

closing the **gap**

State Policy Levers

Closing the Achievement Gap



by Kati Haycock

The Elementary and Secondary Education Act (ESEA) signed into law by President Bush on January 8th contains several important provisions regarding the disaggregation of student achievement data. States that have not already begun to do so must now report performance by group. Moreover, statewide accountability systems must now track school progress in raising the performance of different groups of students, rather than simply a school-wide average.

In states like California, which have had disaggregated school-level data for decades, these new requirements are unlikely to prompt much discussion or public handwringing. But many states have never before reported data on the performance of different racial or economic groups. Thus, in some communities, these reports will serve as the first-ever public acknowledgment of systematic differences in the performance of local children from different groups—and perhaps prompt the first-ever public discussion of what to do.

This article is intended to provide some national context for those discussions. It includes an overview of what the national data tell us about achievement patterns by race and class, as well as run through what both research and experience have taught us about how to close those gaps once and for all.

Understanding Achievement Patterns

Most educators and education policy leaders know that student achievement in the country as a whole has been relatively flat over the past several decades. Up a little bit in some subjects and at some grade levels, down a little bit in others. Underneath that average, though, two separate and very different stories played out vis-à-vis the performance of minority and poor students.

The first story took place between about 1970 and 1988. During that period, the performance of African American and Latino youngsters improved dramatically. Indeed, the gap between white and African American students was cut in half; the gap between whites and Latinos declined by one-third.

The '90s, however, were another matter. In some subjects and at some grade levels the gaps started growing again; in others, they were simply stagnant.

- At age 17, for example, reading achievement among African Americans and Latinos climbed substantially through the 1970s and 1980s, but gaps separating them from other students widened somewhat during the 1990s.¹
- At age 13, the patterns in mathematics achievement look very similar, with the black/white gap reaching its narrowest in 1990 and the Latino/white gap narrowing until 1992, then both gaps widening somewhat thereafter.

By the end of high school:

- Only 1 in 50 Latinos and 1 in 100 African American 17-year-olds can read and gain information from specialized text—something like the science section in the newspaper—compared to about 1 in 12 whites.
- Fewer than one-quarter of Latinos and one-fifth of African Americans can read the complicated, but less specialized, text that more than half of white students can read.
- The same patterns hold in math. About 1 in 30 Latinos and 1 in 100 African Americans can comfortably do multi-step problem solving and elementary algebra, compared with about 1 in 10 white students.
- At a more basic level, only 3 in 10 African American and 4 in 10 Latino 17 year-olds have mastered the usage and computation of fractions, commonly used percents, and averages, compared with 7 in 10 white students.²
- Near the end of high school, in fact, African American and Latino students have skills in both reading and mathematics that are virtually the same as those of white students in 8th grade (see Chart 1 below).

Differences in Attainment, as Well

There also continue to be significant differences in the rates at which different groups of students complete high school, as well as in their postsecondary education experiences.

- In the 18-24-year-old-group, about 90 percent of whites and 94 percent of Asians have either completed high school or earned a GED. Among African Americans, the rate drops to 81 percent, while among Latinos, it is only 63 percent.
- After graduating, approximately 76 percent of white graduates and 86 percent of Asian graduates go directly on to college, compared to 71 percent of African American and 71 percent of Latino graduates.
- Young African Americans are only about one-half as

likely as white students to earn a bachelor's degree by age 29; young Latinos are only one-third as likely as whites.³

WHAT'S GOING ON?

Over the past five years, we've shared these and related data on the achievement gap with hundreds of audiences all over the country. During that time, we've learned a lot about what people think is behind these numbers.

When our audience is adults, no matter where we are in the country, they make the same list of factors: "they're too poor," "their parents don't care," "they come to school without an adequate breakfast," "they don't have enough books in the home," "there aren't enough parents in the home," or "they live in difficult neighborhoods." Reasons, in other words, that are always about the children and their families.

If, however, things like poverty or single-parent homes *cause* low achievement—if they, in fact, make low achievement inevitable—how can it be that very poor children and children from minority groups are performing so high in some places?

