

## Essential Information for Education Policy

# Research Points

## Closing the Gap: High Achievement for Students of Color

This year marks the 50th anniversary of the U.S. Supreme Court's landmark *Brown v. Board of Education* school desegregation decision. Yet despite half a century of efforts to improve educational opportunities for African American students and other minorities, a large achievement gap persists.<sup>1</sup>

By 12th grade, the average African American and Hispanic student can only do math and read as well as a white eighth grader. In addition, high school completion rates remain markedly lower for students of color.<sup>2</sup>

Substantial research has tried to explain the test score gap. We know that it begins early; for example, there is a significant gap in vocabulary knowledge even as children enter school.<sup>3</sup> This confirms earlier findings that family and community differences have a significant impact on student achievement.<sup>4</sup>

We also know that what students are taught is one of the most powerful predictors of how they will perform on achievement tests.<sup>5</sup> Despite policies calling for equal "opportunities to learn," minority students often do not have a chance to study as rigorous a curriculum as more privileged students, and they also are less likely to be taught by teachers with high levels of experience.<sup>6</sup>

Other explanations frequently offered for the achievement gap point to the power of

social expectations. Four decades ago, researchers showed a "Pygmalion" effect in schooling.<sup>7</sup> Teachers were told that, based on results of predictive tests, certain (randomly chosen) students were expected to perform exceptionally well. Subsequently, those students did, in fact, do better than other students. Multiple studies since then have shown the same effect.<sup>8</sup> In addition, negative stereotypes concerning academic ability can interfere with minority students' academic persistence.<sup>9</sup>

### High Achievement in Practice

While the overall numbers can be daunting, there is evidence that the achievement gap can be reduced. One recent study based on national data found that between fourth and eighth grade, African American and Hispanic children's gains in reading exceeded those of white children.<sup>10</sup>

What can schools do? Although we do not have carefully controlled studies, a number of programs that have been sufficiently documented suggest successful practices.



## ELEMENTARY AND MIDDLE SCHOOLS

A public school in an African American community in Baltimore saw significant test score gains after implementing a rigorous instructional program used by Calvert, a private school. The **Calvert program's** philosophy of high expectations included weekly homework sheets, monthly report cards, and learning with attention to details such as punctuation.

After one year, average reading comprehension scores in three first-grade groups ranged from the 40th to the 49th percentile; scores for a comparison group averaged at the 18th percentile.<sup>11</sup> This success demonstrates that exposing underrepresented students to a rigorous curriculum coupled with high expectations enables academic excellence.

Another model is the **Knowledge Is Power Program (KIPP)**, which provides underprivileged fifth to ninth graders with a rigorous academic program. KIPP schools encompass a social support system that expects student commitment to school and peers and enforces a contract, signed by parents and students, supporting extended school days, Saturday classes, and summer sessions.

An independent analysis of three KIPP schools showed impressive improvements in one year.<sup>12</sup> In North Carolina, for example, 93 percent of KIPP students passed the end-of-year reading exams in 2002, a 36 percent jump from the year before when the students were at other schools.

The **U.S. Department of Defense (DoD)** schools extend some of the basic principles from Calvert and KIPP to an entire school system, and African American and Hispanic student academic achievement at DoD schools is among the best in the nation. In eighth-grade writing, 38 percent of DoD students were rated proficient or better on the 1998 National Assessment of Educational Progress, 24 percent above the national average. Similarly high performance was seen in reading and math.<sup>13</sup>

Academic success at DoD schools rests in part on a combination of in-school and out-of-school initiatives, sometimes called "supplementary education,"<sup>14</sup> that promote students' academic and social development beyond the traditional school day. DoD schools are distinguished by an education planning process that involves stakeholders from the entire community, a culture of high expectations for teachers and students, and extensive parental involvement. Although it is unrealistic to expect to transfer the entire DoD experience to other learning environments, many elements are worth considering when building a model suited to the needs of a specific school or district.

## HIGH SCHOOLS

A number of high school programs have elevated academic performance among students at risk of diminished academic aspirations. Many of these initiatives also have increased college entrance exam test taking and scores and have raised minority college attendance.

Operating in 30 high schools in California, **High School Puente**, for example, aims to increase college enrollment for Hispanic students by using mentors to raise students' aspirations and peer partners to guide students through the transition into high school. Close parental involvement also is critical, and a parent or guardian must sign a statement pledging to support the student. Puente participants are twice as likely to attend the University of California or California State University as non-Puente students.<sup>15</sup>

**Advancement Via Individual Determination (AVID)** applies similar principles in more than 1,000 middle and high schools nationwide. The program focuses on low-income students from families with no history of college attendance. It features a rigorous curriculum, teacher professional development, and college students as tutors. An extra class focuses on writing skills and critical thinking. Dropout rates in AVID's California schools declined 37 percent between 1985 and 1992, compared to a 14 percent decline in other California schools. Meanwhile, nearly 95 percent of AVID graduates enroll in college, and more than 80 percent are still there after two years.<sup>16</sup>

## HIGHER EDUCATION

Once in college, even high-achieving minority students can fail to live up to their early promise. This underachievement may result from negative stereotypes and low expectations, academic and cultural isolation, lack of support from faculty and peers, and persistent racism and discrimination.<sup>17</sup> Many college-level initiatives focus on minority achievement in the sciences, mathematics, and engineering.<sup>18</sup> We highlight two here.

