



RACIAL/ETHNIC

groups' curricula rigor and GPAs are increasing. Black graduates have closed the gap with White graduates at the midlevel curriculum, but Hispanic graduates still lag.

GPAs for all groups have increased, with Asian/Pacific Islander and White graduates continuing to earn higher GPAs than Black and Hispanic graduates.

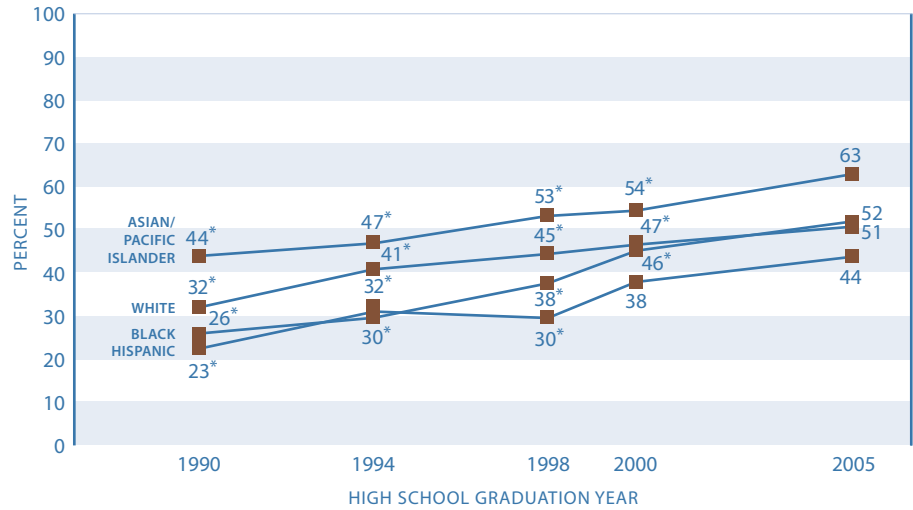
ALL RACIAL/ETHNIC GROUPS COMPLETE MORE CHALLENGING CURRICULA

Figure 23 indicates that the percentage of White, Black, Hispanic, and Asian/Pacific Islander graduates completing curricula at or above midlevel has increased since 1990. Asian/Pacific Islander graduates consistently completed more challenging curricula than other racial/ethnic groups during this time.

FIGURE 23
Percent completing curriculum at or above midlevel, by race/ethnicity: 1990–2005

* Significantly different ($p < .05$) from 2005.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, High School Transcript Study (HSTS), various years, 1990–2005.

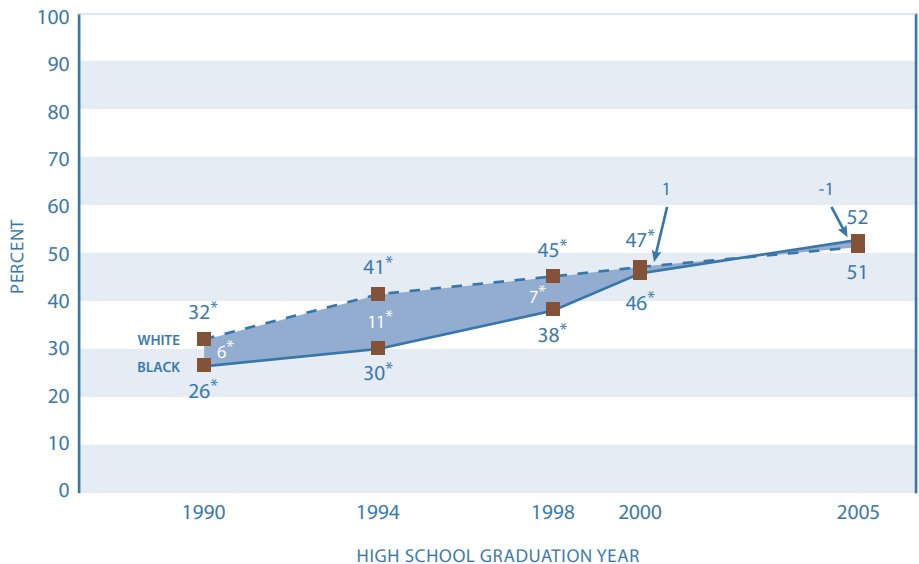


In 2005, there was not a significant difference between the percentage of Black and White graduates completing a curriculum at or above midlevel, as seen in figure 24. This differed from 1990, when there was a 6 percentage point White-Black gap. Although not shown, White graduates continued to complete a rigorous curriculum at a higher rate than Black graduates (11 percent compared to 6 percent).

