets, hiring, and teacher professional development, these principals signed five-year performance contracts that specified they would meet targets for a variety of indicators, including attendance, graduation rates, and test scores. If Autonomy Zone schools missed more than a certain number of targets, they faced an aggressive series of consequences, including the possibility that the principal could be removed after two years of missed targets, and the school could be closed after three years of inadequate performance. Two years into the program, only two schools had failed to meet their goals.⁷⁸ These successes informed both district policy change and the 2005 contract negotiations with the United Federation of Teachers. By the 2006-07 school year, most schools citywide had the same freedoms.⁷⁹

After piloting the Autonomy Zone, Klein went on to implement even more radical strategies to reduce district control of schools and empower principals to chart their own courses. By 2007, Klein had disbanded the 10 geographically based administrative regions in favor of a three-pronged organizational structure.⁸⁰ By far the largest number of school principals received full autonomy in exchange for performance contracts, and then formed self-managed networks of support known as Empowerment Support Organizations, or ESOs. Schools already partnered with external nonprofit organizations—such as small high schools supported by New Visions—received autonomy in exchange for performance, and their partners were formally recognized as Partnership Support Organizations, or PSOs, and held accountable for the results of schools they supported. Finally, the district continued to offer four Learning Support Organizations, or LSOs, to schools that did not adopt an ESO or PSO. The four LSOs resembled the previous district-sponsored regions but were not geographically based.⁸¹

As the district offered schools greater autonomy, it also built new accountability structures. During the 2006-07 school year, Klein debuted both Quality Reviews—school visits by outside experts, modeled on the school-inspection process in Great Britain and Hong Kong—and school Progress Reports, which gave each school a letter grade. The grades were based on four subsections: school environment, student performance, student progress, and additional credit for raising the performance of the school’s lowest performers. In an effort to encourage schools to focus on the individual needs of their students, individual student growth on tests from year to year was given greater weight than the average absolute performance of the schools’ students at a point in time.⁸²

Together, Quality Reviews and Progress Reports pushed schools to use data as a tool for instructional decision making. In the 2007-08 school year, New York City launched its Achievement Reporting and Innovation System, known as ARIS, which was intended to make it easier for teachers to access data on their students and school and use it to guide instruction. But a 2012 report from the Research Alliance for New York City Schools found that while ARIS was useful to building leaders for schoolwide planning and monitoring a school’s overall progress in meeting accountability metrics, ARIS lacked the real-time information that teachers needed to design instruction. Teachers also had not received sufficient training or time to use ARIS effectively.⁸³

Some observers credited the district with using accountability to encourage a focus on the neediest students. “It’s making [schools] pay attention to their bottom third,” observed Jill Herman, a former principal and leader of an ESO managed by the nonprofit Urban Assembly.⁸⁴ “People are beginning to try and figure out where kids are stuck. You can’t fix things if you don’t know what’s wrong.”

Others noted flaws in the measurement system used for Progress Reports. Harvard testing expert Dan Koretz pointed out that New York state’s tests were designed as point-in-time measures, making them inappropriate for measuring year-to-year student or school growth. Year-to-year scores also changed unpredictably, suggesting measurement error. In 2010, the district’s Office of Accountability changed its methods for calculating student progress to address these criticisms and give more credit to schools with large numbers of high absolute scores.⁸⁵ The most significant of these changes was a shift in the calculation of student progress in elementary and middle schools; the new method measured an individual growth percentile for each student.⁸⁶ This method compares a student’s performance with that of a peer group that started at the same proficiency level the prior year and indicates the percentage of peers who scored lower than that student

did.⁸⁷ These individual growth percentiles are then used to calculate two Progress Report indicators: the median growth percentile for all students in each school and the median growth percentile for the bottom third of students based on the prior year's test results.⁸⁸ A 2012 report from the Independent Budget Office found this change in methodology increased the year-to-year stability of the student progress sub-score, indicating it improved the Progress Report's ability to capture "systemic rather than spurious" differences between schools.⁸⁹

Since its launch, the Quality Review process has also undergone changes. Originally, Quality Reviews were conducted annually by outside consultants at significant expense—the initial three-year contract cost \$19 million.⁹⁰ According to James Liebman, the New York City Department of Education's first chief accountability officer, the intent was to "instill a culture of data-driven instructional differentiation in our schools" without pushing a particular educational philosophy or professional-development strategy.⁹¹ By 2009, the district no longer reviewed every school annually. Schools with A's or B's on their Progress Reports and previous Quality Review ratings of proficient or higher were scheduled for review every third year provided they maintained or raised their Progress Report grade.⁹² At the same time, the system's principals and central administrators took over the work of Quality Reviews.

These changes—which focused on low-performing schools and relied on insiders with an eye on more specific behaviors and practices—had the unintended consequence of transforming the process into one "much more compliance oriented than the DOE intended," according to Stacey Childress and her research colleagues.⁹³ Since 2010, the Quality Review process has been changed to allow support networks to have a greater role in conducting Quality Reviews for new and high-performing schools.⁹⁴ This allows the Department of Education to concentrate on reviewing under-performing schools, new schools in their third year of operation, and schools that have not been reviewed for four years or more.

As accountability has changed, so have the supports for autonomy. The three types of support organizations—ESO, PSO, and LSO—evolved into nongeographic, self-selected, self-governing networks. Once a year, schools have the option to switch their network affiliation. By 2010, networks were not only supporting schools instructionally, but operationally as well.⁹⁵ District leaders say the change reduced the costs of support to schools by 32 percent between 2006 and 2011, and that the savings have gone directly to schools.⁹⁶ In May 2013 the expansion of Children First networks was named among the top 25 programs in an innovations competition sponsored by Harvard's Kennedy School of Government.⁹⁷

Results of remaking the district

Knowledgeable observers credit the shift to mayoral control in New York City with opening space for real reforms to the district and its schools in ways previously thought impossible. “Whether or not you agree with the strategy [of mayoral control], [Mayor Bloomberg and Klein] showed you could move the system. People didn’t think you could do that before they came in,” noted Teachers College’s Henig.⁹⁸

Mayoral control also had clear links to significant effects. For example, New York City schools’ share of private philanthropic dollars increased roughly fivefold from 2000 to 2005.⁹⁹ Since 2000, major private education funders have displayed a strong preference for funding school districts controlled by their city’s mayor.¹⁰⁰ Foundation officers appear to value a paradoxical set of circumstances present in some high-profile cities: stability of leadership offered by multiterm mayors such as Mayor Bloomberg, coupled with school governance giving them broad power to shape change within the school system.¹⁰¹

However, it is more difficult to establish a direct relationship between mayoral control and student achievement. Research has established a relationship between mayoral control and increased student achievement of New York City’s African American and Latino fourth-graders in math and reading, but no significant direct effects on student achievement in other grades and subjects.¹⁰²

Over time, New Yorkers’ perspectives on mayoral control have become more nuanced. As state lawmakers prepared to decide whether to renew mayoral control in 2008, New York City saw the emergence of three groups with three different positions on mayoral control.¹⁰³ Learn NY, with close ties to Mayor Bloomberg and central office administrators, supported the existing law on mayoral control with no changes. The Campaign for Better Schools, a broad coalition of 26 advocacy, policy, and research organizations, recommended changing mayoral control to provide checks on mayoral power, greater transparency, and greater public participation in policymaking. A third group, the Parent Commission on School Governance and Mayoral Control, was appointed by the city’s public advocate, an elected official who serves as a watchdog on policymaking and public accountability. The parent commission, which consisted of parent leaders from Community Education Councils—the 32 local-district boards with reduced powers—plus parent advocates from grassroots groups critical of Mayor Bloomberg’s policies, recommended even more radical changes to school governance, such as creating fixed terms for the central PEP board and creating a mix of elected and appointed members.¹⁰⁴

