

Doing the Impossible: The Limits of Schooling, the Power of Poverty

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The idea that schools can have little influence on children coming from poor homes and neighborhoods is often attributed to the 1966 Coleman Report. At one time, this position was clearly favored by conservatives seeking to minimize public investments; more recently, it has been embraced by progressives arguing to increase public investments in poor children. In either form, arguments about the inability of schools to effectively speak to the needs of poor students are often poorly specified and are increasingly in tension with the best available evidence. No matter how well-intentioned they are, these arguments may inadvertently reinforce some very problematic ideas about the potential impact of schools on the academic performance of disadvantaged youngsters. We argue that while the power of poverty to stunt growth is undeniable, we have to be more willing to learn from contemporary evidence that suggests schooling can significantly mitigate the negative effects of poverty.

Keywords: education; poverty; Coleman Report; school effects; school reform; urban schools; disadvantaged students

Educational researchers have never achieved consensus on how effective schooling can be at supporting academic achievement in the face of poverty and racial disadvantage. The roots of

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the debate can be traced back at least to the 1966 report by James Coleman and his associates, where they famously concluded: “Whatever may be the combination of non-school factors—poverty, community attitudes, low educational level of parents—which put minority children at a disadvantage in verbal and nonverbal skills when they enter first grade, the fact is the schools have not overcome it” (Coleman et al. 1966, 21). The report was widely understood as meaning “schools don’t matter”—an exaggerated interpretation—and was embraced by conservatives, President Richard Nixon among them, as justification for reduced education funding (Grant 1973). The national ascendancy, after 1983, of market-oriented education reformers brought a different spin among conservatives on the idea of what schools can and cannot do. They began to affirm the capacity of schools to do much better with poor children, attributing the failures of schools to the incompetence of the education establishment, in particular to the venality of teachers’ unions. After a long tradition of saying, in various ways, that the problem with the poor is their lack of character (Payne 1984), an important group of conservatives began saying that poor children are just fine; American educational institutions are failing them (e.g., Klein 2011; Hill and Jochim 2015).

The onslaught of criticism against teachers, their unions, and schools generated a commensurate response. In the face of attack, some educators have taken to stressing that schools and teachers are doing all that can be expected, given the power of poverty. Now, we have the curious spectacle of a growing chorus of progressive voices making a spiffed-up version of the argument that used to belong to Richard Nixon, but framing it as a defense of educators and a rationale for more resources, not less. These progressives claim that rather than berating educators for their shortcomings, we should be directly attacking poverty and its effects.

Richard Rothstein’s *Class and Schools* (2004) is one of the most influential and thoughtful statements of this position. The foreword is by Arthur Levine, then-president of Teachers College, Columbia, who is widely credited with getting that institution to focus on issues of equity. Characterizing the book as “compelling,” Levine says Rothstein “shows that schools alone cannot provide a remedy. Along the way, the author presents evidence debunking the popular myth that there are super-schools capable of eliminating the gap. Presenting study after study, Rothstein highlights the far greater impact of healthcare, nutrition, parents, home, and community” (2004, ix). *Class and Schools*, to its credit, does raise the issue of outliers (“super-schools”) where poor and minority children seem to thrive academically, but it warns that, by and large, these schools are disappointing when examined more closely. Apparent successes turn out to be unscalable, or to be dependent upon unusual concentrations of resources, unrepresentative student populations, or uniquely talented teachers. Sometimes the reports of excellence are just based on bad evidence. Sometimes these schools are unstable. The apparent outliers, then, do not tell us much about real improvement at any scale.

A decade after *Class and Schools* was published, its essential arguments continue to be reproduced in rebuke of any school-based reform effort, often by scholars central to the field. Nobel laureate James Heckman, a pillar of the movement to expand preschool for children, has written: “The Coleman Report as well as recent work ... show that families and not schools are the major sources of

inequality in student performance. By the third grade, gaps in test scores across socio-economic groups are stable by age, suggesting that later schooling and variations in schooling quality have little effect in reducing or widening the gaps that appear before students enter school” (Heckman 2006, 1901).

David Berliner, past president of the American Education Research Association, similarly argues (2013):

- School reform efforts have produced little improvement in American schools.
- They assume the sources of failure to be inside schools: teachers, curriculum, testing programs and administration.
- In fact, the sources of America’s educational problems are outside school, primarily a result of income inequality.
- Thus, targeted economic and social policies have more potential to improve the nation’s schools than almost any current school reform proposal offered by either political party at federal, state, or local levels.

He, too, notes cases of success for poor children. “But the *general* case is that poor people stay poor and that teachers and schools serving impoverished youth do not often succeed in changing the life chances for their students” (Berliner 2013, 2, emphasis in original).

Perhaps his central empirical point is that years of research show that school effects are associated with about 20 percent of the variation in achievement test scores while out-of-school factors are associated with about 60 percent, the latter including such factors as “family income; the neighborhood’s sense of collective efficacy, violence rate, and average income; medical and dental care available and used; level of food insecurity; number of moves a family makes over the course of a child’s school years; whether one parent or two parents are raising the child; provision of high-quality early education in the neighborhood; language spoken at home” (Berliner 2013, 5). Since children spend 90 percent of their time with their families and in their neighborhoods, dysfunctional or toxic out-of-school environments should be expected to have more effect than what happens in schools. If we want to understand why Americans’ performance on international benchmarks is so poor, then, we should look first to our degree of child poverty: about 20 percent here compared to about 5 percent in Finland, whose schools are often held up as exemplary (Berliner 2013, 4–5). It is not just poverty that matters but the degree of inequality in a society. Relative poverty—poverty in the midst of great wealth—may be more damaging than poverty itself; the United States is the most unequal in the distribution of income among wealthy societies.

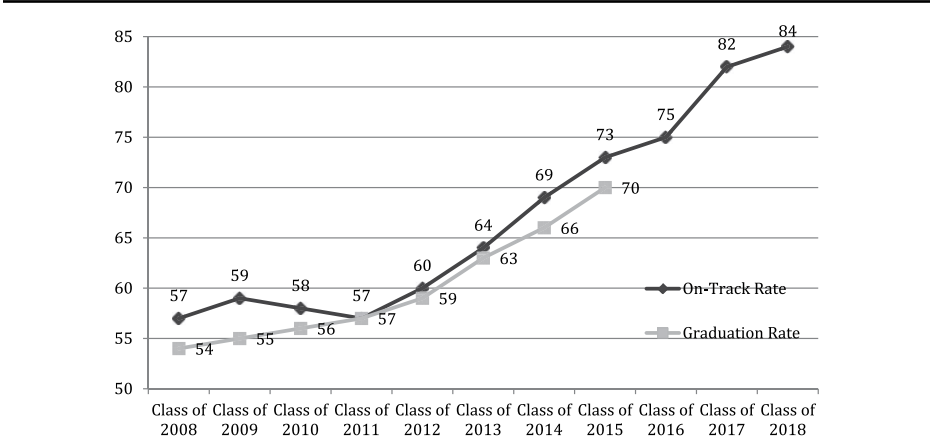
The most important policy change that Berliner advocated is the provision of living wage jobs for everyone, which would require higher taxes, including taxes on the corporations that do not pay any. Those funds could also support quality preschool, smaller classes in the early grades and summer learning opportunities, initiatives to reduce teacher turnover in poor schools, as well as visiting nurse programs and wraparound social services. All of this requires a realistic

understanding of what schools can and cannot do. Berliner concludes: “Certainly poverty should never be an excuse for schools to do little, *but poverty is a powerful explanation for why they cannot do much!*” (Berliner 2013, 21, emphasis in original).

We have little quarrel with this package of proposals. If we want to see the greatest number of children flourish to the optimal degree, a set of policies more or less like these would be advantageous, if not sufficient. That said, acknowledging the profound influence of family and neighborhood (Sampson 2012; Sharkey 2013) on the development of children does not necessarily tell us much about the power of schools to counter problems generated elsewhere.¹ Stressing the *typical* causes of failure does little to help us think about what schools *could* do. Much of this narrative is built around the fallacy of conflating correlation with causation and causation with change, overlooking the fact that a pattern that has been caused by one thing may be changed by another. Not long after the report was published, Thomas Pettigrew (1968, 75) remarked that the Coleman Report “is of necessity a broad-gauged, aggregate survey of what exists now in American public schools. It could neither detail precise learning processes nor test what American public schools could potentially become in the future.” Precisely what we need to know, though, is what schools could do, and under what circumstances, not what they are typically doing now.

We have reason to think, for example, that the right investments at the right points in the developmental process can have important payoffs. High school graduation is a key hurdle in the lives of young people. After almost three decades of stagnation, the national cohort graduation rate surpassed 80 percent for the first time in 2012 and increased to 83 percent in 2014 (DePaoli et al. 2015). Between 2007 and 2012, the national rate rose by 7 percent, compared to 9 percent for black students and a whopping 15 percent for Latino/a students (Balfanz et al. 2014, 3–4). Among states, Tennessee, with a large proportion of low-income students, was a big winner, going from a 63 percent graduation rate in 2003 to 87 percent in 2012, while Florida went from 57 percent to 75 percent. Among the factors most often cited as likely to be driving these changes are the closing of so-called dropout factory high schools (those graduating fewer than 60 percent of their students) and the widespread use of early warning systems. Between 2002 and 2012, 648 schools with low graduating power were closed, meaning that 1.2 million fewer students were trying to get an education in environments where failure had been normalized (Balfanz et al. 2014, 4). Early warning systems look at the attendance, behavior, and course performance of students, usually in middle school or ninth grade, to identify students likely to drop out and then target them with extra supports (Roderick et al. 2014; Allensworth and Easton 2007). As Figure 1 shows, Chicago has been a leader in this movement, and progress there has been striking, with graduation rates rising from 54 percent to 70 percent in seven years and on track to reach 84 percent for the class of 2018. The largest improvement has been among low-scoring students. Meanwhile, ACT scores inched up from 17.6 to 18.4, a low figure still but enough to suggest that the increase in graduation is not being achieved by watering down the academics (Healey, Nagaoka, and Michelman 2014).