FIGURE 24
White-Black gap in percent completing curriculum at or above midlevel: 1990–2005

* Significantly different ($p < .05$) from 2005.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, High School Transcript Study (HSTS), various years, 1990–2005.



Race/ethnicity of high school dropouts

The HSTS only obtains information about high school graduates, so the experiences of high school dropouts are not included. It is especially important to keep this in mind in interpreting information for racial/ethnic groups. For example, in 2004, approximately 7 percent of Whites, ages

18 through 24 who were no longer in elementary or secondary school, had not graduated from high school. The corresponding percentage for Blacks was 12 percent. For Hispanics, it was 24 percent, and for Asian/Pacific Islanders, it was 4 percent. Among Hispanics, those who were born outside

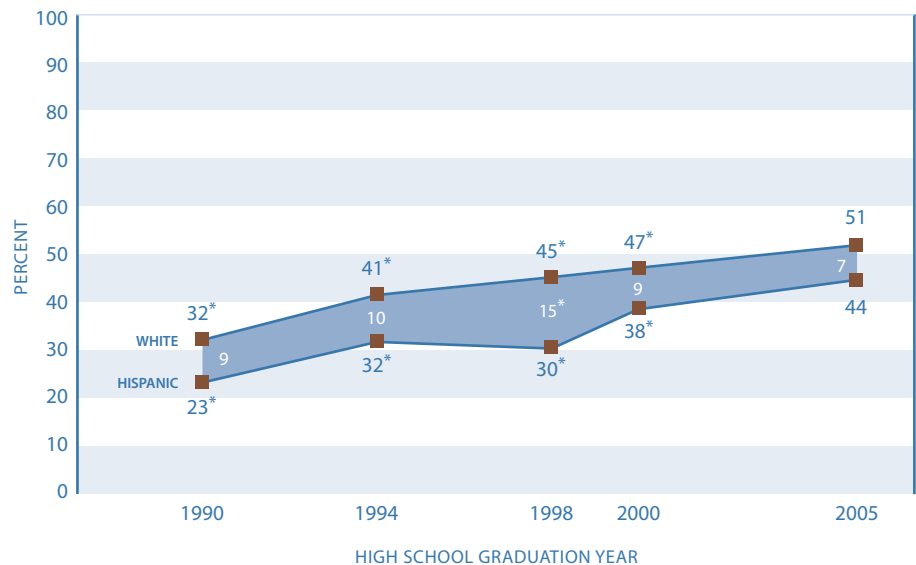
the 50 states and the District of Columbia were more likely to have been dropouts than Hispanics born in the United States (38 percent versus 14 percent). (SOURCE: U.S. Department of Commerce, Census Bureau, Current Population Survey, October 2004.)

As shown in figure 25, the gap between White and Hispanic graduates in completing a curriculum at or above midlevel in 2005 was not significantly larger than in 2000 or 1990. Although not shown here, there was also no progress in reducing the White-Hispanic gap for the percentage who completed a standard-level curriculum or better during this time. For Hispanic graduates, the percentage completing a rigorous curriculum in 2005 was 3 percentage points less than their White counterparts (8 percent compared to 11 percent).

FIGURE 25
White-Hispanic gap in percentage completing a curriculum level at or above midlevel: 1990–2005

* Significantly different ($p < .05$) from 2005.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, High School Transcript Study (HSTS), various years, 1990–2005.



Consistent with the 2005 racial/ethnic differences in completion of a curriculum at or above the midlevel, figures 26 and 27 show that there were significant differences by race/ethnicity in the highest level of mathematics and science courses taken. Asian/Pacific Islander graduates completed calculus or other advanced mathematics courses at a higher rate than all other racial/ethnic groups (62 percent compared to 46 percent for White

graduates, 29 percent for Black graduates, and 28 percent for Hispanic graduates). They were also more likely than other racial/ethnic groups to have completed advanced science or physics (62 percent compared to 46 percent for White graduates, 34 percent for Black graduates, and 32 percent for Hispanic graduates).

