
What is this study about?

The study examined whether winning an admissions lottery for a small school of choice improved high school students' progress toward graduation and graduation rates.

The study analyzed data on more than 21,000 students in New York City who participated in a ninth-grade admissions lottery for a small school of choice. Eighth-grade students who participated in lotteries during the 2004–05 through 2007–08 school years were followed through the 2008–09 school year, resulting in four years of follow-up data for the cohort in the 2004–05 lottery, three years for the cohort in the 2005–06 lottery, and so on.

Key measures of students' progress toward graduation were an on-track indicator after the first year of high school—which noted whether students earned at least 10 credits and had no more than one failing semester in a core subject—and total credits earned after the second and third years of high school. Graduation rates were measured four years after students' scheduled entry into ninth grade.

The study measured the effect of an offer to enroll in a small school of choice by comparing outcomes of students who won an admissions lottery with those of students who lost the same admissions lottery. Students could enter admissions lotteries for more than one school, and approximately one-quarter of participating students won one lottery and lost at least one other lottery.

Features of Small Schools of Choice

- Small, nonselective high schools located in disadvantaged communities that serve approximately 100 students per grade.
- Emphasis on academic rigor, strong relationships between students and teachers, and community partnerships.
- Founded in 2002 by planning teams comprised of teachers, administrators, and community partners that developed the mission and planned curriculum for each new school.
- Utilized substantial new resources, such as new principals and teachers, partnerships with organizations that had experience starting new schools, and start-up grants, to support implementation.

Quick reviews examine evidence published in a study (supplemented, if necessary, by information from author queries) to assess whether that study's design meets WWC evidence standards. Quick reviews rely on the effect sizes and significance levels reported by study authors.


2 This quick review reports the results of the intent-to-treat analysis, found in Appendix B of the study report, which measures the effect of the offer to attend a small school of choice and is the analysis preferred by the WWC. The main body of the report presents the effect of attending a small school of choice. The effects of attending a small school of choice on high school students' progress toward graduation and graduation rates are reported to be 20–30% larger and are also statistically significant. See the full report for the results of that analysis, which is not rated in this quick review.
What did the study find?

The study found that students who won an admissions lottery for a small school of choice showed the following statistically significant improvements in graduation prospects, relative to students who lost the same admissions lottery:

After the first year of high school, lottery winners were more likely than members of the control group to be on track for graduation: 57.9% compared with 50.5%.

After the second and third years of high school, lottery winners averaged 1.4 and 1.3 more credits toward graduation than control group members.

Four years after their scheduled entry into ninth grade, 68.1% of lottery winners graduated compared with 63.8% of control group members.

The WWC has reservations about these results because carrying out the lotteries using the method described in the report may have resulted in nonrandom differences between the study groups.

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**The research described in this report meets WWC evidence standards with reservations**

**Strengths:** Three-quarters of students in the analysis sample were assigned by a random process. For the full sample, the assignment process resulted in groups that were equivalent on baseline test scores and demographic characteristics.

**Cautions:** One-quarter of the students were assigned by a process that may not have been random. Specifically, for students participating in multiple lotteries, the probability of winning later lotteries (after the first lottery) depended, in part, on the probability of winning earlier lotteries. But the probability of winning earlier lotteries was not random: it was determined by the lotteries to which the student chose to apply.

The authors showed that lottery winners and losers in the full analysis sample were equivalent on demographic characteristics and test scores, but it is possible that other differences between the two groups existed that were not accounted for in the analysis.

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3 Although the version of the report reviewed by the WWC did not contain information on the baseline equivalence of the analysis samples, the study authors subsequently provided this information to the review team.