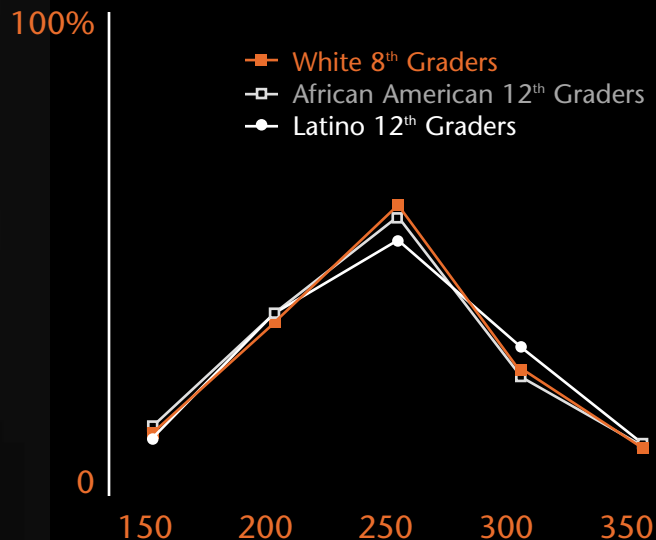
DISPELLING THE MYTH

Wrigley Elementary School in the Appalachian Mountains, for example, is one of the poorest schools in Kentucky. Approximately 80 percent of the children are poor; many live in homes with no electricity or other public services. Yet these very poor children are the 3rd highest performing in reading and the 6th highest performing in writing in the entire state of Kentucky.

But it's not just in Kentucky. Mt. Royal Elementary School in Baltimore is 99 percent African American and 80 percent poor. Yet the children in that school are the highest-performing in elementary mathematics in the state of Maryland—higher, in fact, than some of that state's most affluent suburban schools.

Chart 1

African American and Latino 17-year-olds read at the same levels as white 13-year-olds



Source: National Center for Education Statistics, *NEAP 1999 Long-Term Trends Summary Tables* (Washington, DC: U.S. Department of Education, National Center for Education Statistics, 2000).

And it turns out that these schools are not simply the freakish outliers that they've been dismissed as for decades. A recent Education Trust study found a whopping 4500+ schools nationwide that fell in the top third of their states in terms of poverty, the top third in minority enrollments—and also the top third in student achievement on one or more state assessments!

Not only are some schools doing a better job than others in educating poor and minority students, but some districts—indeed some entire states—are doing a better job, too.

The 4th-grade National Assessment of Educational Progress (NAEP) math results are a good illustration. In the country as a whole, African American 4th graders improved their performance by 13 points during the '90s. However, African American 4th graders in North Carolina, Texas, and Indiana made nearly twice the gains made by their counterparts in the country as a whole.⁴ The same differences are clear in the data for Latinos, who were up 4 points during the '90s in the nation as a whole, but up considerably more in Tennessee (15 points), Minnesota and Rhode Island (both by 11 points), and Mississippi (10 points).

NAEP reading data for Connecticut and North Carolina show how much more different groups of students grew in these two states than did their counterparts in the nation as a whole. Some states, in other words, continued to make the kind of progress during the '90s that we did as a nation during the '70s and '80s.

Texas shows up as a high performer—especially for minority students—in almost every analysis of NAEP performance during the '90s. The 8th-grade writing results, however, may be the most dramatic. For African American 8th graders in the state of Texas write as well or better on that test than do white students in 7 states! Indeed, if you moved the African American 8th graders from Texas across the border into Arkansas, there would still be a black/white achievement gap in Arkansas—but black students would be on top.

Interestingly, none of this latter data is a surprise to young people. For they have very different answers to the question about why there is a gap between groups. They talk about teachers who often do not know the subjects they are teaching. They talk about counselors who consistently underestimate their potential, and program them into lower-level courses. They talk about principals who dismiss their concerns about these things when they raise them. And they talk, in particular, about a curriculum and set of expectations that feel so miserably low-level that they literally bore the students right out the school door.

When we ask them, “What about the things that the adults are always talking about—neighborhood violence, single-parent homes, and so on?,” what the young people say is fascinating. “Sure, those things matter,” they say. “We're not going to tell you they don't. But what matters more is that you teach us less.”

The truth of the matter is that the data bear out what the young people say. It's not that things like poverty and parental education don't matter. Clearly they do make both teaching and learning more challenging.

But what *we* do in education is this: we take the children who have less to begin with and then systematically give them less in school, too. In fact, we give these children less of everything that we believe makes a difference.