FIGURE 26
Highest level mathematics course completed, by race/ethnicity: 2005

- Calculus
- Advanced math
- Algebra II
- Geometry
- Algebra I or below

*Significantly different ($p < .05$) from White graduates.
NOTE: Details may not sum to total because of rounding. Advanced mathematics includes courses, other than calculus, that are generally taken after algebra II (e.g., AP statistics and precalculus).
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, High School Transcript Study (HSTS), 2005.

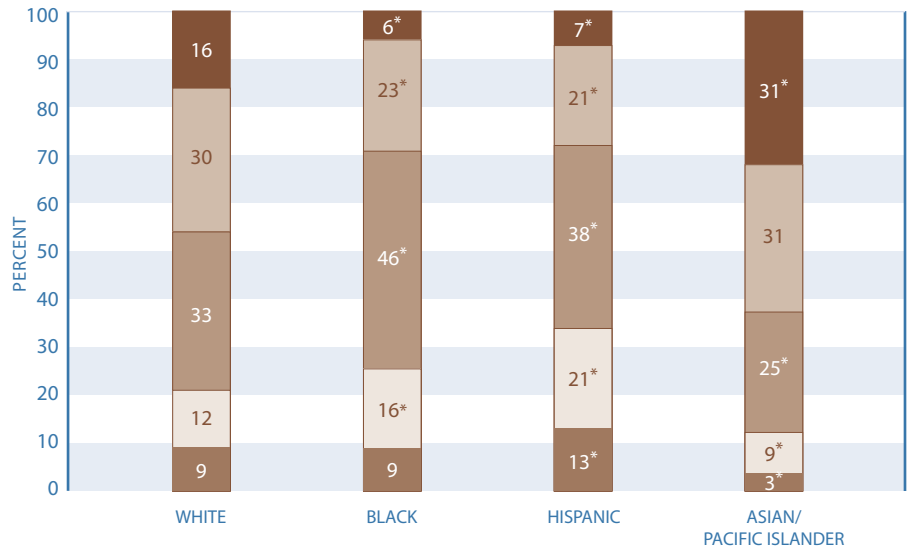
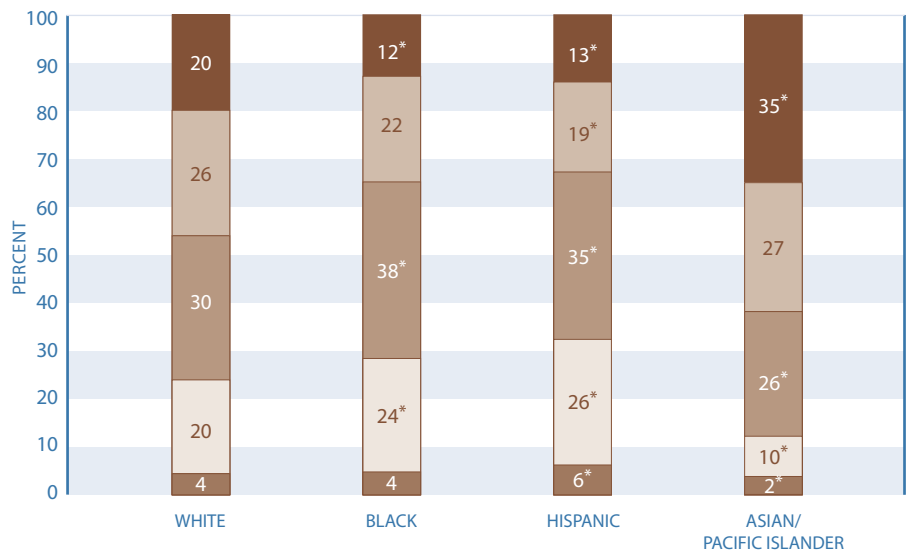


FIGURE 27
Highest level science course completed, by race/ethnicity: 2005

- Advanced science
- Physics
- Chemistry
- Biology
- General/earth

*Significantly different ($p < .05$) from White graduates.
NOTE: Details may not sum to total because of rounding. Advanced science courses are courses that contain advanced content (like AP biology, IB chemistry, AP physics, etc.) or are considered second-year courses (chemistry II, advanced biology, etc.).
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, High School Transcript Study (HSTS), 2005.



