

EDUCATION

The Stanford Center on Poverty and Inequality

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The United States has made some progress toward closing racial and ethnic gaps in educational outcomes. However, continued large disparities in academic achievement provide clear evidence that black and Hispanic children grow up with more limited educational opportunities than white children.

The National Assessment of Educational Progress (NAEP) provides the best evidence of historical trends in racial and ethnic academic achievement gaps. The U.S. Department of Education administers NAEP tests in math and reading to nationally representative samples of students. We use data from the main NAEP assessments, which were first administered in the early 1990s, to measure trends in white-black and white-Hispanic achievement gaps in the United States from 1990 to 2015 (shown in Figure 1). The gaps are measured in standard deviations of student achievement. In interpreting these gaps, it should be noted that one standard deviation is roughly equivalent to a three-grade-level difference in academic skills.

Over this 25-year period, the achievement gaps in math and reading in fourth and eighth grade have declined 15 to 25 percent, depending on the grade, subject, or group.¹ These gaps have *not* closed because white performance has declined: To the contrary, average academic performance improved for all racial and ethnic groups, although it grew fastest among black and Hispanic students.² In particular, the average test scores among black and Hispanic students improved by one-third of a standard deviation in reading and two-thirds of a standard deviation in math since 1990. As shown in Figure 1, these greater improvements among black and Hispanic children led to narrowing achievement gaps, particularly during the last 15 to 20 years. Similar trends are evident in high school graduation rates: white-black and white-Hispanic graduation rate gaps have narrowed sharply over the last two decades.³

The narrowing of white-black and white-Hispanic achievement and graduation rate gaps constitutes notable progress. However, Figure 1 provides little evidence that this narrow-

KEY FINDINGS

- Between 1990 and 2015, average academic performance improved for students of all racial and ethnic groups, but grew fastest among black and Hispanic students. As a result, white-black and white-Hispanic achievement gaps have declined by 15 to 25 percent.
- But achievement gaps remain large: Hispanic students lag almost two grade levels, and black students lag roughly two to two-and-a-half grade levels behind whites.
- Two nonschooling factors—persistent racial and ethnic disparities in family resources and segregation patterns—are fundamental determinants of unequal educational opportunity for minority students.

ing can be attributed to changes in K–12 schooling. Racial and ethnic achievement gaps are roughly the same size in fourth and eighth grade.⁴ This suggests that the narrowing of achievement gaps in recent years is, instead, the result of equalizing educational opportunity during early childhood or early elementary school.⁵

Moreover, the achievement gaps are still very large: The white-Hispanic gaps are three-fifths of a standard deviation (almost two grade levels), and the white-black gaps are even larger (0.70 to 0.85 standard deviations, roughly two to two-and-a-half grade levels). Even if these gaps continue to narrow at the same rate as they have for the last two decades, it will be more than 50 years before they are eliminated.

Causes of Racial and Ethnic Disparities in Education

Why, then, do large racial and ethnic achievement gaps persist? Research consistently points to two main contributors: (a) disparities in family socioeconomic background and (b) residential segregation. White, black, and Hispanic children have very different family resources (e.g., parental income and education). They also grow up in neighborhoods of unequal

quality. Given the importance of early childhood experiences⁶ and neighborhood conditions⁷ in shaping educational outcomes, it is these two key differences in nonschooling factors that drive racial and ethnic academic achievement gaps.

