Pennsylvania

Mathematics Grade 4

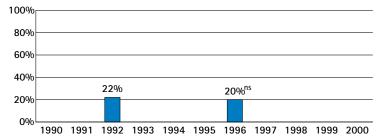
1. Improvement Over Time

Have Pennsylvania's 4th graders improved in mathematics achievement?

Not yet. Between 1992 and 1996, there was no significant change in the percentage of public school 4th graders who met the Goals Panel's performance standard in mathematics.

The Goals Panel has set its performance standard at the two highest levels of achievement — Proficient or Advanced — on the National Assessment of Educational Progress, or NAEP.

Percentage of public school 4th graders at or above Proficient on the NAEP mathematics assessment



ns Interpret with caution. Change was not statistically significant. Mathematics performance will be tested again in 2000.

2. State Comparisons[†]

How did Pennsylvania compare with other states in 4th grade mathematics achievement in public schools in 1996?

4 states had significantly higher' percentages of students who were at or above Proficient on NAEP:

| Connecticut | 31% | Maine, Wisconsin | 27% |
|-------------|-----|------------------|-----|
| Minnesota | 29% | | |

25 states had similar percentages of students who were at or above Proficient on NAEP:

| New Jersey, Texas Indiana, Massachusetts, Nebraska, | 25% 24% | Pennsylvania , Missouri, New York Virginia, West Virginia, Wyoming | 20% 19% |
|--|------------|---|----------------|
| North Dakota | | Rhode Island, Tennessee | 17% |
| Michigan, Utah, Vermont | 23% | Delaware ² | 16% |
| Colorado, Iowa, Maryland, Montana | 22% | | |
| U.S* Alaska, North Carolina, Oregon. | 21% | | |

Washington

15 states had significantly lower' percentages of students who were at or above Proficient on NAEP:

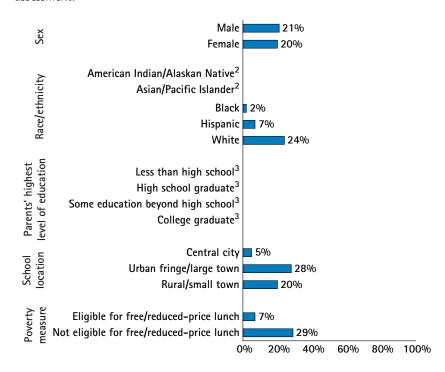
| Hawaii,² Kentucky² | 16% | Alabama, California | 11% |
|-------------------------------|-----|------------------------|-----|
| Arizona, Florida | 15% | Louisiana, Mississippi | 8% |
| Nevada | 14% | District of Columbia | 5% |
| Arkansas, Georgia, New Mexico | 13% | Guam | 3% |
| South Carolina | 12% | | |

⁺ The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.

* Figure shown for the U.S. includes both public and nonpublic school data.

3. Subgroup Performance

What percentages of public school 4th graders in different subgroups' in Pennsylvania were at or above Proficient on the 1996 NAEP mathematics assessment?



¹ Interpret differences between subgroups with caution. See pp. 3-4 and Appendix D.

¹ See explanation on pp. 3-4.

² State may appear to be out of place; however, statistically, its placement is correct. See pp. 3-4.

² Characteristics of the sample do not permit a reliable estimate.

³ The Pennsylvania Department of Education suggested that students refrain from answering this question.

Mathematics Grade 8

Pennsylvania

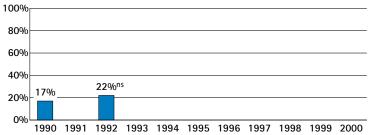
1. Improvement Over Time

Have Pennsylvania's 8th graders improved in mathematics achievement?

Not yet. Between 1990 and 1992, there was no significant change in the percentage of public school 8th graders who met the Goals Panel's performance standard in mathematics.

The Goals Panel has set its performance standard at the two highest levels of achievement — Proficient or Advanced — on the National Assessment of Educational Progress, or NAEP.

Percentage of public school 8th graders at or above Proficient on the NAEP mathematics assessment



ns Interpret with caution. Change was not statistically significant. Mathematics performance will be tested again in 2000.

2. State Comparisons

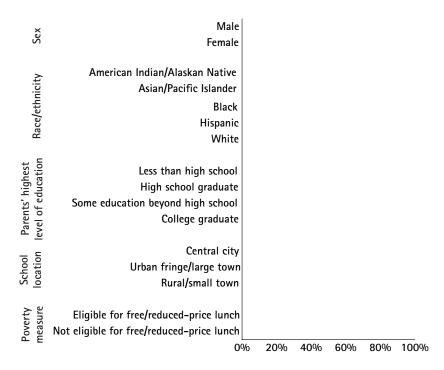
How did Pennsylvania compare with other states in 8th grade mathematics achievement in public schools in 1996?

Pennsylvania did not participate in NAEP mathematics in 1996.

3. Subgroup Performance

What percentages of public school 8th graders in different subgroups¹ in Pennsylvania were at or above Proficient on the 1996 NAEP mathematics assessment?

Pennsylvania did not participate in NAEP mathematics in 1996.



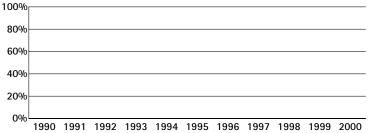
Pennsylvania

Science Grade 8

1. Improvement Over Time

Have Pennsylvania's 8th graders improved in science achievement? *Pennsylvania did not participate in NAEP science in 1996.*

Percentage of public school 8th graders at or above Proficient on the NAEP science assessment



Science performance will be tested again in 2000.

2. State Comparisons

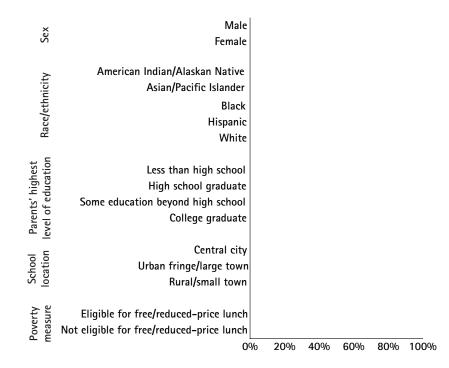
How did Pennsylvania compare with other states in 8th grade science achievement in public schools in 1996?

Pennsylvania did not participate in NAEP science in 1996.

3. Subgroup Performance

What percentages of public school 8th graders in different subgroups in Pennsylvania were at or above Proficient on the 1996 NAEP science assessment?

Pennsylvania did not participate in NAEP science in 1996.



International Comparisons

Pennsylvania

Mathematics Grade 8

Forty-one nations[†] participated in the Third International Mathematics and Science Study (TIMSS) in 8th grade mathematics in 1995. If public school 8th graders in Pennsylvania participated in the TIMSS mathematics assessment, how would their average performance compare to that of students who took TIMSS in these nations?

It is not possible to predict how students in Pennsylvania would have performed on TIMSS, because the estimate is based on scores from the 1996 NAEP mathematics assessment. Pennsylvania did not participate in NAEP mathematics in Grade 8 in 1996.

Science Grade 8

Forty-one nations[†] participated in the Third International Mathematics and Science Study (TIMSS) in 8th grade science in 1995. If public school 8th graders in Pennsylvania participated in the TIMSS science assessment, how would their average performance compare to that of students who took TIMSS in these nations?

It is not possible to predict how students in Pennsylvania would have performed on TIMSS, because the estimate is based on scores from the 1996 NAEP science assessment. Pennsylvania did not participate in NAEP science in 1996.

[†] The term "nation" is used to refer to nations, states, or jurisdictions.