In each racial/ethnic group, most graduates with disabilities receive standard diplomas

Approximately 90 percent of 2005 graduates identified by their schools as having disabilities received either a standard or honors diploma. The remaining 10 percent of the graduates received either a special education diploma or a certificate

of completion. This analysis, unlike the analyses in the rest of the report, includes graduates who received a special education diploma or a certificate of completion. Black and Hispanic graduates with disabilities were less likely to

receive a standard or honors diploma than White graduates with disabilities (81 percent of Black graduates and 87 percent of Hispanic graduates, compared to 94 percent of White graduates).

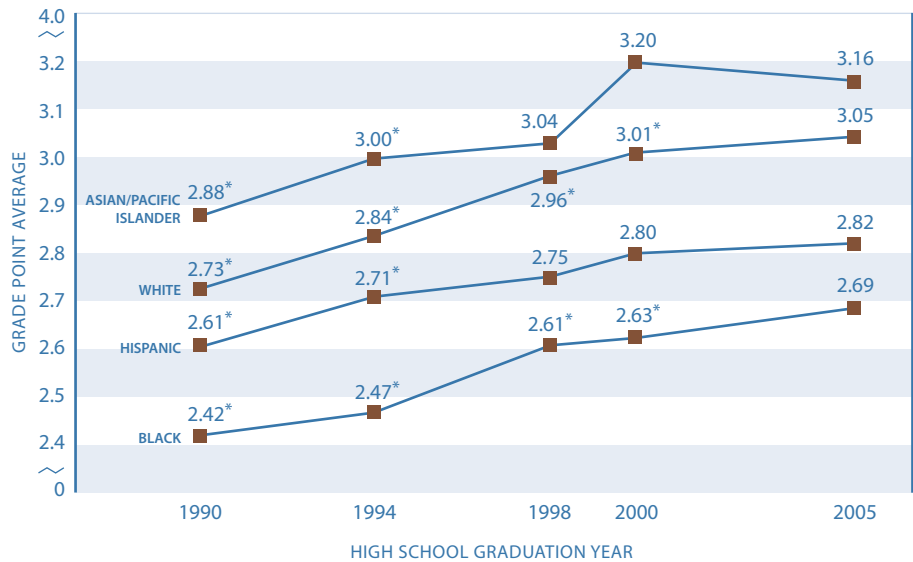
GPA INCREASES FOR ALL RACIAL/ETHNIC GROUPS

As shown in figure 28, the GPA of graduates from all major racial/ethnic groups increased from 1990 to 2005. However, only White and Black graduates earned higher GPAs in 2005 than in 2000. In all years, White and Asian/Pacific Islander graduates earned higher GPAs than Black and Hispanic graduates.

FIGURE 28
Trends in GPAs of graduates,
by race/ethnicity: 1990–2005

*Significantly different ($p < .05$) from 2005.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, High School Transcript Study (HSTS), various years, 1990–2005.



White-Black and White-Hispanic GPA gaps increase from 1990, but do not change significantly from 2000

White graduates earned higher GPAs than Black or Hispanic graduates in all years, as shown in figures 29 and 30. The 2005 gaps were significantly larger than the 1990 gaps. There was no significant change in the size of the gaps between 2000 and 2005. The White-Black gap in 2005 was 0.36 points, slightly more than a third of a letter grade.

FIGURE 29
White-Black gap in GPA: 1990–2005

* Significantly different ($p < .05$) from 2005.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, High School Transcript Study (HSTS), various years, 1990–2005.