Despite the parent commission's critical stance toward mayoral control, in its final report, the group noted that mayoral control had been a necessary precondition for change in a stagnant system. "Since 2002, the school system has undergone more change than in any similar period in its history. The amount of change that has occurred in a once-immovable school system may be the most significant measurable impact of mayoral control. While change is not synonymous with progress, it is a prerequisite for progress."¹⁰⁵

But once change became possible, the parent commission saw a need for mayoral governance to evolve. In a 2011 television interview, the group's executive director, Joseph Viteritti, summarized its recommendations this way: "There need to be more checks on the power of the mayor, and there need to be more avenues for community and parental involvement."¹⁰⁶ Though their recommendations were largely ignored in the 2009 renewal, these concerns remain part of the public discourse and could be addressed in 2015, the next time state lawmakers will be asked to renew mayoral control in New York.¹⁰⁷

Remaking the schools: Small schools, choice, closures, and charters

At the same time that Mayor Bloomberg and Klein were remaking the relationship between the district and its schools, they were also remaking the schools themselves, especially high schools. They quickly scaled up pre-existing efforts to transform the city’s mammoth high schools—disparagingly termed “dropout factories”—by replacing them with multiple, small schools housed in the same building. By early 2003, Klein had opened the Office of Small Schools within the New York City Department of Education and given it a mission to open 200 new, small high schools. By 2013, New York City had opened 337 new, small high schools and closed or begun phasing out 63 pre-existing high schools.¹⁰⁸ Research indicates that this dramatic transformation has supported more struggling students to graduate and increased completion rates of the state’s rigorous Regents diploma.

Though the Bill & Melinda Gates Foundation—formerly a national supporter of small high schools—chose to shift its focus away from small schools, New York City has maintained and expanded its high school reform efforts. (Bill Gates has publicly acknowledged that New York City’s small schools have been the exception to a national pattern of disappointing results from the small schools push.¹⁰⁹) It continues to open new high schools and is a nationally recognized leader in innovations to meet the needs of over-age high school students who have earned few credits.¹¹⁰

New York City education leaders took meticulous care in some aspects of the transformation process—opening new schools one grade at a time to build the culture while allowing closing schools to graduate out their remaining students. Yet existing large high schools that were not phased out struggled as their enrollments jumped when new, small schools could not accommodate the entire enrollment of their predecessors. Significant numbers of large high schools faced increasing enrollments coupled with declining attendance and graduation rates.¹¹¹

New York City has a long history of offering families a broad array of school options. Researchers credit the push for families to choose their child’s high school with fostering the growth of small schools. Some families have struggled to navigate the complex choice process, especially in high school admissions.¹¹²

Mayor Bloomberg and his chancellors have further expanded choice by accelerating the growth of charter schools. In New York City's challenging real estate market, inviting charter operators to share space with district schools in district buildings has been critical to successful expansion. By fall 2013, New York City was home to 183 charter schools, mostly elementary schools, serving 70,000 students or about 6 percent of the system's enrollment.¹¹³ Multiple studies indicate that students in New York City's charter schools show higher performance than their peers in district schools.¹¹⁴

Over time, the district has increasingly coordinated new schools, closures, and charters as a portfolio-management strategy. Starting new schools and phasing out others have been closely coupled since the early Bloomberg years, but charters have only more recently been integrated into the new-school strategy. Since the arrival of Chancellor Walcott, revitalizing middle schools has gained traction as a reform strategy, including the creation of 54 new middle schools by September 2013. About half of the new middle schools are charters.¹¹⁵ But political pushback related to charters sharing district-operated facilities may slow the growth of charters once Mayor Bloomberg leaves office.

Small schools: Successful and sustainable

Small schools have deep roots in New York City, stretching back to the creation of Central Park East Elementary School in East Harlem in 1974. Through the 1990s, New York City's Annenberg Challenge effort focused on the creation of small schools in high-poverty neighborhoods. Local sponsors included the nonprofit New Visions for Public Schools, which went on to play a major role in small-school creation under Mayor Bloomberg. With funding from the Gates Foundation, Carnegie Corporation of New York, and Open Society Foundations—formerly the Open Society Institute—New Visions supported the creation of the New Century High Schools, 75 small high schools, between 2002 and 2005. An evaluation conducted by Policy Studies Associates showed higher attendance and graduation rates for students in the New Century High Schools than in both a comparison group of larger high schools and citywide.¹¹⁶

Since 2010, MDRC, a nonpartisan social policy research organization, has released a series of reports that evaluate the small schools effort by comparing student outcomes for graduates of small schools with outcomes for students who applied to small schools but did not win lottery admission and went elsewhere.

Their research focuses on 105 small schools in New York City mostly serving students in neighborhoods where large, underperforming high schools had been closed. The schools in the study did not have a screening process for admissions; however, these schools received more applications than they could accept. As a result, their students won admission by a centrally administered random lottery. Meanwhile, lottery losers generally attended larger high schools, though a small fraction of those schools had developed efforts to increase personalization, such as small learning communities.¹¹⁷ MDRC demographically matched lottery winners to lottery losers and studied cohorts of entering ninth-graders in the fall of 2005 through 2008. The randomized assignment of students and the large sample size both of schools and of students—21,000 students—met the highest standards of social-science research.¹¹⁸

In 2013, MDRC released a report that extended its analysis of graduation rates among small schools graduates to a third graduating class, and found 70.4 percent of students in the three cohorts graduated in four years, compared to only 60.9 percent of their peers in control group cohorts.¹¹⁹ Importantly, the new report indicates special education students and English language learners are also graduating at higher rates from small schools, although their numbers are still too small to judge whether these increases are statistically significant.¹²⁰ An October 2013 report from researchers at the Massachusetts Institute of Technology and Duke University showed that graduates of small schools were more likely to attend college, less likely to need remediation, and more likely to persist in college for at least two semesters.¹²¹

In their 2010 report, MDRC researchers noted that effecting change at scale through a small schools effort to improve graduation and college readiness requires effective implementation of an interlocking set of reforms.¹²² Neither closing schools nor creating small schools independently would likely have achieved the same results. Importantly, the schools created were not simply small but were mission focused, intentional in providing both academic and social-emotional support for their students, and selected through a rigorous application process. In addition, district and external resources have protected and supported small schools through their startup phase. The NYC Leadership Academy developed a New School Intensive track for new, small-school principals (since discontinued), and has invested in additional training for small-school principals and teachers. Most significantly, small schools are allowed to start with only ninth graders and grow to full ninth- through 12th-grade enrollment over four years, which requires a significant investment of startup money before per-pupil funds are sufficient to sustain the school's budget.

Sustaining the small schools' initial successes will be challenging. Startup high schools have faced special challenges in establishing culture, retaining staff, and even finding a stable home. A report commissioned by the Bill & Melinda Gates Foundation observed a near-universal "second-year slump" in small-school attendance, related to the sudden doubling of the numbers of students and faculty as new high schools increase in size.¹²³ A 2009 report published by the Center for New York City Affairs tracked 210 small schools opened between the fall of 2002 and the fall of 2007 and found that the first three cohorts of schools had principal-turnover rates ranging from 40 percent to 60 percent, rising the longer the school had been open.¹²⁴ Also, nearly one-quarter of the small schools had experienced one or more changes in location since opening, usually moving among floors within the high school building or adding floor space as their enrollment grew. Shifting classrooms puts more pressure on nascent school culture.¹²⁵

New York City has done an admirable job of sustaining small-school reform over time even as funders shifted strategy. Cities elsewhere have chosen to recentralize multiple small schools into one. Meanwhile, MDRC researchers have suggested New York City's small schools implementation could serve as "a blueprint" for future national reforms of urban high schools.¹²⁶ The involvement of external partners such as New Visions, which helped create more than 100 of New York City's small schools and now supports 73 of them by offering teacher professional development and support in analyzing student data, will be critical to the long-term success of small schools. In its most recent report, MDRC announced it has contracted with an expert in school finance to compare the operating costs of small schools with those of New York City high schools attended by control group students.¹²⁷ This analysis should provide critical information to other districts interested in developing small high schools of choice.