FIGURE 1
Chicago Is Solving Its Dropout Crisis by Focusing on Ninth Grade



SOURCE: Consortium on Chicago School Research.

Closing dropout factories and providing extra supports to targeted students do not address the root causes of dropping out, which are presumably multiple and develop over time. In fact, children likely to drop out can be identified as early as second grade. By changing the way that we invest at some critical points, we may be able to compensate for lack of investment at other points. Consider, for example, the Charlotte-Mecklenburg school system, which regularly posts some of the country’s best performance figures for poor and minority children (see Tables 1 and 2). Leaders of that system attribute that to their commitment to systematically providing better human capital, particularly better leadership, to the children who are usually last in line for it (Clark 2014). If they are right, they are helping more low-income youngsters have a chance at conventional success, even though they may not be addressing homes with little educational strength, to invoke Coleman’s useful phrase, and are not fixing dangerous neighborhoods or negative peer cultures. Those things matter, but saying that out-of-school factors are very powerful leaves open the question of what strategic investments might do to counter them.

The Limits of Schooling Reconsidered

Throughout these debates, there have been scholars who have argued, sometimes adducing considerable evidence, that school effects can be important despite the power of poverty (e.g., Murnane 1975; Card and Krueger 1996; Elmore and Burney 1997; Rowan, Correnti, and Miller 2002; Bryk and Schneider 2002; Bryk et al. 2010; Konstantopoulos and Borman 2011; Duncan and Murnane 2014). Conversations about out-of-school effects and school effects sometimes

TABLE 1
NAEP Percentage of Fourth-Grade Students at or above Proficiency in
Reading, 2015 Trial Urban District Assessment (TUDA)

TUDA District	Percentage	Average Scale Score
Tampa-Hillsborough Co. ^a	41	230
Charlotte-Mecklenburg Co. ^a	39	226
Miami-Dade ^a	39	226
National	36	223
Louisville-Jefferson Co. ^a	36	222
Austin	35	220
Duval County (FL) ^a	35	225
San Diego	30	216
District of Columbia (DCPS)	30	214
Boston	29	219
Chicago	27	213
Atlanta	26	212
New York City	26	214
Albuquerque	24	207
Houston	23	210
Los Angeles	21	204
Dallas	17	204
Philadelphia	14	201
Fresno	13	199
Baltimore City	11	199
Cleveland	11	197
Detroit	6	186

SOURCE: National Assessment of Educational Progress (NAEP), National Center for Educational Statistics.
a. City-county district.

bump up against one another. But sustained conversation across the camps has been uncommon. Over the last decade or so, however, we have seen a steady accumulation of evidence that pushes our sense of possibility. Some of it involves wide variations in outcomes for apparently similar children, and in some cases we have strong evidence that the variations are driven by school practice. Some of it involves changes at the national or district level in attainment and achievement, which are potentially in tension with the idea that schools cannot do better. Some of these efforts are long-standing and at considerable scale. In sum, they suggest that the strong versions of the “schools can’t do it” argument should no longer be allowed to guide our thinking.

Consider first some of the work with relatively strong grounds for causal inference. One of the best-known cases involves New York’s small high schools of choice. Since 2002, the City has opened more than 120 academically nonselective

TABLE 2
NAEP Percentage of Fourth-Grade Students at or above Proficiency in Math, 2015 Trial
Urban District Assessment (TUDA)

TUDA District	Percentage	Average Scale Score
Charlotte-Mecklenburg Co. ^a	51	248
Austin	47	246
Tampa-Hillsborough Co. ^a	43	244
Miami-Dade ^a	41	242
Jacksonville- Duval Co. (FL) ^a	41	243
National	40	240
Houston	36	239
Dallas	34	238
Louisville-Jefferson Co. ^a	34	236
District of Columbia (DCPS)	33	232
Boston	33	215
San Diego	31	233
Chicago	30	232
Albuquerque	28	231
New York City	26	231
Atlanta	26	228
Los Angeles	22	224
Philadelphia	15	217
Fresno	14	218
Cleveland	13	219
Baltimore City	12	215
Detroit	5	205

SOURCE: National Assessment of Educational Progress (NAEP), National Center for Educational Statistics.

a. City-county district.

small high schools, serving some of New York's most distressed neighborhoods; the large schools that they replaced typically had graduation rates below 45 percent. These schools now serve more than 20,000 students. A fifth of incoming students were over age for eighth grade; 70 percent were below grade level in reading and 63 percent below in math. The schools stress rigorous learning and have curricular themes. They were designed through a competitive process involving many stakeholder groups, including teachers and community members. Part of the rationale for keeping the schools small was to facilitate deeper relations between adults and youth. Most had community partners who offered students additional learning opportunities inside and outside the classroom or provided organizational support. Both the teachers' union and the administrators' union were involved in the implementation. An evaluation (Bloom and Unterman 2013) of the first three graduating cohorts shows an average increase of 9.5

percent on graduation rates, while also increasing by 7.6 percent the proportion of students who meet a measure of college readiness in English (though not in math). The positive effects hold for several subgroups, including previously low-achieving students, males and females, Blacks and Hispanics, and lower-income students. Black and Hispanic males are among the largest gainers. Positive effects seem to persist into college or junior college.² These schools are also something of a financial bargain. Through the four years of high school the per-student costs of the small schools are not statistically different from those at control schools; but if the figures are calculated as the cost of producing a high school graduate, the small schools on average do that at a cost that is 16 percent less than the controls (Bifulco, Unterman, and Bloom 2014).

Since students are chosen for the schools by lottery, these are almost certainly school effects, but even a strong causal argument does not necessarily tell us much about just *how* schools are having an impact. When asked to explain their results, principals and teachers at some of the most successful schools pointed to academic rigor and the personal relationships that students and teachers can develop, along with staff committed to being in that kind of environment and working with that kind of student. The emphasis on teaching and relationships is given short shrift in the Coleman Report, where “school” is usually operationalized as facilities, curriculum, and student body composition. In the absence of effective teaching and supportive relationships, those things may not mean very much.

The importance of rigor for children who are not ordinarily exposed to it is a recurring theme in studies finding strong impacts on disadvantaged children. The International Baccalaureate (IB) high school program, originally designed for the children of diplomats, is widely acknowledged to be one of the most intellectually challenging approaches to secondary education and is heavily oriented toward critical thinking. Chicago implemented IB in twelve neighborhood high schools, making it available to students who, while better academically than the system average, were not strong enough to qualify for admission to selective enrollment high schools. Almost 40 percent of students who began the program dropped out of it. Having been in the program seemed to have no effect on them, but the impacts on those who stayed with it were very strong. Compared to matched comparison groups, those who stuck it out were 40 percent more likely to attend a four-year college and 50 percent more likely to attend a more selective college; they were more likely to persist in college at least through the first two years; and, once in college, they reported feeling very confident about their academic preparedness (Coca et al. 2012). Coming primarily from families where the parents had not attended college, they had significantly more problems navigating college as a social environment. Still, these findings are unusually robust, suggesting a population for whom a more challenging educational environment can make life-changing differences. The graduates’ high dropout rate is concerning, but one would hope that that can be improved with experience and better social supports. This work is important partly because, like the small schools in NYC, it contradicts the idea that we cannot reach older students, but partly because it

almost forces us to think about what might happen if we were to treat poor children like we do privileged ones.³

Since charter schools are more likely to be able to randomize their admissions processes, some of the work that best demonstrates causality has been done in charters. A lottery study⁴ of a group of well-respected Boston charters (Angrist et al. 2013) found that attending them

- increased pass rates on the exam for high school graduation;
- increased the likelihood of qualifying for a state-sponsored college scholarship;
- improved SAT scores;
- increased the likelihood of taking an Advanced Placement (AP) exam, the number of AP exams taken, and scores on AP calculus tests; and
- increased the likelihood of going to four-year as opposed to two-year institutions.

Increasingly, the fear that we cannot do anything that will help older children seems ill-founded. At the other end of the age spectrum, the value of preschool for children from low-income families is now uncontested. Consider New Jersey's well-funded effort to provide high-quality, full-day preschool to children in thirty-one of its most disadvantaged urban areas and reaching more than 40,000 students. Using a regression discontinuity design to estimate impacts, Steven Barnett and his colleagues (2013) found that participating students showed significant gains in literacy, language, math, and science. And, in contrast to some studies of preschool, the academic effects did not fade, at least through fourth and fifth grade. The proportion of students being retained in grade and the proportion referred to special education were both reduced by 7 percent, which is important since cost savings in those areas help to recover some of the program costs. Academically, one year of participation reduced minority-white achievement gaps by 10 to 20 percent, and two years of participation by 20 to 40 percent. Two years of participation reduced gaps between low-income and well-to-do children by half. There is good reason to believe that these numbers understate possible impacts, since program quality improved after the data were gathered.

These robust findings should caution us against thinking about the limits of schooling by looking just at individual interventions. We should be thinking about finding ways to provide students with a range of high-impact experiences, preschool among them. We really do not know the limits of what can happen when kids get this kind of alignment of positive experiences, but that question is being explored by the Promise Neighborhood movement and some charter school networks.⁵

The Ambitious Elementary School (McGhee Hassrick, Raudenbush, and Rosen 2017) is a particularly instructive addition to this literature. It is a lottery-based examination of a Chicago elementary school that uses a feedback-rich instructional system for literacy in the early grades. It is what they call a "shared and systematic" teaching approach, limiting teacher autonomy but giving teachers an elaborate set of supports in the classroom and beyond, including assistance

in engaging parents. For the African American students who won admittance, attending the school reduced the gap in math and reading scores between them and the city's mean scores for white students by 76 percent. These results seem to persist into middle school. The school spent more money per pupil than was typical for Chicago—\$12,500 as opposed to \$9,500—but that was less, sometimes considerably less, than many other systems, including those in the District of Columbia, Detroit, Boston, and New York. Studies like this should push our sense of what is possible with some disadvantaged youth when schools are expertly organized and resourced to support their student population. It also warns us against looking at instructional interventions in isolation, without considering the social, technical, and material supports for the intervention.