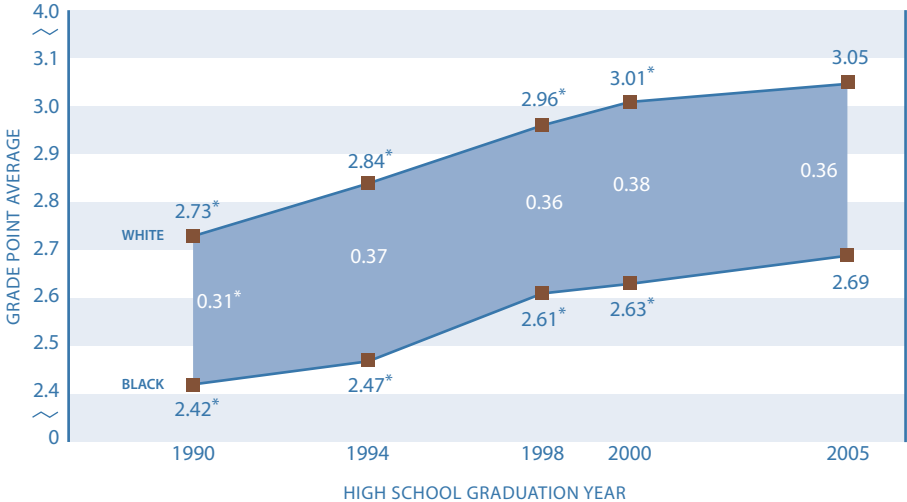
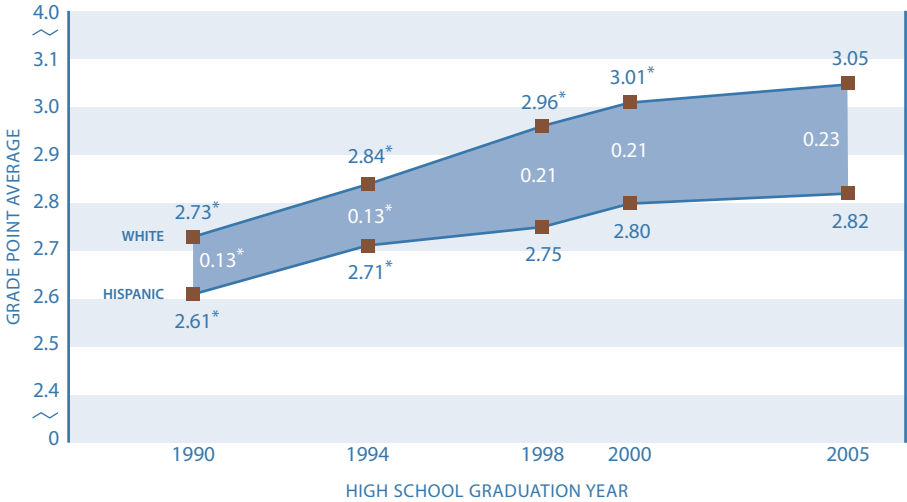


FIGURE 30
White-Hispanic gap in GPA: 1990–2005

* Significantly different ($p < .05$) from 2005.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, High School Transcript Study (HSTS), various years, 1990–2005.





ASIAN/PACIFIC ISLANDER AND WHITE GRADUATES HAVE HIGHER AVERAGE NAEP SCORES THAN BLACK AND HISPANIC GRADUATES TAKING MATHEMATICS AND SCIENCE COURSES AT THE SAME LEVELS

White, Hispanic, and Asian/Pacific Islander graduates who took calculus had average mathematics NAEP scores at the *Proficient* achievement level, as seen in figure 31. However, the average score of Black graduates whose highest course was calculus was at the *Basic* level.

FIGURE 31
NAEP mathematics scores, by race/ethnicity and highest level course taken: 2005

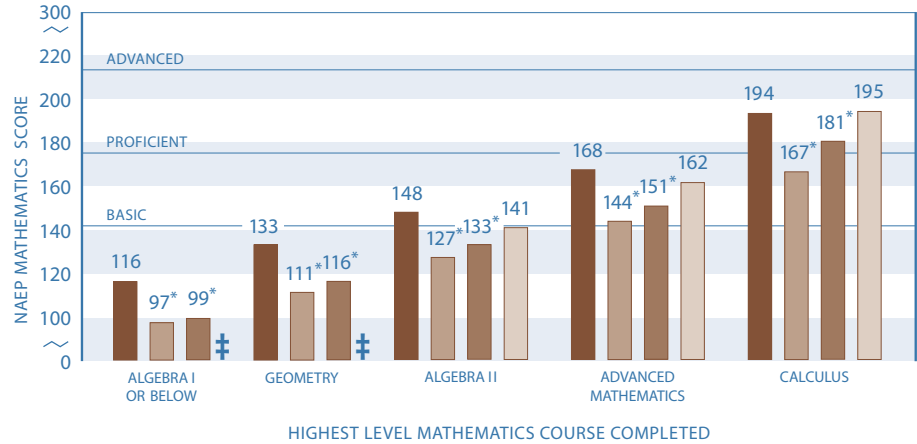
White ■
Black ■
Hispanic ■
Asian/Pacific Islander ■

‡ Reporting standard not met.

