

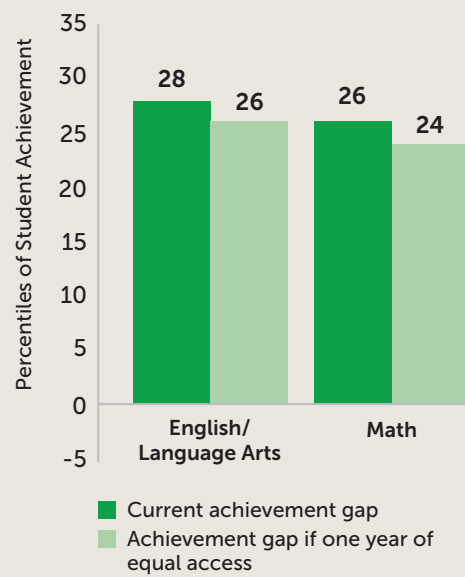
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Access to Effective Teaching for Disadvantaged Students

Recent federal initiatives in education, such as Race to the Top, the Teacher Incentive Fund, and the flexibility policy for the Elementary and Secondary Education Act are designed in part to ensure that disadvantaged students have equal access to effective teaching. The initiatives respond to the concern that disadvantaged students may be taught by less effective teachers and that this could contribute to the achievement gap between disadvantaged students and other students. To address the need for evidence on this issue, the Institute of Education Sciences at the U.S. Department of Education initiated a study to examine access to effective teaching for disadvantaged students in 29 diverse school districts. Mathematica Policy Research and its partner, the American Institutes for Research, conducted the study, which focused on English/language arts (ELA) and math teachers in grades 4 through 8 from the 2008–2009 to the 2010–2011 school year.

The study measured access to effective teaching in grades 4 through 8 from the 2008–09 through the 2010–11 school year.

Change in Student Achievement Gap if Equal Access to Effective Teaching for One Year



KEY FINDINGS

Disadvantaged students received less effective teaching, on average, than other students in the 29 study districts. To understand how unequal access contributes to differences in achievement between disadvantaged students and other students, we measured how eliminating unequal access to effective teaching for one year would reduce the student achievement gap. Providing equal access to effective teaching for the two sets of students would reduce the gap in achievement from 28 to 26 percentile points in ELA and from 26 to 24 percentile points in math in a given year. This difference is equivalent to a gap of 0.034 standard deviations of student achievement in ELA and 0.024 standard deviations of student achievement in math.

Access to effective teaching for disadvantaged students varied across school districts. In some districts, disadvantaged students and other students had similar access to effective teaching. In other districts, differences in access to

effective teaching between the two groups were as large as 0.11 standard deviations in student test scores in ELA and 0.08 standard deviations in math, favoring non-disadvantaged students. Disadvantaged students had less access to effective teaching in ELA in 27 of the 29 districts and in 19 of the 29 districts in math. In the remaining districts, disadvantaged students and other students had similar access to effective teaching.

Unequal access to effective teaching was primarily the result of how teachers and students were spread across schools rather than how principals assigned teachers to students *within* schools. We measured whether unequal access was due to disadvantaged students attending schools with less effective teaching, or to disadvantaged students being assigned to classrooms with less effective teaching within schools. Differences in access to effective teaching for disadvantaged students across schools were larger than the differences within schools for both subjects, especially for ELA in the upper elementary grades (4 and 5).

Methods. The study compares the average effectiveness of teaching experienced by disadvantaged students and other students. We used a value-added analysis to measure the effectiveness of teaching. Value-added analysis attempts to estimate each teacher's unique contribution to student achievement by accounting for students' prior achievement and other factors that are related to achievement but outside the teacher's control. We then compared the average value added of the teachers of disadvantaged students to the average value added of the teachers of all other students. To identify disadvantaged students, we used eligibility for a free or reduced-price lunch.

Differences in access to effective teaching for disadvantaged students across schools were larger than differences within schools.

Participating Districts. The 29 study districts are geographically diverse and have similar characteristics to the 100 largest districts in the United States. The districts tend to have more poor and minority students than the average U.S. district, with 63 percent of students in study districts eligible to receive a free or reduced-price lunch.

Upcoming reports. The next report in this series will describe patterns of teacher hiring, mobility, and attrition. The final report will update all results based on an additional two years of data.

To view the full report, Access to Effective Teaching for Disadvantaged Students, please visit Mathematica's website www.mathematica-mpr.com or the U.S. Department of Education Institute of Education Sciences website: <http://ies.ed.gov/>