One of the reasons this research has been underappreciated is that discussions about the limitations of schooling often homogenize poor children, proceeding as if all of them were equally damaged. The students studied in *The Ambitious Elementary School* (McGhee Hassrick, Raudenbush, and Rosen 2107) scored slightly above the city average for African American students when they entered the school. In fact, some disadvantaged students get enough support from family and other sources to be able to take advantage of what schools can offer, while some need just a little more support, and others need robust interventions. A step in the direction of concretizing the latter group would be to think in terms of “multisystem” families (Goerge et al. 2010), that is, those involved with two or more of the following systems: foster care, mental illness in adults and emotional disorders in children, substance abuse, adult incarceration, and juvenile incarceration. Children from these families face stiffer developmental challenges and need better coordinated and more concentrated resources.

At the other end of the need spectrum, consider all the low-income children who get to senior year of high school interested in college and are qualified to go, but wind up not going. Part of the problem is just filling out the federal financial aid forms (FAFSA), a dauntingly complex task. Apparently, many cities see a 25 to 30 percent increase in college enrollment for low- and moderate-income students if they get their FAFSAs done in a timely fashion (Phillips 2014), not such a tall order when we start attending to it. The FAFSA story is part of a larger story about what schools can do to better support a pipeline that carries students to high school graduation and college. Every step in the college application process, from planning to apply to enrolling, waylays some students; at some points, Latino students seem especially vulnerable, perhaps a reflection of weaker relevant social capital. Schools with college-going cultures, however, can make a very large difference in outcomes. College-going culture can be measured, in part, by whether teachers expect most students to go to college, whether they help students to plan for college, whether curriculum is college-focused, and whether most students are planning to go to college. In a Chicago study, even after controlling for students' test scores and GPAs, those students attending schools with stronger college-going cultures were more likely to plan to go to a four-year college, more likely to apply, and more likely to actually enroll. The strength of the culture is generally associated with differences of 12 percent or more, but for the weakest students, differences were sometimes more than 20 percent (Roderick

et al. 2008)—another indication that what schools do matters more for the most vulnerable.

In Chicago, college enrollment increased about 7 percent from 2006 to 2013, but 62 percent of those attending college were going to schools beneath their level of qualifications. Among the best-qualified students, those scoring 24 or above on the ACT, one-fifth were not enrolled in college immediately after high school graduation; among those scoring between 21 and 23, one-third were not enrolled. Even after a decade or more of system-wide attention to improving postsecondary outcomes, a large number of the students who have prepared themselves for the next step are not getting the supports they need to take it, or they take the step, but not in the most advantageous way. Relatively small investments in such students may yield relatively large impacts on life outcomes.

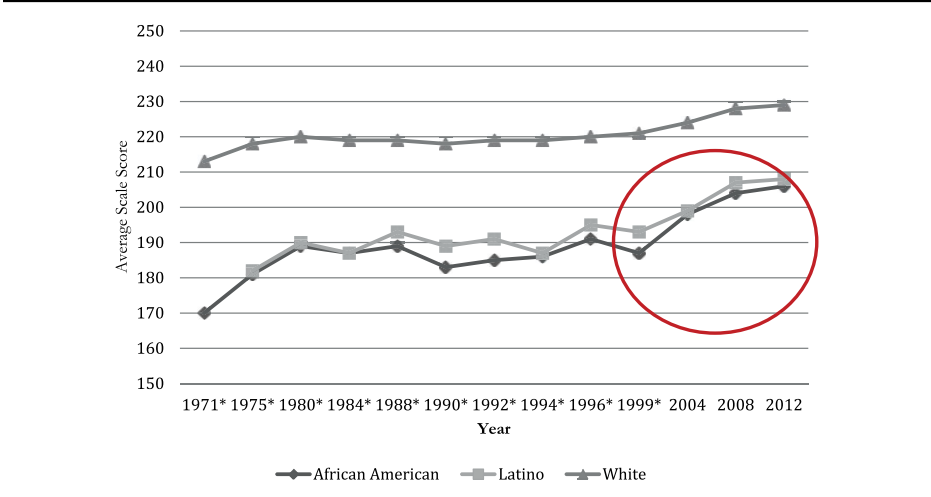
Note, too, that it is more difficult to see improvement if we restrict ourselves to only test scores. Other predictors of life chances may be shifted more easily. FAFSA support is probably the poster child for small investments with potentially large payoffs. It seems safe to say that schools can affect school readiness, high school graduation, achievement as measured by test scores, college readiness, college enrollment, and quality of college selected. Some of this work requires significantly higher levels of resources, but some of it does not. Some of it is at considerable scale; much of it is clearly with populations who are not easy to work with. There are questions to be raised about how long some of these projects will be sustained. In most cases, we are still fuzzy on exactly what it is about the intervention that provides better outcomes. Indeed, it is entirely possible that much of this is driven by human capital. All that said, this research should make it clear that schools can do something meaningful for a significant number of disadvantaged youngsters. Maybe broad statements about the impotence of schooling were plausible in the past, but they are increasingly at odds with a growing body of evidence.

The Dynamic and Varied Landscape of American Education

We have other evidence of meaningful progress at the national level besides high school graduation rates. Over the last few decades, we have seen some improvements in attainment and achievement at the national level, and some urban school districts seem to be separating themselves from the pack. We cannot be sure what is driving improvement, but in important cases we can be sure that it cannot be explained by demographic change. It is simply inaccurate to paint the landscape of American schooling as stagnant, with unvarying failure for poor children.

The National Assessment of Educational Progress (NAEP)⁶ has the advantage of being more rigorous than most state and local tests, and we have better reason to believe that its results are predictive of life outcomes. Proficiency on the NAEP is considered a high bar; it might be thought of as “above grade level” or

FIGURE 2
Large Gains for All Groups of Students, Especially Students of Color, since 1999: Nine-Year-Olds—NAEP Reading



SOURCE: Education Trust, National Center for Educational Statistics, “The Nation’s Report Card: Trends in Academic Progress 2012,” available from <https://nces.ed.gov/nationsreportcard/pubs/main2012/2013456.aspx>.
NOTE: Asterisks (*) denote previous assessment format.

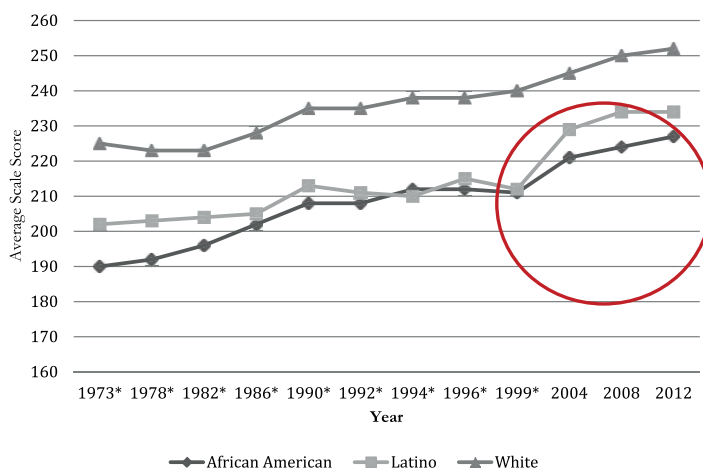
“strongly prepared for college.” If we look at NAEP trends for younger children, the long-term story is positive, and more so for students of color (see Figures 2 and 3).

In the middle grades, the patterns are similar, although more modest for reading in particular. Long-term data on proficiency show progress in some areas, especially math (see Figures 4 and 5). Starting from low base numbers, the proportion of minority students reaching proficiency has more than tripled; perhaps more importantly, the proportion in “below basic” has been more than halved.

If we look at large cities as compared to the nation as a whole, we again see long-term relative progress despite that so many kinds of disadvantage are concentrated there (see Figure 6). Over 12 years, the proportion of young students who scored at or above proficient in math improved 8 points for the nation but 12 points for large cities. The proportion scoring below basic declined 5 points for the nation but 12 points for large cities.

Although the nation can claim steady but slow progress in the elementary school grades, more in math than in reading, the high school picture is less encouraging (see Figure 7). “Stagnation” fits the situation for high school reading. This picture is disappointing, but there may be more to the story. The rise in high school graduation rates over that last decade means that more students are staying in school long enough to be tested, many of whom would likely be low-scoring. If so, the fact that scores have not dipped with expansion of the tested population could actually be a small victory.

FIGURE 3
Large Gains for All Groups of Students, Especially Students of Color, since
1999: Nine-Year-Olds—NAEP Math



SOURCE: Education Trust, National Center for Educational Statistics, “The Nation’s Report Card: Trends in Academic Progress 2012,” available from <https://nces.ed.gov/nationsreportcard/pubs/main2012/2013456.aspx>.