* Significantly different ($p < .05$) from White graduates.

NOTE: Advanced mathematics includes courses, other than calculus, that are generally taken after algebra II (e.g., AP statistics and precalculus).

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, High School Transcript Study (HSTS), 2005.



As shown in figure 32, the average science scores of Asian/Pacific Islander and White graduates were higher than those of Black and Hispanic graduates whose highest level science course was the same. For example, the average White score on the NAEP science assessment for graduates completing advanced science was 178. This was not significantly different from the score for Asian/Pacific Islander graduates, but was above the scores for both Black and Hispanic graduates (140 and 154, respectively).

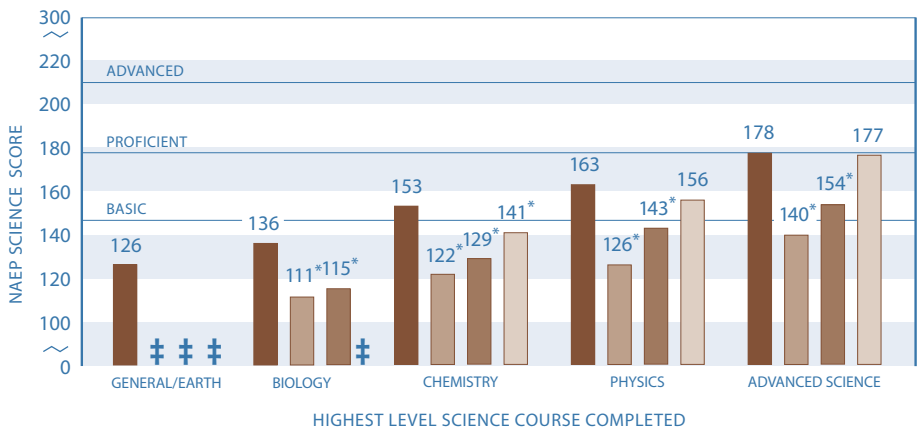
FIGURE 32
NAEP science scores, by race/ethnicity and highest level course taken: 2005

White ■
Black ■
Hispanic ■
Asian/Pacific Islander ■

‡ Reporting standard not met.

* Significantly different ($p < .05$) from White graduates.

NOTE: Advanced science courses are courses that contain advanced content (like AP biology, IB chemistry, AP physics, etc.) or are considered second-year courses (chemistry II, advanced biology, etc.).



As seen in figures 33 and 34, within each of the mathematics and science GPA quartiles, White and Asian/Pacific Islander graduates had higher NAEP scores than Black and Hispanic graduates on the corresponding NAEP assessment. For example, White and Asian/Pacific Islander graduates in the top quartile for mathematics GPA scored, on average, at the *Proficient* level in mathematics, while Black and Hispanic graduates in the top quartile scored at *Basic*.

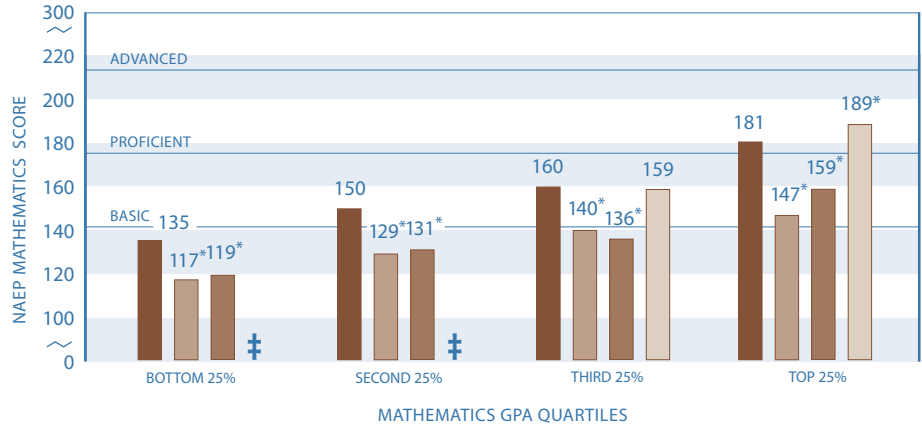
FIGURE 33
NAEP mathematics scores,
by race/ethnicity and GPA quartile: 2005

White ■
Black ■
Hispanic ■
Asian/Pacific Islander ■

‡ Reporting standard not met.

