

The background of the cover features two large, vibrant green apples. One apple is on the left, partially cut off by the edge, and the other is on the right, also partially cut off. They are set against a plain white background. The text is overlaid on the white space between the apples.

Transforming the High School Experience

EXECUTIVE SUMMARY

How New York City's New Small Schools Are
Boosting Student Achievement and Graduation Rates

Howard S. Bloom
Saskia Levy Thompson
Rebecca Unterman

JUNE 2010

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BUILDING KNOWLEDGE
TO IMPROVE SOCIAL POLICY

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By

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with

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Overview

Since 2002, New York City has closed more than 20 underperforming public high schools, opened more than 200 new secondary schools, and introduced a centralized high school admissions process in which approximately 80,000 students a year indicate their school preferences from a wide-ranging choice of programs. At the heart of these reforms lie 123 new “small schools of choice” (SSCs) — small, academically nonselective, four-year public high schools for students in grades 9 through 12. Open to students at all levels of academic achievement and located in historically disadvantaged communities, SSCs were intended to be viable alternatives to the neighborhood high schools that were closing.

SSCs are more than just *small*. They were authorized through a demanding competitive proposal process designed to stimulate innovative ideas for new schools by a range of stakeholders and institutions, from educators to school reform intermediary organizations. The resulting schools emphasize strong, sustained relationships between students and faculty. Each SSC also received start-up funding as well as assistance and policy protections from the district and other key players to facilitate leadership development, hiring, and implementation.

The first step in New York City’s high school admissions process is to require eighth-graders to select in rank order of priority up to 12 high schools that they want to attend; when an SSC has more applicants than spaces, the district uses a lottery-like process to randomly assign students to the SSC or to another school in the district. These lotteries provide the basis for an unusually large and rigorous study, supported by the Bill & Melinda Gates Foundation, of the effects of SSCs on students’ academic achievement.

This report presents encouraging findings from that study, providing clear and reliable evidence that, in roughly six years, a large system of small public high schools can be created and can markedly improve graduation prospects for many disadvantaged students. Specifically:

- By the end of their first year of high school, 58.5 percent of SSC enrollees are on track to graduate in four years compared with 48.5 percent of their non-SSC counterparts, for a difference of 10.0 percentage points. These positive effects are sustained over the next two years.
- By the fourth year of high school, SSCs increase overall graduation rates by 6.8 percentage points, which is roughly *one-third the size of the gap in graduation rates* between white students and students of color in New York City.
- SSCs’ positive effects are seen for a broad range of students, including male high school students of color, whose educational prospects have been historically difficult to improve.

Preface

The traditional large high schools that typify so many school districts in this country — particularly our poor urban centers — are a relic of a former time, with too many of them characterized by shockingly high dropout rates and large numbers of young people who graduate unprepared for college-level studies. Despite much experimentation, little concrete evidence has emerged about how to turn around our lowest-performing public schools and equip America’s high school students with the skills they’ll need in today’s rapidly changing world.

In New York City, however, a remarkable transformation now appears to be taking place. Since 2002, the city has closed more than 20 underperforming public high schools, opened more than 200 new secondary schools, and introduced a centralized high school admissions process in which approximately 80,000 students a year indicate their school preferences from a wide-ranging choice of programs. At the heart of these reforms lie 123 small, academically nonselective public high schools for students in grades 9 through 12. These “small schools of choice” (SSCs) — a name coined by the authors of this report to highlight the fact that students at any academic level could choose to attend them — are located in historically disadvantaged communities and were intended to be viable alternatives to the neighborhood high schools that were closing. This report presents the findings of the first large-scale, rigorous evaluation of that reform effort.

What was the exact nature of the reform? It was rooted in the small schools movement, but it went further. SSCs are more than just *small*. They were authorized through a demanding and competitive proposal process that was designed to encourage and enable a range of on-the-ground stakeholders with innovative ideas — from educators to school reform intermediary organizations — to start new schools. The result was an emphasis on features that offered support to disadvantaged and traditionally underserved students, such as reduced teacher load and common planning time as a way to ensure that all students were known well and to promote strong, sustained relationships between students and faculty. Each SSC also received start-up funding as well as assistance and policy support from the district and other key players to facilitate leadership development, hiring, and implementation. In short, these schools were the product of a bottom-up, not a top-down, process.

