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## The Anatomy of Inequality: How the Opportunity Gap Is Constructed

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I think by far the most important bill in our whole code is that for the diffusion of knowledge among the people. No other sure foundation can be devised for the preservation of freedom and happiness. . . . [The Education Act is] to avail the commonwealth of those talents and virtues which nature has sown as liberally among the poor as rich, and which are lost to their country by the want of means for their cultivation.

—Thomas Jefferson<sup>1</sup>

Of all the civil rights for which the world has struggled and fought for 5,000 years, the right to learn is undoubtedly the most fundamental. . . . The freedom to learn . . . has been bought by bitter sacrifice. And whatever we may think of the curtailment of other civil rights, we should fight to the last ditch to keep open the right to learn, the right to have examined in our schools not only what we believe, but what we do not believe; not only what our leaders say, but what the leaders of other groups and nations, and the leaders of other centuries have said. We must insist upon this to give our children the fairness of a start which will equip them with such an array of facts and such an attitude toward truth that they can have a real chance to judge what the world is and what its greater minds have thought it might be.

—W.E.B. DuBois<sup>2</sup>



The United States of America is founded on the idea of educational equality. A major part of our national heritage is our collective commitment to the notion that all

men—and women—are “created equal and entitled to life, liberty, and the pursuit of happiness.” Furthermore, according to the 14th Amendment, all are entitled to equal protection under the law. However, the realization of these ideals has required long struggle, in education and in other arenas of national life.

That struggle has concerned not only access to schooling but access to an empowering form of education—one that can enable people to think critically and powerfully, to take control of the course of their own learning, and to determine their own fate—rather than merely to follow dictates prescribed by others. These tensions were articulated most clearly in the great debates between Booker T. Washington and W.E.B. DuBois about how African Americans should be educated, with some philanthropists and politicians advocating training for menial jobs while educators like DuBois, Carter G. Woodson, and Anna Julia Cooper sought access to a classical education that would allow Blacks to become leaders.<sup>3</sup> This struggle has played out in each historical era for racial/ethnic minority groups, new immigrants, and the poor, surfacing in decisions about whom to educate, with what resources, where and how, and toward what ends. The debate is even more relevant today, as preparation for thinking work is the prerequisite for productive engagement in our economy and society.

Enormous energy is devoted in the United States to discussions of the achievement gap. Much less attention, however, is paid to the opportunity gap—the accumulated differences in access to key educational resources—expert teachers, personalized attention, high-quality curriculum opportunities, good educational materials, and plentiful information resources—that support learning at home and at school. Compounded inequalities in all of these resources, reinforced over generations, have created what Gloria Ladson-Billings has called an “educational debt,” owed to those who have been denied access to quality education for hundreds of years.<sup>4</sup>

Indeed, institutionally sanctioned discrimination in access to education is older than the American nation itself. In his history of 18th-century colonial education, Lawrence Cremin wrote:

For all of its openness, provincial America . . . distributed its educational resources unequally, and to some groups, particularly those Indians and Afro-Americans who were enslaved and even those who were not, it was for all intents and purposes closed. . . . For the slaves, there were few books, few libraries, [and] few schools . . . the doors of wisdom were not only not open, they were shut tight and designed to remain that way. . . . [B]y the end of the colonial period, there was a well-developed ideology of race inferiority to justify that situation and ensure that it would stand firm against all the heady rhetoric of the Revolution.<sup>5</sup>

The legacy of discrimination did persist. From the time Southern states made it illegal to teach an enslaved person to read, throughout the 19th century and into the 20th, African Americans faced *de facto* and *de jure* exclusion from public

schools throughout the nation, as did Native Americans and, frequently, Mexican Americans.<sup>6</sup> Even in the North, the problems were severe: "While [19th-century] publicists glorified the unifying influence of common learning under the common roof of the common school, black Americans were rarely part of that design."<sup>7</sup> In 1857, for example, a group of African American leaders protested to a New York State investigating committee that the New York board of education spent \$16 per White child and only one cent per Black child for school buildings. While Black students occupied schools described as "dark and cheerless" in neighborhoods "full of vice and filth," White students had access to buildings that were "splendid, almost palatial edifices, with manifold comforts, conveniences, and elegancies."<sup>8</sup>

Over a century later, after the Supreme Court had already declared "separate but equal" education to be a violation of the 14th Amendment, James Bryant Conant's *Slums and Suburbs* documented continuing disparities in educational opportunity, including spending in suburban districts that was twice that of segregated inner-city schools.<sup>9</sup> These disparities, although somewhat reduced in the 1960s and 1970s, have returned in full force and characterize U.S. education for many students today, just as they did more than 50 years ago. This is especially true for the children of those who did not squeak through the door of opportunity when it opened a crack in the late 1960s, before it slammed shut again in the 1980s.

These inequities are in part a function of how public education in the United States is funded. In most cases, education costs are supported primarily by local property taxes, along with state grants-in-aid that are somewhat equalizing, but typically not sufficient to close the gaps caused by differences in local property values. Rich districts can spend more, even when poorer districts tax themselves at proportionally higher rates. In Texas, for instance, when school finance litigation was under way in 1989, the 100 wealthiest districts could raise more than twice as much per pupil at tax rates that were nearly 50% lower than those being levied in the 100 poorest districts.<sup>10</sup>

These same differences exist among states, with per pupil expenditures ranging from nearly \$13,000 in New Jersey to just \$5,000 in Utah in 2004.<sup>11</sup> And, while states generally make some effort to provide aid that has some equalizing effect on spending among districts, the federal government thus far plays no such role with respect to differential wealth among states. In fact, the largest federal education program, Title I of the Elementary and Secondary Education Act, allocates funds in part based on levels of state per pupil spending, thus reinforcing rather than ameliorating these wealth-based inequalities.<sup>12</sup>

It is true that there are many great schools in this country that offer every possible opportunity to learn in empowering and engaging ways. And more of them are open to a wider range of children than was once the case. This leads many to assume that inequality has been eliminated from the national landscape. And precisely

because of the segregation that currently cordons off poor communities of color from the rest of society, most policymakers, reporters, and editorial writers don't live with or know about how the "other half" experiences school.

For these reasons and others, recurring explanations of educational inequality among everyday people, pundits, and policymakers often implicitly or explicitly blame children and their families for lack of effort, poor childrearing, a "culture of poverty," or inadequate genes.<sup>15</sup> Certainly, there are issues of responsibility that are appropriately laid at the door of the family. Parents who are at home should take responsibility for turning off the TV, expecting homework to get done, and ensuring attendance at school. Many more families need to do these things. However, many others make these commitments unrequited by a return from the schools their children are required to attend.

The presumption that undergirds much of the conversation about the achievement gap is that equal educational opportunity now exists; therefore, continued low levels of achievement on the part of students of color must be intrinsic to them, their families, or their communities. Yet, when the evidence is examined, it is clear that educational outcomes for these students are at least as much a function of their unequal access to key educational resources, both inside and outside of school, as they are a function of race, class, or culture. Furthermore, students' willingness to commit to school and their own futures is interwoven with their perceptions about whether the society, their schools, and their teachers believe they are worthwhile investments—perceptions that enable them to invest in themselves. Thus, the more intangible aspects of school success—a student's dedication to do what is needed to achieve and knowledge of how to do so—intersect with access to key resources such as quality teachers and curriculum, as well as schools' investments in those programs and practices that can leverage strong achievement.

Five factors create the major building blocks of unequal and inadequate educational outcomes in the United States:

- The high level of poverty and the low levels of social supports for low-income children's health and welfare, including their early learning opportunities
- The unequal allocation of school resources, which is made politically easier by the increasing resegregation of schools
- Inadequate systems for providing high-quality teachers and teaching to all children in all communities
- Rationing of high-quality curriculum through tracking and interschool disparities
- Factory-model school designs that have created dysfunctional learning environments for students and unsupportive settings for strong teaching

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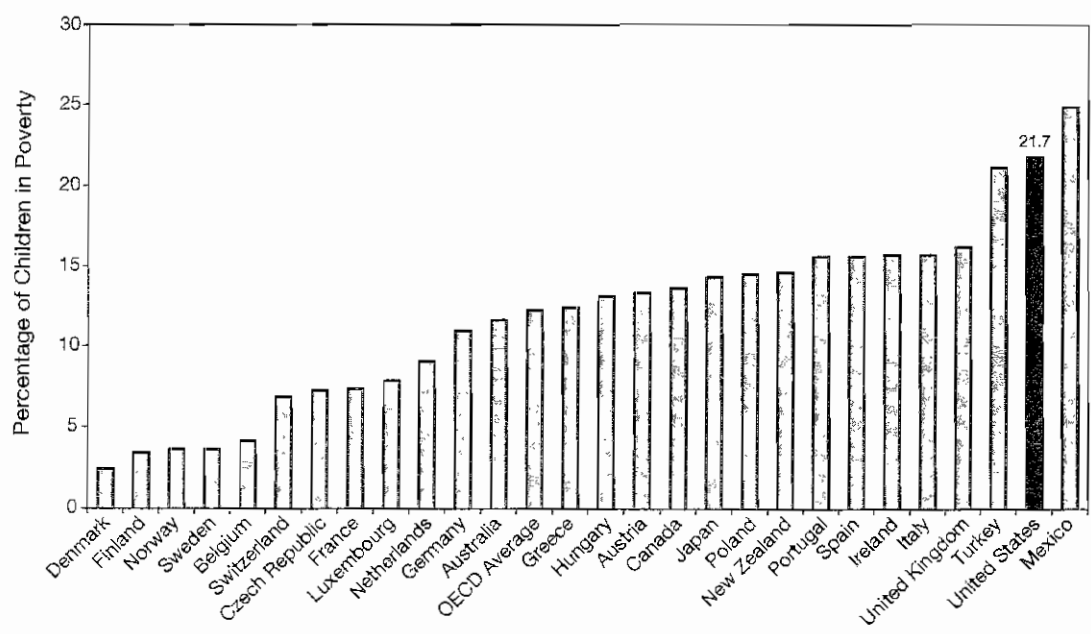
These environments allow children to fall through the cracks, rather than being carefully and personally nurtured, something the parents of affluent children take for granted as a prerequisite for success. Our factory-model schools also fail to support teachers in developing and sharing professional expertise, thus reducing both opportunities and incentives for improving teaching. And all of these factors feed psychological barriers that can sabotage success.

### POVERTY AND LACK OF SOCIAL SUPPORTS

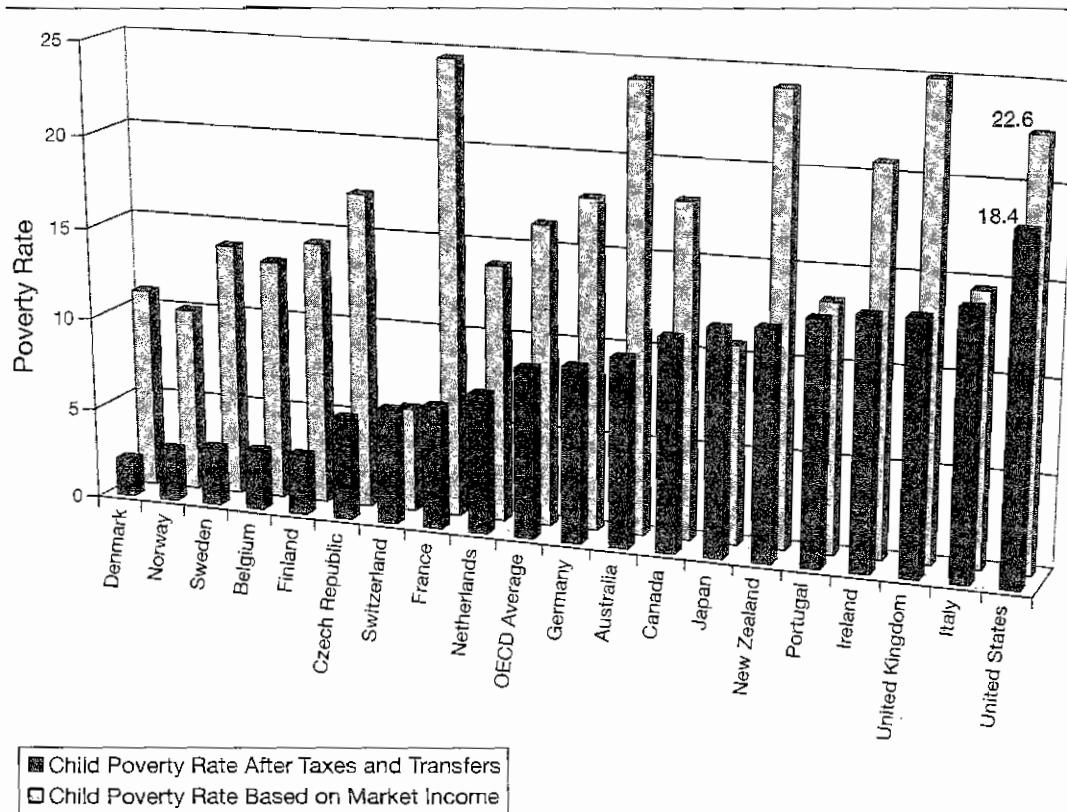
The United States not only has the highest poverty rates for children among industrialized nations (see Figure 2.1), but it also provides fewer social supports for their well-being and fewer resources for them at school. In 2007, 23% of U.S. children were living in poverty, more than twice the rate of most European nations, and a higher rate than was true in the early 1970s, when poverty rates for children had been reduced to 15% as a result of the War on Poverty.<sup>14</sup>

In addition, in each of the OECD countries, policies for transfer of resources to low-income families reduce poverty by a much greater amount than is true in the United States.<sup>15</sup> Thus, the United States has by far the highest child poverty rate

Figure 2.1. Poverty Rates in OECD Countries Around the Year 2000 (Based on 50% of Median Income).