Challenges stemming from choice

New York City has long had significant choice options for parents, and the advent of small high schools expanded them further. In 2003, New York City virtually eliminated zoned neighborhood high schools and implemented a system requiring students and their families to actively select their high school choices. Students were matched to schools through a complex process modeled on the match system for medical residencies. The system allows students to submit up to 12 ranked high school options from among about 700 programs; in addition,

they can take the exam for the city’s most-selective “specialized” high schools and/or audition for New York City’s public, performing-arts high school.¹²⁸

MDRC notes that the adoption of a new high school admissions process that required all students to choose a high school likely helped small schools gain traction among underserved students.¹²⁹

At the same time, many students and their families are struggling to navigate the high school choice process. About 80,000 middle school students a year apply to New York City high schools.¹³⁰ The Center for New York City Affairs reported that about 14,000 entering ninth-graders annually are assigned to schools they did not choose. About half were rejected from all of their choices and the other half simply showed up in the fall and were assigned to whatever schools still had open seats—generally, the city’s lowest-performing schools.¹³¹ A study of the choices made by eighth graders in 2008 showed that students tended to prefer high schools that matched their own academic, racial, and socioeconomic background, suggesting the possibility that choice might increase stratification by race, socioeconomic status, and academic ability. According to study authors Sean Corcoran and Harry Levin, “If demand is relatively insensitive to academic quality and more responsive to location and/or social influences, even a fair system of choice will fail to provide an impetus for academic improvement.”¹³²

Corcoran and Levin pointed to geography, eligibility constraints, and student preferences as factors affecting the choice process. The Center for New York City Affairs noted that middle school guidance counselors, who serve as the bridge to high school admissions, have caseloads ranging from 100 students to more than 300 students. Special-needs students and children of immigrant families face additional barriers in choosing schools.¹³³ Additionally, the test-based admissions process to the city’s specialized high schools—elite schools such as The Bronx High School of Science and Stuyvesant High School—has been challenged by the National Association for the Advancement of Colored People and other civil rights groups for denying admission to African American and Latino students at much higher rates than other racial and ethnic groups.¹³⁴

The flip side of the effort to grow the number of new schools in New York City, particularly new small high schools, has been increased emphasis on closing underperforming schools, particularly large, low-performing high schools. Central administrators have adopted an active portfolio-management strategy for high schools, describing the need to “open enough so you can close enough.”¹³⁵

As large high schools were phased out and replaced by small schools, the remnant school enrollments shrank and many students shifted to nearby large high schools. Also, although small schools did not select students based on test scores or other measures of academic performance, until 2007 they were allowed to exclude special-needs students and English language learners during their first two years of operation, in order to reduce the challenges they faced.¹³⁶ Those students went to other large high schools instead, adding to enrollment increases.

In its 2009 report, the Center for New York City Affairs report suggested a possible “domino effect” from the increased enrollment of high-need students in nearby struggling large schools leading to lowered attendance and the eventual closure of other large high schools near the schools in the first wave of closures in Brooklyn, the Bronx, and Manhattan.¹³⁷ The Center for New York City Affairs, however, is planning to release a follow-up study that indicates the small schools have taken in an increasing share of high-need students--students with special needs and English-language learners—and the system has taken measures to ensure those students have greater access to a wide variety of schools citywide.¹³⁸

Charter school performance outpaces the nation

During Mayor Bloomberg’s tenure, his administration has considered charter schools as part of the public school system. As a result of that support, the number of New York City charter schools has grown from 14 in 2001 to 183 in 2013.¹³⁹

Charter schools’ effectiveness has been a subject of intense debate, both nationally and in New York City. Stanford University’s Center for Research on Education Outcomes, or CREDO, has evaluated charters both nationally and in New York City. Its 2009 study of charters in 16 states, not including New York state, showed that only 17 percent of charter schools outperformed their district schools on standardized tests, while 37 percent of charters studied had underperformed relative to their district-run peers. The remaining 46 percent of charters showed no appreciable differences from their district peers in terms of student academic performance as measured by state tests.¹⁴⁰

In the wake of this report, the New York City Department of Education commissioned CREDO to employ the same methodology—comparing each charter school student’s academic performance with that of a composite district-school student peer matched for demographics (“virtual twin”)—in analyzing its charter schools. In a 2010 report, CREDO found that New York City’s charters were

performing better than the national sample: In 51 percent of the city's charters, students outperformed their local peers in math, and 29 percent of the charters had students performing above local peers in reading. The 2010 report also examined charter students' academic gains over three years and found that while their reading gains lagged behind district peers in their first year at a charter school, students made substantial gains in both reading and math in their second year.¹⁴¹

In 2013, CREDO released an updated study of New York City's charters and found that they had continued to make strong math gains with their students, while reading gains were more modest. Expressed in months of learning, the city's charter school students on average gained five additional months in math and one in reading compared to their peers in district-managed schools. However, the results for students varied significantly from school to school, and charter schools generally performed better in math than in reading. In math, 63 percent of charter schools outperformed their district peers while only 25 percent of charters outperformed district schools in reading, which was a lower proportion than in 2010. The update report also looked specifically at charter results in Harlem, an area that had been deliberately targeted for charters to provide new options in hopes of raising the academic achievement of previously underserved students. Harlem charter school students showed even greater math gains than other charter school students, while their reading gains were slightly smaller. For Harlem students, the gains represented seven months' worth of additional math learning and less than one additional month of reading.¹⁴²

CREDO researchers noted that mediocre charters in the district remain a problem. "The number that demands attention is the nearly 46 percent of New York City charter schools that have both low growth and low achievement in reading," said Devora Davis, research manager and lead author of CREDO's 2013 New York City report. "If things continue as they are students in these schools may be at risk of falling further behind their peers in the city over time."¹⁴³

In New York City's tight real estate market, independent facilities for charters can be prohibitively expensive. Mayor Bloomberg's openness to charters has translated into a willingness to let them share space with existing public schools, a practice known as co-location. District openness to co-location with public schools has been a major factor in the growth of charter schools. As of 2011, about 60 percent of charter schools were located within public school buildings.¹⁴⁴ At the same time, opposition to the co-location strategy is growing, and there are several lawsuits and state bills aimed at slowing or stopping the practice.¹⁴⁵ These challenges may force charters to work with the private market to find new facility solutions, such as tapping the bond market.¹⁴⁶

Remaking the budget: Focus on equity

New York City's schools have long struggled with inadequate and inequitable funding. During the Bloomberg years, city spending on schools has more than doubled, reaching a budget of \$24.5 billion for fiscal year 2014, an increase of \$1 billion over fiscal year 2013.¹⁴⁷ The Great Recession and its fallout, however, kept city schools on a financial roller coaster.