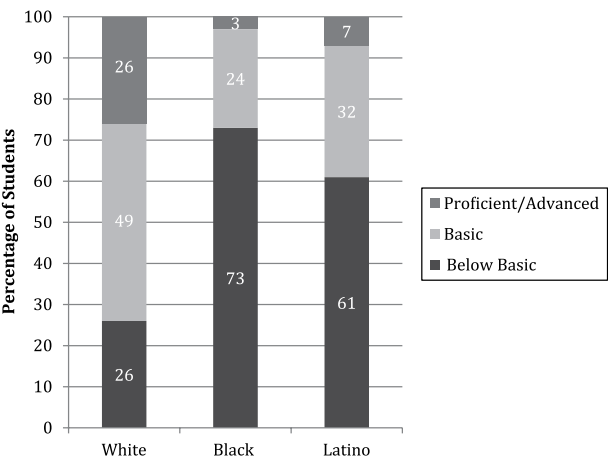
NOTE: Asterisks (*) denote previous assessment format.

While we have seen some long-term shrinkage in racial gaps, social class seems to be exerting more influence than ever. Sean Reardon (2011) has demonstrated that poverty hurts children more academically than it once did. That gap is shown in Figure 8, using NAEP data.

Changes over time are important because they seem, all else being equal, less likely to be driven by contextual factors. NAEP was designed to make state-level comparisons, but since 2002–03, under the Trial Urban District Assessment (TUDA) initiative,⁷ a group of districts have been reporting their NAEP scores at the district level. Participants have grown from ten districts in 2002–03 to twenty-one currently, and will grow to twenty-seven in 2017. If we look at how the original districts have fared over time, we see that between 2003 and 2015 these districts have improved faster than the nation (see Figures 9 and 10). In fourth-grade reading, the nation improved by 5 scale points, but large cities improved by 9 points, with Los Angeles, Boston, Atlanta, Chicago, and (especially) the District of Columbia the largest gainers. In fourth-grade math, the nation’s improvement of 6 points was exceeded by the 10-point gain among large cities, with Houston, Atlanta, Boston, Chicago, and (especially) the District of Columbia leading all others.

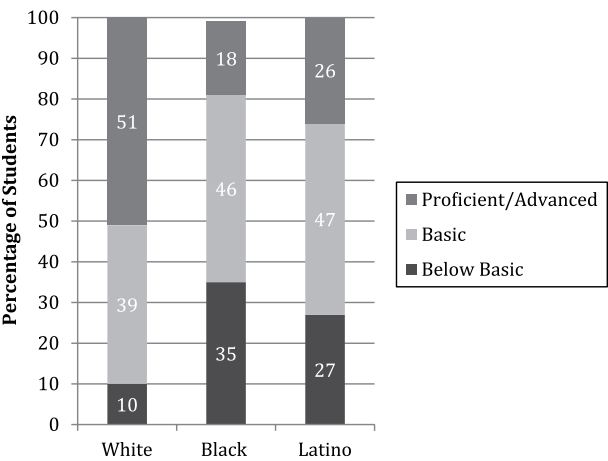
With the exception of Boston and Charlotte, none of the fastest-improving cities is among the cities that traditionally post the highest scores. Even if we do not understand the drivers of change, it is important to note that several poorly resourced districts are improving faster than the nation as a whole. The overall

FIGURE 4
Percentage of Students below Basic, at Basic, and Proficient/Advanced in
Fourth-Grade Math, by Race/Ethnicity, NAEP 1996



SOURCE: National Assessment of Educational Progress Data Explorer, National Center for Educational Statistics.

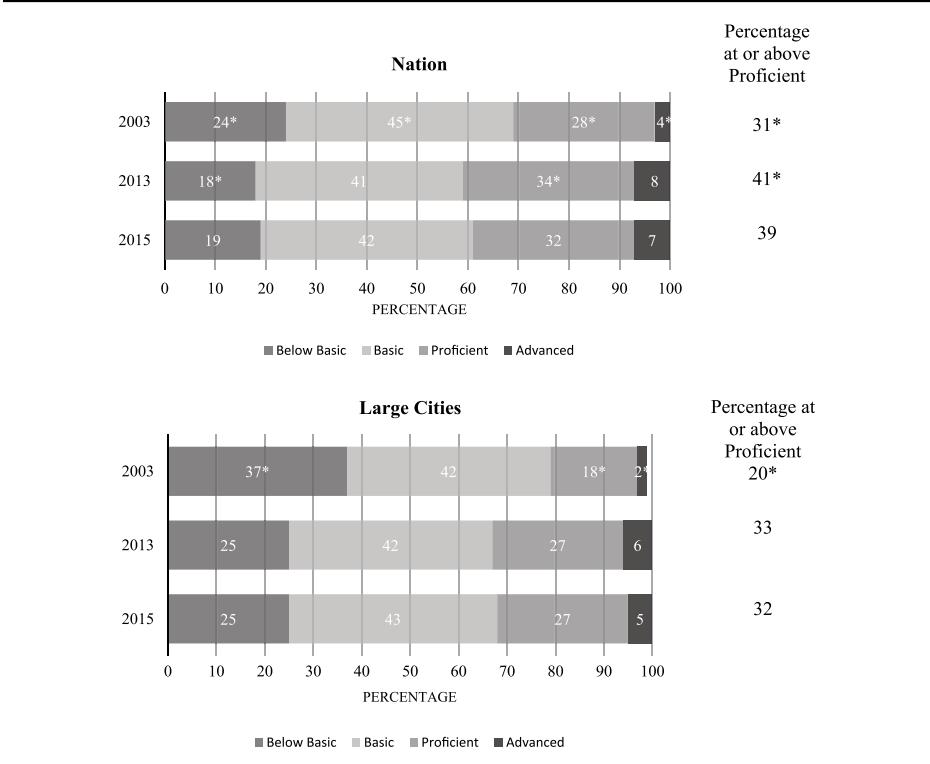
FIGURE 5
Percentage of Students below Basic, at Basic, and Proficient/Advanced, Fourth-Grade
Math by Race/Ethnicity, NAEP 2015



SOURCE: National Assessment of Educational Progress Data Explorer, National Center for Educational Statistics.

point thus far, then, is that there are important metrics on which the country seems to be making progress, however slowly and unevenly, and some of this progress includes vulnerable students or places where we expect disadvantage to

FIGURE 6
Grade 4 Mathematics, Proficiency Level, Nation and Large Cities, 2003, 2013, and 2105, NAEP



SOURCE: National Assessment of Educational Progress, National Center for Educational Statistics.

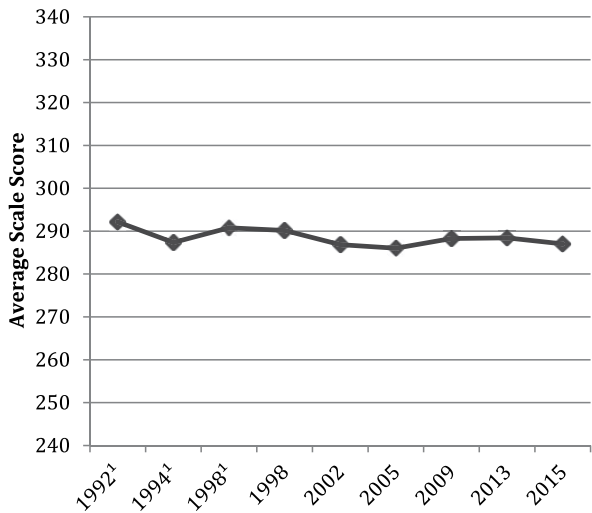
NOTE: Figure shows higher proportions at or above proficient compared to 2003. Detail may not sum to totals because of rounding.

*Significantly different ($p < .05$) from 2015.

be concentrated. The educator-bashing of the last several years has taken place in a context of improving educational outcomes.

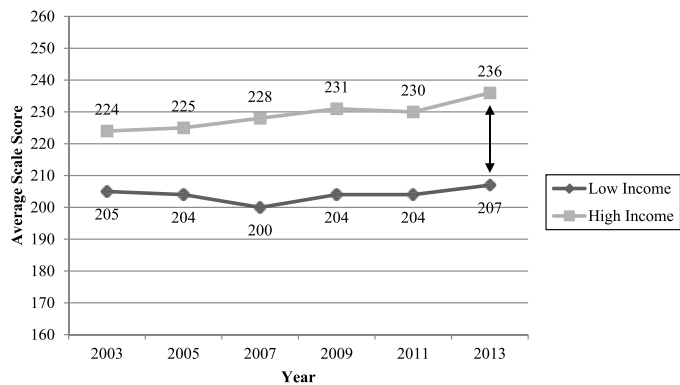
If we look at proficiency levels across jurisdictions, it is clear that children's hometowns matter. Table 1 presents 2015 fourth-grade reading data. Across these twenty-one cities, the range of achievement at the level of proficiency goes from 11 percent or below in Detroit, Cleveland, and Baltimore to 39 to 41 percent in Tampa, Miami, and Charlotte. Those three systems plus Louisville are either tied with the national average or slightly above it. On a metric that should mean something for the quality of children's lives, some big cities are doing close to four times better than others. (Some of the TUDA districts are combined city-county jurisdictions, and others are central cities. The city-county districts typically have lower rates of poverty and may be better resourced.) In fourth-grade

FIGURE 7
NAEP Reading Achievement, 17-Year-Olds, 1992–2015



SOURCE: National Assessment of Educational Progress Data Explorer, National Center for Educational Statistics.