Source: Gifford, 2002.

**Figure 2.2.** Child Poverty Rates, Before and After Governmental Transfers.

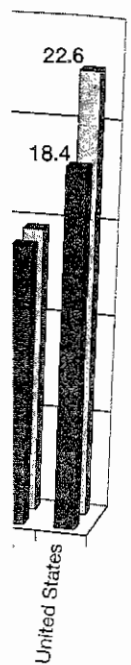
Source: Bell, Bernstein, & Greenberg (2008), p. 85.

after governmental transfers of any of these nations (see Figure 2.2). These transfers occur through tax policies, cash benefits, housing and health-care subsidies, and child care assistance. American children living in poverty have a much weaker safety net than their peers in other industrialized countries, where universal health care, housing subsidies, and high-quality childcare are the norm.

Because of both the large income disparities and our shredded safety net, in 2004, 38.2 million Americans lived in households experiencing hunger, an increase of more than 20% since 1999 and more than 50% since 1985.<sup>16</sup> The per person allocation for food stamps each month is less than half of what would be needed to purchase low-cost food that meets the Surgeon General's guidelines for a healthy diet.<sup>17</sup> Ironically, while research has shown how strongly food insecurity influences childhood illness, the average total cost for a single hospitalization for pediatric illness would purchase almost 5 years of food stamps for an average family.<sup>18</sup>

Meanwhile, in a growing number of households, poor families are forced to make choices between paying rent and buying food or medicine, and more are losing their homes in the greatest economic crisis since the 1930s. In 2004, of more than 3 million Americans experiencing homelessness, 40% were families with children and

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an additional 5% were unaccompanied children.<sup>19</sup> And with 46 million Americans lacking health-care coverage in 2005, 11% of children under 18 had no coverage, including 19% of children in poverty and 22% of Hispanic children.<sup>20</sup> With the deep job losses in 2009, these numbers are now growing too rapidly to keep count.

The devastating effects of these realities of contemporary American life were brought home poignantly in a recent congressional briefing by then-Superintendent John Deasy of the Prince Georges County Public Schools, an urban district bordering on Washington, D.C., who described a 9-year-old child in his district, living within sight of the Capitol, who had recently died of sepsis from an infected cavity that had gone untreated because the child lacked dental insurance. As this story suggests, child mortality is higher in the United States than in any other wealthy country.<sup>21</sup>

In other developed countries, schools can focus primarily on providing education, rather than also having to provide breakfasts and lunches, help families find housing and health care, and deal with constant mobility due to evictions, the effects of untreated physical and mental illness, and the large gaps in children's readiness that exist at entry to school.

### LIMITED EARLY LEARNING OPPORTUNITIES

A growing body of research suggests that learning opportunities before children enter school also substantially predict their success or failure. However, many children do not have the kinds of experiences at home or in a preschool setting that enable them to develop the communication and interaction skills, motor development, cognitive skills, and social-emotional skills that enable them to be independent learners when they arrive in school. This undermines their academic success both in the short and longer run.

An estimated 30 to 40% of children enter kindergarten without the social and emotional skills and language experiences needed to be initially successful in school.<sup>22</sup> Studies have found that the size of the working vocabulary of 4-year-old children from low-income families is approximately one-third that of children from middle-income families,<sup>23</sup> which makes it much more difficult for them to read with comprehension or to engage in academic learning relying on that vocabulary, even when they can decode text. By first grade, only half as many first graders from poor families are proficient at understanding words in context and engaging in basic mathematics as first graders from nonpoor families.<sup>24</sup>

Nobel Prize-winning economist James Heckman notes: "Compared to 50 years ago, a greater fraction of American children is being born into disadvantaged families where investments in children are smaller than in advantaged families."<sup>25</sup> These lower investments in early education and health care negatively affect later school success

and adult outcomes; yet, he argues, there is convincing evidence that if interventions occur early enough, they can improve children's health, welfare, and learning significantly. The earlier the intervention, the greater the social returns, since

Skills beget skills and capabilities foster future capabilities. All capabilities are built on a foundation of capacities that are developed earlier. Early learning confers value on acquired skills, which leads to (a) self-reinforcing motivation to learn more and (b) early mastery of a range of cognitive, social and emotional competencies making learning at late ages more efficient, and therefore easier and more likely to continue. . . . Early interventions promote economic efficiency and reduce lifetime inequality.<sup>26</sup>

High-quality preschool programs, such as the Perry Preschool Program and the Abecedarian Program, have been found to reduce the probability of students being retained in grade, needing special education, dropping out of school, being unemployed, and being incarcerated. They have also shown gains in educational attainment, with more graduates going onto postsecondary education, which boosts later earnings. As a consequence of all of these benefits, studies have estimated returns to investment in preschool education of about \$4 to \$10 for every dollar invested.<sup>27</sup> High-quality programs that produce these kinds of benefits have relied on highly qualified teachers with a bachelor's or master's degree in early childhood education, small class sizes, rich hands-on learning materials, and parent outreach and education.<sup>28</sup>

Although pre-kindergarten enrollment has been growing in recent years, low-income children continue to participate in early education at much lower rates than children from higher-income families. In 2000, 65% of children ages 3 to 5 (not yet in kindergarten) whose parents earned \$50,000 or more were enrolled in pre-kindergarten, but only 44% of children the same age with family incomes below \$15,000 were enrolled.<sup>29</sup> These children rely heavily on publicly funded programs, which serve more than three-quarters of those from families with incomes below \$35,000.<sup>30</sup> Yet, as the demands for educational success increase, the supports for children in and out of school have not kept pace.

Ironically, as more and more middle-income children receive preschool education that poor children lack, the gap in cognitive skills, vocabulary, and learning experiences the children bring with them to school is further exacerbated. In racially and economically integrated environments, the differentials present teachers with an even wider range of developed abilities among entering children than was once the case. The parents of those who have had high-quality preschool for several years and enriched home environments often demand a more academically accelerated curriculum while students without these advantages still need to learn their colors, numbers, and other basic concepts. These disparities can influence both teachers' perceptions of the potential of less-prepared children and students' own self-confidence and perceived abilities, all of which have cumulative effects on motivation

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and learning. In cases where teachers cannot manage this wide range, it can create a reverberating cycle of discouragement and failure for less experienced children who soon perceive that they are behind before they even begin. In racially and economically segregated environments, this often leads to lowered expectations of low-income children and few models of success to be emulated.

## RESEGREGATION AND UNEQUAL SCHOOLING

As Heckman notes, “the advantages gained from effective early interventions are best sustained when they are followed by continued high quality learning experiences.”<sup>31</sup> However, beyond the large and growing inequalities that exist among families, profound inequalities in resource allocations to schools have been reinforced by the increasing resegregation of schools over the decades of the 1980s and 1990s. During that 20-year span, desegregation policies were largely abandoned by the federal government and the courts, and state governments generally followed suit.<sup>32</sup> With the abandonment of funding for federal desegregation assistance to schools in the 1980s and a spate of court decisions that ended judicial oversight of desegregating districts in the 1990s, there were fewer and fewer levers to counterbalance residential segregation.

While desegregation has clearly made it possible for many students of color to attend schools they could never before have accessed, the nation’s limping progress has left many behind. Many Americans presume that school desegregation happened immediately and completely after *Brown v. Board of Education*; however, by 1964, fully a decade later, 98% of African American students in Southern schools were still enrolled in all-Black schools, and over 70% of Northern Black students were still enrolled in predominantly minority schools.<sup>33</sup> Progress made after the passage of the 1964 Civil Rights Act was steady for only about a decade. Although the percentage of African American students in predominantly minority schools declined in the 1960s, it remained virtually unchanged between 1972 and 1986, while the share of Hispanic students located in such schools actually grew from 55% in 1968 to 71% by 1986.<sup>34</sup>

During the 1990s, segregation increased further across both schools and classrooms. Classroom-based segregation increased as a function of additional tracking within schools,<sup>35</sup> a strategy that created largely segregated experiences for many students within “integrated” schools. By 2000, 72% of the nation’s Black students attended predominantly minority schools, up significantly from the low point of 63% in 1980. The proportion of students of color in intensely segregated schools also increased. Nearly 40% of African American and Latino students attend schools with a minority enrollment of 90 to 100% (see Table 2.1). Thus, with respect to school segregation, America stood at the gateway to the 21st century, almost exactly where it stood 30 years earlier—having lost in a giant tug-of-war much of the ground it gained during the 1970s.

**Table 2.1.** Percentage Distribution of Public Elementary and Secondary School Students of Each Racial/Ethnic Group, by Percent Minority of School, Fall 2000.

Race/Ethnicity	< 10%	10–24%	25–49%	50–74%	75–89%	> 90%
Total	28	19	19	13	8	14
White, non-Hispanic	43	26	20	8	2	1
Black, non-Hispanic	2	7	19	21	13	37
Hispanic	2	7	15	20	19	38
Asian/Pacific Islander	7	15	23	22	18	15
American Indian/Alaska Native	9	19	27	17	8	20

Source: National Center for Education Statistics, Common Core of Data, 2000–2001.

The situation threatens to become worse, since the Supreme Court's 2007 ruling in a case brought by parents from Jefferson County, Kentucky, and Seattle, Washington, which found that local school authorities could no longer use race as a basis for decision making in school assignments, even if it was the only way to maintain integrated schools.<sup>36</sup> More than 550 scholars signed onto a social science review that was filed as an amicus brief—something that has happened only five times in the history of the court. The first time was the social science statement signed by a few dozen researchers about the harms of segregated schools prior to the landmark *Brown v. Board of Education* in 1954.

In this brief, scholars summarized an extensive body of research showing the educational and community benefits of integrated schools for both White and minority students, documenting the persisting inequalities of segregated minority schools, and examining evidence that schools will re-segregate in the absence of race-conscious policies. The scholars concluded that

More often than not, segregated minority schools offer profoundly unequal educational opportunities. This inequality is manifested in many ways, including fewer qualified, experienced teachers, greater instability caused by rapid turnover of faculty, fewer educational resources, and limited exposure to peers who can positively influence academic learning. No doubt as a result of these disparities, measures of educational outcomes, such as scores on standardized achievement tests and high school graduation rates, are lower in schools with high percentages of nonwhite students.<sup>37</sup>

Part of the achievement effect is that, for all groups except Whites, racially segregated schools are almost always schools with high concentrations of poverty.<sup>38</sup> Nearly two-thirds of African American and Latino students attend schools where most students are eligible for free or reduced price lunch (see Table 2.2). A number of studies have found that this concentration of poverty has an independent influence on student achievement, beyond the individual students' own socioeconomic status,

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**Table 2.2.** Percentage Distribution of 4th-Grade Public School Students of Each Racial/Ethnic Group, by Percentage of Students in School Eligible for Free or Reduced-Price Lunch, Fall 2000.