The first half of Mayor Bloomberg's tenure enjoyed substantial increases in local revenue and a brief infusion of new, court-ordered state funds intended to promote funding equity among New York state school districts.¹⁴⁸ During the period, Mayor Bloomberg invested in teacher salary increases. Higher starting salaries for new teachers made the city schools more competitive with neighboring districts in hiring new teachers.¹⁴⁹ Between 2002 and 2008, the district also faced rising costs in teacher benefits due to rising health care and pension costs, plus a 20 percent increase in the number of full-time special-education students, from roughly 82,000 students to more than 98,000, which was nearly 10 percent of the 2008 enrollment.¹⁵⁰ (Both of these trends—rising benefit costs and more special-education students—have continued between 2008 and 2013.)

The initially rosy economic picture changed as a result of the 2008 recession and continuing economic challenges in its wake. Though other factors were involved, it is likely not a coincidence that the pace of school reform in New York City slowed once the economy stalled. The recession led to substantial cuts in state education funding, offsetting the early equity gains following implementation of the court-mandated state aid formula.¹⁵¹ And a hiring freeze imposed in 2009 has only been partially lifted. Going forward, New York City cannot rely on the state or on previous economic trends to boost school revenues.

The Bloomberg years have also seen new emphasis on ensuring that dollars follow students, especially those with greater educational need. In 2007, New York City schools began implementing a system of weighted per-pupil funding for schools known as Fair Student Funding. Traditionally, schools received funds based on the

salaries of the teachers in the building. But under Fair Student Funding, schools receive a portion of their funds based on their enrollment and demographics such as the numbers of low-income and special-needs students.¹⁵² By fiscal year 2012, about 66 percent of each district school's funds were allocated through Fair Student Funding.¹⁵³

Both traditional district funding systems and Fair Student Funding have pros and cons when it comes to paying for teachers. Using a traditional, salary-based funding system, schools with more-affluent, higher-achieving students—schools that typically attract higher-paid and more-experienced teachers—receive more money per pupil. Meanwhile, schools with more low-income students and less-experienced teachers receive substantially less money per pupil.¹⁵⁴ Districts frequently account for teacher spending using an average district salary, which obscures the real costs of teachers within each school.

School-based budgeting using Fair Student Funding creates new challenges. First among them is that principals receive a lump sum of money from which they must pay the salaries of their entire school staff, plus all other expenses. In New York City this was phased in by having schools assume the costs of new hires while the central office continued funding teachers already on the payroll through the old system.¹⁵⁵ This creates incentives to reduce salary costs. Unions have expressed concerns that principals will favor hiring less-experienced, less-expensive teachers or be forced to create larger class sizes and hire fewer teachers.¹⁵⁶

The transition from budgets based on teacher salaries to weighted student funding also creates special challenges for a subset of high-achieving schools: those with veteran faculties and large numbers of more affluent students. These schools have high salary costs and stand to lose substantial funds when shifting to a budget based on student demographics. To prevent these schools from hitting a fiscal cliff, New York City coupled Fair Student Funding with a hold-harmless provision that was intended to be a short-term cushion as schools adjusted to their new budgets. A report by the Independent Budget Office showed that over a five-year period, schools were being funded more equitably, but the hold-harmless provision had not been eliminated. The district's Independent Budget Office report recommended eliminating the provision.¹⁵⁷

While juggling the ups and downs of public funds, Mayor Bloomberg aggressively pursued private philanthropy with strong results. Though private dollars were a small fraction of the overall schools budget, funders aligned with the Bloomberg school reform agenda provided key support to implement new ideas.

Revenue increases, equity gains

Between 2002 and 2008, New York City saw significant gains in education revenue, with the budget going from \$14.2 billion in 2002 to \$20 billion in 2008.¹⁵⁸ That translates to per-pupil revenues of \$13,290 in 2002 and \$19,075 in 2008, an increase of \$5,785 per pupil. (All amounts are given in inflation-adjusted dollars.) Increases in local revenues accounted for 58 percent of this growth.¹⁵⁹ During this period, New York City saw “successively larger surpluses” in the city budget due to strong real estate market and stock market performance.¹⁶⁰

These revenue gains helped New York City’s resources for schools meet and even exceed state averages. In 2002, New York City’s per-pupil revenues were below the state average, but by 2008 they exceeded the state average by about \$600. Though state funds only provided about one-third of the revenue increase,¹⁶¹ they were an important factor in helping New York City achieve funding equity.

The new state funds came in part as the result of a longstanding lawsuit by advocates for statewide equity in school funding. In 1993, a group of concerned parents and advocates filed suit against New York state, charging that the state had underfunded its largest city’s schools and had thus denied students their right to the opportunity for a sound basic education.¹⁶² In 2006, the state’s highest court upheld earlier rulings in the plaintiffs’ favor and required the state to develop an education-funding formula that would equalize resources between poor and wealthy districts.¹⁶³

In 2008, New York state rolled out its new education-funding system. It provided a foundation of per-pupil aid to every student in the state, adjusted for need and regional cost variations. Plus, the state’s poorest and most academically challenged districts were eligible for the largest pool of new revenue, called Contracts for Excellence. These school funds are tightly regulated with the state mandating that they be spent on only the following evidence-based approaches to improving student achievement:

- Reduced class size
- Increased time on task
- Improved teacher/principal quality
- Restructured middle and/or high schools

- Full-day pre-kindergarten and kindergarten
- Model English language learner, or ELL, programs (added after the original law was passed)

By 2008, the first year the court-imposed funding formula was implemented, the city's per-pupil state revenue had outpaced the rest of the state: \$8,820 per pupil for New York City compared with \$8,207 per pupil across the rest of the state.¹⁶⁴

Recession brings hiring freeze, class-size increases

The Great Recession scored a direct blow to the core of New York City's revenue base—the financial and real estate markets. The recession also hit state budgets with particular force, driving deep cuts. By 2011, New York state budget cuts essentially eliminated the funding gains high-poverty districts had begun to enjoy based on the 2008 funding formula.¹⁶⁵

When New York state created its new education-funding formula, it planned to increase the foundation aid amount over four years to reach its 2010-11 target level of \$25.5 billion, an increase of about \$5.5 billion from the 2007-08 allocation.¹⁶⁶ But the recession intervened. After initially funding the formula as planned, the state froze its aid in 2009.¹⁶⁷ The state cut school aid again in 2010 and 2011 and capped its growth by limiting school-funding increases to no more than the percentage growth in personal income for the previous year.¹⁶⁸ By capping growth in school aid, state lawmakers virtually guaranteed that the original funding formula would never be fully implemented under current law.¹⁶⁹ By fiscal year 2013, state foundation aid was \$20.3 billion, barely above the 2007-08 allocation.¹⁷⁰

The double whammy of reduced state and local revenues effectively cut New York City's per-pupil spending on schools. A 2011 Independent Budget Office report stated that while per-pupil spending grew 28 percent between 2002 and 2009, it only grew by 2 percent between 2009 and 2012, and that growth was due to increased pension payments as more teachers retired and retired teachers continued to live longer. The IBO report stated that removing those costs—pension payments—would show declines in per-pupil spending over each of the three years.¹⁷¹ In 2009, Chancellor Klein imposed a teacher-hiring freeze. In addition, class-size increases in the wake of the recession prompted protests and an unsuccessful lawsuit by the United Federation of Teachers.¹⁷²

By the summer of 2013, the budget picture at both the state and city levels had improved slightly. At the state level, the 2014 budget included an increase in school aid of more than \$700 million.¹⁷³ While noting this was “the best education budget in five years,” the Campaign for Educational Equity at Columbia University’s Teachers College observed that the budget remained more than \$4 billion below the legislature’s earlier funding target and failed to address additional financial pressures on schools imposed by Common Core State Standards and new teacher evaluation systems.¹⁷⁴ Within New York City, the hiring freeze had been lifted for teachers in shortage areas such as special education, bilingual, and math, and for the Bronx, traditionally the borough hardest to staff.¹⁷⁵