FIGURE 8
Widening Gap between Low-Income Students and Higher Income Students: Grade 4 Reading

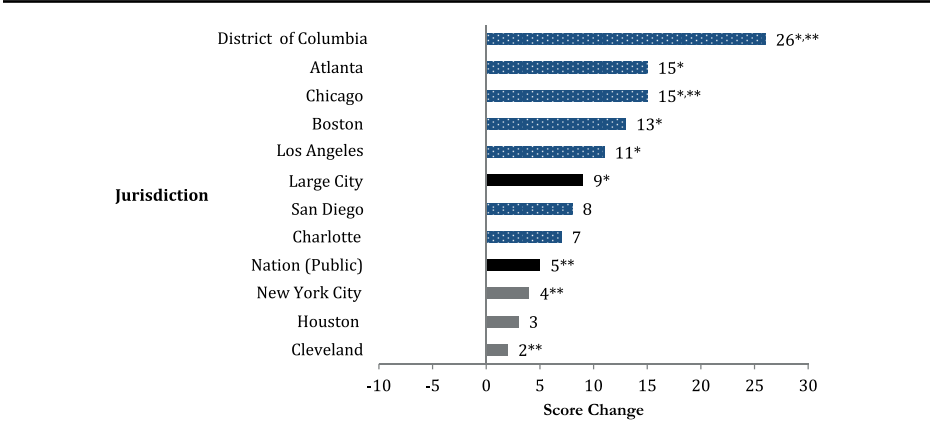


SOURCE: National Assessment of Educational Progress Data Explorer, National Center for Educational Statistics.

NOTE: Proficient Scale Score = 238; Basic Scale Score = 208.

math (see Table 2), the range is even larger, with the three poorest-performing systems averaging 10 percent at/above proficiency against 47 percent for the three best. Five systems outperform the national average.

FIGURE 9
Grade 4 NAEP Reading Score Gains, Selected Districts and the Nation, 2003–2015



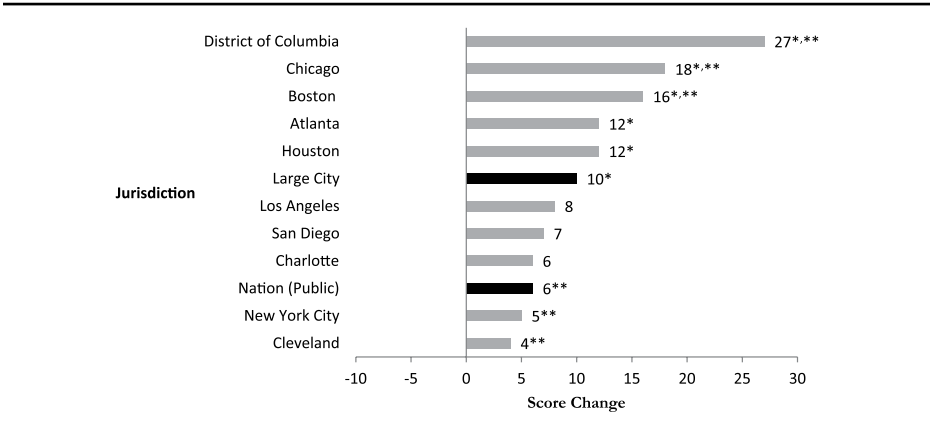
SOURCE: National Assessment of Educational Progress, National Center for Educational Statistics.

NOTE: Seven districts have greater score gains than the nation since 2003. The black bars in the table differentiate the nation and large city categories from the districts. The dot bars indicate a score change; the grey bars indicate no significant change.

*Significantly different ($p < .05$) from nation (public).

**Significantly different ($p < .05$) from large city.

FIGURE 10
Grade 4 NAEP Mathematics Score Gains, Selected Districts and the Nation, 2003–2015



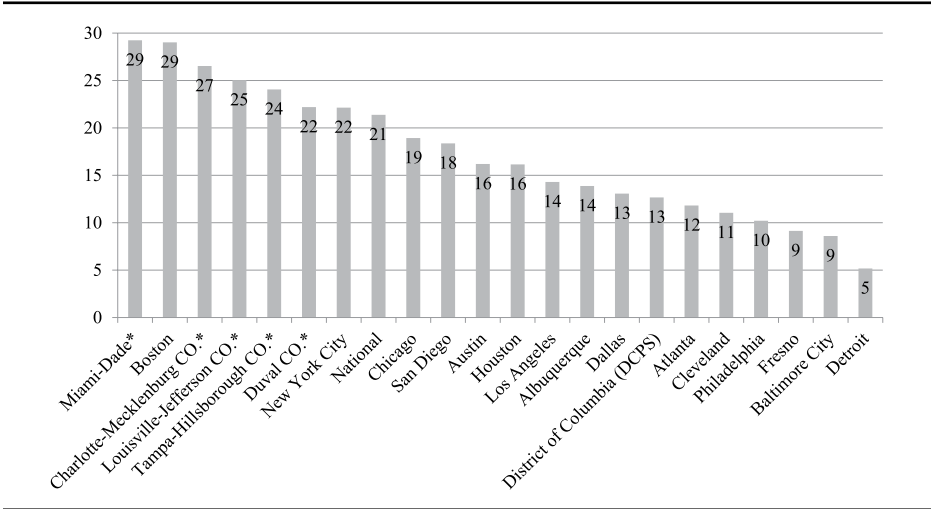
SOURCE: National Assessment of Educational Progress, National Center for Educational Statistics.

NOTE: Eight districts have greater score gains than the nation since 2003. The black bars differentiate the nation and large city category from the districts. The gray bars indicate significant score change since 2003, which was the case for all cities.

*Significantly different ($p < .05$) from nation (public).

**Significantly different ($p < .05$) from large city.

FIGURE 11
NAEP Percentage of Fourth-Grade Students at or above Proficient in Reading: Free and Reduced Lunch Eligible Students, 2015 TUDA

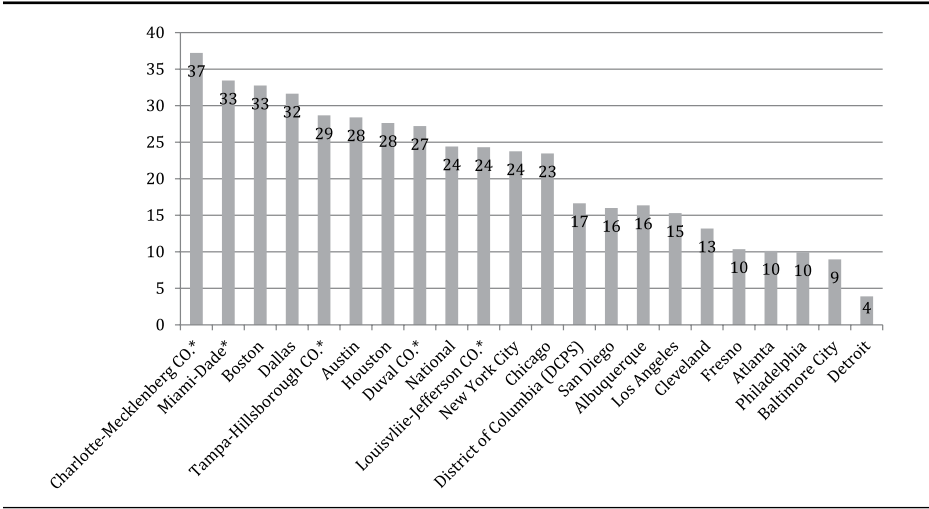


SOURCE: National Assessment of Educational Progress Data Explorer, National Center for Educational Statistics.
NOTE: Asterisks (*) denote city/county systems.

If we look at students likely to be more at risk than others, given the limited controls available, the pattern continues to be that some cities do considerably better than others with similar students. In reading, as Figure 11 shows, five systems are either at or above the national average for students who are eligible for free and reduced price lunch. In math, as Figure 12 shows, nine systems do better than the national average.

Race shows some interesting patterns. If the data presented in Figures 13 through 15 are a reflection of racial privilege, then the effects of privilege are highly variable. Atlanta and the District of Columbia score mostly in the middle of the pack overall; they seem to do quite well by white children, but their performance with black students might be considered disappointing. Tampa, Miami, and Charlotte seem to be the closest empirical referents for that elusive ideal “Excellence and Equity,” besting the national average for all groups. It is not immediately obvious why five of the six systems showing the highest scores for Hispanics should be in the Southeast (including the District of Columbia under that heading). These variations across jurisdictions may signal that racial processes are being institutionalized differently in different places, a possibility that we are unable to consider if we stay focused on what happens on average across districts. Still, the most sobering fact may be that no district on which we have these data has more than 25 percent of black children scoring at or above proficiency, and no district has more than a third of its lower-income children at that level.

FIGURE 12
NAEP Percentage of Fourth-Grade Students at or above Proficiency in Math: Free and Reduced Lunch Eligible Students, 2015 TUDA



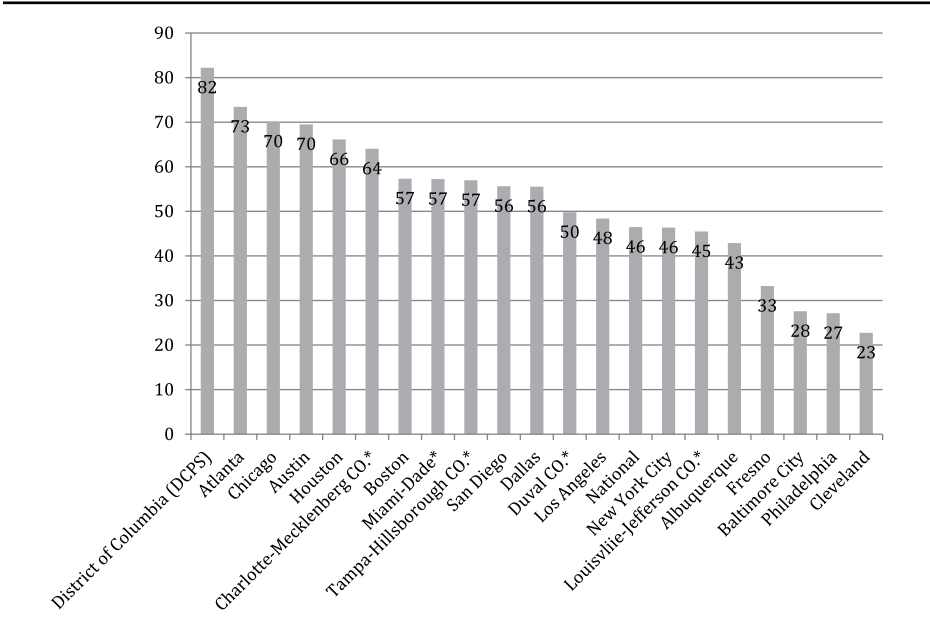
SOURCE: National Assessment of Educational Progress Data Explorer, National Center for Educational Statistics.