MDRC’s unusually large and rigorous study takes advantage of a lottery-like system that New York City uses to assign students when the high schools they choose are oversubscribed. The findings show that it is possible, in a relatively short span of time, to replace a large number of underperforming public high schools in a poor urban community and, in the process, achieve significant gains in students’ academic achievement and attainment. And those gains are seen among a large and diverse group of students — including students who entered the ninth grade far below grade level and male students of color, for whom such gains have been stubbornly elusive.

While debates continue over test score differences and whether they can accurately predict progression through high school and success later in life — despite little compelling evidence that scores alone can be relied upon to make such predictions — the reform effort that is the subject of this report has led to actual improvements in measures that point directly to increased attainment, graduation rates, and college-readiness: increases in attendance rates, in the number of credits earned from grade to grade over four years of high school, in high school graduation rates, in earning the New York State Regents diploma, and in achieving Regents scores in English that enable entry into the City University of New York. If the quality of the evidence presented here is rare, the results are rarer still. No comparable evidence has been produced to date for any other major educational reform effort.

Notably, New York City’s reform effort represented a partnership among a diverse group of people and agencies: Mayor Michael Bloomberg, Schools Chancellor Joel Klein, the NYC Department of Education, a consortium of philanthropies, the teachers and principals unions, nonprofit intermediaries, and community groups. It took enormous courage and conviction, and years of unrelenting toil, for this group of people with diverging perspectives to tackle the problem of failing high schools. The logistics alone of simultaneously closing and opening schools at this scale are daunting to contemplate, making the results all the more impressive.

With the nation’s attention focused squarely on turning around failing urban high schools, this study demonstrates that it is possible to achieve meaningful changes at scale within a large, urban public school system. We look forward to following the story of the students in New York City’s small schools of choice to learn whether these gains grow as additional cohorts of students progress through their final year of high school, and whether the gains translate into success in postsecondary education and the labor market.

Gordon Berlin
President
MDRC

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This study would not have been possible without the support of the New York City Department of Education (DOE), which over the course of this project has demonstrated a tremendous commitment to learning about the effects of its reform agenda. We especially want to recognize DOE Chancellor Joel Klein; Michele Cahill, in her former role as Senior Counselor to the Chancellor for Education Policy; and Garth Harries, in his former role as Chief Executive of Portfolio Development, for providing early guidance and support for this study, as well as providing the access and information that seeded the past three years of research. We thank Jennifer Bell-Ellwanger for coordinating the DOE’s involvement. We owe a debt to the former and current staff of the Office of Student Enrollment, including Elizabeth Sciabarra, Evaristo Jimenez, Jesse Margolis, and Hussham Khan, who helped build our understanding of the district’s high school choice process for the purposes of rigorous study. Additionally, we are grateful to the many staff who provided data, input, and suggestions at different stages of the project, including Eric Nadelstern, Shael Polakow-Suransky, John White, Thomas Gold, Douglas Jaffe, Brianna Moore, and Dominique West.

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The Authors

Executive Summary

Over the last decade, New York City has been the site of a systemwide high school reform effort that is unprecedented in its scope and pace. Since 2002, the school district has closed more than 20 failing high schools, opened more than 200 new secondary schools, and implemented a centralized high school admission process in which approximately 80,000 students a year indicate their school preferences from a wide-ranging choice of programs.

At the heart of these reforms lie the new schools that in this report are called “small schools of choice” (SSCs) — small, academically nonselective, public high schools that were opened between 2002 and 2008. Serving approximately 100 students per grade in grades 9 through 12 and open to students at all levels of academic achievement, the SSCs in this study were created to serve the district’s most disadvantaged and historically underserved students. Prior to the 2002-2003 school year, these students would have had little option but to enroll in one of the city’s large, zoned high schools when they made the transition from eighth to ninth grade. Many of the large schools were low-performing, with graduation rates below 50 percent.