It turns out that we do this in literally hundreds of different ways. Rather than dwell on the problems themselves, though, the remainder of this article draws on lessons from communities and states around the country that are tackling the school problems head-on and getting results—for all groups of children.

CLOSING THE GAP

Before talking specifically about what schools can do, let me be clear up front that it would help if there were changes outside of schools, too: if parents spent more time with their children; if poverty didn't crush so many spirits; and if the broader culture didn't bombard young people with so many ultimately destructive messages. But because both research and experience make it clear that what schools do matters hugely, I'll concentrate here on what is known about what works in education.

Lesson #1: Standards are key.

Historically, there has been no agreement on what American young people should learn at each grade level—or on what kind of work is good enough. These decisions have been left to individual schools and teachers.

The result is a system that, by and large, doesn't ask much of most of its students. And you don't have to go very far to find that out: ask the nearest teenager. In survey after survey, these young people are telling us that they are not being challenged in school.

The situation is worse in high-poverty and high-minority schools. Our staff at the Education Trust has spent most of its time over the past six years working with teachers who are trying to improve the achievement of students in their classrooms. But while we've been there, we've been looking carefully at what happens in high-poverty classrooms—what kind of assignments teachers give, for example—versus other classrooms.

We have come away from this experience literally stunned. Stunned, first, by how little is expected of children in high-poverty schools—how very few assignments they get in a given school week or month. But stunned, second, by the miserably low level of the few assignments they do get. In high-poverty urban middle schools, for example, we see an awful lot of coloring rather than writing or mathematics assignments. Even at the high school level, it's not unusual to find coloring assignments. “Read *To Kill a Mockingbird*,” says the 11th-grade English teacher, “and when you're done, color a poster on it.”

Indeed, national data make it clear that we expect so little of students in high-poverty schools that we give them “A” grades for work that would earn a “C-” or a “D+” anyplace else.⁵

Clear and public standards for what students should learn at benchmark grade levels are a critical part of solving this problem. They are a guide—for teachers, administrators, par-

ents, and students themselves—to what knowledge and skills are critical for students to master.

Kentucky is the first state to have embraced what has come to be called “standards-based” reform. Ten years ago, the Kentucky legislature laid out an ambitious set of learning goals and had the audacity to declare that all of its children—even the poorest—would meet those goals.

Leaders in Kentucky would be the first to acknowledge that they are not there yet. But their progress is clear and compelling. And poor children are, in fact, learning. Among the top-performing elementary schools in each subject, for example, 7 of the top 20 in reading are high poverty, 8 of the 20 in math are high poverty, and 13 of the 20 in writing are high poverty.

Lesson #2: All students must be in a challenging curriculum aligned with standards.

Standards won’t make much of a difference, though, if they are not accompanied by a rigorous curriculum lined up with those standards. Yet in too many places, *some* students are taught high-level curriculum, while *other* students continue to be taught a low-level curriculum that is better aligned with jobs that no longer exist than with state standards.

Current patterns are clearest in high school, where students who take more rigorous coursework learn more and perform better on tests. Indeed, the more they take the better they do.

- In mathematics, for example, students who complete the full college preparatory sequence perform much higher on NAEP than those who complete only one or two courses.⁶
- The reverse is true of watered-down, traditional “vocational” courses. In this case, the more students take, the lower their performance.
- While some of these differences are clearly attributable to higher-scoring students being assigned to the tougher classes to begin with, careful research shows very clearly the positive impact of more rigorous coursework even on students in the bottom quartile.

Since 1983, we’ve made progress in increasing the number of students in a rigorous, “college prep” curriculum. But the pace is not fast enough.

- While almost three-quarters of high school graduates are going on to higher education, only about half of these grads complete even a mid-level college preparatory curriculum (4 English, and 3 each in math, science, and social studies). If you also include two years of foreign language and a semester of computer science, the numbers drop to about 12 percent.
- And the numbers are worse for African Americans, Latinos, and low-income students (see Chart 2 below).

These patterns are disturbing, because the quality and intensity of high school coursework is the single most important determinant of who succeeds in college—more important than class rank or scores on college admissions tests. Curriculum rigor is also important for work-bound students.

Faster change is possible. A few years ago, the Chancellor of the New York City Schools required all 9th graders to take Regents Math and Regents Science exams. Though many were worried that failure rates would be astronomical, in one year the number of Latinos in New York City passing Regents Science tripled and the number of African Americans doubled. There were gains for other groups too, and also gains in mathematics (see Chart 3 at right).

