

# Headed to College

The Effects of New York City's Small Public High Schools of Choice on Postsecondary Enrollment

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The Alliance for Excellent Education

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# Small Schools of Choice: Key Features

- Accessible to all students of all academic abilities
- Small in size and function with thematic focus
- Demanding “bottom up” proposal process emphasizing
  - Academic rigor, personalization, community/employer partnership
  - Competitive application process overseen initially by core team representing teachers/principals unions, foundations, DOE, and nonprofit intermediary
- Infusion of outside resources/intermediary start-up supports
- Predominantly located in economically and educationally disadvantaged communities

# Small Schools of Choice: What We Found!

- SSC enrollees are more likely to graduate high school, obtain a Regent's diploma, enroll in and persist in college
- Every student subgroup benefits from SSC enrollment
- These effects are large and consistent year after year
- SSCs cost per graduate are lower than those of the HSs attended by control group counterparts:
  - Because SSC graduation rates are higher and fewer students require a fifth HS year

# A Lottery-Based Experimental Research Design

- When an SSC is oversubscribed, an algorithm that matches student choices to schools uses a lottery-like process to break ties
- We used this process to identify 230 lotteries, involving 4 cohorts of incoming 9<sup>th</sup>-graders (2005, 2006, 2007, 2008), affecting 93 high schools and 14,608 students
- The lottery process created two nearly identical groups of students: one group of lottery winners who had an opportunity to enroll in the first SSC they competed for and another that did not

# SSCs Increase HS Graduation and Boost Enrollment in Postsecondary Institutions

Outcome (%)	Target SSC Enrollees	Control Group Counterparts	Estimated Effect
<b><u>High School Graduation</u></b>			
Graduated from high school	71.6	62.2	<b>9.4**</b>
Local diploma granted	13.2	11.4	1.8
Regents diploma granted	50.2	43.5	<b>6.7**</b>
Advanced Regents diploma granted	8.2	7.3	<b>0.9</b>
<b><u>College Readiness</u></b>			
English Regents exam score of 75 or above	42.1	35.8	<b>6.3**</b>
Math A Regents exam score of 75 or above	25.1	24.5	0.5
<b><u>Enrolled in Postsecondary Institution</u></b>	49.0	40.7	<b>8.4**</b>

# Postsecondary Enrollment Rates Rise for All

Student Characteristic (%)	Target SSC Enrollees	Control Group Counterparts	Estimated Effect
<b><u>Low-income: free/reduced-price lunch</u></b>	47.7	38.1	<b>9.6**</b>
<b><u>Race/ethnicity, by gender</u></b>			
Black male	42.3	31.0	<b>11.3**</b>
Black female	53.4	46.4	7.0*
Hispanic male	43.4	36.8	6.6
Hispanic female	48.9	43.3	5.6
Other female	70.5	58.0	12.6*
<b><u>8th-grade reading proficiency</u></b>			
Did not meet standards (level 1)	26.2	22.9	3.3
Partially met standards (level 2)	42.7	34.1	<b>8.5**</b>
Fully met standards (level 3)	62.8	52.1	<b>10.7**</b>
<b><u>Special education status</u></b>	35.8	31.7	4.1
<b><u>English language learner</u></b>	49.6	41.1	<b>8.4</b>

# The SSC Effect Persists Over Time (Cohort 1)

In Follow-Up Period (%)	Target SSC Enrollees (%)	Control Group Counterparts (%)	Estimated Effect (%)
<b><u>Postsecondary enrollment</u></b>			
Year 1	44.4	37.6	<b>6.8*</b>
Year 2	37.6	31.3	<b>6.4*</b>
Year 3	31.7	25.8	<b>5.8*</b>
Fall of year 4	25.1	19.5	<b>5.7</b>
<b><u>Postsecondary degree completion</u></b>			
Fall of year 4	3.7	2.3	1.4

# Summary: Reform at Scale is Feasible

- Small, themed, non-selective high schools of choice can be an effective reform strategy
- As implemented in NYC, small schools significantly improved students' academic outcomes, graduation rates, and college enrollment
- Costs per graduate are actually lower because more students graduate and fewer students need a 5<sup>th</sup> year of HS
- NYC's results and approach to small school selection and design stands in stark contrast to initiatives in other locations



# Looking into the Black Box of SSC Effectiveness

We asked principals and teachers at 25 effective small schools:

- What features of these SSCs do you believe are most responsible for their effectiveness?
- What do you believe are the most serious obstacles to creating and maintaining the effectiveness of these SSCs?