This report presents encouraging findings from an unusually large and rigorous study, supported by the Bill & Melinda Gates Foundation, of the effects of SSCs on students’ academic achievement in high school. It emerges at a moment when policymakers, practitioners, and researchers have identified the high school years as the point of greatest weakness within the education pipeline. The rationale for this collective focus is clear: far too many students drop out of high school, and the consequences of entering adult life without a high school diploma are increasingly grave. Amid a national call for change and a dearth of effective responses, the findings presented in this report provide clear and reliable evidence that:

- In roughly six years, it is possible to create a large system of small public high schools that markedly improve graduation prospects for many of the disadvantaged students who choose to attend these schools.
- In the schools being evaluated, positive effects on students’ progress toward high school graduation become apparent as early as the ninth grade and are sustained during the next two years; by the end of four years of high school, these effects culminate in higher rates of graduation.
- These positive effects are experienced by a broad range of students who differ in terms of their demographic characteristics, economic circumstances, and academic preparation. It is particularly noteworthy that the benefits of small schools extend to male high school students of color, whose educational prospects have been historically difficult to improve.

This executive summary describes these findings and identifies their key implications for policy, practice, and knowledge-building.

What Are Small Schools of Choice?

The New York City public school system is the largest in the United States, with over 1.1 million students enrolled in more than 1,600 schools. Over the past decade, it has been the site of an ambitious effort to reform the high school system, of which the creation of SSCs was a central part. Beginning in 2002, the New York City Department of Education (DOE) accelerated and expanded efforts that had been under way since the mid-1990s to close large, low-performing schools and open new small schools in their stead. These reform efforts were supported by a consortium of funders led by the Bill & Melinda Gates Foundation — which ultimately invested over \$150 million in New York City¹ — and were implemented in partnership with the teachers and principals unions.² The resulting changes in the high school landscape transpired with unprecedented scale and rapidity. By 2008, 23 high schools with graduation rates below 45 percent had been targeted for closure, and 216 new small schools, of which 123 were SSCs, had been opened.

While the district established a variety of small school models (shown in Box ES.1), ranging from transfer schools designed to serve students who had struggled in conventional high schools to specialized schools intended to serve the district’s highest-performing students, the predominant model was the small school of choice,³ which, notably among the other school types, was academically nonselective and small not only in size but also in function. That is, structures such as reduced teacher load and common planning time (in which teachers meet together to discuss their students’ progress and problems) were recommended to ensure that all students were known well and to promote strong, sustained relationships between students and teachers. SSCs also had four other essential features:

- SSCs were predominantly located in disadvantaged communities whose neighborhood high schools were closing.

¹The Gates Foundation supported the DOE’s new school creation efforts in partnership with the Carnegie Corporation of New York and the Open Society Institute, and other systemwide initiatives benefited from at least \$230 million worth of funding from philanthropies including the Wallace Foundation, the Michael & Susan Dell Foundation, and the Eli and Edythe Broad Foundation. Quint, Smith, Unterman, and Moedano (2010) provides a history of small schools in New York City, including the efforts undertaken by New Visions for Public Schools — which launched the New Century High Schools Initiative — that immediately preceded and served as the model for the school creation efforts under the Bloomberg/Klein administration.

²New Visions for Public Schools (2005).

³“Choice” in “small schools of choice,” a term coined by the researchers, is meant to emphasize the fact that these nonselective schools are accessible to students of all academic levels.

New York City Small Schools of Choice

Box ES.1

Types of New Small Schools Opened Between 2002 and 2008

General high schools offer a standard core curriculum in addition to elective courses and serve students at various levels of academic ability in grades 9-12.

- **Small schools of choice (SSCs)** are both small and academically nonselective (123 opened by the 2008-2009 school year).
- **Other general high schools** are small and academically selective (38 opened by the 2008-2009 school year).

Transfer schools are small, personalized, full-time schools designed to help overage and undercredited students overcome obstacles to graduation (21 opened by the 2008-2009 school year).

Middle/high schools, typically serving grades 6-12 or 7-12, are intended to support students' transition from middle to high school by enabling them to maintain relationships with familiar staff members and stay within familiar surroundings (33 opened by the 2008-2009 school year).

Specialized high schools serve students who are high-performing academically and/or artistically. Admission usually depends on the student's score on the Specialized High Schools Admissions Test, taken during eighth grade (1 opened by the 2008-2009 school year).

SOURCE: MDRC calculations use High School Application Processing System data from 2004-2005 to 2007-2008 and school-level administrative records provided by the DOE for the 2002-2003 to 2008-2009 school years.

- SSCs were established via a demanding and competitive proposal process that emphasized the common design principles of *academic rigor*, *personalization*, and *community partnerships*. This process required a prospective school leadership team to articulate an educational philosophy and demonstrate how it would motivate teachers, community members, and partner organizations around it. Additionally, the new school leadership had to develop a viable improvement strategy from the ground up.
- SSCs benefited from an infusion of outside resources: new principals and teachers, partnerships with intermediary organizations that had expertise in starting new schools, and start-up funding from the district and its philanthropic partners.