Race/Ethnicity	0%	1-5%	6-10%	11-25%	26-50%	51-75%	76-99%	100%
Total	6	11	11	14	20	20	11	6
White, non-Hispanic	7	14	15	18	23	17	5	1
Black, non-Hispanic	2	2	2	7	14	28	32	13
Hispanic	4	4	7	9	16	26	16	17
Asian/Pacific Islander	7	27	16	9	13	10	17	2
American Indian/ Alaska Native	3	2	1	9	25	32	16	12

Source: National Center for Education Statistics, Common Core of Data, 2000-2001.

confirming the 1966 Coleman Report finding that "the social composition of [a school's] student body is more highly related to student achievement, independent of the student's own social background, than is any school factor."<sup>39</sup>

All kinds of students, both poor and nonpoor, have lower achievement in high-poverty elementary schools. Indeed, students who are not low-income have lower achievement in high-poverty schools than do low-income students attending more affluent schools.<sup>40</sup> And a recent study of Southern high schools found that the socioeconomic status of students' high schools had as much independent impact on their achievement growth as their own socioeconomic status.<sup>41</sup>

Concentrated poverty is shorthand for a constellation of inequalities that shape schooling. These schools not only typically have less qualified and less experienced teachers and fewer learning resources, but they also have lower levels of peer group support and competition, more limited curricula taught at less challenging levels, more serious health and safety problems, much more student and family mobility, and many other factors that seriously affect academic achievement.<sup>42</sup>

With respect to peer effects, for example, having a critical mass of students from higher-income families with better-educated parents may mean that there are more role models in classrooms who model successful learning strategies. They may bring academic know-how to study groups, cooperative work groups, and other settings where students work together. For new immigrant students, being in classes with English speakers is critical to mastering a new language. High levels of segregation produce linguistic isolation in schools with many native Spanish speakers and few fluent native speakers of academic English. The lack of opportunity for ongoing conversation with native English speakers impedes the acquisition of academic English, which students must acquire to be successful in high school and college.<sup>43</sup> Higher-income parents may also have more social capital and clout, insisting on higher levels of services from the central administration and stronger accountability for performance from schools.

Deepening segregation tied to dwindling resources has occurred as African American and Hispanic American students are increasingly concentrated in central city public schools, many of which have become majority “minority” over the past decade while their funding has fallen further behind that of their suburbs. In 2005, students of color comprised 71% of those served by the 100 largest school districts.<sup>44</sup> By the late 1990s, in cities across the nation, a group of schools emerged that might be characterized as “apartheid schools”—schools serving exclusively students of color in low-income communities. Whether in Compton, California; Chicago, Illinois; or Camden, New Jersey, these schools have featured crumbling, overcrowded buildings, poor libraries and few materials, old and dilapidated texts so scarce that students must share them in class and cannot take them home for homework, and a revolving-door teaching force with little professional expertise.

In part, these conditions arose as taxpayer revolts pulled the bottom out of state education funding, and the distribution of funds became more unequal. The extent to which urban and poor rural schools serving high proportions of low-income students of color could be abandoned without major outcry was in part a function of their intense segregation. This, indeed, was one of the reasons civil rights advocates sought desegregation in the first place. Their long struggle to end segregation was not motivated purely by a desire to have Black children sit next to White children. Instead, there was strong evidence that the “equal” part of the “separate but equal” principle enunciated by the Supreme Court in its 1896 *Plessy v. Ferguson* decision had never been honored, and that predominantly White schools offered better opportunities on many levels—more resources, higher graduation and college attendance rates, more demanding courses, and better facilities and equipment. Furthermore, there was a belief that such schools, once integrated, would continue to be advantaged by the greater public commitment occasioned by the more advantaged community they serve. This belief seems borne out by the rapid slide of resegregated schools in cities that were turning black and brown during the 1980s and 1990s into conditions of severe resource impoverishment comparable to those in undeveloped nations.

This connection between inadequate funding and the race and social status of students exacerbates the difficulties of creating either integrated schools or adequately funded ones. The vicious cycle was described early on in the fight for school funding reform:

School inequality between suburbia and central city crucially reinforces racial isolation in housing; and the resulting racial segregation of the schools constantly inhibits progress toward funding a therapeutic answer for the elimination of school inequality. If we are to exorcise the evils of separateness and inequality, we must view them together, for each dimension of the problem renders the other more difficult to solve—racially separate schools inhibit elimination of school inequality, and unequal schools retard eradication of school segregation.<sup>45</sup>

The differences in resources that typically exist between city and suburban schools can strongly influence school outcomes. For example, an experimental study of African American high school youth randomly placed in public housing in the Chicago suburbs rather than in the city found that, compared to their city-placed peers, who started with equivalent income and academic attainment, the students who were enabled to attend better-funded, largely White suburban schools with higher-quality teachers and curriculum had better educational outcomes across many dimensions: They were substantially more likely to have the opportunity to take challenging courses, receive additional academic help, graduate on time, attend college, and secure good jobs.<sup>46</sup>

Finally, not only do funding systems and other policies create a situation in which urban districts receive fewer resources than their suburban neighbors, but schools with high concentrations of low-income and “minority” students typically receive fewer resources than other schools within these districts. This occurs both because upper-income parents lobby more effectively for academic programs, computers, libraries, and other supports—and tolerate less neglect when it comes to building maintenance and physical amenities—and because more affluent schools generally secure more experienced and educated teachers through initial assignments and seniority transfers.

One recent study of five urban districts found that the official disparities in funding between schools in the highest-poverty quartile and those in the lowest-poverty quartile ranged from 10% to 23% of a school’s overall budget.<sup>47</sup> In another study of the 50 largest California districts, high-poverty schools spent an average of \$2,576 per teacher less on salaries than low-poverty schools within the same district.<sup>48</sup>

The New America Foundation notes that, while the Elementary and Secondary Education Act once included very detailed requirements for ensuring comparability of funding, staffing, services, and salary costs among Title I (low-income) and non-Title I schools, enforcement of the comparability provisions essentially ended in 1981, during President Reagan’s administration. The previous requirement that districts demonstrate comparability through both staff-student and salary-student ratios was relaxed to allow districts to submit written assurances in lieu of actual data reports, asserting that they had a district-wide salary schedule and policies to ensure equivalence among schools in staffing and materials.<sup>49</sup>

These assurances have often masked or ignored the differential allocation of resources to schools by student race, class, language background, and zip code. And these official disparities do not even include the much more substantial private fundraising more affluent parents can accomplish for the schools their students attend. In some communities, these privately raised funds—in the tens and even hundreds of thousands of dollars—purchase music and art programs, library books and computers, and even teachers that these schools (both public and private) would otherwise be unable to afford, further expanding inequality.

## UNEQUAL ACCESS TO QUALIFIED TEACHERS

More important even than the contrasts between up-to-date and dilapidated buildings, or between overflowing libraries and empty shelves, are the differences in teachers different children encounter. In the United States, teachers are the most inequitably distributed school resource. When I worked in New York City during the 1990s, the city hired nearly half of its new teachers each year without full preparation, while losing about that same proportion of new teachers at the end of each year as they burned out and gave up or moved on. Meanwhile, the minimum qualification to get hired in a wealthy district like suburban Scarsdale was 5 years of successful teaching experience and at least a master's degree from a highly respected school like Columbia University's Teachers College. During those years, New York City could not manage to hire even the qualified teachers who applied (including many from Teachers College), because of a combination of dysfunctional hiring practices and noncompetitive salaries. In 2003, median teacher salaries in New York City were \$53,000, as compared to \$95,000 in Scarsdale—a function of dramatically different salary schedules as well as levels of teacher experience and education.

To understand the import of these differences, consider this description by Jonathan Kozol of teaching conditions at that time in a middle school in Harlem serving African American and Hispanic students, 70% of whom scored at the lowest level on the state's achievement tests:

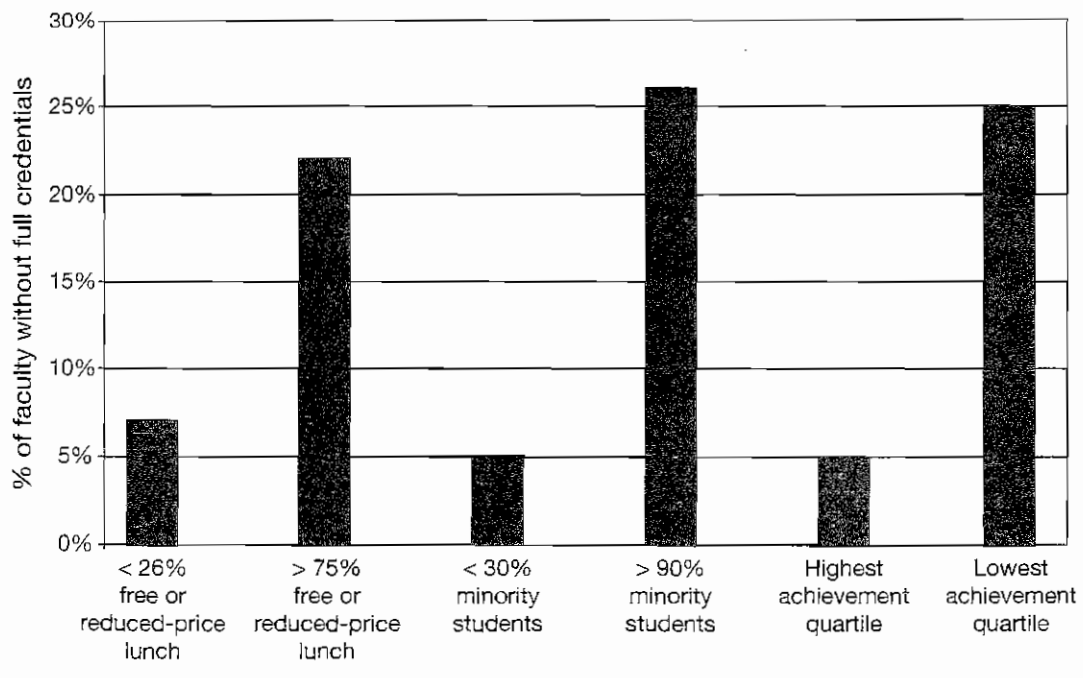
The school . . . turned out to be a bleak and grimy institution on the top floor of an old five-story building in East Harlem. . . . Class size averaged 30 students. . . . Thirteen of the 15 teachers were "provisionals," which meant they were not fully certified to teach. Supplies were scarce. "Three of my classes don't have textbooks," said the principal. "I have to fight and scratch for everything we get." . . . "If we had the money, ideal class size for these kids would be 15 to 20," said a teacher. "Many are in foster care—their parents may have died of AIDS or are in jail." But even if they had the money for more teachers, said the principal, "we wouldn't have the space," and he unlocked a door to show me that his social studies teacher had to use a storage closet as her office. Standards posters, lists of numbered mandates, lists of rubrics lined most of the classroom walls. I asked a mathematics teacher if these lists had pedagogic value for his students. "District wants to see it, wants to know I'm teaching this," the teacher answered, rather dryly. When I asked him how he'd found a job in this academy, he told me he had been in "real estate, insurance" for nine years, then for some reason (I believe he lost his job) he needed to find work. "A friend said, 'Bring your college transcript in.' I did. They sent me to the district. The next day I got the job."<sup>50</sup>

The "bleak and grimy" conditions Kozol describes are closely related to the shortages of qualified teachers. Studies have found that working conditions are at least as powerful as salaries in predicting whether schools can recruit and retain teachers who

have other options.<sup>51</sup> As in New York, increasing numbers of underqualified teachers have been hired in many cities since the late 1980s, when teacher demand began to increase while resources were declining. In 1990, for example, the Los Angeles City School District was sued by students in predominantly minority schools because their schools were not only overcrowded and less well funded than other schools, but they were also disproportionately staffed by inexperienced and unprepared teachers hired on emergency credentials.<sup>52</sup> The practice of lowering or waiving credentialing standards to fill classrooms in high-minority, low-income schools—a practice that is unheard of in high-achieving nations and in other professions—became commonplace in many U.S. states during this period of time, especially in states with large minority and immigrant populations, such as California, Texas, Florida, and New York, which allocated such teachers almost exclusively to these students.