# SSC Success Factors

Principals perceived:

- Their teachers (84%)
- Personal relationships (76%)

Teachers perceived:

- Personal relationships (88%)
- High academic expectations (80%)
- Teachers (64%)

# SSC Challenge Factors

Principals perceived:

- Financial resources (64%)
- Space (44%)
- Academic expectations (40%)
- Staffing (36%)

Teachers perceived:

- Staff (88%)
- Academic expectations (40%)

# Conclusion

Sustained district-wide reform at scale IS possible. But it's not easy, requiring:

- Strong partnerships among the district, unions, intermediaries, and funders
- Dedicated principals and teachers, backed by intermediaries and other supports
- Commitment to stay the course

# Contact Information

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# Why The Findings Are Important

- Scale and bold nature of the intervention
  - Opening 123 small, innovative, unscreened high schools in NYC's poorest neighborhoods and institutionalizing choice for all rising 9<sup>th</sup> graders
- Schools serve low-income, disadvantaged students of color
  - 93% minority; 83% low-income; 2/3rds behind grade level at HS entry
- Rigor of the evaluation
  - Lottery-based natural experiment with over 21,000 students and 105 high schools
- Process and criteria for selecting, starting and managing schools created high performing public schools staffed by union teachers

# Factors Principals/Teachers Say Influence SSC Effectiveness

	Principal Interviews		Teacher Focus Groups	
	Factor	Factor	Factor	Factor
Factor (%)	mentioned	mentioned first	mentioned	mentioned first
Teachers	84	52	64	8
Personal relationships	76	28	88	52
High academic expectations	24	4	80	12
Leadership	20	-	36	12
Collaboration	16	8	-	-
External partners	4	-	16	-
Data use/tracking students	-	-	12	8

# Perceived Challenges to SSC Effectiveness

	Principal Interviews		Teacher Focus Groups	
	Challenge	Challenge	Challenge	Challenge
Challenge (%)	mentioned	mentioned first	mentioned	mentioned first
Financial resources	64	28	28	24
Space	44	20	12	-
Academic expectations	40	16	40	16
Staffing	36	-	88	24
High-need student	24	4	24	-
Attendance	-	-	8	8
Socioeconomic challenges	28	12	28	4
Discipline	-	-	4	4
Other challenge(s)	100	20	100	20



