

Are student test scores an accurate measure of high school teachers' effectiveness?

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Although student test scores have been shown to often be a valid indication of teacher effectiveness at the elementary school level, do test scores do a similarly good job of evaluating the value added of high school teachers?

In "[Teacher quality at the high-school level: the importance of accounting for tracks](#)" (National Bureau of Economic Research, working paper no. 17722, January 2012), Northwestern University's C. Kirabo Jackson tries to determine the effectiveness of high school teachers by looking at the test scores of Algebra I and English I students.

Jackson took into consideration that many secondary school students may be exposed to different teachers, courses, levels of teaching (advanced, regular, and basic), and other variables that cause test score bias and most likely are not present at the elementary school level. To eliminate most biases, he compares students in the same track at the same school.

The 2005–2010 data on public middle and high school student demographics, achievement, end-of-course grades, and test scores come from the North Carolina Education Research Data Center. Because over 90 percent of North Carolina students took either Algebra I or English I, Jackson chose these two courses as a focus of the study.

After classifying data on almost 350,000 students from nearly 620 schools and on more than 4,200 English I and 3,500 Algebra I teachers, Jackson found that although high school teachers positively impact test scores, it may not be as much as previously expected. He did find, however, that students with teachers who had 10 or more years of teaching experience had higher test scores.

Jackson surmises that either high school teachers are less influential on the test scores of their students than are elementary school teachers, or high school test scores are an inadequate way to measure a teacher's quality.