

Putting School Surveys to the Test

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Summary

School districts have long used standardized test scores to measure and report on school quality. But in recent decades, this has begun to change. Some researchers, educators, and parents have begun to emphasize school climate and socioemotional development. In response, large urban districts like New York City Public Schools (NYCPS) now emphasize surveys of school climate and student engagement.

Do positive survey reviews predict longterm gains in students' educational attainment? How do survey- and test-based forecasts compare? In a new study, Blueprint Labs economists **Joshua Angrist**, **Peter Hull, Russell Legate-Yang, Parag Pathak**, and **Christopher Walters** explore the links between school effects on test scores, student survey responses, and longer-term student outcomes in NYCPS. The authors first measure a school's causal effects on longer-term outcomes such as high school graduation and college enrollment. These effects, also called "value-added," isolate a school's impact on student outcomes from other factors that might influence their outcomes—for instance, race, income, or student preparation level at school entry. Traditional school quality measures might be biased by the student population's background, but value-added captures only the effects of the school itself.

Accurate measures of school value-added allow Blueprint researchers to study how well surveys, test scores, and other performance measures predict school effects. Surveys can help stakeholders understand dimensions of school quality like climate and safety. But do they predict longer-term success? The results from this study help stakeholders better understand how well surveys and tests measure consequential longer-term outcomes like



MIT Department of Economics 77 Massachusetts Avenue, Bldg. E53-390 Cambridge, MA 02139 blueprintlabs.mit.edu @blueprintMIT high school graduation, college enrollment, and college persistence.

The study finds that both surveys and test scores predict some student outcomes. Surveys better predict high school graduation, whereas test scores tie more closely to college enrollment and persistence. Families interested in improving college attainment may learn more from a school's test score valueadded than its surveys, though neither serves as a perfect guide.

Technical Paper

Angrist, J., Hull, P., Legate-Yang, R., Pathak, P., and C. Walters (2025): "Putting School Surveys to the Test." *Blueprint Labs Working Paper #2025.02*.

Background and Policy Relevance

Educators, researchers, and policymakers have recently argued that school quality should be measured using non-academic factors. Social scientists have emphasized the importance of socioemotional development for long-term success. For example, skills like teamwork and grit may improve later-life outcomes. Policy reflects a similar shift. The 2015 Every Student Succeeds Act requires that states use multiple indicators to measure school quality and underscores the flexibility to use non-academic measures. Surveys often serve as a non-academic measure to help stakeholders understand a school's support for socioemotional development.

In 2014, New York City revamped its school accountability system with a new emphasis on survey data. The new school quality ratings include dimensions often overlooked by test scores. Present-day NYCPS school performance reports include high school graduation and college enrollment rates, standardized test scores. student demographics, and school climate survey responses (for example, the percentage of students reporting they "learn a lot from feedback on their work"). Families often use such information when choosing schools, and districts use it to guide policies on closures, interventions, and expansions.

Setting and Methods

This study uses NYCPS data from the 2012– 13 to 2016–17 school years to examine high school quality and the 2015–16 school year to study middle schools. The authors first measure a school's value-added on student outcomes. As described above, value-added represents a school's causal impact independent of other determinants of student success like family background. The authors compute schools' value-added on test scores, college enrollment, college persistence, and high school graduation.

The study then evaluates how well test scores and survey value-added predict a school's causal effects on longer-term outcomes. Policymakers and families can use insights from this study to better understand which short-term metrics indicate a school's longer-term impact.

Key Findings

Key Finding #1: Surveys predict students' high school graduation better than test scores.

Schools with high test score valueadded and positive survey responses both tend to improve longer-term outcomes. However, as seen in Figure 1, surveys predict high school graduation better than test score value-added. Surveys also predict middle schoolers' high school graduation rates, but to a lesser extent.

Figure 1: Effects of high school test scores and surveys on longer-term outcomes



How to read this figure: This figure reports the effects of a school's test score value-added and the survey responses a school receives on three outcomes: on-time high school graduation, on-time college enrollment, and college persistence (defined as enrollment in two full years of college). These results are from a model that includes both test scores and survey levels. The second purple bar indicates that a school that improves test scores by one standard deviation increases college enrollment by 8.9 percentage points, holding survey levels fixed. The black line represents statistical significance; a line crossing zero indicates no significant effect.

Students who attend high schools that improve test scores and high schools with positive survey responses are more likely to enroll in college, though test scores are a stronger predictor (see Figure 1). Test scores also predict students' likelihood to complete two years of college, unlike surveys. These results hold for middle schoolers.

Key Finding #3: Simulations show that test scores serve as a better but imperfect guide for those interested in improving postsecondary outcomes.

Blueprint researchers simulate a hypothetical family decision-making process to understand which information would be most useful. The authors simulate a family that uses test or survey information to pick a school. How well does their choice improve the student's odds of attending college compared to the best available school? The difference between chosen and best available schools is "regret," measured by students' lost college-going odds. A family with perfect information has no regret. A family with no information can typically do no better than the average available school.

As seen in Figure 2, knowing a school's causal effect on test scores reduces regret more than knowing the school's survey responses. A family that picks a

school based on its test score valueadded would reduce regret by around 32% compared to a family with no information. Picking based on survey results would only reduce regret by around 20%. While test scores may serve as a better guide than surveys for college outcomes, neither is near perfect. Measures of college enrollment value-added would reduce regret by 90%.



Figure 2: Reduction in regret for families choosing a school based on varied information compared to a random choice

How to read this figure: This figure reports the simulated family regret in deciding which high school in their borough to send their student to based on varied information, compared to the regret they would experience from a decision made with no information. For example, the second bar indicates that families would experience 20% less regret if they chose a school based on its survey levels, compared to a random decision. Regret is measured as the difference in college value-added for the best in-borough school compared to the chosen school.