

Selective Enrollment High Schools in Chicago: Admission and Impacts

In the 2015-16 school year, 75 percent of Chicago Public Schools (CPS) ninth-graders opted out of their assigned high school. These students could choose from more than 300 programs at 138 public high schools. Selective enrollment high schools (SEHSs) were among the most high-profile and most sought-out options: 13,400 students applied for 3,600 seats in 11 SEHSs. SEHSs aim to provide high-achieving students with a challenging academic experience and admit students based on prior academic performance. Many of the SEHSs are consistently ranked as the top schools in Illinois by *U.S. News and World Report*. However, criticisms about these schools include concerns that they disproportionately serve affluent students and drain resources from neighborhood schools. This research asks two key questions:

How does the admission policy in CPS affect the profile of SEHS students in Chicago? What effects do SEHSs have on students?

An Overview of the SEHS Admission System in CPS

Students are admitted to a SEHS based on a combination of their application score, their neighborhood socioeconomic status (SES) classification, and the seats available at the SEHSs where they apply.

- Application scores are comprised of:
 - Seventh-grade GPA in math, English, science, and social studies;
 - Seventh-grade standardized test scores;
 - A selective enrollment admissions exam.

• Each applicant is also assigned a SES "tier":

- Each census tract in Chicago receives an SES index score based on indicators from the American Community Survey and neighborhood elementary school performance.
- The census tracts are then equally divided into four tiers so that each tier contains approximately one-quarter of Chicago's school-aged children. Tier 1 represents the lowest-SES quartile; tier 4, the highest-SES quartile.

- Applicants can apply to and rank up to six SEHSs.
- How SEHS seats are allocated:
 - At each SEHS, 30% of seats are allocated to top-scoring applicants, regardless of their SES tier.
 - Remaining seats are divided equally among the four SES tiers; 17.5% of seats are allocated to each SES tier.
 - Prior to 2010, the admission system allocated seats using student race/ ethnicity instead of neighborhood SES.

For more details, see https://go.cps.edu/ explore/program-types

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Research Findings

Applicant Preferences

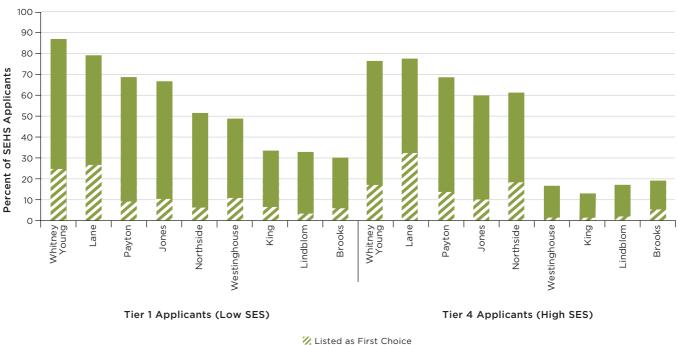
Applicants tend to prefer the same selective enrollment high schools. These most-competitive schools:

- Are located near downtown or on the north side of Chicago. They include:
 - Jones College Prep
 - Lane Tech College Prep
 - Northside College Prep
 - Walter Payton College Prep
 - Whitney M. Young Magnet High School

- Are listed as the first choice by:
 - 75% of tier 1 (low SES) applicants
 - 91% of tier 4 (high SES) applicants
- Are the schools with the highest cutoff scores for admission.

SNAPSHOT FIGURE 1

Applicants' Preferences for SEHSs Are Similar, Regardless of Their SES Tier



Percent of Applicants Listing Each SEHS on Their Application for SY 2012-13

Note: This figure is based on applicants for the 2012-13 school year, when there were nine SEHSs. Findings are similar for other cohorts. Schools are ordered by the percent of tier 1 applicants including each school on their application

Components of the Admission System

The components considered in any admission process influence who is admitted. CPS uses multiple academic performance metrics and a proxy for students' SES for SEHS admissions. The district made these choices in part to create more diverse selective enrollment high schools.