- SSCs received policy protections during their start-up period, including opening with only one founding grade of students (ninth grade) and having access to supports to facilitate procurement and hiring — such as special training for school principals and teachers; an amendment to the collective bargaining agreement, which gave principals more hiring discretion; and the conversion from a management system of regional offices to one in which schools had greater control over their budgets and educational programs.

How Was the Study Conducted?

In the spring of 2004, the city introduced the High School Application Processing System (HSAPS), a centralized choice process that was to govern the placement of all entering ninth-grade students. HSAPS uses an objective, computer-based process to assign about 72,500 entering ninth-graders annually to about 400 public high schools.⁴ When they are in the eighth grade, students who participate in HSAPS indicate, in order of preference, up to 12 high schools they would like to attend. Each year, some schools have more applicants than seats available. When this occurs at an SSC, a lottery is created within HSAPS that randomly determines which students are assigned to that school.

The analysis presented in this report uses data from the high school admissions process to identify a sample of students who chose SSCs, but who — because their chosen SSC had more applicants than seats available — were assigned via lottery either to that school or to a subsequent choice on their list. The analysis includes four annual cohorts of students who entered high school in the fall of 2005, 2006, 2007, and 2008, respectively — a total of 21,085 students who applied to the 105 SSCs that were oversubscribed, and for which lotteries were held, during the study period.

The existence of these lotteries provides an unprecedented opportunity to launch a rigorous study of the effects of this group of schools on student academic achievement, because the lotteries create two randomized groups among students who chose a given SSC — those who won its lottery and were assigned to the SSC and those who lost its lottery and were assigned elsewhere. Future outcomes for these two groups can be compared to obtain valid estimates of the effects of SSCs on student achievement. The lotteries created by HSAPS together with the unusually large size of the randomized sample they produced allow for a high degree of validity and precision in the present analyses. Thus, one can have considerable

⁴Although approximately 80,000 students participate in HSAPS each year, a small percentage of those students do not receive a match and advance to high school through a borough enrollment office instead of through HSAPS. Thus, an average of 72,500 students are *assigned* through HSAPS.

confidence in them. Using these lotteries as the basis for its analysis, this report presents the estimated effects of *enrolling in* a small school of choice versus enrolling in one of the other high schools that are available to the average incoming ninth-grader.⁵

Most of the schools attended by students who did not enroll in an SSC were *older* and *larger* than the SSCs: all SSCs were created since 2002 while two-thirds of the schools attended by the non-SSC enrollees were established before then, and the ninth-grade classes averaged 129 students in SSCs and 635 students in the non-SSC schools.⁶ However, it is important to remember that the SSCs are *not* being compared with the large, failing schools they replaced but rather with a wide range of schools that were also operating in a reform-rich atmosphere.

What Are the Effects of Small Schools of Choice?

Making a successful transition *into* high school is a critical step toward graduation. For example, the Consortium on Chicago School Research found that high school students who are on track to graduate by the end of their first year — meaning that they have earned at least 10 credits and are failing no more than one core subject — are three and a half times more likely to graduate in four years than are other students.

The First Three Years of High School

SSCs have a substantial positive impact on the transition into high school during ninth grade, according to data using all four cohorts (see Table ES.1):

- SSC enrollees were 10.8 percentage points more likely than the students who enrolled in other schools to earn 10 or more credits during their first year — 73.1 percent compared with 62.3 percent.
- SSC enrollees were 7.8 percentage points less likely to fail more than one core subject (39 percent compared with 46.8 percent).
- Combining these two indicators, 58.5 percent of SSC enrollees were on track to graduate in four years compared with 48.5 percent of their counterparts who attended a different type of school — a 10 percentage point difference.

⁵As explained in Appendix A, to estimate the effects of enrolling in an SSC, the estimated effects of winning an SSC lottery (see Appendix B) are adjusted to account for the proportion of SSC lottery winners who do not enroll in an SSC and the proportion of control group members who do enroll in an SSC, using a well-known statistical approach called instrumental variables analysis.

⁶While the schools attended by non-SSC enrollees were significantly larger, some of those larger schools (for approximately one-eighth of those students) had structures such as small learning communities in place to increase the level of personalization.