A decade later, California was sued again as disparate access to well-qualified teachers had grown even worse. In 2001, for example, students in California's most segregated minority schools were more than five times as likely to have uncertified teachers as those in predominantly White schools. As standards were lowered, nearly 50% of the state's new teachers entered without training, virtually all of them assigned to teach in high-need schools. In the 20% of schools serving almost exclusively students of color, more than 20% of teachers were uncertified, and in some schools they comprised the majority of the teaching force<sup>53</sup> (see Figure 2.3).

**Figure 2.3.** Distribution of Unqualified Teachers in California, 2001.



Source: Shields et al. (2001).

During this era in California, an episode of the *Merrow Report*<sup>54</sup> illustrated how debilitating these policies had become for a group of students in Oakland—although the segment could as easily have been about schools in Philadelphia, Los Angeles, Chicago, Newark, Atlanta, or New York City. Zooming into a portable classroom in a middle school comprised entirely of African American and Latino students, Merrow interviewed the students in an 8th-grade math class that had been without a regular math teacher for most of the year, asking, “How many math teachers have you had this year?” One young man with an obviously good memory started off the count: “Let’s see, there is Mr. Berry, Miss Gaines, Mr. Lee, Mr. Dijon, Mr. Franklin. . . . Coach Brown was one of our substitutes one day.” A studious-looking girl chimed in: “We had Miss Nakasako; we had Miss Gaines; we had Miss Elmore; we had this other man named . . . he had like curly hair. His name was Mr. umm . . .” Merrow noted: “So you’ve had so many teachers you can’t remember all their names?” The children nodded in agreement.

A few miles away at Oakland High School, a 9th-grade science class had had nothing but substitutes all year long, spending the entire year without a certified science teacher. Merrow asked what it was like having so many teachers during the year. Students’ frustration was evident as they answered. Said one boy: “It’s just weird. It’s like we have to get used to a new teacher every couple of weeks or so.” Echoed another, “I’m feeling short-handed, because this is the third year . . . ever since I got into junior high school, I haven’t had a science teacher. . . . [I’ve had] substitutes all three years.” A young Latina observed: “All we learn is like the same thing all over again. When a new teacher comes, sometimes we’ve got to skip chapters and start all over again; and it’s difficult.” When Merrow asked, “Have you learned much science this year?” the students shook their heads. A Black student, laying his hand on the book in front of him as though it were a life raft, shook his head sadly and answered, “Not really. We haven’t had the chance to.”

The reporter went on to interview several fully certified science teachers who had applied to teach in the district and had not received a call back from the personnel office. As in some other underresourced urban districts, uncredentialed teachers and temporary staff were hired in lieu of more expensive teachers with preparation and experience in order to save money. In recent years, Oakland’s new leadership has worked heroically to change these historic practices and to seek out and hire teachers who will become better-prepared and stay in the district. Yet the district, like many others in the state, still struggles with the inadequate funding and low salaries that create an uphill climb to staff its schools each year.

Similar inequalities have been documented in lawsuits challenging school funding in Massachusetts, New Jersey, New York, South Carolina, and Texas, among other states. In Massachusetts, for example, students in predominantly minority schools were five times more likely in 2002 to have uncertified teachers than those



in the quartile of schools serving the fewest students of color.<sup>55</sup> In South Carolina and Texas the ratio was four to one.<sup>56</sup>

By every measure of qualifications—certification, subject-matter background, pedagogical training, selectivity of college attended, test scores, or experience—less-qualified teachers are found in schools serving greater numbers of low-income and minority students.<sup>57</sup> In Jeannie Oakes's nationwide study of the distribution of mathematics and science opportunities, students in high-minority schools had less than a 50% chance of being taught by math or science teacher who held a degree and a license in the field they teach.<sup>58</sup> As Kati Haycock has noted, these statistics on differentials in credentials and experience, as shocking as they are, actually *understate* the degree of the problem in the most impacted schools:

For one thing, these effects are additive. The fact that only 25% of the teachers in a school are uncertified doesn't mean that the other 75% are fine. More often, they are either brand new, assigned to teach out of field, or low-performers on the licensure exam. . . . There are, in other words, significant numbers of schools that are essentially dumping grounds for unqualified teachers—just as they are dumping grounds for the children they serve.<sup>59</sup>

### The Influence of Teacher Quality on Student Achievement

All of these aspects of teacher quality matter. Studies at the state, district, school, and individual level have found that teachers' academic background, preparation for teaching, and certification status, as well as their experience, significantly affect their students' achievement.<sup>60</sup> These findings appear to extend around the world as well. For example, Motoko Akiba and colleagues found that the most significant predictors of mathematics achievement across 46 nations included teacher's certification, a major in mathematics or mathematics education, and at least 3 years of teaching experience.<sup>61</sup>

In combination, teachers' qualifications can have very large effects. For example, a recent study of high school students in North Carolina found that students' achievement was significantly higher if they were taught by a teacher who was certified in his or her teaching field, fully prepared upon entry, had higher scores on the teacher licensing test, graduated from a competitive college, had taught for more than 2 years, and was national board certified.<sup>62</sup> While each of these traits made teachers more effective, the combined influence of having a teacher with most of these qualifications as compared to one having few of them was larger than the effects of race and parent education combined. That is, the difference in student achievement between having a very well-qualified teacher rather than a poorly qualified one was larger than the average difference in achievement between a typical White student with college-educated parents and a typical Black student with high school-educated parents. The achievement gap would be much reduced if

low-income minority students were routinely assigned such highly qualified teachers rather than those they most often encounter.

A similar study of teachers in New York City<sup>63</sup> also found that teachers' certification status, pathway into teaching, teaching experience, graduation from a competitive college, and math SAT scores were significant predictors of teacher effectiveness in elementary and middle grades mathematics. A student's achievement was most enhanced by having a fully certified teacher who had graduated from a university pre-service program, who had a strong academic background, and who had more than two years of experience. Students' achievement was hurt most by having an inexperienced teacher on a temporary license—again, a teaching profile most common in high-minority, low-income schools. In combination, improvements in these qualifications reduced the gap in achievement between the schools serving the poorest and most affluent student bodies by 25%.

Changes in the teacher qualifications available to students strongly influence student achievement, suggesting that policies that tackle the twin problems of inadequate and unequally distributed teacher quality may help improve school outcomes.

Indeed, because of public attention to these disparities and to the importance of teacher quality,<sup>64</sup> Congress included a provision in the No Child Left Behind Act of 2002 that states should ensure that all students have access to "highly qualified teachers," defined as teachers with full certification and demonstrated competence in the subject-matter field(s) they teach. This provision was historic, especially since the students targeted by federal legislation—students who are low-income, low-achieving, new English language learners, or identified with special education needs—have been in many communities those least likely to be served by experienced and well-prepared teachers.<sup>65</sup>

At the same time, reflecting a key Bush administration agenda, the law encouraged states to expand alternative certification programs, and regulations developed by the U.S. Department of Education allow candidates who have just begun, but have not yet completed, such a program to be counted as "highly qualified"—a ruling that caused parents of low-income, minority students taught by such teachers in California to sue the Department of Education. The parents claimed that the department's rule sanctioned inadequate teaching for their children and masked the fact that they were being underserved, thus reducing pressure on policymakers to create the incentives that would have given their children access to fully prepared teachers.

The alternative programs created in the field vary widely. Some of these programs are well-designed routes for mid-career entrants that provide a tailored pathway that wraps relevant coursework around a carefully supervised practicum over the course of a year under the wing of an expert teacher. Given the emphasis in most states on 4-year undergraduate preparation programs, these routes have

created a useful pathway into teaching for those who already earned a bachelor's degree, and have allowed the schools to benefit from a more mature pool with useful work experience—and sometimes parenting experience—that provides a strong foundation for teaching. Other programs—generally targeted for high-turnover urban schools—offer only a few weeks of training before teachers step into the classroom on their own, with variable access to mentoring or support. These efforts to address shortages in high-need schools by reducing training rather than increasing the incentives to teach have, in many cases, actually exacerbated staffing problems and undermined efforts to raise student achievement.

### The Effects of Alternative Certification

The effects on achievement of nonselective alternative certification programs were illuminated by a recent *Mathematica* study<sup>66</sup> of such programs. The researchers found only 12 states that had such routes allowing elementary teachers to enter without having completed training; some of these, such as Wisconsin and Michigan, allow the practice only in a single high-need district, such as Milwaukee or Detroit. In the high-minority, low-income schools that hire many such teachers, candidates from “low-coursework” and “high-coursework” alternative programs were compared to counterpart teachers of similar experience in the same schools. “High-coursework” programs usually cover most or all of the same courses as traditional programs, but allow candidates to start teaching before they have completed the courses and sometimes without having had student teaching. “Low-coursework” programs usually skip student teaching and reduce the overall amount of training prospective teachers are exposed to, sometimes by as much as two-thirds.

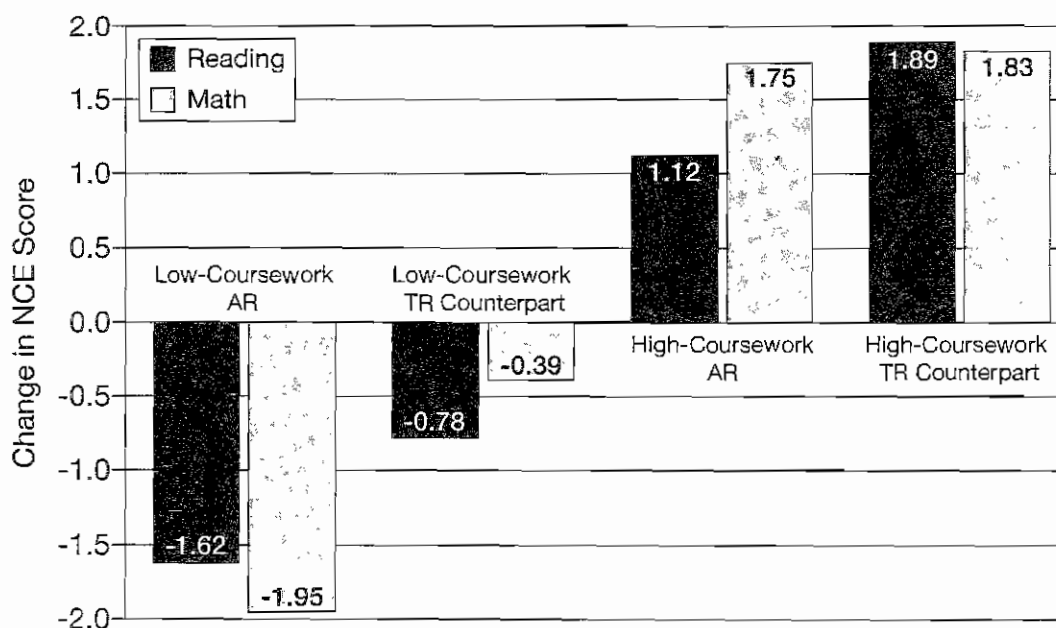
This means that teachers get little training in areas such as child development and learning; how to construct curriculum and develop assessments; how to teach reading, mathematics, or other subjects; how to manage a classroom productively; and how to teach special education students or those who are learning English for the first time. These teachers generally also take coursework while they are teaching, but much less of it, and they generally enter teaching without studying under the wing of a successful veteran teacher. Advice from a mentor who visits the classroom periodically is intended to offset these reductions in pre-service training. Most of the “low-coursework” teachers in the sample were from Texas, a state that had lowered its requirements for teacher education training for all teachers more than a decade earlier, and then reduced still further the requirements for alternative route entrants, who teach primarily in low-income, minority schools.

Even though the traditionally certified (TC) teachers in the hard-to-staff sample schools were also less well prepared than most elementary teachers nationally, the study found that their students gained more on achievement tests than those of

the alternatively certified (AC) teachers who were still taking coursework, as well as those of AC teachers in their third and fourth years. Most important, though, a careful look at the test score data shows that the reading and math achievement of students taught by teachers from what the study called “low-coursework” alternative programs actually *declined* by nearly two normal curve equivalent (NCE) points between fall and spring of the academic year.<sup>67</sup> Students taught by their traditional route counterparts, who started further behind in the fall, declined by a smaller amount, and ended up roughly comparable to those of the alternative route teachers by spring—not a reassuring finding for any of the children in these high-need schools (see Figure 2.4).