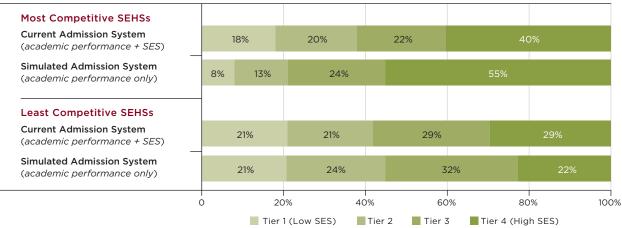
• Including SES tiers increases access to the most-competitive SEHSs for low-SES students, Black students, and Latino students, compared to simulated admissions without SES tiers.

SNAPSHOT FIGURE 2

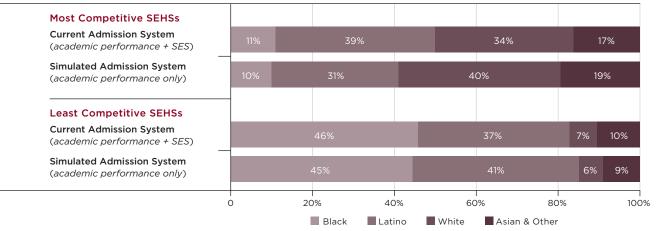
Including SES Tiers in Admission Criteria Changes Admission Offers

Percent of Admission Offers for SY 2012-13

By Student SES Tier



By Race/Ethnicity



Note: This figure is based on applicants for the 2012-13 school year, when there were nine SEHSs. Findings are similar for other cohorts. Simulations assume the same applicant pool and the same SEHS rankings in applications, and assign top-scoring students to schools, without consideration of SES tier. Approximately 2% of applicants identified as Native American/Alaskan Native, multiracial, or had missing race/ethnicity data; they are included in the "Asian & Other" category.

How Do Different Academic Criteria Affect Who Is Admitted?

On average, female and Latino students have higher grades than their male and Black peers. Therefore:

criteria increases the representation of:

Using course grades and test scores in admission Using only test scores in admission criteria would increase the representation of:

- Female students
- Latino students

- Male students
- Black students

Student Outcomes

The common perception is that SEHSs benefit all students who attend them. The picture is more complicated, particularly for students who live in low-SES neighborhoods.

Comparing Similar Students

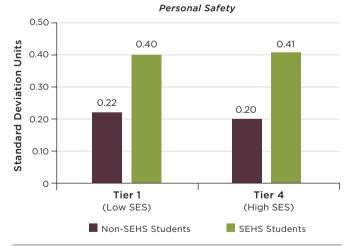
For each SEHS, there are published admission cutoff scores. An applicant scoring above the cutoff score received an offer, while an applicant below that score did not. There is likely little difference in the academic skills of the students very close to, but on either side of, the cutoff. We compare outcomes (like test scores, grades, college enrollment, and perceptions of safety at school) of students in the same SES tier who are on either side of the admission cutoff for that tier. This technique is called a regression discontinuity design.

Compared to similar students, SEHS students:

- Have similar:
 - Test scores
 - High school graduation rates
 - College enrollment rates
- Report better experiences:
 - Higher levels of safety at their high school
 - Stronger relationships with peers

SNAPSHOT FIGURE 3

Admission to a SEHS Increases Student Reports of Personal Safety



Note: Heights of the bars represent the regression-adjusted reported levels of safety by admission status at the cutoff. The tier 4 effects are statistically significant (p-value < 0.01). Effects are estimated using first-time ninth-graders in 2010-11 to 2013-14.

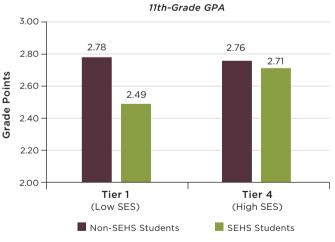
students who do not enroll in SEHSs.

• However, tier 1 (low SES) SEHS students have significantly lower GPAs and are less likely

to attend a selective college than similar tier 1

SNAPSHOT FIGURE 4

Admission to a SEHS Decreases 11th-Grade GPA



Note: Heights of the bars represent the regression-adjusted average GPA by admissionstatus at the cutoff. The negative effect on eleventh-grade GPA for tier 1 students is statistically different from zero (p-value=0.03) and statistically larger than for tier 4 students (p-value=0.04). Effects are estimated using first-time ninth-graders in 2010-11 to 2013-14.