Despite budgetary challenges, New York City’s commitment to Fair Student Funding has made progress increasing fiscal equity among city schools. By the 2012 school year, about two-thirds of each school’s budget was allotted through Fair Student Funding.¹⁷⁶ Researchers from New York’s Independent Budget Office compared Fair Student Funding formula allocations to actual funds schools received from school years 2007-08 through 2011-12. The IBO’s 2013 report showed that by 2012, schools were receiving funding more closely aligned to the actual needs of their students. But the district’s mechanism to hold the change harmless for schools funded higher than the formula is still in place, though it was originally promised for only two years.¹⁷⁷ At the same time, the IBO analysis showed that the vast majority—94 percent—of New York City schools were receiving too little money based on student need.¹⁷⁸ The office recommended that the city funnel more money to schools through its Fair Student Funding formula and end the hold-harmless provision.¹⁷⁹

Philanthropy’s role in reform

Mayor Bloomberg and former Chancellor Klein aggressively pursued private philanthropy in support of their reform efforts. In 2002, they relaunched the Fund for New York City Public Schools, the fiscal agent for donations to the school system, with the explicit mission to attract private investment for school reform. Klein recruited Caroline Kennedy, daughter of former President John F. Kennedy, to lead the fundraising work, a move that lent energy and star power to the effort. (Kennedy served in the lead staff role from 2002 through 2004 and today serves as an honorary director.)

Between fiscal year 2003 and fiscal year 2009, the Fund raised nearly \$245 million.¹⁸⁰ More than \$80 million went to support the NYC Leadership Academy in its early years of operation. Subsequently, the Leadership Academy was shifted to public support via a five-year, competitively bid, public contract.¹⁸¹ The Fund has continued to serve as the research and development funding source for the district, supporting development of school Quality Reviews; the Achievement Reporting and Information System, or ARIS, data system; and the networks that currently support schools' efforts to improve their instruction and operations.¹⁸²

Beyond the Fund, substantial philanthropic investment has supported other reforms, notably small high schools and charter schools. The Bill & Melinda Gates Foundation invested more than \$150 million in New York's high school reform effort.¹⁸³ In 2005, the nation's top K-12 grantmakers invested \$1.1 million in city charter schools, and since then their investments have increased.¹⁸⁴ In 2009, the Broad Foundation, for example, announced grants totaling \$2.5 million for two New York-based charter-management organizations: the Success Charter Network and Uncommon Schools.¹⁸⁵

Nonetheless, while philanthropy contributed only a tiny fraction to the city's education revenue—less than 0.5 percent of the system budget—it amounted to an unrestricted fund for innovation.¹⁸⁶ Given that most school systems have very few discretionary dollars at their disposal, even a small pool of unrestricted funds can play a significant role in reform efforts. New York University researchers Leanna Stiefel and Amy Ellen Schwartz suggested in their analysis of K-12 spending under Mayor Bloomberg for the book *Education Reform in New York City: Ambitious Change in the Nation's Most Complex School System* that other education leaders might benefit by adopting a similar strategy.¹⁸⁷

Remaking the workforce: Developing talent in local context

In no area of school reform have the New York City schools under Mayor Bloomberg been more of a thought leader among urban districts than on the issue of human capital. When Mayor Bloomberg took office, the city school district faced significant challenges in teacher recruitment, hiring, and retention. Principals had little control over the hiring of school staff, or even their assistant principals.¹⁸⁸ Senior teachers wishing to change schools had priority for jobs, and laid-off veteran teachers from one school could “bump” junior teachers out of their jobs in other schools. The central office could not hire new teachers until the veteran teachers had been placed.¹⁸⁹ Consequently, prospective teachers were not hired until late August and might not know their school assignments until the first day of the new school year—or even later. For more than a decade prior to 2002, New York City’s teacher salaries had lagged behind inflation and were significantly lower than salaries in neighboring suburban districts.¹⁹⁰

Conditions in the schools—which may be of even more importance to teachers than salary when deciding where to work—were also challenging, especially in the highest-need schools. Research shows that teachers prioritize three aspects of working conditions: student attributes, school leadership, and supports for teachers.¹⁹¹ Teachers generally prefer to work with higher-achieving students, and higher-quality principals tend to lead higher-achieving schools.¹⁹² Thus, schools serving struggling students face additional hurdles in both recruiting and retaining teachers and leaders with the capacity to serve their students well. A telling statistic illustrates the impact of this challenge in New York City: Between 1996 and 2002, 34 percent of new teachers with high scores on the certification test who started their careers in low-achieving schools left the district after just one year, compared to only 20 percent of their peers in high-achieving schools.¹⁹³

Mayor Bloomberg’s Children First reforms tackled the human-capital problem strategically and systematically, launching many new approaches within a relatively short timeframe. In roughly chronological order of implementation, these approaches included:

- Establishing new pathways for training teachers and principals
- Opening the market for teacher hiring and transfer
- Instituting pay increases and pay-for-performance
- Implementing innovations in principal and teacher evaluation

Taken together, the impact of these changes has been significant. By 2005, New York City had virtually eliminated unlicensed teachers from its new hires and narrowed the teacher-qualifications gap between low-poverty and high-poverty schools.¹⁹⁴ By 2011, the proportion of teachers leaving the system after their first year had decreased from one-third of new teachers to one-fifth of that population, and only 2 of 172 new principals in 2011 chose to leave the system. Retention after three years had also improved for both groups.¹⁹⁵

New pathways for training principals, teachers

Mayor Bloomberg and Klein were quick to realize the importance of well-trained principals to improving schools. In 2003—well ahead of the national reform agenda—they opened the NYC Leadership Academy, taking a crucial step to build a principal pipeline focused on delivering quality school leaders well versed in the local context and needs of the city’s unique environment.¹⁹⁶ The mission of the Leadership Academy is to prepare principals to transform the city’s most challenging schools and improve student outcomes.

Research shows the quality of principal leadership strongly influences teacher turnover, which has been shown to produce negative effects on student achievement.¹⁹⁷ In a survey of New York City teachers who left or considered leaving the district after their first year of teaching, respondents identified the perceived quality of school leadership and leadership support for teachers as the most important factors in their decision processes.¹⁹⁸

The Leadership Academy is a particularly strong example of how one Children First reform cannot be separated from the others. The Leadership Academy’s training has been closely linked to the creation of new schools; to the autonomy-accountability exchange, which defines the second phase of the reform effort; and to the increased emphasis on use of data to make both operational and

instructional decisions within schools, among other reforms. Also, the Leadership Academy is an example of a foundation-funded reform effort that was transitioned to public monies after a startup period.¹⁹⁹

At its founding, the NYC Leadership Academy had the dual mission of training principals in business-style management while preparing them to deliver the system's new standards-based curriculum and instructional supports to schools without a history of access to high-quality instruction.²⁰⁰ Over time and leadership transitions, the Leadership Academy's emphasis has shifted toward experiential learning for aspiring principals, intensive early-career support, and creating a pipeline from the classroom to the principalship. This shift has been led by the Leadership Academy's current executive director, Irma Zardoya, who created a nationally recognized principal pipeline in partnership with the Bank Street College of Education while serving as superintendent of New York City's former administrative Region I, which comprised 100,000 students in 137 Bronx schools.²⁰¹

The Leadership Academy's core work, the Aspiring Principals Program, trains new principals to work in lower-performing elementary and middle schools. According to the Independent Budget Office, by 2012, there were 1,624 principals working in the public schools. Of these, 268, or about 17 percent, had graduated from the Aspiring Principals Program.²⁰² Research indicates that the Leadership Academy is fulfilling its mission of bringing leadership that can improve student outcomes to the city's most academically challenged schools. Researchers from New York University found that compared to other principal hires in the same year, graduates of the Aspiring Principals Program led schools where less-experienced teachers were teaching higher concentrations of poor and minority students, and where initial achievement in math and English language arts was low and trending downward.²⁰³

