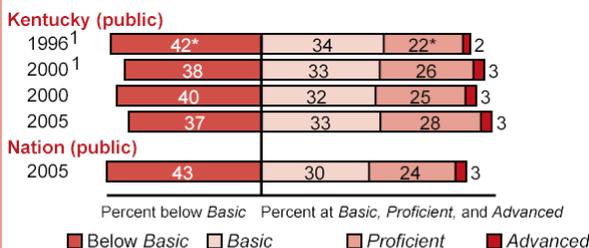


The National Assessment of Educational Progress (NAEP) assesses science in two major dimensions: Fields of Science (Earth, Physical, and Life) and Knowing and Doing Science (Conceptual Understanding, Scientific Investigation, and Practical Reasoning). The NAEP science scale ranges from 0 to 300. Scales are created separately for each grade.

Overall Science Results for Kentucky

- In 2005, the average scale score for eighth-grade students in Kentucky was 153. This was higher than their average score in 2000 (150), and was higher than their average score in 1996 (147).¹
- Kentucky's average score (153) in 2005 was higher than that of the nation's public schools (147).
- Of the 44 states and one jurisdiction that participated in the 2005 eighth-grade assessment, students' average scale score in Kentucky was higher than those in 20 jurisdictions, not significantly different from those in 12 jurisdictions, and lower than those in 12 jurisdictions.²
- The percentage of students in Kentucky who performed at or above the NAEP *Proficient* level was 31 percent in 2005. This percentage was not significantly different from that in 2000 (28 percent), and was greater than that in 1996 (23 percent).
- The percentage of students in Kentucky who performed at or above the NAEP *Basic* level was 63 percent in 2005. This percentage was not significantly different from that in 2000 (60 percent), and was greater than that in 1996 (58 percent).

Student Percentages at NAEP Achievement Levels



¹ Accommodations were not permitted for this assessment.

NOTE: The NAEP grade 8 science achievement levels correspond to the following scale points: *Below Basic*, 142 or lower; *Basic*, 143–169; *Proficient*, 170–207; *Advanced*, 208 or above.

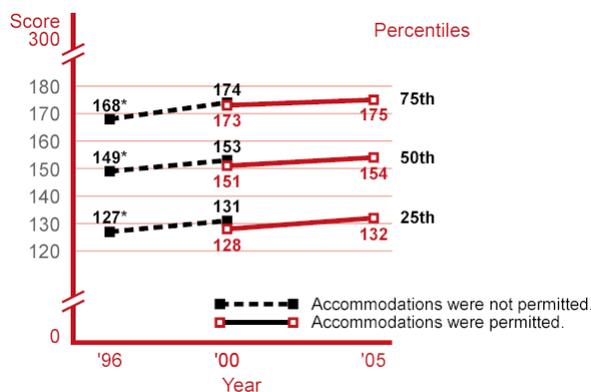
Performance of NAEP Reporting Groups in Kentucky: 2005

Reporting groups	Percent of students	Average score	Percent below <i>Basic</i>	Percent of students at or above <i>Basic</i>	Percent of students at or above <i>Proficient</i>	Percent <i>Advanced</i>
Male	51	154	35	65	33	3
Female	49	151 ↑	38 ↓	62 ↑	28 ↑	3
White	87	155	33	67	33	3
Black	10	130	68	32	7	#
Hispanic	1 ↑	‡	‡	‡	‡	‡
Asian/Pacific Islander	1	‡	‡	‡	‡	‡
American Indian/Alaska Native	#	‡	‡	‡	‡	‡
Eligible for free/reduced-price school lunch	45 ↑	145 ↑	48 ↓	52 ↑	21 ↑	2
Not eligible for free/reduced-price school lunch	54 ↓	159	28	72	38	4

Average Score Gaps Between Selected Groups

- In 2005, male students in Kentucky had an average score that was higher than that of female students by 3 points. In 1996, there was no significant difference between the average score of male and female students.
- In 2005, Black students had an average score that was lower than that of White students by 26 points. In 1996, the average score for Black students was lower than that of White students by 25 points.
- Data are not reported for Hispanic students in 2005, because reporting standards were not met. Therefore, the performance gap results are not reported.
- In 2005, students who were eligible for free/reduced-price school lunch, an indicator of poverty, had an average score that was lower than that of students who were not eligible for free/reduced-price school lunch by 15 points. In 1996, the average score for students who were eligible for free/reduced-price school lunch was lower than the score of those not eligible by 20 points.
- In 2005, the score gap between students at the 75th percentile and students at the 25th percentile was 42 points. In 1996, the score gap between students at the 75th percentile and students at the 25th percentile was 41 points.

Science Scale Scores at Selected Percentiles



Scores at selected percentiles on the NAEP science scale indicate how well students at lower, middle, and higher levels performed.

The estimate rounds to zero.

‡ Reporting standards not met.

* Significantly different from 2005.

↑ Significantly higher than 2000. ↓ Significantly lower than 2000.

¹ Comparisons (higher/lower/not different) are based on statistical tests. The .05 level was used for testing statistical significance. Comparisons across jurisdictions and comparisons with the nation or within a jurisdiction across years may be affected by differences in exclusion rates for students with disabilities (SD) and English language learners (ELL). The exclusion rates for SD and ELL in Kentucky were 2 percent and percentage rounds to zero in 2005, respectively. Statistical comparisons are calculated on the basis of unrounded scale scores or percentages.

² "Jurisdiction" refers to states and the Department of Defense Education Activity schools.

NOTE: Detail may not sum to totals because of rounding and because the "Information not available" category for free/reduced-price school lunch and the "Unclassified" category for race/ethnicity are not displayed. Visit <http://nces.ed.gov/nationsreportcard/states/> for additional results and detailed information.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Assessment of Educational Progress (NAEP), 1996, 2000, and 2005 Science Assessments.