Implications

When a school district implements a portfolio approach, it offers many different kinds of schools and programs to students and families. Chicago has charter, career academy, magnet, and selective enrollment high schools—just to name a few. CPS has proposed expanding the number of selective enrollment schools. At the same time, the district faces budgetary constraints and must make decisions about where to invest resources. The research presented in this snapshot offers implications for district policymakers.

- Application criteria affect who is admitted.
 For example, when grades are included, girls are more likely to be admitted because they have higher grades on average than boys. When SES tiers are used, more tier 1 (low SES) students are likely be admitted because student achievement and SES are correlated (and therefore, on average, tier 1 applicants have lower application scores than tier 4 applicants).
- We need to understand why low-SES students who just make the cutoff for admission to a SEHS have more negative academic outcomes than otherwise similar students who just missed the cutoff. In this study, admission to a SEHS had significant negative effects on GPA and attendance at a selective college for tier 1 students. Do these negative effects reflect a need for more student supports or changes in guidance on college applications from counselors at SEHSs? Is it that many colleges rely heavily on GPA and test scores without regard to the characteristics of a student's high school? Are there other explanations to consider?
- SEHS applicants with strong academic records succeed academically at high schools that are not SEHSs. Students who just miss the cutoff for admission to a SEHS do just as well or better on a variety of academic outcomes, including test scores and college enrollment rates, than similar students who are admitted to a SEHS. Many who miss the cutoff attend high-performing neighborhood high schools or special programs within high schools, like International Baccalaureate.
- Students perceive SEHSs as having safer, stronger school climates, suggesting that resources should be invested in fostering strong climates in non-selective high schools. Students and families may seek out selective schools because of their strong climates. Given the academic success that high-achieving students have at other high schools, policymakers may want to invest in improving school climate at non-selective high schools.

"Students who just miss the cutoff for admission to a selective enrollment high school do just as well or better on a variety of academic outcomes than similar students who are admitted."

ABOUT THE RESEARCH

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Publication Information:

Barrow, L., & Sartain, L. (2017)

The expansion of high school choice in Chicago Public Schools. *Economic Perspectives*, *41*(5), 1-30.

Barrow, L., Sartain, L., & de la Torre, M. (2017)

The role of selective high schools in equalizing educational outcomes: Using place-based affirmative action to estimate heterogenous effects by neighborhood socioeconomic status. Chicago, IL: University of Chicago Consortium on School Research.

Michelman, V., & de la Torre, M. (forthcoming)

Fostering diversity in selective enrollment high schools in Chicago. Chicago, IL: University of Chicago Consortium on School Research.

ABOUT THE UCHICAGO CONSORTIUM

The University of Chicago Consortium on School Research conducts research of high technical quality that can inform and assess policy and practice in the Chicago Public Schools. We seek to expand communication among researchers, policymakers, and practitioners as we support the search for solutions to the problems of school reform. The UChicago Consortium encourages the use of research in policy action and improvement of practice, but does not argue for particular policies or programs. Rather, we help to build capacity for school reform by identifying what matters for student success and school improvement, creating critical indicators to chart progress, and conducting theory-driven evaluation to identify how programs and policies are working. The UChicago Consortium is a unit of the Urban Education Institute.

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The Federal Reserve Bank of Chicago is one of 12 regional Reserve Banks that, along with the Board of Governors in Washington, DC, make up the nation's central bank. The Chicago Reserve Bank serves the seventh Federal Reserve District, which encompasses the northern portions of Illinois and Indiana, southern Wisconsin, the Lower Peninsula of Michigan, and the state of Iowa. In addition to participation in the formulation of monetary policy, each Reserve Bank supervises member banks and bank holding companies, provides financial services to depository institutions and the U.S. government, and monitors economic conditions in its District.

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To read the research behind this snapshot, visit: http://consortium.uchicago.edu/publication-tags/selective-enrollment-high-schools

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