New York City Small Schools of Choice

Table ES.1

Estimated Effects of SSC Enrollment in Years 1 to 4 of High School

Outcome	Target SSC Enrollees	Control Group Counterparts	Estimated Effect	Effect Size (Standard Deviation)	P-Value for Estimated Effect
<u>Year 1 of high school (cohorts 1 to 4)</u>					
9th-grade on-track indicator ^a (%)	58.5	48.5	10.0 **		0.000
Earned 10 or more credits	73.1	62.3	10.8 **		0.000
Failed more than 1 semester of a core subject	39.0	46.8	-7.8 **		0.000
Total credits earned toward graduation ^b	11.3	10.4	0.9 **	0.21 **	0.000
Total number of student observations = 29,811					
<u>Year 2 of high school (cohorts 1 to 3)</u>					
Earned 20 or more credits (%)	69.4	58.3	11.1 **		0.000
Total credits earned toward graduation ^b	22.3	19.8	2.6 **	0.31 **	0.000
Total number of student observations = 21,822					
<u>Year 3 of high school (cohorts 1 and 2)</u>					
Earned 30 or more credits (%)	69.5	62.4	7.1 **		0.000
Total credits earned toward graduation ^b	32.2	29.7	2.4 **	0.23 **	0.000
Total number of student observations = 13,297					
<u>Year 4 of high school (cohort 1)</u>					
Graduated from high school	68.7	61.9	6.8 *		0.013
Local diploma granted	24.6	21.9	2.8		0.261
Regents diploma granted	39.5	34.6	4.9		0.074
Advanced Regents diploma granted	4.4	5.5	-1.1		0.366
Total number of student observations = 5,363					

SOURCES: MDRC's calculations use High School Application Processing System data from eighth-graders in 2004-2005 to 2007-2008, as well as data from New York City Department of Education attendance, course credits, Regents exam, transactional, and enrollment files from the 2005-2006 to 2008-2009 school years.

NOTES: This table presents the estimated effects for students who have follow-up course credits data. Appendix A describes how values in the column labeled "Target SSC Enrollees" are estimated. Appendix A also describes how values in the column labeled "Estimated Effect" are estimated. Values in the column labeled "Control Group Counterparts" are differences between corresponding values in the first and third columns.

A two-tailed t-test was applied to the estimated effect. Statistical significance levels are indicated as: ** = 1 percent; * = 5 percent.

Cohorts 1, 2, 3, and 4 consist of students in the study who were eighth-graders in the spring of 2005, 2006, 2007, and 2008, respectively.

^aThe on-track composite measure indicates whether students earned at least 10 credits in their first year of high school and had no more than one semester of failure in a core subject in that school year (English, math, science, and social studies).

^bThe "total credits earned toward graduation" measure is the aggregate number of course credits earned toward fulfilling the New York State graduation requirements. The credit requirements are as follows: 31 core subject credits, including 8 credits each of English and social studies; 6 credits each of math and science; 2 credits of arts; 1 credit of health; and 13 additional credits, including 4 credits of physical education, 2 credits of a foreign language, and 7 credits of electives.

- During the first year of high school, SSC enrollees earn almost one full credit more (0.9 credit) toward graduation than do their control group counterparts.

These positive effects on the transition into high school during ninth grade were seen among nearly all subgroups as defined by students' academic proficiency, socioeconomic status, race/ethnicity, and gender. The effects of SSCs for the second year of high school (using data from the first three cohorts) are also positive:

- Among second-year SSC enrollees, 69.4 percent had earned 20 or more credits toward graduation as opposed to 58.3 percent of their counterparts in non-SSC schools — an 11.1 percentage point difference.
- Second-year SSC enrollees had accumulated an average of 22.3 credits toward graduation as opposed to 19.8 credits for their non-SSC counterparts, for a difference of 2.6 credits.
- SSCs continue to increase students' engagement during their second year of high school, as evidenced by the increase in the percentage of students who attend school regularly — that is, at least 90 percent of the time — by 6.2 percentage points (49.0 percent for the non-SSC group compared with 55.2 percent for SSC enrollees).