After three years in their schools, Aspiring Principals Program graduates had reduced the achievement-score gaps between their schools and comparable similar schools. In language arts, initial score gaps were reduced by half. In math, score gaps initially widened but virtually disappeared in year three and beyond.²⁰⁴ But as of 2009, it was unclear whether these principals have been better able to retain effective teachers.²⁰⁵

The New York City school system has continued to innovate around principal training. New York City is among the urban districts working with New Leaders, a national effort to develop school leaders who are prepared to transform high-need schools into high-achieving schools. The city is also developing a new pipeline

to move current teachers into administration. In 2009, central administrators worked with the NYC Leadership Academy to create the Leaders in Education Apprenticeship Program, or LEAP. While the Leadership Academy's aspiring principals are placed as interns in schools regardless of their prior teaching assignments, LEAP offers eligible teachers working in New York City schools a year-long, part-time residency within their current school to transition into a principal position. According to IBO, New Leaders and LEAP together had produced about 5 percent of New York City's principals in 2012.²⁰⁶

Despite the successes of these programs, New York City still struggles to build a sufficient pool of qualified applicants to fill its estimated 200 principal vacancies and 400 assistant principal vacancies annually.²⁰⁷ In recent years, the number of Aspiring Principal Program graduates has declined significantly, from 70 in the 2005-06 school year to 28 in the 2011-12 school year.²⁰⁸ At the same time, the numbers of LEAP graduates are growing; however, many graduates' next step is the assistant-principal position, not the principal slot.²⁰⁹ To fill this gap and improve supports for principals as they continue their careers, New York City is one of six urban districts tapped in 2011 by the Wallace Foundation to launch its Principal Pipeline Initiative.²¹⁰ New York City district leaders intend to tap into their large pool of teachers to find potential principals and devote greater attention to succession planning in schools.²¹¹

As it did with principal training, New York City also took steps to improve the preparation of its entry-level teachers. Under state pressure to eliminate unlicensed teachers, Mayor Bloomberg and Klein quickly scaled up the NYC Teaching Fellows program and increased their use of Teach for America, or TFA. Both TFA and NYC Teaching Fellows are highly selective programs drawing large numbers of applicants.²¹² In 2005, newly hired teachers from these programs had higher math SAT scores than new hires from traditional teacher-preparation programs and substantially higher math SAT scores than newly hired, unlicensed teachers in 2002.²¹³ Although TFA members have high turnover—their expected term of service is two years²¹⁴—Teaching Fellows have retention rates more similar to those of traditionally certified teachers.²¹⁵ Importantly, these new hiring pathways also substantially narrowed the rich-school/poor-school gap in teacher qualifications.²¹⁶ These improved teacher qualifications, especially among the poorest schools, appear to have resulted in increased student achievement.²¹⁷ More recent research suggests that TFA members produce greater student achievement gains in middle school math than other novice New York City teachers; however, their higher attrition rates appear to cancel out this effect over time. The researchers conclude that New York City Teaching Fellows and other programs preparing

teachers to enter the New York City public schools could potentially learn from TFA's selection methods in choosing candidates.²¹⁸

In recent years, three teacher residency programs have launched in New York City: a district-sponsored effort to prepare teachers to work specifically in turnaround schools; another geared to preparing teachers to work with English language learners; and a residency program sponsored by New Visions, one of the district's major external partners providing schools with training and support. All three programs offer participants the chance to earn a subsidized master's degree in exchange for a four-year commitment to teach in the district's public schools. All three are also members of the Urban Teacher Residency United network, a national effort to launch and sustain high-quality residency programs in high-need urban districts. (Currently, only 18 of about 70 programs across the nation meet the network's quality benchmarks.²¹⁹) Nationally, graduates of urban teacher residency programs in the network average 86 percent retention rates at three years and 85 percent retention after five years. Principals who have supervised both residents and graduates of these residency programs report that these teachers are more effective than typical new teachers in establishing a learning environment and in classroom instruction, including culturally responsive teaching.²²⁰

Opening the market for teacher hiring and transfer

After making efforts to develop a better-quality pool of candidates from which to hire, Klein and the New York City Department of Education turned to the task of giving principals a better teacher-hiring process and tools to find the best candidates. Following the release of The New Teacher Project's 2003 seminal report, "Missed Opportunities," which documented the negative impact of late hiring on teacher quality,²²¹ district leaders made several process changes that reduced the loss of talented applicants. School budgets are now established in the spring, giving principals a timely sense of the number of new teachers they need to hire. A central online-search system that flags candidates who have demonstrated the background, skills, and attitudes likely to make them effective in the classroom helps principals find strong candidates faster.²²²

New York City also made moves to give principals greater control over hiring, and teachers more power to determine where they wanted to work, regardless of their seniority. By 2005, the district and the United Federation of Teachers had agreed to a new contract that included an "open-market transfer system." The new open-market system affected school staffing in three key ways:

- It gave school principals the power to hire teachers regardless of seniority.
- It ended the longstanding process of veteran teachers “bumping” less-experienced teachers out of their positions without input from the principal or other school staff.
- It created a more open hiring process for “excessed” teachers—those displaced from their positions due to declining enrollment, program changes, school closures, or other factors.

These changes came within a larger contract package that included substantial pay increases and a new “lead teacher” position for qualified veterans to serve as mentors to their colleagues.²²³

By 2008, there was strong evidence that teachers found the new open-market transfer system helpful in finding satisfactory new positions, while giving schools greater choice in hiring. The New Teacher Project surveyed excessed teachers in 2006 and both excessed and voluntary-transfer teachers in 2007. According to the surveys, 90 percent of transfer-teacher respondents and 80 percent of excessed-teacher respondents described their new positions as satisfying. Only 9 percent of 2007 transfer respondents said they were considering transferring again in 2008.²²⁴ The New Teacher Project also tracked where teachers moved and found their movements did not result in higher turnover among high-poverty schools.²²⁵

Because teachers are now hired directly by their principals, they know their placement when the school year begins and principals have greater control over building a faculty. Especially in the larger context of Children First, New York City’s new hiring process has made it more possible for principals to hire quality teachers with a commitment to the school’s instructional framework, a key element of principal leadership for school improvement.²²⁶

One side effect of the contractual changes, however, continues to dog the system—the Absent Teacher Reserve, or ATR. Excessed teachers who have not found a new permanent position join the teacher pool, generally working as substitute teachers while searching for a new permanent job. Unlike Chicago, where the local contract sets a 10-month cap on the length of time teachers can spend without a permanent position before being dismissed, New York City holds its excessed teachers indefinitely, at an annual estimated cost of \$100 million.²²⁷ Efforts to negotiate a buyout process in 2012 have yet to result in reforms.²²⁸

Pay increases and pay-for-performance

In the 2005 teachers union contract, the end of seniority bumping was coupled with across-the-board pay raises to win union support for the changes, plus special attention to increased pay in the early years of a teacher's career. The contracted salary schedule, still in place as of this writing, offers a beginning teacher with a bachelor's degree a starting salary of \$45,530. The salary scale maxes out at slightly more than \$100,000 for highly educated, veteran teachers.²²⁹ Currently, New York City public school teachers are well paid compared to their peers nationally. In 2012, the national average wage for elementary school teachers was \$56,130 and for high school teachers was \$57,770.²³⁰ In New York City, the average salary is approximately \$60,000.²³¹ But the New York metropolitan area, which includes some of the nation's wealthiest suburbs, is the highest-paying metro area for high school teachers and a high-paying area for elementary school teachers.²³² In 2012, the annual mean wage for high school teachers in the New York metro area was \$77,400; for elementary school teachers, the mean wage was \$70,950.²³³ This puts New York City's average teacher salaries somewhat below their suburban counterparts. The new salary scale made New York City more competitive in the local teacher-labor market and likely increased teachers' desire to stay in the system.