Teachers from the “high-coursework” programs did somewhat better, and their traditional route counterparts did better still, suggesting that more comprehensive programs can lead to better outcomes for students. However, these teachers added only one to two NCE points in achievement for their students over the course of the year, not nearly enough to begin closing the achievement gap for their students who were already scoring well below the norm. While the researchers who conducted the study interpreted their findings as suggesting that the alternative route candidates who teach in these difficult contexts do not much more harm than other teachers in their schools, these poor outcomes are not an acceptable standard. They

**Figure 2.4.** Fall-to-Spring Test Score Gains/Losses of Students Taught by Alternative-Route and Traditional-Route Teachers.



Source: Darling-Hammond (2009).

represent a race to the bottom for the students and schools in these communities, rather than the race to the top we need to create substantially higher levels of teacher effectiveness, especially for children who have been left furthest behind.

These findings are similar to those in other studies. In the North Carolina study cited above, the largest negative effects on student achievement were found for inexperienced teachers and for teachers who had entered teaching on the state's "lateral entry" program, an alternate route that allows entry for mid-career recruits who have subject-matter background but no initial training for teaching. In addition, three large, well-controlled studies, using longitudinal individual-level student data from New York City and Houston, Texas, found that teachers who entered teaching without full preparation—as emergency hires or alternative route candidates—were significantly less effective when they started than fully prepared beginning teachers working with similar students, especially in teaching reading.<sup>68</sup> This is not surprising, given the sophisticated knowledge and skills needed to teach beginning reading, especially to students who have few literacy experiences outside of school and those who are new English language learners.

On the more positive side, all of these studies found that, among the alternate route teachers who stayed in teaching long enough to complete their required coursework for certification, the gap in effectiveness closed. Indeed, in two of the studies, students of Teach for America (TFA) alumni who became certified after a couple of years of teaching had larger than average gains in mathematics. However, this represented a small minority of these recruits, as more than 80% of the TFA entrants and half of other alternatively prepared teachers had left the profession by year 4, as compared to about one-third of traditional entrants. Since less effective teachers tend to leave sooner, it is likely that these findings are both because the better teachers stayed and because they had gained in effectiveness as they completed their training and gained experience.

Even if those who stay in teaching catch up to their peers later, however, students who have had such teachers when they were novices suffer and may never catch up, especially if the students have a revolving door of such beginners year after year. In reading, for example, the negative differential for upper elementary students taught by underprepared novices was estimated to be the loss of about one-third of a grade level.<sup>69</sup> When children in hard-to-staff schools experience several such teachers in a row, it is easy for the students to fall further and further behind. And when teachers who quit are replaced by other new, underprepared teachers, the achievement level within a school or district remains depressed.

This high turnover for those who enter without having complete preparation is not unusual. A nationwide study by the National Center for Education Statistics (NCES) found, for example, that, among recent college graduates, 49% of those who entered teaching without certification left the profession within 5 years, as compared

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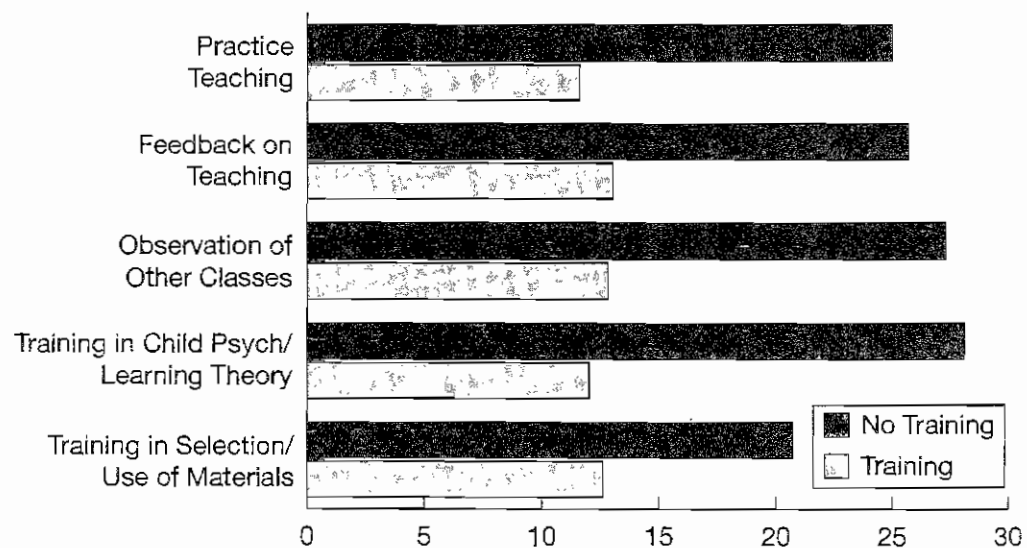
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to only 14% of certified entrants who entered at the same time.<sup>70</sup> An analysis of another NCES database showed attrition rates for new teachers who lacked student teaching and teacher education coursework at rates double those of those who had had student teaching<sup>71</sup> (see Figure 2.5). Ironically, efforts to address shortages of teachers through fast-track programs that offer a few weeks of preparation before a sink-or-swim entry can ultimately add to the churn in urban schools.

This high turnover is often linked to teachers' sense of effectiveness. Although many people believe they do not need much specialized preparation before they enter, most learn quickly that teaching is much more difficult than they thought, and they either desperately seek out additional training, construct a teaching style that focuses on control—often by “dumbing down” the curriculum to what can be easily managed—or leave in despair.<sup>72</sup>

For example, a report in the *St. Petersburg Times* in January 2001 reported on the loss of nearly 100 area recruits in the first few months of that school year, many of them mid-career alternative certification candidates who had entered without education training and were supposed to learn on the job. Microbiologist Bill Gaulman, a 56-year-old African American former Marine and New York City firefighter, left before mid-year; his comments reflected the experiences of many: “The word that comes to mind is ‘overwhelmed,’” said Galman. “People told me ‘Just get through that first year.’ I was like, ‘I don’t know if I can get through this week.’ I didn’t want to shortchange the kids. I didn’t want to fake it. I wanted to

**Figure 2.5.** Teacher Preparation and Attrition of 1st-Year Teachers  
(Percentage of Teachers Leaving After One Year)



Source: National Commission for Teaching and America's Future (2003).

do it right.” Erika Lavrack, a 29-year-old psychologist without education training, was assigned to teach special education resigned on her second day. “The kids were nice enough,” Lavrack said, “but they were running all over the place. There was no way I could teach them anything if I couldn’t get them to sit down. I didn’t know what to do.”<sup>73</sup>

Some, like this recruit who entered teaching after a few weeks of summer training, find that they end up blaming the students for their own lack of skills:

I stayed one year. I felt it was important for me to see the year out but I didn’t necessarily feel like it was a good idea for me to teach again without something else. I knew if I wanted to go on teaching there was no way I could do it without training. I found myself having problems with cross-cultural teaching issues—blaming my kids because the class was crazy and out of control, blaming the parents as though they didn’t care about their kids. It was frustrating to me to get caught up in that.

Other teachers understand that they will ultimately carry the burden of the students who are undereducated by teachers who are underprepared. A teacher in a California school with a revolving door of underprepared teachers explained:

Teachers who had not been through [preparation] programs had more concerns about classroom management and about effective methods for delivering instruction to the student population at our school than teachers who had been through credential programs. It was a topic that was discussed at the lunch table . . . the fact we had a class that had had so many substitutes and had had an uncredentialed teacher who was not able to handle the situation and ended up not returning, and that the kids were going to struggle and the teachers who received them the next year would probably have a difficult time with those students because of what they had been through.<sup>74</sup>

Some studies confirm what this teacher suggests: that the negative effects of an ineffective teacher persist into future years, lowering children’s academic achievement, and two or three such teachers in a row create a substantial deficit. One analysis indicates, for example, that students who receive three ineffective teachers in a row may achieve at levels that are as much as 50 percentile points lower than students who receive three highly effective teachers in a row<sup>75</sup>—a differential large enough to distinguish students who may struggle to graduate from high school from those who go on a competitive college or university (see Figure 2.6).

### **The Effects of Concentrations of Underprepared Teachers**

Beyond the effects of individual teachers on students, there are additional effects on student learning of teacher expertise across a school or district. The more

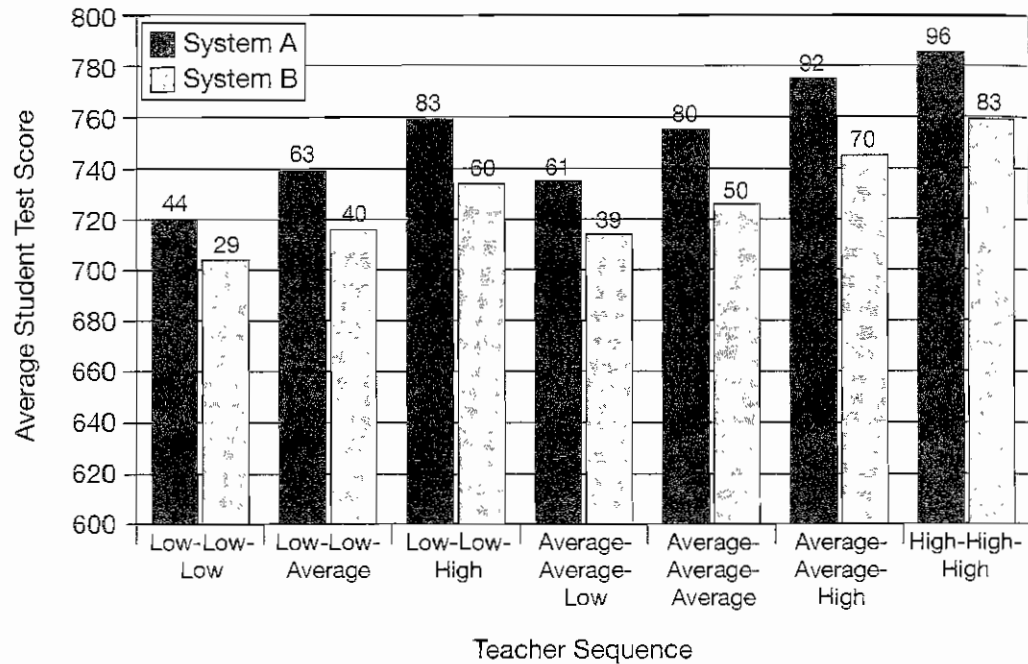
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**Figure 2.6.** Cumulative Effects of Teacher Effectiveness. Student Test Scores in 5th-Grade Math by the Effectiveness Levels of Their Teachers (Low, Average, High) Over a 3-Year Period, for Two School Systems.



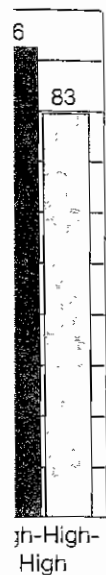
Source: Sanders & Rivers (1996).

expert and experienced teachers there are in a school, the more professional knowledge they can share and bring to bear on making good curriculum decisions. In addition, the greater the continuity in instructional practice from class to class and from year to year, the larger the cumulative effects of good teaching. The converse is also true. Studies have found that, at the school, district, and even state levels, the proportion of teachers who are inexperienced, underprepared, or uncertified has a significant negative effect on student achievement after controlling for student characteristics like poverty and language background.<sup>76</sup>

This is partly because high levels of turnover and staff instability create additional problems for schools beyond the effects of individual teachers who may be weak. As a study by Stanford Research International found, in the many low-income, high-minority schools with large shares of inexperienced, underprepared teachers, high turnover drains both financial and human resources. Schools that hire a parade of novices and short-term teachers must constantly pour money into recruitment and professional support for new teachers, without reaping benefits from the investments. Like filling a leaky bucket, these schools are forced to repeat this waste of energy and resources over and over again. Other teachers, including the few who could serve as mentors, are stretched thin by the needs of their colleagues



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as well as their students, increasing the chance they will burn out.<sup>77</sup> Scarce resources are wasted trying to reteach the basics each year to teachers who arrive with few tools and leave before they become skilled. Most important, the constant staff churn consigns a large share of children in high-turnover schools to a parade of relatively ineffective teachers, with all of the long-term costs of remediation, grade retention, and dropping out experienced by the society at large.

