

## **Executive Summary: The Role of Selective High Schools in Equalizing Educational Outcomes: Heterogeneous Effects by Neighborhood Socioeconomic Status**

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The achievement gap in test scores between low-income students and their more affluent counterparts has widened in the last 50 years (Reardon, 2011). While much attention has been paid to racial achievement gaps, the test score gaps between students from low-income and high-income families are actually much larger. Further, many low-income students who are high-achieving in elementary school fail to make it to college (Fox, Connolly, & Snyder, 2005). Improving access to high-quality public schools for low-income students may act as a lever for closing the gap by providing equitable educational opportunities for students who have fewer economic resources at home.

In this study, researchers from the University of Chicago Consortium on School Research and the Federal Reserve Bank of Chicago use data from Chicago Public Schools (CPS) to test whether selective enrollment high schools can act as that lever to close the income achievement gap. In other words, this study investigates whether the benefits of attending a selective high school are larger for students from low-socioeconomic (SES) neighborhoods than for students from high-SES neighborhoods. We can do so because the CPS admissions policy guarantees seats for students from all SES backgrounds.

In order to categorize neighborhoods by SES, CPS uses Census information, such as income and adult educational attainment, as well as the performance of nearby elementary schools. The neighborhoods are then divided into four groups such that approximately 25 percent of the school-aged population lives in each neighborhood SES category, from “Tier 4” for the highest-SES neighborhoods to “Tier 1” for the lowest-SES neighborhoods. This explicit consideration of neighborhood SES for admission to a selective enrollment high school is unique to Chicago.

On average, selective high schools will have better student outcomes than non-selective high schools because, by definition, selective high schools only enroll high-achieving students. As a result, it is difficult to separate the effect of the selective high schools themselves from the ability the students bring to the school. Ideally, we need to compare nearly identical students who attend both types of schools. In this study, we compare students just above and just below the cutoff admission score. These students have similar academic performance and live in the same neighborhood SES category, but some were offered a seat and others were not offered a seat at selective enrollment high schools.

This analysis estimates whether attending a selective high school improves students' academic outcomes (e.g. grades and test scores); college outcomes (e.g. probability of attending college and probability of attending a selective college); and perceptions of their high school environment (e.g., do they report better relationships with peers and teachers). We find nearly uniformly positive effects on survey reports of students' experiences while in high school. Namely, *regardless of the students' neighborhood SES*, attending a selective enrollment high school:

- Improves student reports of personal safety at school.
- Improves students' assessments of the quality of their relationships with peers and teachers.

However, we find mixed results on academic and college outcomes. Attending a selective enrollment high school:

- Has no effect on test scores for students from low- or high-SES neighborhoods. This is consistent with existing research on selective high schools in the U.S. (Abdulkadiroğlu, Angrist, & Pathak, 2014; Dobbie & Fryer, 2014).
- Has a negative effect on GPA for students from low-SES neighborhoods. The negative effects on GPA are much smaller for students from high-SES neighborhoods.
- Has no effect on whether students graduate from high school or go on to college, regardless of neighborhood SES.
- Reduces the probability that a student from a low-SES neighborhood attends a selective college. At the same time, there may be an increased probability that a student from a high-SES neighborhood attends a selective college.

Our finding about the effects on the selectivity of college attended is particularly notable since college completion rates are higher at more selective colleges. College selectivity could also influence longer-term life outcomes like earnings and health. We suspect that the negative result on college selectivity for students from low-SES neighborhoods may be driven by the negative effect on their high school GPAs. But we need to do more work to understand these differences because many factors influence college choice. Are high school counselors advising students to apply to different sets of colleges? Are selective enrollment students applying to the same colleges as their peers who do not attend a selective high school, but the lower GPA makes them less likely to be admitted to selective colleges? Does the negative effect on high school GPA make students ineligible for scholarships, thus affecting where they enroll in college? Do students see themselves as less qualified to apply to selective colleges based on their peer group? Understanding the mechanism driving our result on college selectivity will be important for determining implications for both policy and practice.