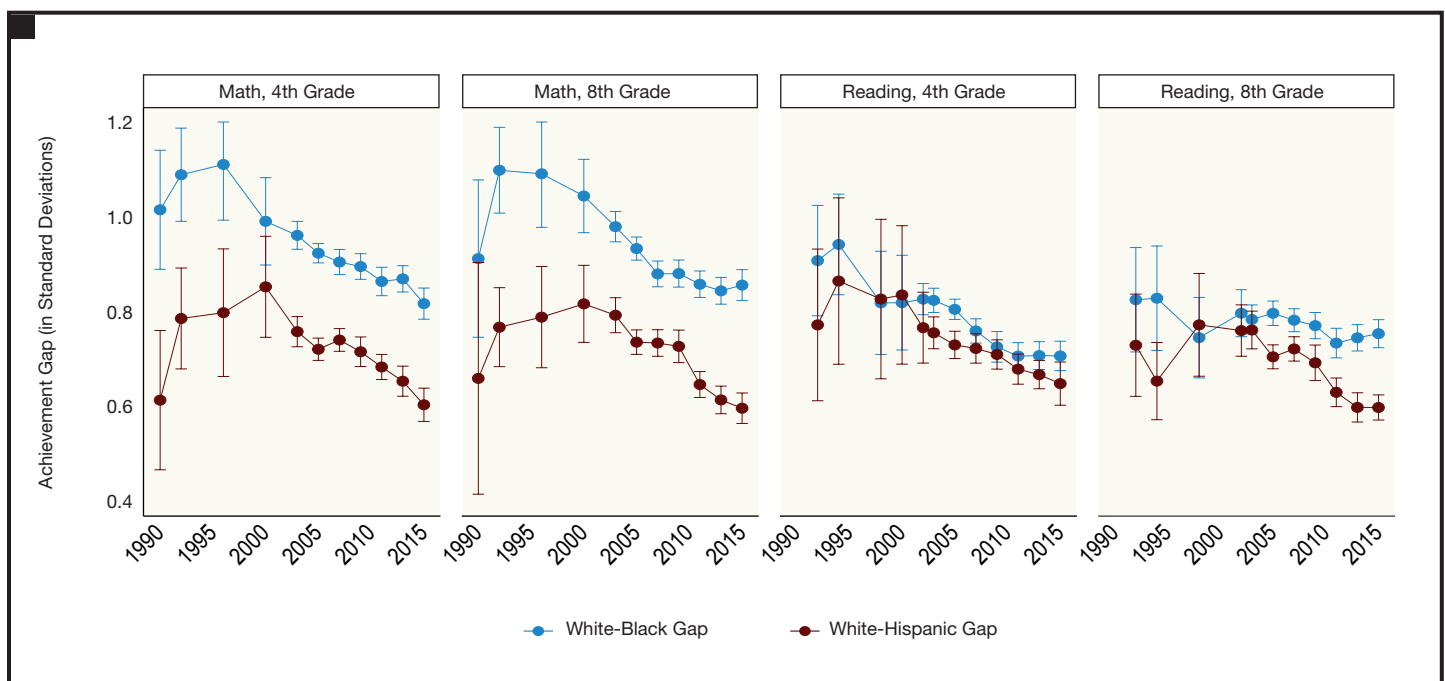
The effects of parental resources are evident in Figure 2, which shows white-black and white-Hispanic achievement gaps as a function of the white-minority socioeconomic gaps in U.S. school districts. As the red lines indicate, the achievement gaps are larger where socioeconomic disparities are larger. However, there is evidence that educational opportunities (and consequently achievement gaps) are shaped by more than the socioeconomic status differences that frequently obtain between racial and ethnic groups. Even in school districts with no white-minority difference in socioeconomic status, achievement gaps are still roughly one-third of a standard deviation (i.e., approximately one grade level). Additionally, there is substantial variation in the size of the achievement gap among school districts with a similar level of socioeconomic disparity.

What explains the racial and ethnic gaps among children of similar socioeconomic backgrounds? Residential and school segregation are key drivers of unequal educational opportunity. Even among families with the same income, black and

Hispanic students live in much poorer neighborhoods than white children and attend schools with greater concentrations of poverty, a result of the long legacy of racial housing discrimination and exclusion in the U.S.⁸ High-poverty schools typically have fewer resources, poorer facilities, a harder time attracting and retaining skilled teachers, and more students in need of remediation and additional services. In addition, high-poverty schools typically have fewer students whose parents have economic, social, and political resources to invest in schools. As a result, segregation is strongly correlated with academic achievement gaps, even after accounting for racial and ethnic differences in socioeconomic family characteristics. Indeed, metropolitan-area achievement gaps are more strongly correlated with segregation than they are with racial and ethnic disparities in socioeconomic status.⁹

Although we have made some progress in improving the equality of educational outcomes over the last few decades—as evidenced by narrowing achievement gaps—we have done little to change the fundamental sources of inequality of educational opportunity. Racial and ethnic differences in family income, wealth, and parental education remain very large and have changed very little: black and Hispanic households’ median incomes today are roughly 60 percent as large as white households’, up only slightly from 55 percent in 1967.¹⁰

FIGURE 1. Trends in Test Score Gaps by Subject, Grade, and Race/Ethnicity, 1990–2015



Note: Estimates are based on nationally representative samples of fourth- and eighth-grade public and private school students. Achievement is standardized in each grade, subject, and year; gaps are computed as average between-group differences in standardized scores. Error bars indicate 95 percent confidence intervals. Source: Authors’ calculations from main NAEP assessment data, 1990–2015 (U.S. Department of Education, no date).