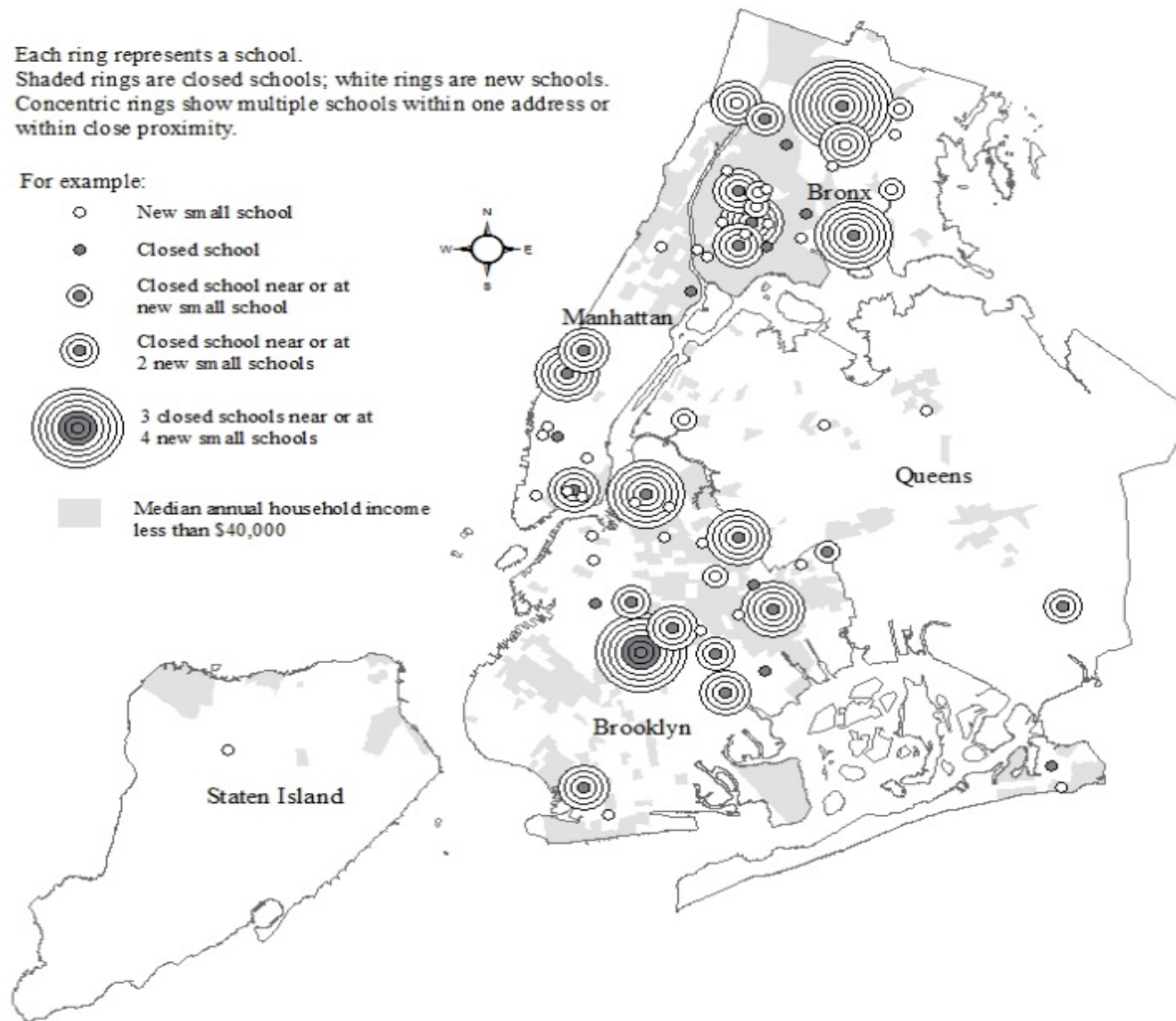
# SSC Graduates Are Not Disproportionately Enrolling in Less Selective Colleges

By Barron's Selectivity Level (%)	Target SSC Enrollees (%)	Control Group Counterparts (%)	Estimated Effect (%)
Enrolled in Post-Secondary	49.0	40.7	8.4**
<b><u>By Barron's Selectivity for cohorts 1-4</u></b>			
<u>Four-year colleges</u>			
Most competitive	1.2	0.5	0.7**
Highly competitive	1.6	0.4	1.2**
Very competitive	6.0	4.7	1.2
Competitive	8.3	7.2	1.1
Less competitive	3.3	2.1	1.2*
Non competitive	9.3	8.3	1.0
<u>Two-year colleges</u>			
Special/Unranked/Two-year	19.3	17.4	1.9

Each ring represents a school.  
 Shaded rings are closed schools; white rings are new schools.  
 Concentric rings show multiple schools within one address or  
 within close proximity.

For example:

- New small school
- Closed school
- ◉ Closed school near or at  
new small school
- ◉ Closed school near or at  
2 new small schools
- ◉ 3 closed schools near or at  
4 new small schools
- Median annual household income  
less than \$40,000



# Relevance

Responses on school theme and external partnerships were mixed.

Theme may:

- limit the curriculum and college-readiness
- help attract like-minded teachers and students

Responses regarding the role of external partners were varied.

# HS Graduation Rates: All Students Benefit

Student Characteristic (%)	Target SSC Enrollees	Control Group Counterparts	Estimated Effect
<u>Low-income: free/reduced-price lunch</u>	69.7	59.2	<b>10.5**</b>
<u>Race/ethnicity, by gender</u>			
Black male	67.2	55.0	<b>12.2**</b>
Black female	73.8	66.5	7.3*
Hispanic male	66.7	60.3	6.4
Hispanic female	72.0	62.6	9.4**
Other female	88.4	77.6	10.8
<u>8th-grade reading proficiency</u>			
Did not meet standards (level 1)	43.9	37.3	6.6
Partially met standards (level 2)	66.3	55.7	<b>10.7**</b>
Fully met standards (level 3)	85.3	73.3	<b>12.0**</b>
<u>Special education status</u>	63.4	50.1	<b>13.4*</b>
<u>English language learner</u>	65.0	60.4	4.6