New York City has also used other financial incentives to draw experienced teachers to work in high-need schools and subject areas such as mathematics, science, and special education. In 2006, the district began offering experienced teachers in these subjects up to \$15,000 toward relocation expenses, a house down payment, or current rent or mortgage expenses in exchange for a three-year commitment to teach in New York City.²³⁴ Tenured teachers with a track record of improving the achievement of high-need students can apply to become Lead Teachers. Those individuals selected as Lead Teachers are eligible for about \$10,000 of additional pay and split their workday between classroom teaching and coaching their peers.²³⁵

Researchers note that increased teacher compensation under Mayor Bloomberg played a role in teacher recruitment and retention, though the effect of salary increases had not been directly studied as of 2009.²³⁶ Between 2000 and 2008, New York City's starting teacher salaries increased 13 percent after adjusting for inflation, rising to \$45,530 for a bachelor's-degreed teacher without experience.²³⁷

Mayor Bloomberg's successor will likely face challenges in keeping teacher salaries competitive with nearby districts. In the big picture of New York City's education budget, salary increases under Mayor Bloomberg were dwarfed by increased spend-

ing on benefits.²³⁸ Since 2003, pension costs have more than tripled, reaching \$2.7 billion in 2013.²³⁹ New York City's next mayor will face the dual challenge of managing pension costs while negotiating new contracts with all city workers, including teachers.²⁴⁰ As of 2013, the 2008 teacher salary schedule is still in effect. The next mayor, however, will face pressure to award teachers hefty retroactive raises.²⁴¹

Principal compensation in the system has also increased significantly under Mayor Bloomberg. In 2007, the mayor signed a contract with the administrators' union increasing base pay for principals and assistant principals by 23 percent and offering \$25,000 bonuses for increased student test scores.²⁴² Furthermore, under the terms of the contract, select principals willing to commit to three years in troubled schools could receive an additional bonus of up to \$25,000.²⁴³ In exchange, administrators agreed to a new evaluation aligned with school Progress Reports and gave up seniority rights for assistant principals, who could previously force their way into some vacancies even if the sitting principal objected.²⁴⁴

While retention of principals has improved, the New York City school system still faces big challenges in recruiting sufficient new principals. Salary alone may not be an adequate draw to attract strong candidates for a job some consider the most difficult in the United States—principal of a high-need urban school.

New York City's failed effort to create pay-for-performance for teachers illustrates the limits of financial incentives. In the 2007-08 school year, the district implemented the School-Wide Performance Bonus Program.²⁴⁵ Volunteer, high-need schools created internal, four-person committees to determine how bonuses would be distributed. Most schools chose to distribute them equally among teachers, which worked out to a bonus of about \$3,000 per teacher.²⁴⁶

In the first year of the bonus program, 205 schools chose to participate, with participation declining very slightly in the program's next two years. A RAND Corporation study determined the bonuses had no effect on student achievement, and teachers surveyed for the study said the bonuses had had no effect on their performance. These findings held true whether a school had chosen to award equal bonuses among all teachers or adopt a more differentiated strategy.²⁴⁷ RAND research confirmed no statistical differences between the reported practices and behaviors of teachers in the program versus a control group of teachers from schools that did not participate. As a result of RAND's findings, New York City ended the program in 2011.²⁴⁸

RAND researchers offer multiple possible explanations for these results, including implementation flaws; lack of resources—time, expertise, school leadership—to improve teacher practice; and the likelihood that the bonus had much lower motivational value than other, pre-existing accountability incentives such as achieving a good Progress Report grade or making “adequate yearly progress” as required by No Child Left Behind. Almost half of the teachers surveyed for the study said that the bonus was not large enough to motivate them to extra levels of effort.²⁴⁹

It is also important to note that the third year of the bonus program’s implementation—school year 2010—was the same year New York state raised the cut scores required for proficiency on the state tests. As a result, the number of schools awarded bonuses dropped precipitously, from 82 percent in 2009 to 13 percent in 2010. RAND researchers observed, “Prior to implementing a performance-based bonus system, it would behoove leaders to ensure greater stability of the accountability measures on which the bonuses rely.”²⁵⁰ The researchers also recommended conducting a broader dialogue with school staff about the accountability system, and even changing the performance metrics if necessary to win buy-in from teachers and principals.²⁵¹

RAND’s other recommendations for districts considering piloting pay-for-performance systems included developing plans early in the school year and communicating them clearly to all teachers, addressing capacity challenges that prevent teachers from improving their practices, and recognizing that school norms of egalitarianism and collaboration sharply conflict with the idea of differential pay based on performance. Finally, RAND recommended that other districts interested in developing pay-for-performance systems follow New York City in piloting such systems prior to their full implementation, and using evaluation results from pilot programs to guide their next steps.²⁵²

Teacher and principal evaluation

New York City’s efforts to improve evaluation systems for teachers and principals started in the mid-2000s.²⁵³ As principals began receiving greater authority over their schools through the district’s Autonomy Zone, they took greater responsibility for results by signing five-year performance contracts that spelled out targets for metrics such as student attendance, test scores, and graduation rates. Principals who failed to meet targets after two years on the job could be removed.²⁵⁴

As mentioned earlier in this report, the 2007 administrators' contract brought principal evaluation in line with school accountability, including progress raising student achievement. In 2013, New York state broke an impasse between the district and the teachers union over teacher evaluation and imposed a new evaluation system for both teachers and principals. Under the new system, both principals and teachers would have 20 percent of their evaluations based on their students' growth on state standardized tests. Another 20 percent would be allotted for what are termed "locally selected measures." For principals, those measures will be selected from Progress Report metrics. For teachers, local measures will be determined within the schools by a committee of union- and administrator-chosen representatives.²⁵⁵ New York City is the only district in the state of New York where schools have some say over the measures by which teachers are evaluated.²⁵⁶ New York City has also explicitly tied its new teacher evaluation practices to Common Core State Standards implementation, and in a 2013 teacher survey, 85 percent of respondents said they had received both performance feedback and professional development that helped them shift practice to align with Common Core State Standards.²⁵⁷

This new emphasis on evaluating principal and teacher performance came within a context that gave principals and teachers greater flexibility and control over how they chose to improve instruction in the service of increased student performance. Many Children First reforms focused on school leadership as the driver of change and building professional capacity. For example, in the 2007-08 school year, all public schools in New York City were required to create their own teams of school leaders and teachers, who met regularly to examine data, determine where students needed additional instructional support, and develop and test teaching strategies that would address learning gaps.²⁵⁸ Researchers have pointed to some systemic implementation issues that limit the effectiveness of school-level efforts to improve teacher practice: a greater emphasis on principal empowerment than on teacher empowerment, lack of understanding among some network leaders about how to use the inquiry process, and networks relying largely on only their own schools for exemplars of effective instructional practices.²⁵⁹

Under Children First, the New York City school system has made its greatest strides in human capital by revamping training for teachers and principals, opening the market for teachers, giving principals authority to hire their school staffs, narrowing the qualifications gap between high-poverty and more affluent schools, and reducing staff turnover. But the New York City school system still struggles to establish incentives that draw strong principals and teachers to the schools that need them most and creating the type of positive working conditions that will keep them there.