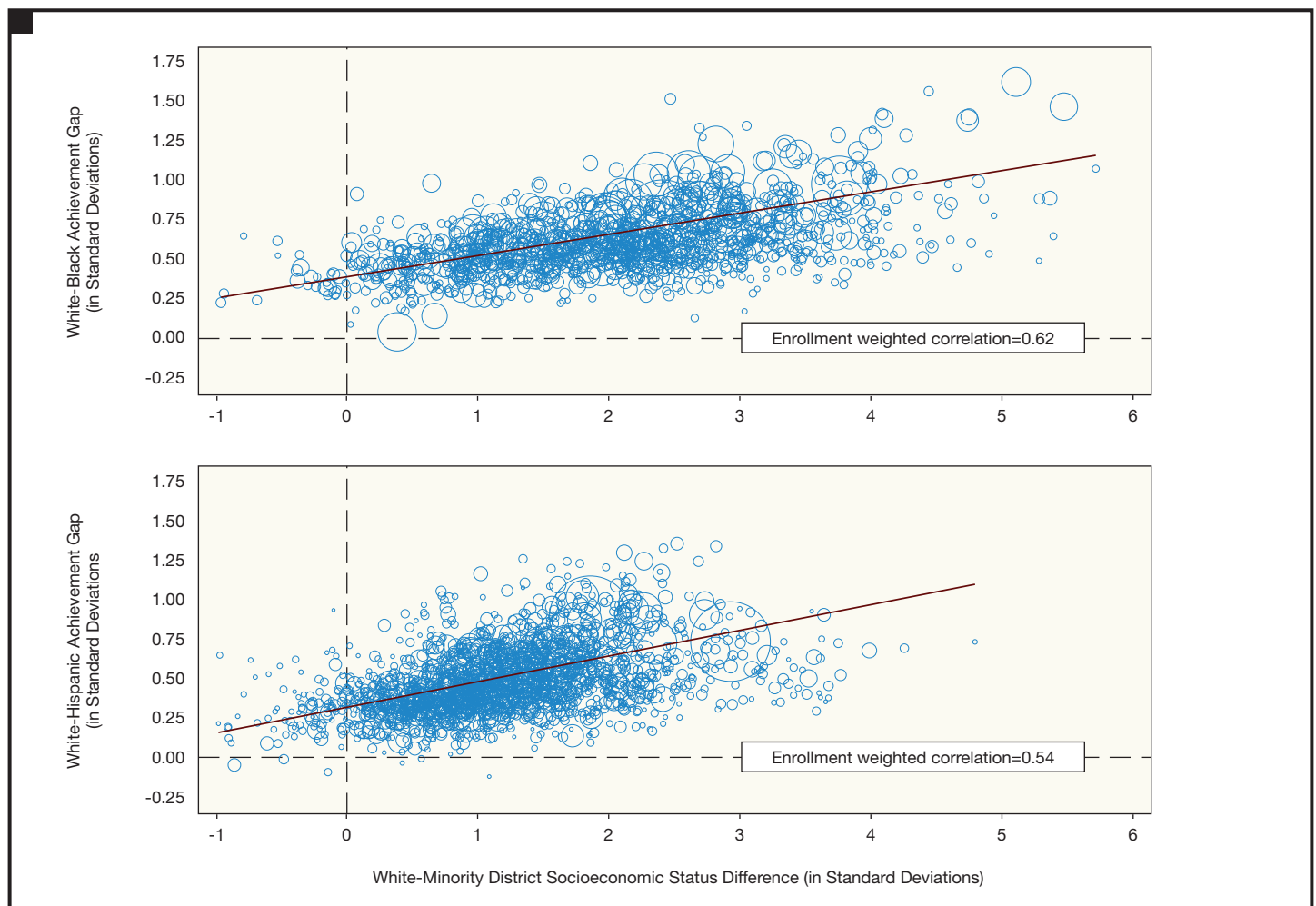
And although residential segregation has declined slowly, school segregation has not declined since the 1970s—and has actually grown by some measures.¹¹

Unless we change the fundamental sources of unequal educational opportunity—socioeconomic disparity and segregation between racial and ethnic groups—we are unlikely to eliminate racial and ethnic educational inequality. The narrowing of achievement gaps over the last 25 years has likely been driven by early childhood interventions. The expansion of preschool, particularly publicly-funded preschool programs accessible to low- and middle-income children, coupled with increased parental focus on young children’s cognitive

development, appear to have led to some equalization in low-income and minority students’ early childhood educational opportunities.¹² However, the benefits of such investments will remain limited in the face of persistently high levels of socioeconomic and neighborhood inequality. Racial and ethnic equality of educational opportunity requires eliminating these fundamental disparities. ■

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FIGURE 2. Achievement Gaps by Socioeconomic Status Differences, 2009–2013



Note: Includes U.S. school districts with at least 50 students per race and grade. Achievement is standardized in each grade (grades 3–8), subject (math and reading), and year (2009–2013); gaps are computed as the average between-group differences in standardized scores across grades, subjects, and years. Socioeconomic status differences are measured as racial differences in a standardized index of community average socioeconomic family characteristics. Bubbles are weighted by the combined enrollment count of white and black or Hispanic students. Source: Authors’ calculations from EDFacts and American Community Survey data; see Reardon et al., 2017.

NOTES

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