### LACK OF ACCESS TO HIGH-QUALITY CURRICULUM

In addition to being taught by less expert teachers than their White counterparts, students of color face stark differences in courses, curriculum programs, materials and equipment, as well as in the human environment in which they attend school. High-quality instruction—which is shaped by all of these factors—has been found to matter more for school outcomes than students' backgrounds. For example, when sociologist Robert Dreeben studied reading instruction for 300 Black and White first graders across seven schools in the Chicago area, he found that differences in reading achievement were almost entirely explained not by socioeconomic status or race, but by the quality of curriculum and teaching the students received:

Our evidence shows that the level of learning responds strongly to the quality of instruction: having and using enough time, covering a substantial amount of rich curricular material, and matching instruction appropriately to the ability levels of groups. . . . When Black and White children of comparable ability experience the same instruction, they do about equally well, and this is true when the instruction is excellent in quality and when it is inadequate.<sup>78</sup>

However, the study also found that the quality of instruction received by African American students was, on average, much lower than that received by White students, thus creating a racial gap in aggregate achievement by the end of first grade. In fact, the highest ability group in Dreeben's sample at the start of the study was in a school in a low-income African American neighborhood. These students, though, learned less during first grade than their White counterparts because their school was unable to provide the quality instruction this talented group deserved—a story replicated over many decades in many communities across the country.

### Allocating Knowledge

Unequal access to knowledge is structured in a variety of subtle and not-so-subtle ways. In U.S. schools, far more than those in high-achieving nations around the world, this occurs through the allocation of different programmatic and course-

taking opportunities to different students very early in their school experience. Sorting and tracking often begin as early as kindergarten or 1st grade, with decisions about which students will be placed in remedial or “gifted” programs and with differentials among affluent and poor schools in what is offered. For example, wealthy districts often offer foreign languages early in elementary school whereas poor districts offer few such courses even at the high school level; richer districts typically provide extensive music and art programs, project-based science, and elaborate technology supports, while poor districts often have none of these, and offer stripped down drill-and-practice approaches to reading and math learning, rather than teaching for higher-order applications.

Research has found that schools serving African American, Latino, and Native American students are “bottom heavy”—that is, they offer fewer academic and college preparatory courses and more remedial and vocational courses that tend to train specifically for low-status occupations, such as cosmetology and sewing.<sup>79</sup> For example, in 2005, only 30% of California’s highly segregated schools (serving more than 90% students of color) had a sufficient number of the state-required college preparatory courses to accommodate their students. In these schools, constituting one-quarter of all schools in the state, a substantial number of the college-required courses were taught by teachers lacking certification in their subject areas.<sup>80</sup> As a result of these conditions, in 2003, only 6% of the state’s African American and Latino high school graduates had taken and passed both the courses and the tests required to be eligible for admission to the state university system.<sup>81</sup>

In racially mixed schools, curriculum tracks are generally color-coded. Honors or advanced courses are reserved primarily for White students, while the lower tracks (basic, remedial, or vocational) are disproportionately filled with students of color.<sup>82</sup> Unequal access to high-level courses and challenging curriculum explains much of the difference in achievement between minority students and White students, as coursetaking is strongly related to achievement, and there are large race-based differences among students in coursetaking from an early age, especially in such areas as mathematics, science, and foreign language.<sup>83</sup>

By contrast, there is very little curriculum differentiation in the education offerings for students in contemporary high-achieving European and Asian nations, such as Finland, Sweden, Korea, Japan, and Hong Kong, which have sought, as part of their reforms, to equalize access to a common, intellectually ambitious curriculum.<sup>84</sup> These nations typically do not track or sort most students until the end of high school, when, in the last 2 years, there is often differentiation of courses by interest and aptitude, and matriculation examinations influence college admissions. By comparison, European countries such as France and Germany that have continued a tradition of sorting students much earlier are, like the United States, lagging in international assessments.

## Historical Origins

The historical origins of tracking systems in the United States were beliefs in differential intelligence held by eugenicists and some education reformers in the early 1900s, which translated into grouping systems that would lead to specific vocations assigned by socioeconomic status. In 1909, Stanford University Education School dean Ellwood P. Cubberly described the problem as it was then conceptualized with the arrival of Italians, Poles, Czechs, and other new immigrants:

These southern and eastern Europeans are of a very different type from the north Europeans who preceded them. Illiterate, docile, lacking in self-reliance and initiative, and not possessing the Anglo-Teutonic conceptions of law, order, and government, their coming has served to dilute tremendously our national stock, and to corrupt our civic life. . . . Our city schools will soon be forced to give up the exceedingly democratic idea that all are equal and our society devoid of classes . . . and to begin a specialization of educational effort along many lines in an attempt to adapt the school to the needs of these many classes. . . . Industrial and vocational training is especially significant of the changing conception of the school and the classes in the future expected to serve.<sup>85</sup>

Psychologist and IQ test developer Lewis Terman, also a professor at Stanford, found that 80% of the immigrants he tested appeared to be “feeble-minded,” and he concluded in his book *Intelligence Tests and School Reorganization*, published in 1922:

Their dullness seems to be racial, or at least in the family stock from which they come. The fact one meets this type with such extraordinary frequency among Indians, Mexicans, and negroes suggests quite forcibly that the whole question of racial differences in mental differences will have to be taken up anew. . . . Children of this group should be segregated in special classes. . . . They cannot master abstractions, but they can often be made efficient workers.<sup>86</sup>

Schools were designed to be mechanisms for efficient sorting of manpower in the industrialized economy. As educator W. B. Pillsbury wrote in *Scientific Monthly* in 1921:

We can picture the educational system as having a very important function as a selecting agency, a means of selecting the men of best intelligence from the deficient and mediocre. All are poured into the system at the bottom; the incapable are soon rejected or drop out after repeating various grade and pass into the ranks of unskilled labor. . . . The more intelligent who are to be clerical workers pass into the high school; the most intelligent enter the universities whence they are selected for the professions.<sup>87</sup>

The conception of schools as selecting only a few for thinking work rather than as developing the talents of all to a high level has remained, even as educational

expectations in the society and the labor market have changed dramatically. As a result of the work of the scientific managers in the early 1900s, tracking in U.S. schools starts much earlier and is much more extensive than in many other countries. The result of this practice is that challenging curricula are rationed to a very small proportion of students, and far fewer U.S. students ever encounter the kinds of learning opportunities students in high-achieving countries typically experience.<sup>88</sup>

Indeed, access to high-quality curriculum—that is, a combination of ambitious, well-sequenced goals for learning enacted through intellectually challenging assignments, strong instruction, and supportive materials—is relatively rare in the United States. The story of inadequate curriculum is one that has two important dimensions: One is the disparity between the kind of curriculum to which more and less advantaged students have access in this country—a gap that is much greater in the United States than in higher-achieving countries around the world that have been consciously reducing differences in access to knowledge. The second dimension is what Tony Wagner calls the *global gap*—“the gap between what even our best suburban, urban, and rural public schools are teaching and testing versus what all students will need to succeed as learners, workers, and citizens in today’s global knowledge economy.”<sup>89</sup> I discuss this gap further in Chapter 6 where I describe the reforms under way in high-performing nations that have transformed their education systems.

Wagner describes the skills that students need in terms very similar to those others have outlined in reform reports around the world: critical thinking and problem solving; collaboration; agility and adaptability; initiative and entrepreneurialism; effective oral and written communication; accessing and analyzing information; curiosity and imagination. The kind of curriculum that supports these qualities has typically been rationed to the most advantaged students in the United States—a strategy that is increasingly problematic as demand for these skills becomes universal.

### **Curriculum Opportunities and Learning**

The curriculum rationing system we have inherited was justified on the grounds that it was best for students, so that they could be educated in the most appropriate ways, at their own “levels,” and find their way into society. However, a substantial body of research over the last 40 years has found that the combination of teacher quality and curriculum quality explains most of the school’s contribution to achievement, and that access to curriculum opportunities is a more powerful determinant of achievement than initial achievement levels. That is, when students of similar backgrounds and initial achievement levels are exposed to more and less challenging curriculum material, those given the richer, more demanding curriculum opportunities ultimately outperform those placed in less challenging classes.<sup>90</sup> For example,

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a rigorously designed experimental study which randomly assigned 7th-grade “at-risk” students to remedial, average, and honors mathematics classes found that at the end of the year, the at-risk students who took the honors class offering a pre-algebra curriculum outperformed all other students of similar backgrounds.<sup>91</sup>

Similarly, a study by Jeannie Oakes in a California city found that, for students scoring at about the median on the district’s standardized test, those placed in low-track classes lost an average of two normal curve equivalents (NCEs) after 1 year and sustained these losses for 3 years, while those who were placed into an accelerated course gained 6.5 NCEs after 1 year and 9.6 NCEs after 3 years. These patterns held true for students who were initially much lower in the achievement distribution (for example, near the 20th percentile) and for those much higher in the achievement distribution (for example, near the 80th percentile)—a finding reinforced by other studies.<sup>92</sup> In these ways, tracking exacerbates the achievement gap.

Tracking is associated with curriculum differences that can dramatically restrict students’ encounters with knowledge and their opportunities to learn. Decades of research have shown that teachers who produce high levels of learning for initially lower- and higher-achieving students alike provide active learning opportunities involving student collaboration and many uses of oral and written language, connect to students’ prior knowledge and experiences, provide hands-on learning opportunities, and engage students’ higher-order thought processes, including their capacities to approach tasks strategically, hypothesize, predict, evaluate, integrate, and synthesize ideas.<sup>93</sup>

However, many studies have found that students placed in the lowest tracks or in remedial programs tend to experience instruction geared only to rote skills, working at a low cognitive level on fill-in-the-blank worksheets and test-oriented tasks that are profoundly disconnected from the skills they need to learn. Teacher interaction with students in lower-track classes is less motivating and less supportive, more likely to focus on behavioral criticisms, especially for minority students,<sup>94</sup> and less focused on higher-order reasoning and responses.<sup>95</sup> In these classes, students are rarely given the opportunity to talk about what they know, to read real books, to research and write, to construct and solve problems in mathematics, science, or other subjects.<sup>96</sup> Yet, these practices are essential to the development of higher-order thinking skills and to sustained academic achievement.

### Differential Goals

Students in the more advantaged tracks and programs not only encounter more curricular material; they are also typically asked to learn the material differently. They have opportunities to think, investigate, and create. They are challenged to explore. In *Keeping Track*, Jeannie Oakes describes the ways in which teachers differently frame their work for students in different tracks.<sup>97</sup>

Teachers of high-track classes described their class goals in terms of higher-order thinking and independent learning, for example: "Logical thought processes"; "Ability to think and use information"; "Scientific reasoning and logic"; "Self-reliance." Students' views of what they learned in class reflect these goals. High-track students said they learned: "To understand concepts and ideas and experiment with them, and to work independently"; "How to think and reason logically and scientifically"; "How to express myself through writing and compose [my] thoughts in a logical manner [and] express my creativity"; "To search and find out answers to questions."

Conversely, in low-track classes, teachers described few academic goals for their students and none related to thinking logically, critically, or independently. They often focused on compliance and low-level skills, for example: "Better use of time"; "Punctuality and self-discipline"; "Content—minimal. Develop goals they can achieve"; "Good work habits." And low-track students said they had learned how to: "Behave in class"; "How to shut up"; "[A]bout being quiet when the teacher is talking"; "[H]ow to listen and follow the directions of the teacher"; "[How to] do my questions for the book when he asks me."<sup>98</sup>

The contrasts between these experiences can be stark. As African American parent Mark Roberts observed of his daughter's "gifted" classroom in contrast to that of her lower-income friend, Tiffany:

[In the gifted classrooms], children with the proper pedigrees . . . enjoyed the best teachers, smaller classes, an enriched curriculum, exciting field trips, challenging assignments, and the protective watch of the principal. They would never be assigned a teacher like Mrs. Simmons, who screamed at her students, kept a brick on her desk, and made frequent calls on her cell phone.<sup>99</sup>

The principal's response to questions about these differences in Tiffany's classroom was telling: "Remember who we are talking about," said the principal. "There's only so much we can do for these kids."

