School context, segregation, and inequality

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Residential segregation by income is increasing in U.S. cities, with African American and Hispanic families in particular living in increasingly income-segregated communities.[1] At the same time, inequality in student achievement by income has decreased, and there has been a narrowing of racial achievement gaps. In this article, I explore the reasons for these trends, examine the implications of school segregation for school outcomes and inequality, and identify possible policy approaches to increasing the ability of schools to both improve academic outcomes and be more effective at teaching students to be contributing members of society.

Income segregation and the end of race-based busing

One reason for the increasing degree to which black and Hispanic families in the United States have seen their neighborhoods shift from mixed income to poor is the end of court-ordered desegregation. This shift in neighborhoods has had an effect on schooling outcomes. For example, the Charlotte-Mecklenburg School District in North Carolina used race-based busing to desegregate schools for over 30 years, as a result of *Swann v. CMS Board of Education* in 1971. However, after another lawsuit in 2002, busing was ended, and half of all students received a new school assignment. The school board then offered school choice as an option, to permit reassigned students to return to their original school, though few did. The population covered by the school district is about 55 percent black, but racial distribution among neighborhoods is very unequal. This area has also been found to have very low upward mobility, with children of families in the bottom income quintile having only a 4 percent probability of rising to the top income quintile.

This set of circumstances provided a unique opportunity to use quasi-experimental methods to study the long-run effects of school and segregation. In a study conducted by myself, Stephen Billings, and Jonah Rockoff, we found that attending a school with a larger share of minority or poor students resulted in lower test scores.[2] For white students, such a change in school population also reduced graduation rates, but we did not find such a reduction for black students. These effects were larger for earlier study cohorts. The school district targeted financial resources to high poverty schools beginning in 2005, about halfway through our study period, and we find evidence that this compensatory resource allocation may have closed gaps in academic outcomes.

While the effects of segregation on academic outcomes may have been somewhat ameliorated by increasing funding, we also found effects on crime, including large increases in arrest rates for those moved to schools with higher rates of minority students, that did not diminish over time. We also found suggestive evidence that increased exposure to crime-prone peers during school-age years leads to more crime in adulthood.[3] These findings have been supported by other studies including one I conducted with Stephen Billings and Stephen Ross, which found that concentrations of similar peers, especially nonwhite males, increases total crime.[4]

Separate but better?

While residential segregation has increased, inequality in student achievement has decreased and racial achievement gaps have narrowed. For example, as shown in Figure 1, reading achievement gaps for 9-year-olds between whites and blacks, and between whites and Hispanics, have narrowed significantly over the past four decades.

Though the fact that the increase in residential segregation has been accompanied by a decrease in racial achievement gaps may seem counterintuitive, it is of note that "no excuses" charter schools, which have had a demonstrably large effect on student achievement and postsecondary attainment, tend to have very high proportions of students of color. Studies of no excuses charter schools have found yearly gains large enough to close the black-white achievement gap.[5] In 2008, 70 percent of black students in charter schools attended a school with over 90 percent students of color; this compares to only 36 percent of black students in public schools.[6] This raises the question of whether it is acceptable for schools to be segregated if it actually results in students of color doing better.

What can we learn from these findings?

Improvements in school quality, including no excuses charter schools, can close achievement gaps for academic outcomes. However, outcomes that are more determined by peer interactions are harder to solve with policy changes. We need to decide what we are trying to accomplish with schools. If the primary job of schools is academics, that it may be acceptable to focus on improving academic outcomes and closing achievement gaps, to the exclusion of improving other outcomes. However, if schools are framed as social institutions that build civic participation, tolerance, diversity, and teach students how to be contributing members

