

InFOCUS

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Mathematica's Evaluation of The Equity Project Charter School:

High Salaries for Teachers, Positive Impacts on Student Achievement

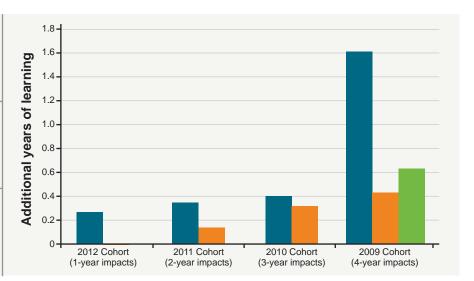
Although research has shown that highly effective teachers can dramatically improve student achievement, many schools serving disadvantaged students struggle to attract, retain, and develop effective teachers. Even before it opened in 2009, The Equity Project (TEP) Charter School achieved widespread attention because of its unique approach to rewarding and developing high quality teachers. Using the standard public funds available to any New York City charter school, TEP pays all of its regular teachers salaries of \$125,000 and provides them with ongoing professional development and substantial professional responsibility. TEP is a middle school located in the Washington Heights neighborhood, and its students are overwhelmingly low-income and Hispanic. TEP enrolled its first 5th-grade class during the 2009–2010 school year, and in 2013 that class graduated from TEP's 8th grade.

Mathematica found that by the end of the 2012–2013 school year, TEP's impacts on student achievement were consistently positive.

Mathematica has been studying TEP's operations and performance since the school opened. A **new report** describes TEP's instructional and personnel strategies, examines student characteristics and attrition rates, and reports impacts on student achievement during the school's first four years.

Mathematica found that by the end of the 2012–2013 school year, TEP's impacts on student achievement were consistently positive across grades and subjects, with especially large effects in math. Using benchmarks for average annual learning gains, the research team found that, compared to similar students in comparable New York City public schools, students who attended TEP for four years had test score gains equal to an additional 1.6 years of school in math, an additional 0.4 years of school in English language arts, and an additional 0.6 years of school in science. TEP's cumulative effect on student achievement over four years is about 78% of the Hispanic-white achievement gap in math, 17% in English language arts, and 25% percent in science.

TEP students' additional years of learning in math, **English language** arts, and science English relative to similar language arts students over the same time period. Science



KEY FINDINGS

- TEP attracts and rewards teachers with annual salaries of \$125,000, plus weekly professional development and a bonus based on schoolwide performance. TEP teachers receive intensive professional development and have substantial administrative authority and responsibilities.
- TEP's students are similar to students in other schools in the neighborhood. TEP's admission lottery favors students in the neighborhood and low-achieving students. More than 90 percent of TEP students are from low-income households (defined in the study as eligible for free or reduced-price lunch); 87 percent are Hispanic; and the percentage of TEP students who receive special education services is similar to other neighborhood schools and the overall rate in New York City. TEP's student attrition rate is also similar to that of comparable New York City schools.
- By the end of the 2012–2013 school year, TEP's impacts on student achievement were consistently positive. Students who attended TEP for four years had test score gains equal to an additional 1.6 years of school in math, an additional 0.4 years of school in English language arts, and an additional 0.6 years of school in science (see the figure above).

Although this study examines only one school, the positive findings are of broader interest because improving teacher quality is a primary goal of current education policy. Using only standard charter school funding, TEP produces substantial improvements in achievement for disadvantaged students who enter with relatively low achievement levels. The effectiveness of TEP's approach if implemented on a large scale is unknown, but the school's results provide a "proof of concept" that shows promise for broader implementation. An open question is whether wider implementation of TEP's approach—redefining the teacher's role and offering high salaries, ongoing development, more responsibilities, and accountability—might have the potential to produce systemic changes by attracting stronger applicants to teaching.

ABOUT THE STUDY

The study used a rigorous quasi-experimental methodology to measure TEP's impacts on student achievement. Specifically, we used administrative data from the New York City Department of Education to identify students who closely resembled incoming TEP students in 4th grade, the year before TEP students entered TEP's 5th grade. We found students who had similar demographic characteristics and similar 4th-grade achievement levels. Using a statistical regression analysis to adjust for small differences between the TEP students and comparison students in 4th grade, we then examined the achievement outcomes of TEP students and the comparison group over the years after TEP entry. In previous research, this approach has been shown to accurately replicate results obtained in randomized experiments (the "gold standard" of research methodology).

TEP provides a 'proof of concept' that its strategy can produce substantial improvements in achievement for disadvantaged students who enter with relatively low achievement levels.