This phenomenon is widespread. In his research in New York City, Jonathan Kozol described how, within ostensibly integrated schools, minority children were disproportionately assigned to remedial or special education classes that occupy small, cramped corners and split classrooms, while gifted and talented classrooms—primarily White with a few Asian students—occupied the most splendid spaces, filled with books and computers, where they learned, in the children's words, "logical thinking," "problem solving," "respect for someone else's logic," and "reasoning." Students were recommended for these classes by their teachers and parents as well as by their test scores. Kozol wrote in his notes, "Six girls, four boys. Nine white, one Chinese. I am glad they have this class. But what about the others? Aren't there ten black children in the school who could enjoy this also?"<sup>100</sup>

Three thousand miles away in Alameda County, California, a high school student described the same kind of situation:

Well, at [my school] . . . it is bad, but they have like another school system inside of it called Phi Beta, like all the smart kids, and it's like no minorities in there. And they get all the good instruments and all the other stuff like engineering. . . . And they split them up from the rest of [my school]. They've got their own side of the school. So it's just kind of scandalous how they put everyone else on the other side of the school or [in] different classes.<sup>101</sup>

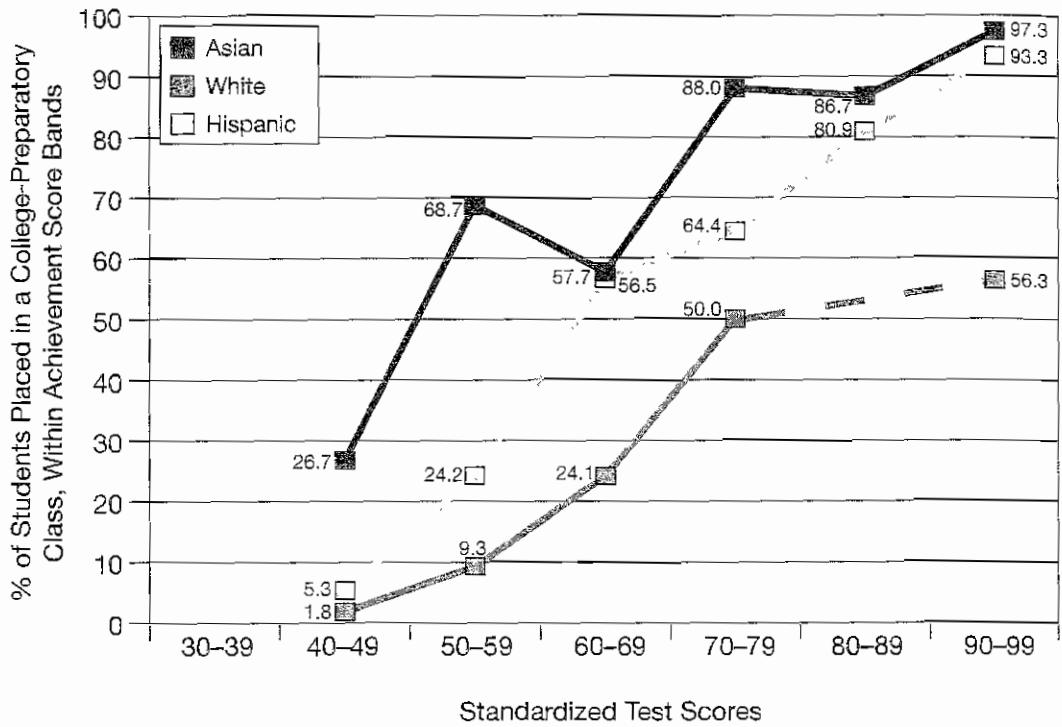
### Tracking, Race, and Class

Although test scores and prior educational opportunities provide the rationale for differential placements, race and income play a distinct role. Even after test scores are controlled, studies have found that race and socioeconomic status determine assignments to high school honors courses, as well as vocational and academic programs and more or less challenging courses within them.<sup>102</sup> Oakes's research demonstrated how students with the same standardized test scores were tracked "up" and "down" at dramatically different rates by race.<sup>103</sup> Latino students, for example, who scored near the 60th percentile on standardized tests were less than half as likely as White and Asian students to be placed in college preparatory classes. And even those who scored above the 90th percentile on such tests had only about a 50% chance of being placed in a college preparatory class, while their White and Asian peers were virtually assured of such placements (see Figure 2.7). Oakes's team found similar patterns for African American and Hispanic students in the Midwestern and East Coast cities they studied.

These patterns are in part a function of prior placements of students in tracked courses and schools of different quality in earlier grades, in part due to counselors' views that they should advise students in ways that are "realistic" about their futures, and in part because of the greater clout of higher-SES parents. For all of these reasons, as well as the influence of achievement scores and teacher recommendations, students of color are strongly underrepresented in academic courses, gifted and talented programs, honors and Advanced Placement programs (see Figure 2.8) and overrepresented in special education courses, where the curriculum is the most watered down and often teachers are least well qualified (see Figure 2.9).

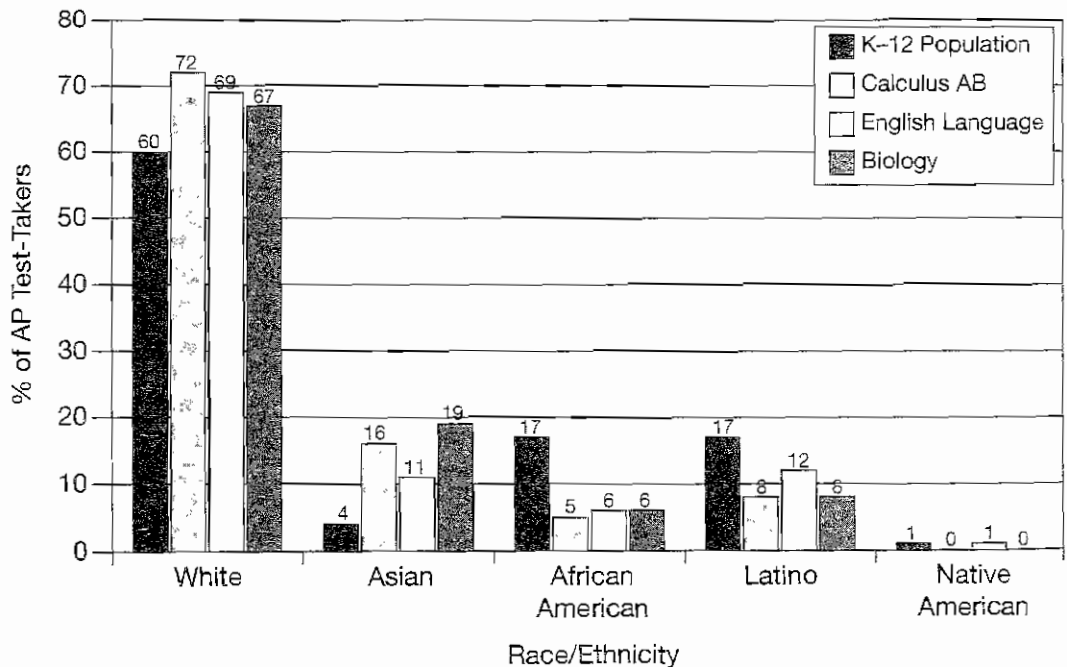
The accumulated benefits of more challenging curriculum and effective instruction open up—or, in their absence, close off—a long string of opportunities for students. For example, in an "integrated" Maryland elementary school I visited which used a gifted and talented magnet program to bring White students into a school community that was just over 50% African American, I noted that the primary grade classrooms were distinctly identifiable by race. Although most classrooms were

**Figure 2.7.** Likelihood of Placement in a College Preparatory Course, Controlling for Standardized Test Scores (9th Grade).



Source: Oakes (1993).

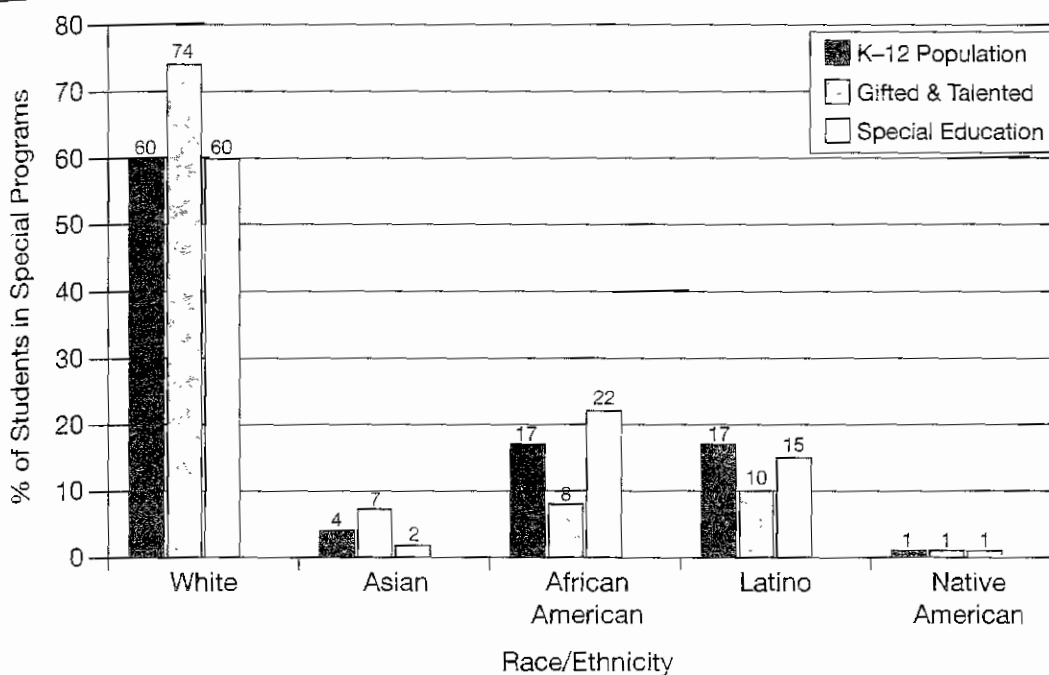
**Figure 2.8.** Participation in Advanced Placement Courses, 2003.



Source: The College Board, AP Summary Reports (2003).



Figure 2.9. Placement in Special Programs, 2000.



Source: U.S. Department of Education, Office for Civil Rights, 2000 Elementary and Secondary School Civil Rights Compliance Report, 2003. Calculations by the Education Trust (Education Watch).

predominantly Black, classes for “gifted and talented” students were almost entirely White. But the mathematics classes were most distinct. In two classrooms teaching a highly conceptual curriculum—the Comprehensive School Mathematics Program (CSMP)—there were no students of color. In the remaining classes, a mechanical, rote-oriented curriculum was being taught. It was clear even in first grade which students were being prepared for algebra, trigonometry, and calculus.

I learned from the principal, that the CSMP curriculum was reserved for “highly gifted” students who tested into the program in kindergarten. When I told her it had been developed by researchers for untracked urban students and should be available to them all, she agreed. She later secured resources so that the curriculum could be offered to all students the next year. And it was. But 3 years later, when I returned to the school, the old tracking system had been reinstated. When I asked what happened, the principal replied that, with only a few days of professional development to start them off, most of the teachers found the more conceptual curriculum too difficult to teach; they lacked the content and teaching skills needed to use it well with a diverse group of learners. And so, tracking for students was revived, primarily as a means for dealing with limitations in teachers’ skills.