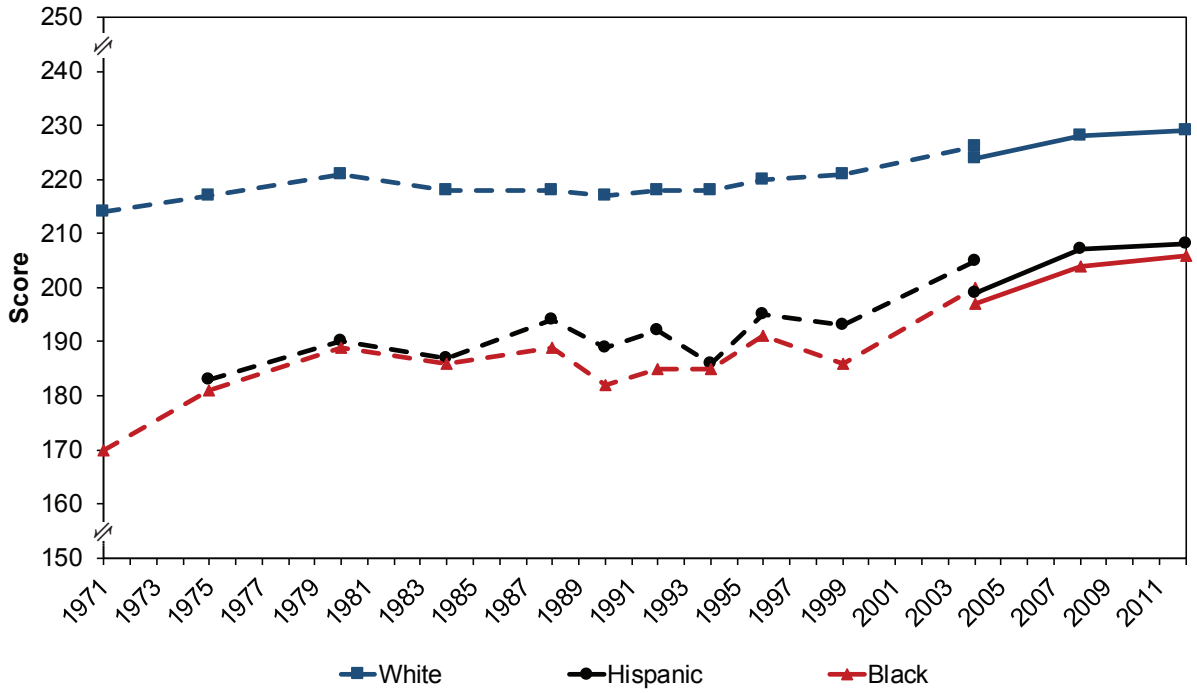

Figure 1. Narrowing of racial achievement gaps in reading.
Source: NAEP long-term trend data.
Notes: Dashed line shows original assessment format, solid line shows revised assessment format. White and black race categories exclude Hispanic origin.

of society as adults, then it is necessary to think more broadly about the implications of segregation.

One piece of evidence in this area comes from a study of Air Force Academy cadets, which found that white male students who were randomly assigned to more diverse squadrons in their first year were more likely to subsequently choose a black roommate, and reported a greater degree of racial tolerance.[7] Another study looking at the effects of socioeconomic school integration in Delhi, India, found that having poor classmates makes wealthy students more generous towards the poor and more likely to volunteer for charity.[8] These studies illustrate the idea that integration increases tolerance and diversity.

Implications for policy

School practice, those elements of school quality that are under a school's control, include the quality of teachers and principals, school organization, and curriculum. By improving school practice through increased funding, better management, or other interventions, racial and socioeconomic academic achievement gaps can be narrowed or even eliminated. However, there are other elements of school quality having to do with school context, such as neighborhood and peer groups, that are not under a school's control. If we think that schools should be increasing tolerance, diversity, and civic participation and decreasing crime, and we believe that those outcomes are driven by peer effects, then the only available policy levers to achieve the desired outcomes are deliberately integrative student assignment policies.■

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[3]D. J. Deming, "Better Schools, Less Crime?" *Quarterly Journal of Economics* 126, No. 4 (2011): 2063–2115.

[4]S. B. Billings, D. J. Deming, and S. L. Ross, "Partners in Crime: Schools, Neighborhoods and the Formation of Criminal Networks," NBER Working Paper No. 21962, National Bureau of Economic Research, February 2016.

[5]See, for example, J. D. Angrist, S. R. Cohodes, S. M. Dynarski, P. A. Pathak, and C. R. Walters, "Stand and Deliver: Effects of Boston's Charter High Schools on College Preparation, Entry and Choice," *Journal of Labor Economics* 34, No. 2 (2016): 275–318.

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