

## The Effect of School Choice on Academic Achievement in the United States

**Researchers:**

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**Sector(s):** Education

**Location:** Chicago, United States of America

**Sample:** 15,403 applications from 7,469 students applying to kindergarten and first grade

**Target group:** Students Urban population

**Outcome of interest:** Enrollment and attendance Student learning

**Intervention type:** School choice

**AEA RCT registration number:** <https://www.socialscienceregistry.org/trials/1102>

**Partner organization(s):** Annie E. Casey Foundation, Chicago Public Schools (CPS)

Children from low-income families often live in neighborhoods with lower-quality schools. Some school districts in the United States have started programs that let these students choose to attend higher-quality schools. Researchers used Chicago's school choice program, which uses a random lottery to allocate slots in elementary schools, to evaluate how the opportunity to attend a higher-quality school impacts academic achievement. They found that lottery winners are more likely to attend higher-performing schools, but they do not have higher test scores than their peers who were not offered slots.

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In 2004, thirteen million children lived below the poverty line in the United States. Because of disparities in local school funding in the United States, children living in poverty are more likely to attend lower-quality schools with fewer financial resources and less qualified teachers. Many policies have aimed to bridge this gap in access to quality schools by allowing low-income students to enroll in resource-rich schools outside of their neighborhoods, but the evidence is mixed on whether this increases test scores and other measures of academic achievement. Previous research found that offering students the opportunity to attend higher-quality high schools did not consistently improve standardized test scores or graduation rates. However, there has been little work evaluating the effect of school choice programs for younger students, who may benefit from attending higher quality schools earlier in their academic careers.

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The Chicago Public Schools (CPS) system includes more than 400,000 children, and poverty rates among households with children attending CPS are well above the U.S. average. Elementary school students are guaranteed admission to assigned neighborhood schools, but they are also eligible to apply to schools outside of their neighborhood or to any of 200 specialized programs that accept students from throughout the city. With the exception of a handful of academically advanced programs, the schools use lotteries to allocate unfilled slots to students. In 2000 and 2001, more than one-third of elementary school students attended a school that was not their neighborhood school.



A teacher involved students in a group activity in the US.

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The researchers used the existing CPS lottery system to test the effect of school choice on academic achievement in elementary school. Each spring, the lotteries randomly allocate slots to eligible students for the following school year. To qualify, parents must fill out a simple, one-page form for each student. Students can apply to more than one school. They must live in the CPS school district in order to be eligible for the lottery, but students are not required to be currently enrolled in a CPS school to apply.

Researchers used information collected by CPS from 15,403 lottery applications to 32 different schools from 7,469 students entering kindergarten and first grade in 2000 and 2001. Roughly one out of every four students won at least one lottery. The data on student test scores and other measures of academic achievement is from 2005, when students were between third and fifth grades.

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*Applications to the school choice program:* Lottery applicants differed from CPS students who did not apply. Students who applied to the lottery were more likely to be white, less likely to be eligible for free or reduced-price lunch, and more likely to live in neighborhoods with lower poverty rates. This suggests that by requiring students to apply, CPS's school choice program may fail to reach students facing the greatest barriers to academic success.

*Impact on access to high quality schools:* Researchers found that lottery winners were more likely to attend better schools than students who did not win a school choice lottery. Lottery winners attended schools with average standardized test scores that were 20 percent higher than the schools that students attended when they did not win. This positive effect on school quality was present even though only 39 percent of students who won a lottery used their slot.

*Impact on academic achievement:* Despite attending higher quality schools, lottery winners did not have higher individual test scores and were equally likely to be in special education classes or to repeat a grade. Furthermore, the intervention had little effect on academic achievement across income and racial identity, even though school choice advocates claim the programs benefit low-income and students of color.

The results suggest that access to better schools alone may not be enough to improve the academic achievement of low-income students and students of color. In fact, the study demonstrated that achievement barriers across racial and income groups can persist between students within schools. Although many policymakers currently advocate for school choice programs, students may gain more from other programs that engage parents, train teachers, or provide remedial instruction in their neighborhood schools.

Cullen, Julie Berry, and Brian Jacob. "Is Gaining Access to a Selective Elementary School Gaining Ground? Evidence from Randomized Lotteries." In Jonathan Gruber, ed *An Economics Perspective on the Problems of Disadvantaged Youth*. Chicago: University of Chicago Press, 2008.