

Issue BRIEF

The number of charter schools has grown to more than

6,000

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Charter High Schools' Effects on Educational Attainment and Earnings

INTRODUCTION

Since their inception in 1992, the number of charter schools has grown to more than 6,000 in 40 states, serving more than 2 million students. Studies of charter schools' test-score impacts have covered a wide variety of jurisdictions, employing quasi-experimental methods with longitudinal data or experimental approaches using data from admission lotteries. The findings from this research are mixed.

Compared to the voluminous literature on test scores, research on the impact of charter schools on long-term outcomes is sparse. Using data from Florida and Chicago, we measure the effects of charter high schools on graduation, college enrollment, and college persistence. In Florida we also provide the first evidence on the effects of charter schools on earnings in adulthood. We find evidence suggesting that charter high schools are not only increasing post-secondary educational attainment but also boosting long-run earnings.

METHODS

Measuring the impact of charter schools is difficult, because students who enroll in charter schools may be different from those who choose to attend traditional public high schools. Some studies solve this problem by using data from the admissions lotteries of oversubscribed charter schools to identify an experimental control group of students who differ from the charter students only because they didn't win an admissions offer in a random lottery. But this method is typically viable only in a small subset of oversubscribed charter schools; a different approach is needed to estimate average effects for large numbers

of charter schools. In our study of charter high schools, we address the challenge first by restricting our attention to a sample of students who were enrolled in charter schools in 8th grade, thus ensuring that both sets of students were motivated to enter a charter school at some point in their prior schooling. The treatment students in our analysis remained enrolled in charter schools in 9th grade, while the comparison students switched to traditional public schools. In other words, the comparison students and treatment students alike had previously chosen to enroll in charter middle schools. Second, we control statistically for 8th-grade student characteristics, including test scores, race/ethnicity, poverty,

Charter high schools in Florida and Chicago appear to boost their students' rates of graduation, college enrollment, and college persistence by

7 to 13

percentage points.

Florida charter high schools may increase their students' later earnings (in their mid-20s) by as much as

12.7%

mobility, and special education status, as indicated in the district and state administrative data used in our analyses.

Key finding: Charter high schools have positive effects on educational attainment in Florida and Chicago

The estimated impacts of charter high schools on students' subsequent academic attainment are presented in Figure 1.

In both Chicago and Florida, enrolling in a charter high school increases a student's probability of graduating from high school and entering college by statistically significant and quantitatively substantial amounts, relative to comparison students who enrolled in traditional high schools. Charter high school enrollment is associated with a 7 to 11 percentage point increase in the probability of earning a standard high school diploma within five years. Charter high school enrollment in Florida leads to a 10 percentage point increase in the probability of attending college; for Chicago the estimated impact is 11 percentage points. In both locations, the estimated impacts on college persistence are likewise positive, but only the Florida results achieve statistical significance. Results for two-year persistence suggest a 13 percentage point advantage for charter high school students in Florida and a 7 percentage point (non-significant) advantage for charter high schools in Chicago.

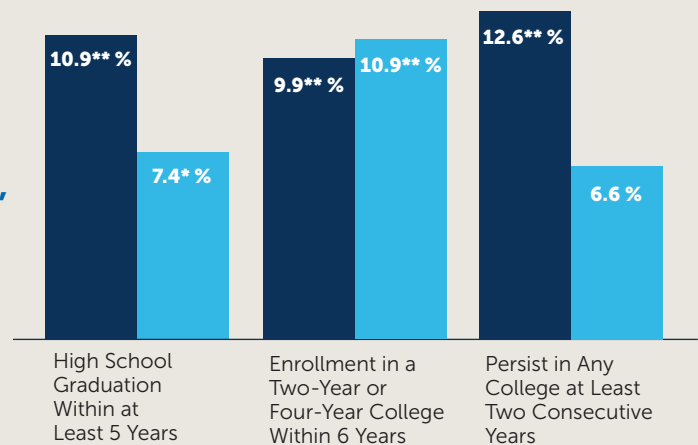
Key finding: Florida charter high schools have large positive effects on earnings in adulthood

In Florida, we can also examine whether students who attend charter high schools have higher subsequent earnings than similar students who attend traditional public schools (again restricting the analysis so that treatment group and comparison group students were enrolled in charter schools in 8th grade). We measure income from 10 to 12 years after the student's start of 8th grade year, when most would be 23 to 25 years old. We examine the maximum earnings during this three-year period for each treatment and comparison subject included in the analysis, on the rationale that, at this early point in their experience in the labor force, the maximum earnings are likely to predict long-term earnings best. Results are shown in Figure 2.

The effects of charter high school attendance are quantitatively substantial and statistically significant. The estimated effect on a student's maximum annual earnings during the three-year period (10, 11, and 12 years after 8th grade) is \$2,347, which represents a 12.7 percent increase relative to the earnings that would have been expected had the student attended a conventional public high school rather than a charter school.

The Effects of Attending a Charter High School on the Probabilities of High School Completion, College Attendance, and Persistence in College

Florida
Chicago



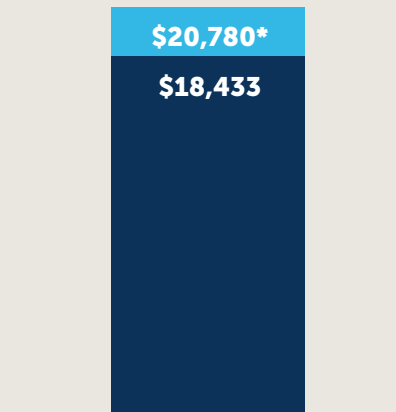
Note: *significant at 5%; **significant at 1%.

Figure 1

The Effect of Florida Charter High School Attendance on Annual Earnings 10 to 12 Years Beyond 8th Grade

Maximum Average Annual Earnings of Traditional Public High School Students Between 10 and 12 Years After Starting 8th Grade

Predicted Maximum Average Annual Earnings of Same Students Between 10 and 12 Years After Starting 8th Grade If They Had Attended Charter High Schools



Note: *significant at 5%.

Figure 2

The practices and operations of successful charter high schools merit close attention in future research.

CONCLUSION

In Chicago and Florida, charter high schools appear to have substantial positive effects on students' long-term educational attainment. In Florida, we also find evidence that charter high schools may have large positive effects on later earnings. These impacts are especially striking given that we have not found large positive impacts on students' test scores in the same locations. Charter high schools seem to be endowing their students with skills that are useful for success in college and career but that are not captured by test scores.

Interestingly, a finding that near-term test-score impacts underestimate longer-term impacts is consistent with findings on Harlem's Promise Academy charter school, on the District of Columbia's voucher program, and on Catholic

high schools. In New York City, small public high schools of choice and schools participating in a private voucher program have recently been shown to have substantial positive effects on attainment as well, at least for some groups of students. It is possible that small, mission-driven high schools of choice may be especially well suited to promoting students' long-term educational attainment, though considerably more research is needed to confirm the generalizability of this conclusion.

Exactly what charter high schools (and perhaps other small, mission-driven high schools of choice) are doing to produce substantial positive effects on educational attainment and earnings is an open question. The practices and operations of successful charter high schools merit close attention in future research.

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