The **Meyerhoff Scholars Program** at the University of Maryland, Baltimore County, for example, fosters academic achievement in students majoring in the sciences, engineering, and mathematics by addressing their need for academic and social integration and encouraging the development of specific knowledge and skills. Program components include holding peer study groups to improve study skills and time management and requiring students to live in the same residence hall their first year.

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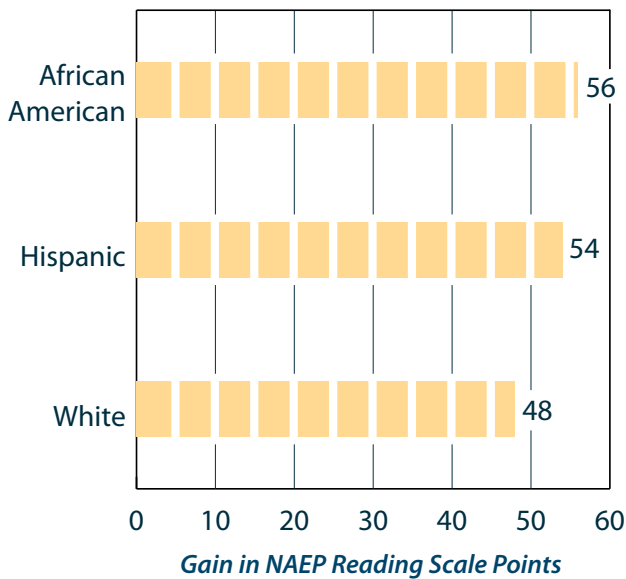
# Minorities Gain, but Gap Persists

Traditional assessments of student achievement compare the performance of students in a given year with that of students in the same grade in previous years. By that measure, little progress is being made in closing the achievement gap. However, a different picture emerges when the same group of students is tracked over time.

A recent analysis of late-1990s data from the National Assessment of Educational Progress (NAEP) showed that African American and Hispanic students gained a few more points than whites between fourth and eighth grade. Nevertheless, much work remains to close the achievement gap.

## Gaining Ground

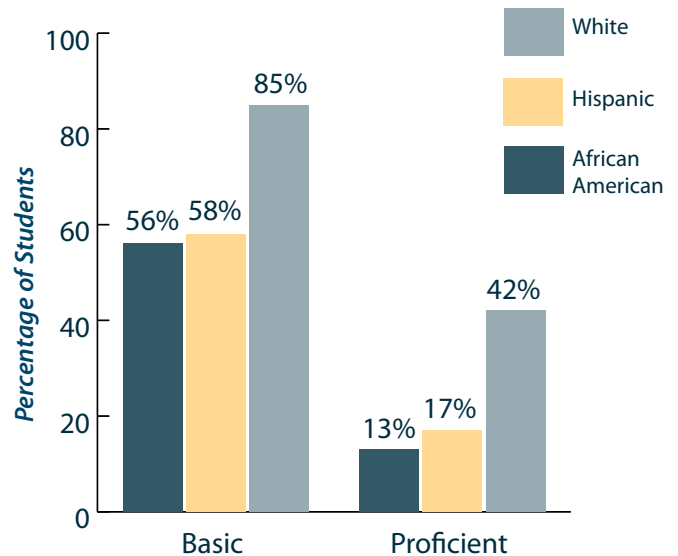
Growth in average NAEP reading scores, grade 4 (1994) to grade 8 (1998)



Source: Coley, J. (2003). *Growth in School Revisited: Achievement Gains from the Fourth to the Eighth Grade*. Princeton, NJ: Educational Testing Service.

## A Long Way to Go

Most recent available NAEP reading levels of 8th graders (2002)



Source: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP) (2002). *Reading Assessments*.

## Facts at a Glance

▶ Academic performance improves when all students have the opportunity to learn the same challenging curriculum marked by high standards and expectations.

▶ Effective academic programs surround students with evidence that the people they care about most think that academic success is important and worth pursuing.

In Meyerhoff's first decade, 29 percent of graduates had earned or were working toward science and mathematics-based PhDs, compared to less than 6 percent of similar students at other schools.<sup>19</sup>

Focusing on freshman calculus, the gateway to scientific and technical degrees, the **Emerging Scholars Program** (ESP) is modeled on Philip Uri Treisman's Mathematics Workshop at the University of California at Berkeley. ESP raises students' sights with smaller and longer lecture-linked discussion sections and with extra-challenging problems that students work on individually or in small groups. Like Meyerhoff, ESP links students with similar academic goals, both in and out of the classroom. Studies have found that ESP participants are more likely than nonparticipants to have high calculus grades and to continue on to higher-level math courses.<sup>20</sup>

## Conclusion

The programs noted here share two common threads: a demanding curriculum and a strong social support system that values and promotes academic achievement.

Providing a rigorous educational experience means giving students the chance to study a mainstream, undiluted curriculum with the best possible teachers. Performance improves when all students have the opportunity to learn the same challenging curriculum, marked by high standards and expectations.

It is not enough just to teach a rigorous curriculum, however. Attention also must be given to the social environment. Effective programs surround students with evidence that the people they most care about think academic success and effort are important. For elementary students, this means committed parental involvement. For older students, the support network expands toward peer groups and mentors.

**First**, support programs that engage all students in a rigorous, standards-based curriculum. Provide additional time and instruction as needed, but do not lower the expectations.

**Second**, create an environment that provides the necessary social supports for learning. It is important for students to be surrounded by peers and family members who value and support academic effort.

**Third**, promote school districts as producers, as well as consumers, of research by investing in collecting evidence of the long-term effects of efforts to raise academic achievement.

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