NOTE: Asterisks (*) denote previous assessment format.

To the naked eye, the variations across districts seem much more consequential for the lives of children and communities than the outcomes from some of the interventions to which we devote so much research attention. If these prove to be significant school effects, our best chance to accelerate improvement may be at the district level, or something analogous to that. Perhaps the work that best makes that point is by Matthew Chingos (2015), who looks at state-to-state variation on NAEP after controlling for eleven student-level characteristics, including language proficiency, race and ethnicity, family structure, and books and other amenities in the home. After the adjustments, he finds very wide variation in the performance of similar students across states. Students in the best-performing state, Massachusetts, outperform similar students in the worst-performing states by a remarkable 18 months of learning. In the two top states with adjusted scores, Massachusetts and New Jersey, students acquire the equivalent of six to nine months' more learning than similar students in average states. Chingos also gives us reason to think the long-term improvement in learning on NAEP is real. When he looked at performance within states from 2003 to 2013, he found that all fifty states improved more than can be explained by demographic changes alone.

Following up on this work, Kristin Blagg (2016) observes that while fourth- and eighth-grade students have improved in NAEP performance by about one-tenth of a standard deviation from 2005 to 2015, for students in large cities, the improvement has been twice that. Looking specifically at the TUDA districts and

FIGURE 13
NAEP Percentage of Fourth-Grade Students at or above Proficiency in
Reading: White Students, 2015 TUDA

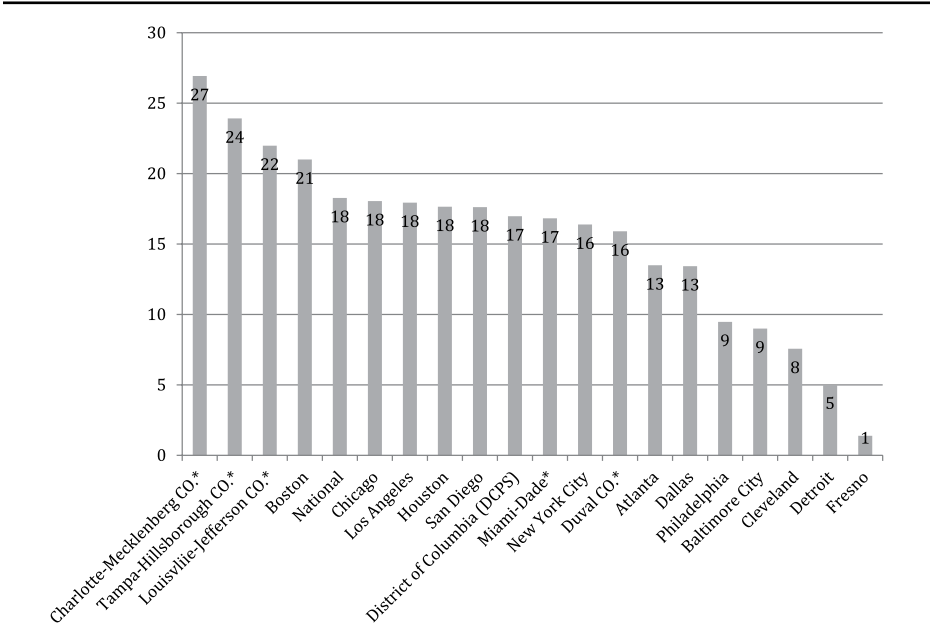


SOURCE: National Assessment of Educational Progress Data Explorer, National Center for Educational Statistics.

NOTE: Detroit reporting standards not met. Asterisks (*) denote previous assessment format.

adjusting for differences in student characteristics, Boston, Charlotte, Austin, Hillsborough County (FL), and Miami turn out to be the top five when averaging the fourth- and eighth-grade scores and, again, the differences between the top three districts and the bottom three are substantial, amounting to about two years of learning. Even with scores adjusted for student characteristics, Detroit remains on the bottom. Much of the improvement in those cities that have both 2005 and 2013 data cannot be explained in terms of changes in demographics. “Substantial variation in school district performance and growth persists even after accounting for demographic differences in student populations, both across school districts and across time” (Blagg 2016, 7). Clearly, there remains the possibility that unobserved student characteristics are shaping these differences. We also cannot know that the social experience of poverty—the amount of violence children are exposed to, the strength of civic institutions in low-income neighborhoods, stability of lower-end employment—is equivalent across cities and states. Nevertheless, the evidence that we do have right now is enough to justify wondering about whether we are devoting much time and energy to debating reforms that have relatively modest impacts, overlooking the possibility of greater leverage by accelerating the progress that some cities have already made.

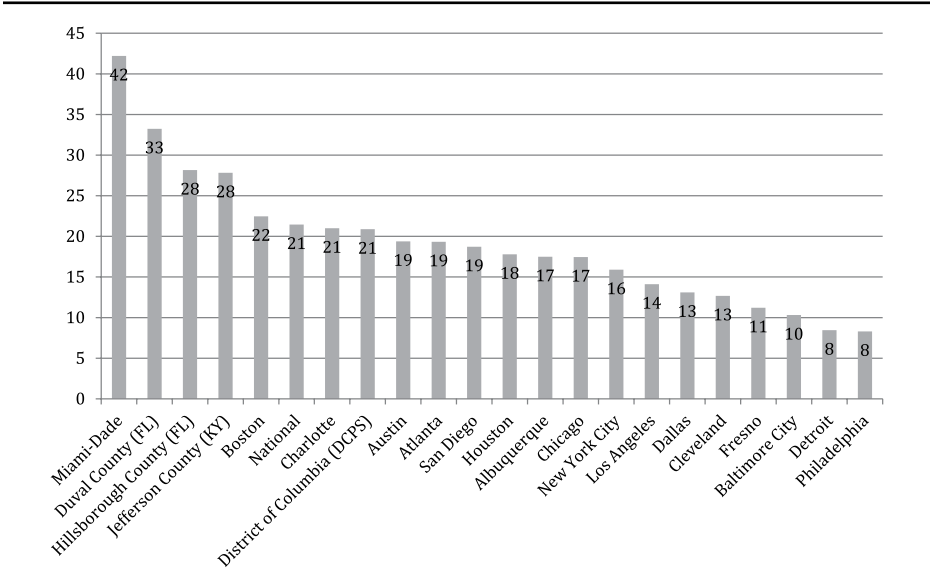
FIGURE 14
NAEP Percentage of Fourth-Grade Students at or above Proficiency in Reading: Black Students, 2015 TUDA



SOURCE: National Assessment of Educational Progress Data Explorer, National Center for Educational Statistics.
NOTE: Albuquerque and Austin reporting standards not met. Asterisks (*) denote previous assessment format.

Obviously, one of the things that we need most now is more careful descriptive work on successful districts. As a case in point, consider Montgomery County, Maryland, the nation’s seventeenth largest district in 2014, with about 154,000 students, 35 percent of them qualifying for free or reduced lunch, half of them African American or Hispanic (MCPS 2014a). Traditionally, the system has had both high-achieving schools and low-achieving schools. Since 1999, district efforts to reduce the inequities have centered on improving student performance on a set of key predictors of long-term success. Improvement has been marked on some of these indicators. For African American students, the proportion reading at or above proficiency on the state test has gone from 48 percent in 2003 to 82 percent in 2011; for Hispanic students, from 40 percent to 83 percent. In 2001, just 19 percent of African American eighth graders had passed Algebra with at least a “C” grade; by 2011, it had more than doubled to 45 percent. For Hispanic students, the rise was from 14 percent to 43 percent. Getting more kids into rigorous coursework is a major point of emphasis. In 2012, the proportion of AP exams taken by African American students who earned college-ready scores (51.8 percent) was higher than the percentage for African American students in

FIGURE 15
NAEP Percentage of Fourth-Grade Students at or above Proficiency in
Reading: Latino/a Students, 2015 TUDA



SOURCE: National Assessment of Educational Progress Data Explorer, National Center for Educational Statistics.

NOTE: Asterisks (*) denote previous assessment format.

the state (31 percent) or nation (28 percent). In both 2012 and 2013, the proportion of African American and Hispanic high school graduates earning 3 or higher on at least one AP exam surpassed the national average for *all* graduates. Not surprisingly, the proportion of both African American and Hispanic graduates going on to college more than quintupled in about 10 years (Childress, Doyle, and Thomas 2009; MCPS 2010, 2012, 2014b; Starr 2012; Weast 2013; Winerip 2011). There are still low-performing schools in the county, but this is a sustained record of forward progress on a range of indicators, and has affected the lives of a large number of children.⁸

Clearly, Montgomery County offered significant advantages. We would point to stable and creative leadership, better than usual financial resources and professional culture, and stronger than usual labor-management cooperation. The underlying drivers of change that are highlighted in the descriptive literature on Montgomery County—more rigorous instruction, leadership accountability, deeper professionalization of teaching, resources following need, higher expectations, stronger building-level leadership, and better human and social capital—overlap significantly with the factors pointed to in the experimental and quasi-experimental literature. As we develop more thick descriptions of outlying districts and states, we will be better able to test some of these ideas.