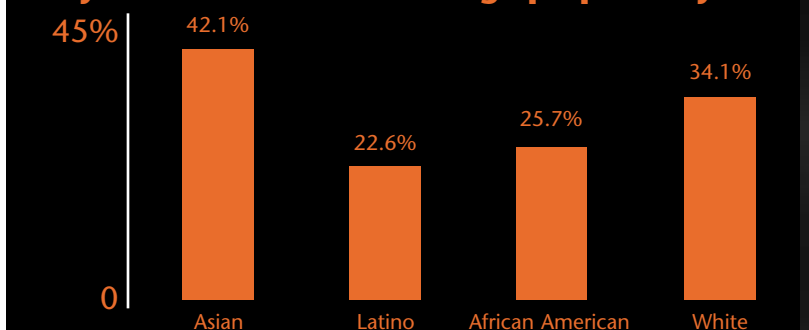
Did they all pass? No, they didn’t. Did they all pass what we all know are very difficult Regents examinations? No, they didn’t. But as an old principal friend of mine used to say, “At least they failed something worthwhile.” And remember, these were youngsters who would never even have been given a chance to learn that higher-order content. Not only did they take the chance, but they passed the course. And state policy changes followed. Only a few short years later, the Regents voted to make passing Regents’ examinations a requirement for a high school diploma.

Lesson #3: Provide extra help for students who need it.

There is now ample evidence that almost all children can achieve at high levels if they are taught at high levels. But it is equally clear that some require more time and more instruction. It won’t do, in other words, just to throw students into a high-level course if they can’t even read the textbook.

One of the most frequent questions we are asked by stressed-out middle and high school teachers is, “How

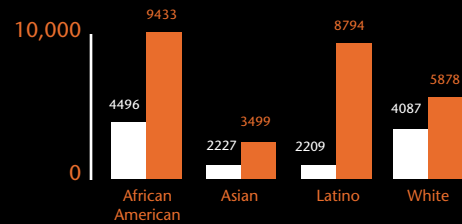
Chart 2
African American and Latino 10th-graders are less likely to be enrolled in a college preparatory track



Source: National Center for Education Statistics, “The First Follow-Up Student Study,” *National Education Longitudinal Study of 1988* (Washington, DC: U.S. Department of Education, National Center for Education Statistics, 1992).

Chart 3

New York City 9th Graders Passing Regents Science



Source: Data courtesy of the New York City Chancellor's Office.

am I supposed to get my students ready to pass the (fill-in-the blank) grade test when they enter with 3rd-grade reading skills and I have only my 35-minute period a day?"

The answer, of course, is "You can't." When students are behind, we can't hold time and instruction constant. Rather, especially when they're behind in foundational skills like reading and mathematics, we need to double or even triple the amount (and quality) of instruction that they get. Time can't, in other words, remain constant.

Around the country, states and communities are wrestling with how best to provide those extras. Kentucky does so by giving high-poverty schools extra funds every year that they can use to extend instruction in whatever way works best in their community: before school, after school, weekends, or summers.

Maryland has an ambitious new plan that provides a wide range of assistance to students not on track to pass its new high school graduation test. And San Diego created more time mostly within the regular school day, by doubling—even tripling—for low-performing students the amount of instructional time devoted to literacy and mathematics and by training *all* of their teachers.

Lesson #4: Teachers matter a lot.

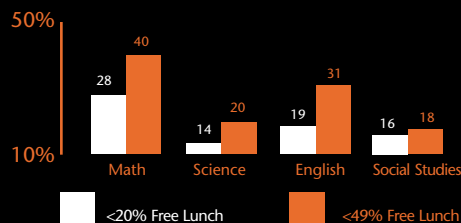
If they are going to learn to high standards, students need teachers who know their subjects and how to teach them. Yet large numbers of students—especially those who are poor or members of minority groups—are taught by teachers who do not have strong backgrounds in the subjects they are teaching.

- In every subject area, students in high-poverty schools are more likely than other students to be taught by teachers without even a minor in the subjects they are teaching (see Chart 4 below).
- The differences are often greater in predominantly minority high schools. In math and science, for example, only about half of the teachers in schools with 90 percent or greater minority enrollments even meet their states' minimum requirements to teach those subjects—about 30 percent fewer than in predominantly white schools.⁷
- The patterns are similar regardless of the measure of teacher qualifications, such as experience, certification, academic preparation, and performance on licensure tests: we take the students who are most dependent upon their teachers for subject matter learning and assign them teachers with the weakest academic foundations.

