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Closing the Achievement Gap

*Excerpts and data from the latest and **most** comprehensive study
on charter schools to date*

How New York City's Charter Schools Affect Achievement

“By the time a charter schools student has reached the end of eighth grade, our estimates indicate that he will be scoring about 30 points higher in math than he would have been scoring if he had been lotteried-out and remained in the regular public schools.”

That's just one of the conclusions of the most recent study of charter school achievement, this one of all but a fraction of NYC charter schools, a city with a storied and consistent history of opening and maintaining accountability over high quality charter schools in a policy environment that values diverse authorizers, diverse providers and freedom for school leaders and staffs to pursue the vision and mission set out in their charters.

This report, by acclaimed professor of Economics at Stanford Dr. Caroline Hoxby (also Hoover Institution fellow and formerly of Harvard University) compares 93 percent of all test-taking charter school students (grades 3-12) from 2001 through 2008. It is therefore the most comprehensive report to date analyzing the effects of charter schools on student achievement (the remainder of students were either enrolled in schools that started in 2005 or after and 2 percent declined to participate, including the union run charter schools. [The Center's text and editorial commentary are in green. The rest are excerpts directly from the report]

Gold standard

The most distinctive feature of the study is that charter schools' effects on achievement are estimated by the best available, "gold standard" method: lotteries. 94 percent of charter school students in New York City are admitted to a school after having participated in a random lottery for school places.

We follow the progress of lotteried-in and lotteried-out students. We compute the effect that charter schools have on their students' achievement by comparing the lotteried-in students to their lotteried-out counterparts. This is a true "apples-to-apples" comparison. Lottery-based studies are scientific and reliable. There are no other methods of studying the achievement of charter school students that have reliability that is "in the same ballpark."

The New York City Charter Schools Evaluation Project reports on the city's charter schools *in the aggregate*. We do not identify individual charter schools with their individual results. However, we do describe the variation in charter schools' performance in this report, and we show the association between charter schools' policies and their effects on achievement. In general, it is important to remember that charter schools differ, and no charter school is a mirror image of the aggregate results.

The Results are Dramatic

Charter school students are more likely to be more minority, more disadvantaged living in homes with adults with fewer education credentials than average NY families in similar neighborhoods, and yet they achieve at higher rates. The longer a student is in a charter school the better he or she fares *

On average, a student who attended a charter school for all of grades kindergarten to eight would close about 86 percent of the achievement gap in math and 66 percent of the achievement gap in English. A student who attended fewer grades would improve by a commensurately smaller amount.

Charter School Neighborhoods — and their schools — are more diverse, serve more minorities

Charter schools locate in neighborhoods that have unusually low proportions of white and Asian residents and unusually high proportions of black and Hispanic residents. For instance, charter schools' neighborhoods are 50.3 percent black whereas New York City as a whole is only 28.7 percent black. Charter schools' neighborhoods are 37.0 percent Hispanic whereas New York City as a whole is only 27.9 percent Hispanic. *

Charter school households are more disadvantaged economically

For instance, the median income of families in charter schools' census tracts is \$28,947 while the median income of families in New York City overall is \$43,018. 42.0 percent of households in charter schools' neighborhoods have incomes less than \$20,000, but only 28.4 percent of NYC households have such low incomes.

Charter schools serve populations more disadvantaged by education and social circumstance

Finally, charter schools' neighborhoods are educationally and socially disadvantaged. 38.4 percent of their adults have no high school diploma or GED. In contrast, only 28 percent of New York City adults have such a low level of education. Only 17.1 percent of adults in charter school neighborhoods have a four-year college degree, whereas 27.9 percent of New York City adults have such a degree. Perhaps most dramatic is the difference in the share of families that are headed by single parents. 57.1 percent of families with children are headed by single parents in charter schools' neighborhoods, whereas only 39.2 percent of such families are headed by single parents in New York City as a whole.

This comprehensive report includes full details into the kinds of programs the schools teach, where they are located, with which, if any management companies they partner, the ethnic, socioeconomic make up of the schools and those they would normally have attended, and a general apples to apples comparison of student achievement that finds that the charter school itself adds enormous value to the achievement these students make. The authors cite several plausible reasons for this, which include policies dictating more time in school to consequences through discipline for students and performance pay for teachers in some cases.

How does this compare to other evaluations?

Only when lottery- based results are unavailable should one turn to other methods--and even then only with caution. If a charter school runs a lottery, its effects on achievement should be evaluated via the lottery method, even if this involves gathering some data.

Rejection of CREDO

A widely touted study issued early this summer found deficiencies in student achievement in charters in several states by employing a method of comparing charter school students to virtual twins in traditional public schools (TPS). Despite our skepticism, the report was widely embraced, with little appreciation for the scientific flaws in the research. This study's author, Dr. Hoxby has long conducted apples to apples scientific comparisons of charter school achievement. She points out that attempts to use other methods of evaluations, such as that recently used by CREDO to issue negative conclusions about charter students in several states, actually make fair comparisons almost impossible.

There are a couple of methods that should not be used because, instead of making the selection bias better, they make it dramatically worse. These methods are: (1) pure value-added and (2) matching based on students' prior history in the traditional public schools ("TPS-history-matching"). Both methods have been used by a variety of researchers."

To do the TPS-history-matching (as in the recent CREDO study), a researcher finds students who are currently in charter school but who were previously enrolled in traditional public schools long enough to establish a program participation history (free lunch participation, special education, English Learner services). Then, the researcher matches the charter school student to one or more students in his or her previous traditional public school. The match is based on whether the students have the same race and ethnicity, the same program participation, and similar prior test scores. The researcher compares each student to his or her matched counterparts. Also, a researcher can use the switchers' histories to find matches for the charter school classmates of switchers, even if these classmates are not themselves switchers. The point is that the entire matching process is based on those students, and only those students, who apply to charter schools in late grades. These switchers are non-representative students and are precisely the students for whom switcher bias is most serious.

(The CREDO study also has a serious statistical problem that causes its estimates of charter schools' effects to be negatively biased. An explanation of this problem can be found in a memo posted on the website for this study: www.nber.org/~schools/charterschoolseval.)

Conclusions

Many may wonder why the positive conclusions netted in this report of NYC differ so dramatically from other state evaluations, or from recent so-called national studies. While many political scientists and other types of academics can and do conduct reliable studies of education, economists seem to bring more clarity and intensity to an issue that is often over-simplified – the comparison of student achievement among different types of schools. Hoxby was joined by other economists, one from the Wharton School and another from the National Bureau of Economic Research. As a result of their study, the New York charter school evaluation team presents fair and unbiased results that do not rely upon convention and often-flawed definitions of poverty, at risk and other social constructs. Instead, they compared real students to other real students, and validated numerous variables to provide an objective, realistic picture of how the charter school landscape performs. It is a model for all other researchers; a gold standard. For more information write charterevaluation@gmail.com.