In the third year of high school, positive effects continue to accumulate (according to data from the first two cohorts):

- SSCs increase the percentage of students earning 30 or more credits by 7.1 percentage points (69.5 percent for SSC enrollees compared with 62.4 percent for the non-SSC group).
- SSCs increase the average number of credits earned toward graduation by 2.4 credits (32.2 credits compared with 29.7 credits).
- SSCs increase average attendance during students' third year of high school by 3.0 percentage points and increase the percentage of students who attend regularly by 8.1 percentage points.

In summary, SSCs consistently improve student academic outcomes during the first three years of high school. The next logical question is: To what extent do these academic gains translate into increased rates of high school graduation?

Effects on Graduation Rates

For the first cohort of students (the only cohort for whom there are four years of follow-up data), the evidence indicates that SSC improvements in students' academic progress and school engagement during the early years of high school translate into higher rates of on-time graduation after four years:

- SSCs increase overall graduation rates by 6.8 percentage points, from 61.9 percent for students who attend schools other than SSCs to 68.7 percent for SSC enrollees.
- A majority of the SSC effect on graduation rates reflects an increase in receipt of New York State Regents diplomas.⁷ For this type of diploma, students must pass a series of Regents examinations with a score of 65 points or above and pass all of their required courses.
- SSCs increase the proportion of students (by 5.3 percentage points) who passed the English Regents with a score of 75 points or higher, the threshold for exempting incoming students at the City University of New York from remedial courses. They did not have an effect on math Regents exams.

What Are the Implications of These Findings?

These findings speak to the nation's current focus on high school reform. Much of the national discussion focuses on three areas where the education community has struggled to demonstrate success: (1) improving the academic outcomes of the most disadvantaged students, particularly with respect to high school graduation and college readiness; (2) identifying turnaround strategies for historically underperforming schools; and (3) implementing effective interventions at scale. This study sits at the nexus of all three themes, and its findings demonstrate that, in a relatively short period of time, an effective model can be implemented at scale and can improve the academic trajectories of large numbers of traditionally underserved students.

⁷Although the estimated effect of SSCs on the overall high school graduation rate is statistically significant, estimates of SSC effects on graduation rates by type of diploma ($p = 0.07$) miss the standard of statistical significance established for this study ($p = 0.05$). Thus, comparisons of effects across diploma types are suggestive only. Regents exams are administered to all public high school students in New York State. Students must pass at least five tests in specified subject areas in order to graduate with a diploma that is recognized by the New York State Board of Regents, which sets standards and regulations for all public schools.

The effects of small high schools of choice described in this report should be understood through three important lenses: their scale, the particular package of reforms they represent, and the group of highly disadvantaged students for whom they occurred.

Effecting Change at Scale. At capacity, the 105 SSCs in the study sample will serve over 45,000 students. That is roughly equivalent to the entire high school population of Houston, which is the seventh largest school district in the country. Readers should understand the magnitude of the present report's findings in that context — imagine, *for a school district the size of Houston*, increasing the percentage of ninth-graders who are eligible for on-time promotion by 10.8 percentage points, the percentage of black males in ninth grade who are on track to graduate by 8.5 percentage points, or the percentage of high school graduates by 6.8 percentage points. Given the scale of the SSC initiative, even seemingly minor gains can be understood as affecting thousands of high school students. In fact, the 6.8 percentage point increase in four-year graduation rates is roughly equivalent in size to one-third of New York City's gap in graduation rates between white students and students of color. Additionally, because the reported effects of SSCs are not the product of a small, targeted intervention but rather of a large system of small schools, the effects can be understood as reflecting the mean performance of a model implemented at scale. Reported effects are not the product of the best or most popular of the SSCs, but of 105 schools on average. In other words, the findings represent a *real-world test* of an intervention launched at the scale of a large-sized urban school district.

The SSC Package of Reforms. Students enrolled in SSCs did not just attend schools that were *small*. SSC enrollees attended schools that were purposefully organized around smaller, personalized units of adults and students, where students had a better chance of being known and noticed, and where teachers knew enough about their charges to provide appropriate academic and socioemotional supports. SSCs were not only *new* but were mission-driven. Their recent establishment via a demanding authorization process, which rejected more school proposals than it approved, required that a prospective school leadership team articulate an educational philosophy and demonstrate how it would motivate teachers, community members, and partner organizations around it. And the district's commitment to acting as a steward for new schools throughout the start-up period generated a set of supports and protections as these schools got up and running. Finally, SSCs benefited from an influx of external ideas, talent, and resources.