A decade ago, we might have said we didn't know how much this mattered. For we believed that what students

Chart 4

Classes in high-poverty high schools are more often taught by underqualified* teachers

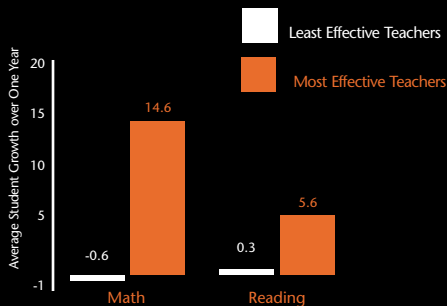


* Teachers who lack a minor in the field

Source: National Commission on Teaching & America's Future, *What Matters Most: Teaching for America's Future* (New York, NY: Teachers College at Columbia University, 1996), 16.

Chart 5

Boston students with effective teachers showed greater gains in reading and math



Source: Boston Public Schools, *High School Restructuring*, 9 March 1998.

learned was largely a factor of their family income or parental education, not what schools did.

But recent research has turned these understandings upside down. It turns out that some things that schools do matter hugely in whether students learn or don't. And the thing that unquestionably matters most is good teaching.

- Results from a recent Boston study of teacher effects are fairly typical. In just one academic year, the top third of teachers produced as much as six times the learning growth as the bottom third of teachers. In fact, 10th graders taught by the least effective teachers made virtually no gains in reading, and even lost ground in math (see Chart 5 above).
- Groundbreaking research in Tennessee and Texas makes it very clear that these effects are *cumulative* and hold up *regardless* of the race, class, or prior achievement of the students. Some of the biggest-gaining classrooms are filled with very poor students, and some with well-to-do students. And it's the same with the small-gain class-

rooms. It turns out that it's not the kids after all: something very different is going on with the teaching.⁸

Findings like these make you wonder what would happen if, instead of getting far *less* than their fair share of good teachers, underachieving children actually got *more*. There are tantalizing hints in a study of Texas school districts conducted by Harvard economist Ronald Ferguson. Ferguson found a handful of districts that reversed the normal pattern: districts with initially high-performing (presumably relatively affluent) first-graders that hired from the bottom of the teacher pool, and districts with initially low-performing (presumably poor) first-graders that hired from the upper tiers of the teacher pool. Interestingly, by the time their students reached the high school years, these districts swapped places in student achievement (see Chart 6 below at left).

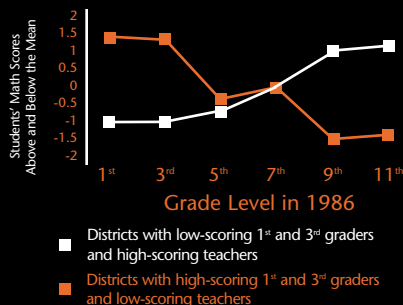
El Paso, Texas is a community that has taken this research seriously. Eight years ago, despite the extraordinarily high poverty of their city, local education leaders set some very high standards for what their students should know and be able to do. Unlike some other communities, though, they didn't stop there. At the University, the faculty entirely remade how teachers were prepared. New elementary teachers, for example, take more than twice as much math and science as their predecessors. More to the point, though, these courses are taught by math and science professors who themselves participated in the standards-setting process and who therefore know at a much deeper level what kinds of mathematical understandings teachers need.

The community also organized a structure—the El Paso Collaborative—to provide support to existing teachers, helping them to teach to the new standards. The Collaborative sponsored intensive summer workshops, monthly meetings for teachers within content areas, and work sessions in schools to analyze student assignments against standards. The three school districts also released about 60 of their teachers to do nothing except coach their peers, day in and day out, helping them to improve their practice.

These efforts are clear in the results: no more low-performing schools and increased achievement for *all groups of students*, with bigger increases among the groups that have historically been behind.⁹

Chart 6

Long-Range Effects of Low-Scoring and High-Scoring Teachers on Student Achievement (Texas)



Source: Ronald Ferguson, "Evidence that Schools Can Narrow the Black-White Test Score Gap," in *The Black-White Test Score Gap*, ed. C.S. Jencks and M. Phillips (Washington, DC: Brookings Institution Press, 1998).