Thus, tracking persists in the face of growing evidence that it does not substantially benefit high achievers and tends to put low achievers at a serious disadvantage,<sup>104</sup> in part because of these long-standing beliefs about the role of schools in selection, and in part because good teaching is a scarce resource and thus must be allocated. Scarce resources tend to get allocated to the students whose parents, advocates, or representatives have the most political leverage. This typically results in the most highly qualified teachers offering the most enriched curricula to the most advantaged students. Evidence suggests that teachers themselves are tracked, with those judged to be the most competent, experienced, or with the highest status assigned to the top tracks, and those with the least experience and training assigned to the lower tracks.<sup>105</sup>

The disequalizing effects of early tracking continue throughout the remaining years of school. For example, only those students who attended the magnet program in the elementary school described above had the preparation needed to attend a magnet program in mathematics and science located within the feeder junior high school—which, in turn, fed into a magnet program within the feeder high school. In the junior high school of about 1,000 students, also predominantly African American, this special magnet program of about 100 students was also virtually all White, with the exception of a couple of African American children who prepared for it during the “reform period” that the elementary school principal had managed to open up for a couple of years.

The group of 100 students in the magnet encountered an enriched and rigorous math, science, and technology curriculum featuring plentiful computers, frequent science investigations, and access to algebra courses as early as seventh grade. These courses were taught by highly trained teachers with master’s and doctoral degrees in their content fields as well as in education. For the other 900 students in the school, there were few computers, no science labs, and only a single mathematics teacher certified in his field and able to teach algebra. Because he was the department chair and needed to spend most of his time supervising other teachers, only one section of about 30 students out of the 900 in the “regular” program had the opportunity to take algebra in junior high school. The rest were tracked into general mathematics until they reached high school, far too late to qualify for the magnet program there—or the upper-level courses—that would have allowed them to catch up in the quest for knowledge.

School pathways locking in inequality can be found in most districts today, as high-quality education is rationed to a relative few. It can also be found in the ways that students of different racial and socioeconomic groups who attend elementary schools of differing quality are slotted into distinctive tracks when they reach larger, more “integrated” middle and high schools. The tracks typically reinforce segregation by race and class.

## Tracking and Language Background

An additional form of tracking that reduces access to knowledge has occurred as schools serve a growing number of new English language learners (ELLs). Many schools engage in the common practice of segregating students in what has sometimes been called the “ELL ghetto”—a sequence of courses for English language learners that keeps them together for multiple years in classes that do not enable them to complete prerequisites for higher tracks or college. This clustering of students is a well-intentioned alternative to the extreme “immersion” strategy that often throws immigrant students into regular classes with no language supports at all, where many fail and give up. Yet it creates other problems when students discover at the end of high school that all of their ESL courses have failed to qualify them for college.

The learning opportunities created for English language learners in the United States are highly variable. As Laurie Olson describes of California schools in *Made in America*,

Most high schools offer two types of classes to LEP (limited English proficient) students: English as a second language and selected electives in the mainstream taught in English, such as physical education or music. Beyond the two common elements, schools vary widely in the program they offer to LEP students. . . . One common pattern is of a partial program: a few classes available, sprinkled throughout all the core subject areas. There are insufficient class slots to accommodate all LEP students who need all the core content classes. And so, some LEP students receive a short schedule of classes. The remainder of the school day is spent in study halls, additional elective courses, or classes that they cannot comprehend in which they . . . sink or swim.<sup>106</sup>

The quality of staffing is also variable, with teacher assignment to LEP classes a “highly political issue” that is resolved through seniority and clout within the faculty hierarchy, as such courses are often considered undesirable assignments by most teachers, both because of the students and the lack of materials and training needed to meet their needs.<sup>107</sup> “Sheltered” courses, taught using methods to make content accessible to English language learners, are viewed by many as a desirable solution, but they require the resource of trained teachers and linguistically appropriate materials; hence, most schools do not offer a full menu of such courses to their students, and many students do not get the academic courses, the language instruction, or the trained teachers they need.

Finally, and not a minor point, cross-school segregation and within-school tracking reduce the extent to which different kinds of students have the opportunity to interact with one another and gain access to multiple perspectives. In *Democracy and Education*, John Dewey noted that “a democracy is more than a form of government; it is primarily a mode of associated living.”<sup>108</sup> He stressed the importance of

creating circumstances in which people share a growing number of interests and participate in a growing number of associations with other groups, noting that,

In order to have a large number of values in common, all the members of the group must have an equitable opportunity to receive and to take from others. There must be a large variety of shared undertakings and experiences. Otherwise, the influences which educate some into masters educate others into slaves. And the experience of each party loses in meaning, when the free interchange of varying modes of life experiences is arrested.<sup>109</sup>

In this respect, too, separate schools and tracks undermine democracy by segregating students by race, language, and social class, and by encouraging silence and separation where communication and connections are needed. These practices heighten divisions among groups and prevent many young people from becoming active social participants in the life of their school—and later in the broader community where, ultimately, we must all learn to work and live together.

### DYSFUNCTIONAL LEARNING ENVIRONMENTS

Many of these practices are inherited from a century ago, and our system has not yet managed to transform itself. Like manufacturing industries that have struggled and gone under in recent decades, modern schools were designed at the turn of the last century as highly bureaucratic organizations—divided into grade levels and subject matter departments, separate tracks, programs, and auxiliary services—each managed separately and run by carefully specified procedures engineered to yield standard products.

The school structure created to implement the predominant conception of teaching and learning as the transmission of predetermined bits of information was designed to be impersonal. With the advice of scientific managers in the early 1900s, the United States adopted the Prussian age-grading system and developed the “platoon system” for moving students along a conveyer belt from teacher to teacher, grade to grade, and class period to class period, to be stamped with a lesson before they pass on to the next. They have little opportunity to become well known over a sustained period of time by any adults who can consider them as whole people or as developing intellects. Secondary school teachers may see 150 students or more each day—currently more than 200 in Los Angeles—precluded by this structure from coming to know most students well.

U.S. teachers also work in isolation from one another with little time to plan with others or share their knowledge. In the factory conception of the school, in which practice is made routine, there is little need for professional expertise or teacher collaboration to develop curriculum and solve problems of practice. Stu-

dents, too, work alone and passively, listening to lectures and memorizing facts and algorithms at separate desks in independent seatwork. Rarely will teachers have the opportunity to work with any group of students for longer than that daily 45-minute period or for more than a year of their school careers. This is an important difference from many European and Asian schools where teachers often stay with their students for more than 1 year and may teach them multiple subjects, even at the high school level.<sup>110</sup> These strategies help them to know their students well enough to teach them effectively. Students in typical U.S. schools see nearly twice as many teachers over the course of their careers as those in many other countries.

Close connections between students and their teachers are most markedly absent in the large urban schools most low-income students of color attend. These schools are run like huge warehouses, housing 3,000 or more students in an organization focused substantially on the control of behavior rather than the development of community. With a locker as their only stable point of contact, young people cycle through a series of seven to nine overloaded teachers and rarely get to see the school counselor who struggles to serve the "personal needs" of hundreds of students. In this setting, students struggling to find connections have little to connect to. Heavily stratified within, and substantially dehumanized throughout, most students are likely to experience such high schools as noncaring, even adversarial environments where "getting over" becomes important when "being known" is impossible. Students perceive that the system is structured for not caring. A New York city dropout from a large, comprehensive high school described his experience this way: "At one time school was important to me. I liked getting good grades and making my parents proud of me. (But in high school) I never felt part of the school. It didn't make no difference if I was there or not. The teachers just threw me aside, probably because I was Spanish. I felt like I was being ignored, like I wasn't important." Another dropout offered this sophisticated analysis of the problem:

I had passing grades when I decided to drop out, but nobody tried to stop me. Nobody cared. . . . None of the counselors paid any attention to me. The only time I ever saw the principal was when I got sent to him, which I never stayed around for. The individual classes were too big for students to learn. Students should have longer exposure to individual teachers. If students could have the same subject teachers throughout their high school careers, this would allow teachers to get to know students better. . . . No high school should have more than four hundred students max and all on one floor. Who needs seven floors in a school?<sup>111</sup>

A California high school student put it more succinctly: "This place hurts my spirit."<sup>112</sup> An administrator in the same school voiced the poignant dilemma of caring educators caught in the squeeze between mandates and children: "Yes, my spirit is hurt, too, when I have to do things I don't believe in."<sup>113</sup> In this study in which

teachers and students shared their views of schooling, the dilemma emerged in full relief. The researchers note:

Teachers perceive themselves to be very caring people who went into teaching to give something to youth. Teachers were initially shocked at the degree to which students felt adults inside schools did not care for them. Teachers struggled as they read student comments, trying to articulate how their attention had been focused away from students. Teachers felt they were pressured to cover the curriculum, meet bureaucratic demands and asked to do too many activities unrelated to the students in their classrooms. There is little time in the day to actually relate with students. Teachers and others felt the size of their classes and numbers of students they saw each day, particularly in middle and high schools, made it difficult to care.<sup>114</sup>

When teachers have little opportunity to come to know their students well, and students have little opportunity to relate to any adult in the school on an extended, personal level, it should not be surprising that factory model high schools create virtual chasms of the cracks into which students can fall. It is not unusual for such schools to graduate fewer than half of the students who enter them.

As concerns about the outcomes of urban comprehensive high schools have intensified, initiatives to launch small schools and small learning communities within large buildings have been launched. These efforts are built upon long-standing studies which have found that, other things equal, smaller schools appear to produce higher achievement, lower dropout rates, lower rates of violence and vandalism, more positive feelings about self and school, and more participation in school activities.<sup>115</sup> In New York, Chicago, Philadelphia, and elsewhere, initiatives to create small, personalized urban schools have been able to produce higher achievement and substantially better graduation and college-going rates for low-income students of color and recent immigrants.<sup>116</sup>

Although a "small schools movement" has been under way since the 1990s, spurred by major philanthropic investments such as the Annenberg Challenge and the efforts of the Bill and Melinda Gates Foundation, there have been considerable difficulties in lassoing the political will, financial support, and professional expertise to develop high-quality new-model schools in all the places they are needed. Long-term funding for such initiatives has been difficult to secure. Communities have difficulty changing their images of what high school means and how it should look. Reflexive responses to violence in schools often lead to investments in metal detectors and security guards rather than more personalized environments with effective human touch points for youth. More affluent parents continue to want their students cordoned off in special tracks. School officials struggle to find teachers and school leaders who can create these environments and the rich curriculum that is needed within them. Policies often create a hostile environment for school models that deviate from traditional structures that mountains of regulations have held in place.

Research suggests that successful new models of schooling require strong teaching faculties who work in organizational structures that create more coherence and a “communal” orientation, in which staff see themselves as part of a family and work together to create a caring environment. These schools reduce curriculum differentiation and tracking, increase instructional authenticity and rigor, and enhance the extent to which students are well known by adults through systems such as advisories and team teaching.<sup>117</sup> Smaller schools may provide the opportunity for important educational conditions such as stronger relationships, greater student involvement, and greater academic press, but they do not, by themselves, guarantee that those conditions will exist.

At the end of the day, both staff and structures need to support student learning. Beyond all of these tangible elements of successful schooling, young people have to believe that they can succeed in order to put forth the effort to do so. This means addressing the negative psychologies that an unequal and highly racialized society has often constructed for both teachers and students. For example, dozens of studies have found that teachers typically hold more negative attitudes about Black children’s personality traits, ability, language, behavior, and potential than they do about White children, and that most Black students have fewer favorable interactions with their teachers than White students.<sup>118</sup> Studies have also found that children of color are more likely to be treated differently in the classroom—neither pushed academically nor praised as much as White students—and more often punished for offenses that White students commit without consequence; they are also more likely to be suspended from school than Whites who commit the same infractions.<sup>119</sup>

Young people are very observant. They note these patterns, and they understand when they have been identified as not deserving a high-quality, humane education. It is little wonder that in settings like these, students of color may come to doubt their academic ability and distrust the school, ultimately rejecting what it has to offer.<sup>120</sup> The psychology of doubt about academic ability has been found to exert measurable negative effects on achievement. People who think that ability is innate rather than developed with effort are less efficacious and less able to rebound from difficulties.<sup>121</sup> Furthermore, in dozens of experimental studies, researchers have found that students of all ages perform more poorly under conditions of “stereotype threat,” when expectations are low and when stereotypes about their group’s expected performance are triggered.<sup>122</sup> The good news is that, when these triggers are explicitly removed, achievement is found to be much higher.

Thus, overcoming inequality will require not only equalizing tangible resources, but also dealing with educators’ views and behaviors, developing environments with strong supports and high expectations, and helping students reconceptualize their possibilities and responsibilities, so that they can commit to themselves and their learning.