Serving Disadvantaged Students. SSCs were intended to be a viable and accessible option for the district's most disadvantaged students, and over the course of the study period, they served a population that almost exclusively comprised low-income students of color. The fact that SSCs targeted and served this population gives the reported findings even greater policy significance, as it is precisely economically disadvantaged students of color who find themselves at the bottom end of the nation's persistent achievement gap, and who are least

likely to graduate from high school on time, if at all. Furthermore, the robust positive SSC effects for many different types of students, including young men of color, hold out great hope for educational policymakers, practitioners, and researchers who wish to effect change, by demonstrating that it is possible to transform a large number of high schools in ways that benefit many disadvantaged students.

Interpreting and Using the Findings

The reforms implemented in New York City should be considered as a package of integrated, reinforcing strategies. The effects are not simply the result of closing low-performing schools or of creating SSCs, but rather a purposeful marriage of the two strategies supported by the implementation of several enabling reforms. Decision-makers interested in replicating the district's strategy should devote as much attention to *how* these reforms were operationalized as they do to *what* was conceptualized. Closing the failing schools would likely not have been singularly effective without the intentional creation of a range of viable alternative options to educate the displaced students. Similarly, the creation of new schools would likely not have gained the traction it did without the introduction of a districtwide choice process that motivated previously underserved students and their families to explore their high school options and exercise choice. Thus, while this study provides compelling evidence in support of a particular small school model, that model cannot be understood as existing in isolation but rather as one integral component of a comprehensive and coordinated set of district reforms.

While these results are uniformly encouraging, they are still early. Only one of the cohorts has been followed through four years of high school up to graduation. The full effects of the high school reform initiative in New York City will not begin to be revealed until the remaining three cohorts of students graduate from high school and venture into postsecondary education and the labor market.

EARLIER PUBLICATIONS ON NEW YORK CITY SMALL SCHOOLS OF CHOICE

Approaches of Bill & Melinda Gates Foundation-Funded Intermediary Organizations to Structuring and Supporting Small High Schools in New York City

2010. Eileen Foley with Erickson Arcaira, Stephen Coleman, Elizabeth Reisner, Troy Scott, Tandra Turner, Yvonne Woods. Prepared by Policy Studies Associates, Inc.

*New York City's Changing High School Landscape
High Schools and Their Characteristics, 2002-2008*

2010. Janet C. Quint, Janell K. Smith, Rebecca Unterman, Alma E. Moedano. Prepared by MDRC.

Small High Schools at Work

A Case Study of Six Gates-Funded Schools in New York City

A Report to the Bill & Melinda Gates Foundation

2010. Prepared by the Academy for Educational Development (AED) Center for School and Community Services.

NOTE: All the publications listed above are available for free download at www.mdrc.org.

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About MDRC

MDRC is a nonprofit, nonpartisan social policy research organization dedicated to learning what works to improve the well-being of low-income people. Through its research and the active communication of its findings, MDRC seeks to enhance the effectiveness of social and education policies and programs.

Founded in 1974 and located in New York City and Oakland, California, MDRC is best known for mounting rigorous, large-scale, real-world tests of new and existing policies and programs. Its projects are a mix of demonstrations (field tests of promising new program approaches) and evaluations of ongoing government and community initiatives. MDRC's staff bring an unusual combination of research and organizational experience to their work, providing expertise on the latest in qualitative and quantitative methods and on program design, development, implementation, and management. MDRC seeks to learn not just whether a program is effective but also how and why the program's effects occur. In addition, it tries to place each project's findings in the broader context of related research — in order to build knowledge about what works across the social and education policy fields. MDRC's findings, lessons, and best practices are proactively shared with a broad audience in the policy and practitioner community as well as with the general public and the media.

Over the years, MDRC has brought its unique approach to an ever-growing range of policy areas and target populations. Once known primarily for evaluations of state welfare-to-work programs, today MDRC is also studying public school reforms, employment programs for ex-offenders and people with disabilities, and programs to help low-income students succeed in college. MDRC's projects are organized into five areas:

- Promoting Family Well-Being and Child Development
- Improving Public Education
- Promoting Successful Transitions to Adulthood
- Supporting Low-Wage Workers and Communities
- Overcoming Barriers to Employment

Working in almost every state, all of the nation's largest cities, and Canada and the United Kingdom, MDRC conducts its projects in partnership with national, state, and local governments, public school systems, community organizations, and numerous private philanthropies.