Policy Levers for State Boards of Education

Communities and states that are getting ever-better results have a lot to teach us about how to simultaneously raise overall achievement and close gaps between groups. Each, of course, does things a little bit differently. In general, though, what we learn is about the value of a relentless focus on the academic core.

The question for state policymakers is how to bring about that kind of focus. Here are a few suggestions:

STANDARDS, ASSESSMENTS, AND ACCOUNTABILITY SYSTEMS

Breaking through the myths that are in people's heads—the myths that are enacted every day in the form of low-level assignments—requires clear and unequivocal signals. That

means standards that are clear and high (at the high school level, “high” means aligned with the skills and knowledge necessary to begin postsecondary study). And it means assessments that are educative—or, as some might say, “worth teaching to.” But it also means accountability systems like the ones prescribed in the new ESEA: systems that provide no cover. State accountability systems should report progress by group, should examine progress at all points on the achievement spectrum, and should also stop providing schools only with information on schools “like” them.

CURRICULUM

While research makes it very clear that *all* students will gain from being in a rigorous, college prep-type curriculum, large numbers of students—disproportionate numbers of minority and poor students among them—continue to be relegated to the general or vocational track. And most states allow schools and districts to do this by specifying only the number of courses in each subject area that students must complete for a diploma, rather than the content of those courses. Last year, the Texas legislature approved a measure aimed at changing that. Beginning a few years from now, the college prep curriculum will become the default curriculum for all students. Similar proposals are pending before other legislatures and boards of education.

TEACHER DISTRIBUTION

Many states have enacted new policies aimed at increasing the supply and/or quality of teachers, but fewer are working hard toward a more equitable distribution of teachers. Among the policies worth considering is the New York policy precluding the hiring or assignment of any uncertified teacher in any state-identified low-performing school. Another is the district report card issued in the state of Louisiana, which reports both the ratio of qualified to unqualified teachers in the district as a whole and the equivalent ratio in the district’s highest-poverty school. By calling attention to such disparities, the state is trying to provoke responsible local action.

SUPPORT FOR TEACHERS AND STUDENTS

After leaving these issues to local school districts for many years, more and more states are stepping in to provide leadership in the professional development arena. In California, for example, the governor and legislature have appropriated sufficient funding over a three-year period for every teacher in the state to participate in a consistent, intensive, state-designed summer professional development institute in the content area they are teaching, along with follow-up support during the year. Each session is carefully calibrated to the textbook that teacher is using. Teacher knowledge is assessed at entry, assessed at exit, then assessed again at the end of year one. So, too, is the achievement of the students in each participating teacher’s classroom.

States are also moving ahead to provide extra dollars for additional instruction for students who are behind. Maryland and Massachusetts are but two recent examples, with the latter including both public and private providers. But in this case,

more than extra funding is required. State boards of education should know that in many places the Carnegie Unit requirements that they have set into place are so detailed and so burdensome that schools literally don’t have the flexibility—even with the students who are hugely behind—to double or triple up on instructional time. More flexibility is essential.

DEALING WITH RESOURCE INEQUITIES

Money isn’t everything. But the resource distribution in some states is so unequal, so unfair, that it’s hard to imagine how to close the achievement gap without closing the funding gap that contributes so heavily to it.

In 42 states, fewer state and local dollars are spent in those states’ highest-poverty school districts than in the highest-wealth districts. That difference is smallest in North Dakota, where it amounts to a difference of less than \$12,800 in a typical elementary school. In New York, by contrast, there are 2,794 fewer state and local dollars spent per child in the highest-poverty districts than in the highest-wealth districts. This amounts to a difference of \$1.17 million per typical elementary school. In Illinois, the difference is \$777,000 per typical elementary school.

It’s pretty hard to argue, I think, that the high-poverty schools couldn’t buy a substantial quantity of the things that matter—highly trained teachers, extra instruction, laboratory equipment, and the like—with these kinds of dollars.

Kati Haycock currently serves as director of Education Trust. Established in 1992 to advocate for young people, especially those who are poor or members of minority groups, the Trust provides hands-on assistance to urban school districts and universities that want to work together to improve K-16 student achievement. Before coming to Education Trust, Haycock served as executive vice president of the Children’s Defense Fund.

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