Conclusion and recommendations

Unquestionably, Mayor Bloomberg and his education chancellors created deep, systemic changes that have had benefits for students. The most positive outcomes are increased high school graduation rates and a reduction of the racial disparities in who graduates. Under Mayor Bloomberg, New York City’s school system made substantive and critical reforms in school finance, school governance, school structure, and human-capital pipelines. These changes built the foundation for the most important reform: improving teacher practice in ways that enhance student learning. New York City’s reform around teacher evaluation and the adoption of a common observation rubric have provided the opportunity for its teachers and administrators to speak the same language of instruction and allowed the system to jumpstart its efforts to implement Common Core State Standards. Certainly, there is reason to be optimistic, but the hardest work is still to come.

Two theories of educational-system change offer insight into the strengths and weaknesses of New York City’s reform approach. First, the Consortium on Chicago School Research has determined five “essential supports” for school improvement, based on its decades-long history of observing school reform—both site-based and centralized—in Chicago Public Schools.²⁶⁰ They are:

1. School leadership as the driver of change
2. Parent-school-community ties
3. Professional capacity, including teachers’ knowledge of content and instructional techniques, quality of professional development, and depth of teacher collaboration
4. Student-centered learning climate
5. School-centered guidance toward more ambitious instruction

A study by the Consortium on Chicago School Research on schools in Chicago shows that when schools self-reported strong capacity in all five indicators, they were up to 10 times more likely to improve students' reading and mathematics skills.²⁶¹ Conversely, a low score on just one indicator could reduce the chance of improving students' academic skills to less than 10 percent.²⁶² "Our evidence does suggest that districts are highly unlikely to succeed absent sustained attention to all five of these organizational subsystems," observed Consortium researchers. "Strong evidence has been presented here that a sustained material weakness in any one of these domains is likely to doom efforts at improving student outcomes."²⁶³

Though New York City has made progress on the five essentials, that progress has been uneven.

Former Chancellor Klein created an Office of Family Engagement and Advocacy with "family advocates" assigned to each local district, but families and community organizations want a greater level of engagement. Recently, the New York City Department of Education and the Research Alliance for New York City Schools have begun redesigning annual school survey questions to develop measures that would more accurately assess the state of the five essentials within each city school.²⁶⁴

Many of the new small high schools are examples for others to follow in implementing student-centered learning climates.

Consortium research also revealed a subset of schools with high concentrations of poverty and students of color that deserve special attention. These schools are located in neighborhoods with high crime, low rates of participation in religious and neighborhood organizations, and high concentrations of children facing abuse and neglect. The Consortium researchers concluded: "In communities where there are few viable institutions ... a much more powerful model of school development is needed—one that melds systemic efforts at strengthening instruction with the social resources of a comprehensive community schools initiative."²⁶⁵ Though the New York City school system has made efforts in this direction, they have yet to reach scale.²⁶⁶

Harvard educational researcher Richard Elmore offers a second lens through which to view New York City's reforms under Mayor Bloomberg: the extent to which those reforms affected what Elmore calls "the instructional core"—teachers, students, and content.²⁶⁷ Elmore has argued that there are fundamentally only

three ways to increase student learning in the classroom: increase the teacher’s knowledge and skills; increase the intellectual challenge of the content; and change the student’s role in the educational process (for example, moving from a passive to an active role in learning).²⁶⁸

New York City implemented structural reforms that created more variation in school and system structure—creating small schools and using networks to create new configurations of schools—that might more intensely focus teachers on the challenge of refining their instructional practices.²⁶⁹ Through collaborative inquiry, the system also required schools to create teams of teachers and administrators charged with identifying and addressing problems of practice.

Elmore recommends developing strong professional norms for good teaching practice based on external authority and expertise, whether national or at the district level, as a means to shift school culture toward more open discussion of practice and collaborative pursuit of improvement.²⁷⁰ New York City is moving in this direction. At the beginning of the devolution of authority to principals, Klein and his team deliberately chose not to focus on setting external norms related to instructional practice. Rather they left schools to determine for themselves—in concert with their support organizations/networks—what instructional practices they would adopt and how they would disseminate them among their teachers. More recently, as teacher evaluation has become a priority, rubrics like the Danielson Framework for Teaching have begun to provide a common framework for examining practice both nationally and in New York City.²⁷¹ The New York City Department of Education’s 2012 teacher survey showed that 83 percent of respondents had received formative feedback from school leaders based on Danielson or a similar, research-based rubric of teacher practice.²⁷²

New York City’s reforms have made headway in helping schools build their professional capacity to solve problems of practice. Creating deep change in the instructional core—particularly helping teachers redesign their instructional tasks to increase the intellectual challenge for students—will be the central challenge of the next phase of education reform.²⁷³ The difficulty of this task cannot be underestimated.

With these challenges and the experience in New York City over the last 10 years in mind, we make the following recommendations for continuing efforts in New York City and to other urban district leaders:

- **Focus on the school as the site of change and the principal as the primary change agent.** New York City’s groundbreaking exchange of principal autonomy for accountability opened up new possibilities for school-level innovation and improvement. There is a risk that the emphasis on high-stakes consequences for principals and schools could result in a reduced pool of talent available to lead the city’s schools, especially low-performing schools most in need of skilled leadership. Schools struggling the most need additional expertise and resources to meet the extraordinary challenges their staff and students face.
- **Develop a pool of talent—teachers and principals—well versed in the local context and needs.** New York City’s initial reforms built a solid foundation for human capital and eliminated unlicensed teachers. Currently, the New York City school system is exploring new models of teacher training, such as urban-teacher residencies and strengthening its pipeline for strong teachers to move into principalships. In the next phase of reform, New York City should continue to strengthen both its entry pathways and its talent-development strategies across the career span for both teachers and principals.
- **Sustain the highly successful small high schools and investigate the reasons for their success.** Three successive reports from MDRC have found that New York City’s small, nonselective high schools have substantially increased graduation rates for disadvantaged youth of color.²⁷⁴ The most recent report begins to delve into the reasons for this success—cultures of greater academic rigor, coupled with stronger personal relationships between students and teachers, made possible by smaller organizational structures and caring, dedicated teachers.²⁷⁵ In the next phase of reform, researchers must determine what factors best explain the success of the most effective small schools, while district leaders must carefully examine the financial and human capital resources that have made small high schools effective and consider how those supports can be further embedded in the overall school system.
- **Build a portfolio of schools to encourage school-level innovation and give families quality options.** New York City has remade its high schools at scale and outpaced the nation in developing high-performing charter schools. The next-phase challenges include finding new resources for charter school facilities and continuing to develop innovative schools for the most challenged students.

- **Balance “disruptive change” with clear priorities for the work of principals and teachers.** Researchers repeatedly noted that in the Bloomberg era, New York City educators scrambled to assimilate frequent policy changes, build communities of practice, and access needed district-level supports in a rapidly shifting school system. Some of the rapid pace of change as perceived by educators was likely inevitable given the urgency of the need to transform the system. Through its work on collaborative inquiry, the use of data to inform instructional planning, and Common Core State Standards implementation, the New York City school system has begun to tackle the tough problem of changing teachers’ instructional practices. The new teacher-evaluation system may prove a useful lever in moving practice as well. But New York City and other urban districts will need to create time for principals and teachers to focus on improving practice and shield them from competing priorities. A recent report from the Parthenon Group recommended network staff take a greater role in freeing principals’ time to focus more deeply on helping teachers refine their instruction.²⁷⁶ Strengthening community-school partnerships can expand time for student learning while freeing teachers of core academic content to plan more challenging lessons, collaborate with peers, and reflect on the successes and failures of their instruction. Practices like these are likely to be essential for New York City to take its reform success to new heights of student achievement.

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