Recent reexaminations of Coleman's data suggest that this entire conversation might have begun differently. Geoffrey Borman and Maritza Dowling (2010) have reanalyzed the report's data using statistical techniques that were not available when the report was done (which take into account the fact that Coleman's individual observations were not independent of one another). They conclude that 40 percent of variance in verbal achievement in the ninth grade was associated with school differences, more than twice the estimate in the Coleman report. Like Coleman, they find that tangible resources were not strongly associated with outcomes, but, introducing more controls than Coleman could, they find "very clear and compelling evidence that going to a high-poverty school or a highly segregated African American school has a profound effect on a student's achievement outcomes. ... In dramatic contrast to previous analyses of the Coleman data, these findings reveal that school context effects dwarf the effects of family background" (Borman and Dowling 2010, 1239).

Coleman collected data on whether teachers preferred to teach middle-class children and how aggressively schools tracked children, but those data are rarely discussed. Borman and Dowling found that within-school variations in achievement by race were significantly explained by whether teachers were biased toward being around middle-class children and what kind of use schools made of tracking, presumably proxies for institutional expectations of children. "Rather than the all-too-familiar summary of the Coleman report's findings that 'schools don't matter,' this analysis suggests that both within-school interactions among students and educators, and racial segregation across schools deny African American children equality of educational opportunity" (Borman and Dowling 2010, 1242). Coleman's data probably did not support the strong version of schools don't matter; more recent evidence certainly does not.

The most important recent addition to the "money doesn't matter" subdebate is probably the work of Julien Lafortune, Jesse Rothstein, and Diane Schanzenbach (2016), in which they compared twenty-six states that have changed school funding patterns, giving more funding to poorer districts, to twenty-three states that have not.⁹ The states putting more money into the poorest districts got considerably better results from those districts. The improvement in achievement was twice as large per dollar spent as the improvement from smaller classes in the early grades. At a moment when educational policy seems poised to turn away from discussion of resource inequity, we should hope the study is widely noticed.

Fifty Years to Get the Question Right

This paper arises out of frustration with the results of school reforms carried out over the past few decades. These efforts have failed. They need to be abandoned.

—David Berliner (2013, 1)

After nearly twenty years of vigorous, standards-based school reform in this nation, we still see an iron law correlation between socioeconomic status and educational achievement and attainment.

—Jeffrey Henig, Helen Janc Malone, and Paul Reville (2012, 119)

There are, no doubt, multiple pathways to more effective schools, but when the smoke clears, it will turn out that some of the most powerful schools will be those that have created environments that students, teachers, and administrators find both demanding and supportive. In these schools, resources, including human and social capital, would be distributed and deployed strategically, which would often mean that poorer children get more; adults would work reasonably well with one another and with children; and teachers, parents, and children would experience schools as affirming spaces. The instruction will be done with a certain degree of intentionality; that is, very little is left to chance, from how teachers are selected and deployed to how curriculum is used. Put differently, we think that these schools operate in ways that blunt the degradation of the schooling experience that is common to poor and racialized students. What we can say now with confidence is that we have seen broad and, arguably, deep progress on some meaningful metrics (though not always simultaneously). Academically, by some of those measures, it looks like some school systems are doing two or three times better with vulnerable students than others. Some urban districts are surpassing national averages on some measures, and large cities are improving faster than the nation as a whole. Some initiatives have been sustained for a considerable period of time. The largest gainers are often the students we would consider the most vulnerable. In some cases, we have clear grounds for causal inference, and it should not take many more cases to enlarge our sense of possibility. Test scores may still be too low in large cities, but over the last decade public school students in large cities have closed about a third of the gap with national scores (Blagg 2016)—a change that seems to have gone largely unnoticed among educators and even researchers. This lack of awareness may jeopardize the gains that we are making, and it certainly makes it impossible to build on them. In the context of a polarized, deeply ideological debate, the facts may not have much traction; but in this case important facts are not even being entered into the conversation: witness the growing intensity of teacher-bashing rhetoric even while schooling for vulnerable students is showing some clear signs of improvement. This situation is all the more concerning since it is our sense that some of the best work in the country is fragile, dependent on a particular leader or political arrangements that may not be stable.

The strong form of the “schools don’t matter” argument can be retired. We cannot eliminate the effects of poverty, but we have good evidence that schooling can give a great many more children a chance at a decent start in life. It is humbling, though, that 50 years after Coleman, we still cannot say with much precision just how much of a difference schooling might make. We can say that simply asking whether schools can have an impact on disadvantaged children is a poorly framed question. It would be much better to ask: Given current resource and political constraints, what educational practices and contexts are associated with what kind of improved outcomes for what kinds of disadvantaged youth? What kinds of impacts are possible, given more resources and fewer political constraints? What prevents those practices and contexts from being built upon and sustained? Which practices offer relatively large payoffs for the investment? What levers can we move outside of formal educational institutions that would

accelerate better outcomes? Suppose that 50 years ago, Coleman had focused more of his inquiry on the particular schools where poor and minority children flourished. Suppose that was then followed up by networks of academic researchers, practitioners, students, and others developing hypotheses about how to replicate and improve such places, trying interventions based on the hypotheses, and making adjustments based on the results. That is, suppose we had had a process that simultaneously looked at what to do and how to do it in real-world contexts that broadened the conception of expertise beyond the academic and broadened the conception of relevant evidence beyond the causal. That sounds like a more generative discussion than the one we have had.¹⁰

We want to stress the importance of abandoning the habit of framing the question as if all disadvantaged children are equally disadvantaged. Some have so many daunting challenges thrown at them that they need really robust, multi-pronged interventions; others have had enough developmental support that they can respond to schools if schools respond to them. Indeed, charter schools seem to make their living by focusing on the least disadvantaged of the disadvantaged. Let us also emphasize the importance of abandoning the idea of “eliminating the achievement gap” as a way to organize this discussion. “Achievement gap” is an artificial construction, and there is no reason to think public policy can “eliminate” it. Our sense is that the parents of disadvantaged children are not much concerned with statistical equality, but are concerned that their children get past the thresholds that stand between them and a chance at a desirable life. Test scores are one of these thresholds, but only one. Attendance, behavior, high school and college graduation, and a sense of optimism are also important, and many of these other thresholds can be moved more easily than test scores. We have to be exceedingly cautious about drawing inferences about what is possible from central tendencies in large datasets. What happens on average does not tell us what might happen given a change in social processes, especially those driven by race and class.

We also want to strongly emphasize that some of the scholars with whom we are taking issue here are among those we most respect in the profession, excellent scholars who have done a great service by keeping some attention focused on the resources to be invested in poor children. Still, as a practical matter, we question the wisdom of linking advocacy for resources to arguments about how *little* schools can do. The broad public support that we now see for expanded preschool seems to be partly the result of relevant publics becoming convinced that preschool can matter for children while saving money over the long term. We suspect that that is the more powerful model, appealing to both the idealism and the self-interest of the public. The more we can demonstrate that educators are making traction against the many ways that poverty and marginalization undermine youth, the more effectively we can make a case for investing in poor children. Beyond that, at a time of declining confidence in American institutions, it is important that the public understand that some educators, working under the most difficult circumstances, are finding a way to make a difference for vulnerable youth.

Finally, we worry about the resonance of the discourse about the impotence of schooling with deeper racial discourses. Narratives of the intellectual limitations of black and brown children are deeply embedded in American social thinking. Other narratives that are consistent with that idea, no matter how well intended, may derive an undeserved plausibility from their similarity. Ideas that run counter to it may struggle to get a fair hearing. In the same way that teachers can create self-fulfilling prophecies in their classrooms, persistent pessimism about schooling for the disadvantaged may feed into a national self-fulfilling prophecy. Social scientists may serve a more useful function by focusing attention on their potential—and the potential of their parents and teachers, for that matter—than on the very real limitations imposed on them by poverty.

Notes

1. Note, too, the ahistoric character of much discussion about home effects. Whether a parent reads to her or his children is likely to be influenced by the nature of the public investments made in that parent when he or she was a child (Raudenbush 2012). When we forget that, we eliminate decades of underinvestment in some communities, especially communities of color, from our understanding of how schools got to be what they are. The neighborhood effects literature has a stronger sense that individual behavior at one point in time can be produced by earlier policies or structural patterns.
2. This research might be thought of as confirming a large, earlier body of more descriptive research (e.g., Raywid 1999), attesting to the value of small schools, which seems largely forgotten as issues of relationships and pedagogical philosophy have been put on the back burner in the national conversation.
3. Spurred by this research, Chicago has started at least seven IB high schools and twelve elementary schools. Several of them appear to have gotten off to strong starts.
4. Schools that admit students by randomized lotteries make it possible to compare lottery winners to lottery losers, significantly strengthening claims of causal impact.
5. See <http://www.promiseneighborhoodsinstitute.org/> and <http://civicengagement.uchicago.edu/education>.
6. See <https://www.nationsreportcard.gov>.
7. See <https://www.nationsreportcard.gov/tuda.aspx>.
8. Recently there are some signs of instructional slippage, at least in mathematics (St. George 2015).
9. Hawaii was excluded from the analysis.
10. For a more elaborate discussion of some of these points, see Bryk et al. (2015).

References

- Allensworth, Elaine M., and John Q. Easton. 2007. *What matters for staying on-track and graduating in Chicago public schools*. Chicago, IL: Consortium on Chicago School Research.
- Angrist, Joshua D., Sarah R. Cohodes, Susan M. Dynarski, Parag A. Pathak, and Christopher D. Walters. 2013. *Charter schools and the road to college readiness: The effects on college preparation, attendance and choice*. Boston, MA: The Boston Foundation and the New Schools Venture Fund.
- Balfanz, Robert, John M. Bridgeland, Joanna Hornig Fox, Jennifer L. DePaoli, Erin S. Ingram, and Mary Maushard. 2014. *Building a grad nation: Progress and challenge in ending the high school dropout epidemic*. Annual update. Washington, DC: Civic Enterprises.
- Barnett, W. Steven, Kwanghee Jung, Min-Jong Youn, and Ellen C. Frede. 2013. *Abbott Preschool Program longitudinal effects study: Fifth grade follow-up*. New Brunswick, NJ: National Institute for Early Education Research, Rutgers University.
- Berliner, David. 2013. Effects of inequality and poverty vs. teachers and schooling on America's youth. *Teachers College Record* 115 (12): 1–2.