*Significantly different ($p < .05$) from White graduates.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, High School Transcript Study (HSTS), 2005.



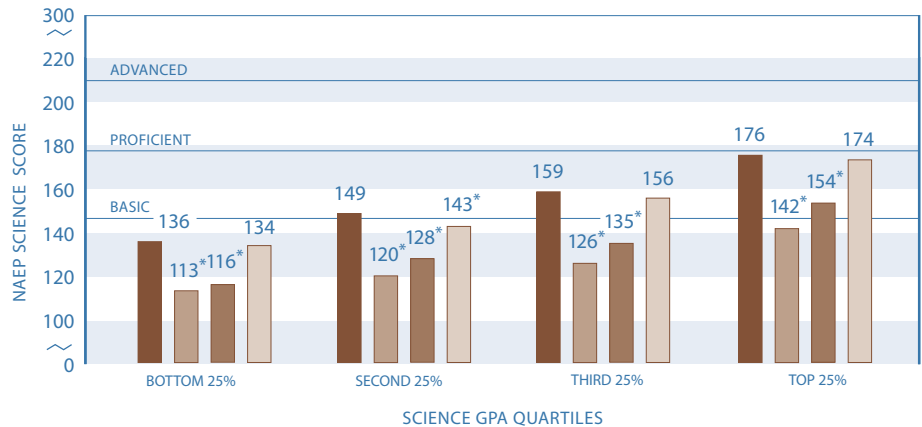
Regardless of race/ethnicity, NAEP assessment scores increased as subject-specific and overall GPA increased. For example, among Black high school graduates, mathematics scores increased from an average of 117 for those having a mathematics GPA in the bottom quarter to 147 for those in the top quarter. In science, scores for Black graduates rose from an average of 113 in the bottom quarter of the science GPAs to 142 in the top quarter.

FIGURE 34
NAEP science scores,
by race/ethnicity and GPA quartile: 2005

White ■
Black ■
Hispanic ■
Asian/Pacific Islander ■

*Significantly different ($p < .05$) from White graduates.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, High School Transcript Study (HSTS), 2005.



Improvements in academic records not reflected in NAEP trends

Recently published NAEP data show that twelfth-grade mathematics and science scores have not increased commensurate with the increases in the number of students taking higher-level courses in mathematics and science, credits earned in mid- and rigorous-level courses, and improvements in GPA described in this report.

This raises a question: How can increasing numbers of students be taking more credits and more rigorous curricula without increased performance on the Nation's Report Card? There are plausible explanations. The population of students tested has changed. The cohorts of students included in NAEP reflect decade-long improvements in graduation rates, reduction in dropout rates, and increases in the percentages

of students who are low income and who speak a language other than English at home (NCES 2006-071). The lack of congruence might also be associated with declining motivation among twelfth graders to do well on relatively low-stakes assessments such as NAEP, a problem that may increase as NAEP faces increasing competition from high-stakes tests such as twelfth-grade graduation tests.

Further analysis of course content, instructional practices, and teacher preparation could provide other insights as to why improvements in academic records are not reflected in NAEP trends. For example, in the past 10 years, advanced course content might have become less rigorous due to an increased range in the abilities of students

taking such courses (e.g., a calculus course in 1990 that differs from a calculus course in 2005 in ways that result in today's students being exposed to less content). Similarly, it is possible that the increase in the number of students taking advanced courses may have outpaced the availability of effective teachers.

Taken together, these possibilities suggest that more in-depth analyses of these data are needed to understand the patterns in the educational trends in student performance. Given the inherent limitations of the cross-sectional nature of these studies, it may not be possible to understand the patterns using NAEP and HSTS data alone—true longitudinal data may be needed to investigate such issues.