- Bifulco, Robert, Rebecca Unterman, and Howard S. Bloom. 2014. The relative costs of New York City's new small public high schools of choice. *MDRC Working Paper*, New York, NY.
- Blagg, Kristin. 2016. *Making the grade in America's cities: Assessing student achievement in urban districts*. Washington, DC: Urban Institute. Available from <http://www.urban.org>.
- Bloom, Howard S., and Rebecca Unterman, eds. 2013. *Sustained progress: New findings about the effectiveness and operation of small public high schools of choice in New York City*. New York, NY: MDRC. Available from https://www.mdrc.org/sites/default/files/sustained_progress_FR_0.pdf.
- Borman, Geoffrey D., and Maritza Dowling. 2010. Schools and inequality: A multilevel analysis of Coleman's equality of educational opportunity data. *Teachers College Record* 112 (5): 1201–46.
- Bryk, Anthony S., Louis M. Gomez, Alicia Grunow, and Paul G. LeMahieu. 2015. *Learning to improve: How America's schools can get better at getting better*. Stanford, CA: Carnegie Foundation for the Improvement of Teaching.
- Bryk, Anthony S., and Barbara L. Schneider. 2002. *Trust in schools: A core resource for improvement*. New York, NY: Russell Sage Foundation.
- Bryk, Anthony S., Penny Bender Sebring, Elaine Allensworth, Stuart Luppescu, and John Q. Easton. 2010. *Organizing schools for improvement: Lessons from Chicago*. Chicago, IL: University of Chicago Press.
- Card, David, and Alan B. Krueger. 1996. School resources and student outcomes: An overview of the literature and new evidence from North and South Carolina. National Bureau of Economic Research Working Paper 5708, Cambridge, MA.
- Childress, Stacey M., Denis P. Doyle, and David A. Thomas. 2009. *Leading for equity: The pursuit of excellence in Montgomery County Public Schools*. Cambridge, MA: Harvard Education Press.
- Chingos, Matthew. 2015. *Breaking the curve: Promises and pitfalls of using NAEP data to assess the state role in student achievement*. Washington, DC: The Urban Institute. Available from <http://www.urban.org/sites/default/files/alfresco/publication-pdfs/2000484-Breaking-the-Curve-Promises-and-Pitfalls-of-Using-NAEP-Data-to-Assess-the-State-Role-in-Student-Achievement.pdf>.
- Clark, Ann. 2014. Getting strong educators to the students who most need them. Presentation at the 2014 Conference of the Education Trust, Baltimore, MD.
- Coca, Vanessa, David W. Johnson, Thomas Kelley-Kemple, Melissa Roderick, Eliza Moeller, Nicole Williams, and Kafi Moragne. 2012. *Working to my potential: The postsecondary experiences of CPS students in the international baccalaureate diploma programme*. Chicago, IL: Consortium on Chicago School Research.
- Coleman, James S., Ernest Q. Campbell, Carol J. Hobson, James McPartland, Alexander M. Mood, Frederic D. Weinfeld, and Robert L. York. 1966. *Equality of educational opportunity*. Washington, DC: U.S. Department of Health, Education, and Welfare.
- DePaoli, Jennifer L., Joanna Hornig Fox, Erin S. Ingram, Mary Maushard, John M. Bridgeland, and Robert Balfanz. 2015. *Building a grad nation: Progress and challenge in ending the high school dropout epidemic*. Annual update. Washington, DC: Civic Enterprises.
- Duncan, Greg J., and Richard J. Murnane. 2014. *Restoring opportunity: The crisis of inequality and the challenge for American education*. Cambridge, MA: Harvard Education Press.
- Elmore, Richard F. 1997. *Investing in teacher learning: Staff development and instructional improvement in community school district # 2, New York City*. With Deanna Burney. New York, NY: National Commission on Teaching & America's Future, Teachers College, Columbia University.
- Goerge, Robert M., Cheryl Smithgall, Roopa Seshadri, and Peter Ballard. 2010. Illinois families and their use of multiple service systems. *Issue brief*. Chicago, IL: Chapin Hall at the University of Chicago.
- Grant, Gerald. 1973. Shaping social policy: The politics of the Coleman Report. *Teachers College Record* 75 (1): 17–54.
- Healey, Kaleen, Jenny Nagaoka, and Valerie Michelman. 2014. *The educational attainment of Chicago public schools students*. Chicago, IL: University of Chicago Consortium on Chicago School Research.
- Heckman, James J. 2006. Skill formation and the economics of investing in disadvantaged children. *Science* 312 (5782): 1900–1902.
- Henig, Jeffrey, Helen Janc Malone, and Paul Reville. 2012. Addressing the disadvantages of poverty: Why ignore the most important challenge of the post-standards era. In *The futures of school reform*, ed. Jal Mehta, Robert B. Schwartz, and Frederick M. Hess, 119–49. Cambridge, MA: Harvard Education Press.
- Hill, Paul, and Ashley Jochim. 2015. *The street-level politics of school reform*. Seattle, WA: Center for the Reinvention of Public Education.

- Klein, Joel. June 2011. The failure of American schools. *The Atlantic*. Available from <https://www.theatlantic.com/magazine/archive/2011/06/the-failure-of-american-schools/308497/>.
- Konstantopoulos, Spyros, and Geoffrey D. Borman. 2011. Family background and school effects on student achievement: A multilevel analysis of the Coleman data. *Teachers College Record* 113 (1): 97–132.
- Lafortune, Julien, Jesse Rothstein, and Diane Whitmore Schanzenbach. 2016. School finance reform and the distribution of student achievement. National Bureau of Economic Research Working Paper 22011, Cambridge, MA.
- McGhee Hassrick, Elizabeth, Stephen W. Raudenbush, and Lisa Rosen. 2017. *The ambitious elementary school: Its conception, design and contribution to educational equality*. Chicago, IL: University of Chicago Press.
- Montgomery County Public Schools (MCPS). 2010. *Annual report*. Available from <http://www.montgomeryschoolsmd.org>.
- MCPS. 2012. *The results book*. Available from <http://www.montgomeryschoolsmd.org>.
- MCPS. 2014a. *MCPS at a glance, 2014–15*. Available from <http://www.montgomeryschoolsmd.org>.
- MCPS. 2014b. *Record of success*. Available from <http://www.montgomeryschoolsmd.org>.
- Murnane, Richard J. 1975. *The impact of school resources on the learning of inner city children*. Cambridge, MA: Ballinger Publishing.
- Payne, Charles M. 1984. *Getting what we ask for: The ambiguity of success and failure in urban education*. Westport, CT: Greenwood Press.
- Pettigrew, Thomas F. 1968. Race and equal educational opportunity. *Harvard Educational Review* 38 (1): 66–76.
- Phillips, Owen. 2014. *States vary on FAFSA completion rates*. New America Edcentral. Available from <http://www.edcentral.org/filling-fafsas>.
- Raudenbush, Stephen W. 2012. Can school improvement reduce racial inequality? In *Research on schools, neighborhoods, and communities: Toward civic responsibility*, ed. William F. Tate, 233–48. Lanham, MD: American Educational Research Association, Rowman and Littlefield.
- Raywid, Mary Anne. 1999. Current literature on small schools. ERIC Digest, ED 425049.
- Reardon, Sean F. 2011. The widening academic achievement gap between the rich and the poor: New evidence and possible explanations. In *Whither opportunity? Rising inequality, schools, and children's life chances*, eds. Greg J. Duncan and Richard J. Murnane, 91–117. New York, NY: Russell Sage Foundation.
- Roderick, Melissa, Thomas Kelley-Kemple, David W. Johnson, and Nicole O. Beechum. 2014. *Preventable failure: Improvements in long-term outcomes when high schools focused on the ninth grade year: Research summary*. Chicago, IL: Consortium on Chicago School Research.
- Roderick, Melissa, Jenny Nagaoka, Vanessa Coca, and Eliza Moeller. 2008. *From high school to the future: Potholes on the road to college*. Research Report. Chicago, IL: Consortium on Chicago School Research.
- Rothstein, Richard. 2004. *Class and schools: Using social, economic, and educational reform to close the black-white achievement gap*. New York, NY: Teachers College.
- Rowan, Brian, Richard Correnti, and Robert J. Miller. 2002. What large-scale survey research tells us about teacher effects on student achievement: Insights from the Prospects Study of elementary schools. *Teachers College Record* 104 (8): 1525–67.
- Sampson, Robert J. 2012. Neighborhood inequality, violence, and the social infrastructure of the American city. In *Research on schools, neighborhoods, and communities: Toward civic responsibility*, ed. William F. Tate, 11–28. Lanham, MD: American Educational Research Association, Rowman and Littlefield.
- Sharkey, Patrick 2013. *Stuck in place: Urban neighborhoods and the end of progress toward racial equality*. Chicago, IL: University of Chicago Press.
- St. George, Donna. 12 July 2015. Montgomery declines on algebra, stalls or lags on some reading marks. *Washington Post*.
- Starr, Dr. Joshua P., Superintendent of Schools, Montgomery County Public Schools. 27 March 2012. Testimony, United States House of Representatives Committee on Appropriations, Subcommittee on Labor, Health and Human Services, Education, and Related Agencies.
- Weast, Jerry. 30 May 2013. Education in America. Speech to Gorter Family Foundation, North Chicago, IL.
- Winerip, Michael. 5 June 2011. Helping teachers help themselves. *New York Times*.